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# REPORT ON THE AGRICULTURE AND FOOD SECTOR IN THE SLOVAK REPUBLIC IN 2023

# **GREEN REPORT**

**BRATISLAVA 2024** 

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# Dear readers.

The Report on Agriculture and Food Sector in the Slovak Republic (the so-called Green Paper) has been prepared annually by the Ministry of Agriculture and Rural Development since 1993. This year we provide you with the 32th edition in its full version.

The Green Paper informs about the situation in the agriculture and food sector in Slovakia, about the year-on-year development, production and market, economic and financial situation of businesses, rural development, regional development and about the position of the agriculture and food sector in the economy of the Slovak Republic and also within the EU countries.

In 2023, the share of agriculture in the macroeconomic indicators of the Slovak economy increased for most evaluated indicators compared to 2022, the share decreased only for the gross fixed capital formation and employment.

According to preliminary data for the year 2023, gross agricultural production at current prices decreased by 4.8% due to the decreases in gross crop production by 13.0% and the increase in gross livestock production by 12.0%.

Primary agricultural production, according to preliminary data, posted a profit before tax in the amount of €228.2 mil. Compared to the previous year, it increased by €141.6 mil. According to the preliminary data of the SO SR, the food sector posted a profit before tax in the amount of €437.9 mil., which was €143.6 mil. more than in the previous year.

Wage development in the agriculture and food sector was positive, however, a wage disparity between both sectors and the economy of the Slovak Republic still persists.

In agri-food foreign trade, due to the higher dynamics of the increase in the value of imports compared to exports, the higher total value of imports compared to exports led to a higher negative trade balance by  $\leq$ 321 million and negative balance accounted for -  $\leq$ 2,238 million.

GREEN REPORT 2023 Foreword

Within the framework of the implementation of the Common Agricultural Policy of the EU, the total expenditure on agriculture and rural development accounted for €807.84 mil. in 2023 and increased by 9.6% on a year-on-year basis. The highest share in total expenditure belonged to direct payments (40.1%) and to the costs of the Rural Development Program of the Slovak Republic 2014 – 2022 (28.3%).

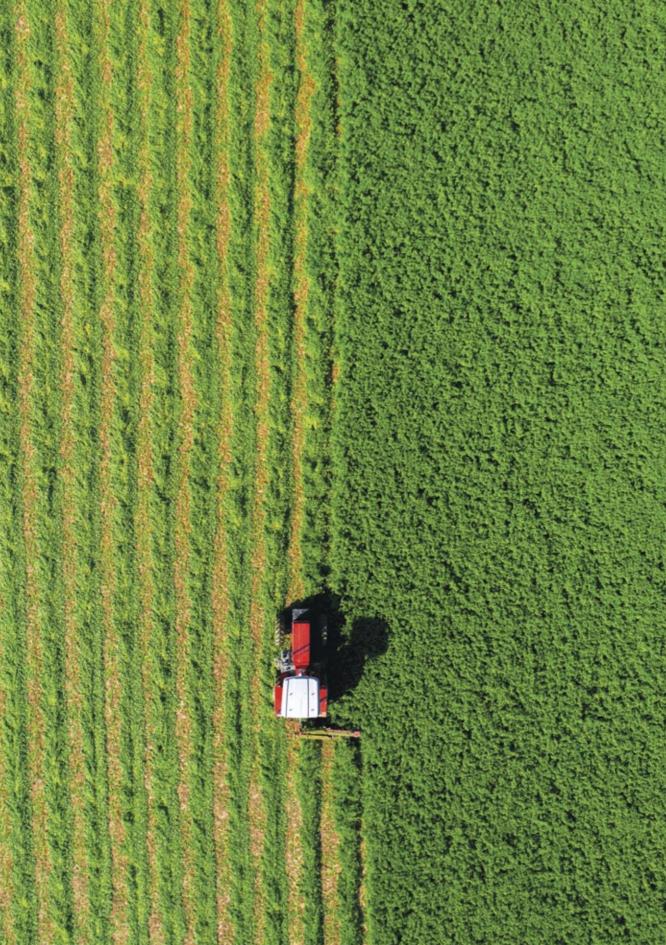
Agriculture and rural development are one of the key factors in the quality and diversity of our country and its environment. Without supporting agriculture and rural development, many areas of Slovakia would face significant economic, social and ecological problems.

As part of the Strategic Plan of the Common Agricultural Policy for the years 2023-2027, nine common strategic goals were implemented - three economic, three environmental and three social goals, which the European Commission stated in the legislative draft of the new Common Agricultural Policy. By adopting this combined and ambitious approach along with the latest advances in knowledge and innovation, the CAP seeks to achieve sustainable farming system in the EU and its alignment with the European Green Deal with the aim to create an inclusive and competitive, environmentally friendly future for Europe.

In November 2023, by an executive decision the European Commission approved the first modification of the Strategic Plan of the Common Agricultural Policy for the period 2023-2027 for Slovakia. The modification included changes in the definition of an active farmer, standards of good agricultural and environmental condition (GAEC), eco-schemes, agroforestry systems and sectoral interventions.

Richard Takáč Minister of Agriculture and Rural Development of the Slovak Republic

The Green Paper is also available on the website of the Ministry of Agriculture and Rural Development of the Slovak Republic http://www.mpsr.sk in Slovak and English versions.



# 1. POSITION OF THE AGRICULTURE AND FOOD SECTOR WITHIN THE ECONOMY OF THE SLOVAK REPUBLIC

## Development of the main indicators of the Slovak economy<sup>1</sup>

Annual price growth averaged 10.5% for the whole year 2023, representing the fourth highest value in the 30-year history of independent Slovakia. **Inflation** peaked at 15.4% in February 2023 and reached 5.9% in December 2023. The decline in headline inflation was mainly caused by frozen regulated household energy prices, which continued to be subsidised by the state budget, and food prices. Food accounts for almost 24% of the consumer basket, meaning that any change in food prices, even a small one, will have a significant impact on consumer spending.

The European Central Bank and other central banks have responded to the sharp acceleration in inflation by raising interest rates. In view of the continued slowdown in inflation and the relatively weak economic growth dynamics in the euro area, money market interest rates can be expected to peak at the turn of 2023/2024.

Slovakia's economic growth as measured by **gross domestic product** slowed down to 1.6% (in constant prices) in 2023. In terms of the individual demand components, a decline in household consumption is a marked change compared to previous years, as households have chosen the path of greater saving at the expense of spending. At the same time, the Slovak economy is significantly affected by foreign demand, which was also in decline as firms in the euro area teetered on the brink of recession.

Despite the gradual recovery of the labour market, employment levels did not reach the levels of late 2019, even after almost three years since the pandemic had broken out. Greater early retirements also contributed to this. However, more inactive people were employed, as well as a large number of working foreigners, while their number exceeded 100,000 by the end of 2023. The number of workers in the Slovak economy reached 2,610,000 in 2023, which is an increase of 0.2% compared to the previous year. In 2023, the **unemployment rate** fell year-on-year (by 0.3 pp) to 5.8%. This positive development was partly due to a year-on-year increase in **nominal wages** by 9.7% on average, with the average monthly wage per employee reaching € 1,430.

According to preliminary results, the **balance of foreign trade** for 2023 reached  $\leq$ 1.9 billion. This is an increase of  $\leq$  8.5 billion compared to 2022.

Investments, as measured by **gross fixed capital formation**, picked up in 2023. Most of the money for the acquisition of gross fixed capital formation is invested in public administration and defence. The second highest amount of investment was in manufacturing.

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<sup>&</sup>lt;sup>1</sup> The chapter has been prepared using the Statistical Report on the Slovak Economy in Q4 2022, Statistical Office of the Slovak Republic.

Table 1 Development of the main economic indicators of the Slovak Republic

Indicator	2022	2023	Difference 2023-2022
GDP¹ (current prices) (€ billion)	110.1	122.9	12.8
GDP¹ (constant prices)2 (€ billion)	100.2	101.6	1.4
GDP growth rate <sup>1</sup> (current prices) – year-on-year change (%)	8.0	11.7	
GDP growth rate <sup>1</sup> (constant prices) <sup>2</sup> – year-on-year change (%)	0.4	1.4	
Inflation rate <sup>3</sup> (%)	12.8	10.5	-2.3
Foreign trade balance⁴ (€ billion)	-6.5	1.9	8.5
Number of employees based on LFS <sup>s</sup> – year-on-year change (%)	1.7	0.2	
Unemployment rate <sup>6</sup> based on LFS (%)	6.1	5.8	-0.3
Change in average monthly wages of employees in the economy (nominal wages) (%)	7.7	9.7	
Change in average monthly wages of employees in the economy (real wages) (%)	-4.5	-0.7	
Current account balance (% of GDP) <sup>7</sup>	-7.3	-1.6	5.7
Gross fixed capital formation in Slovakia (current prices) – year-on-year change (%)	8.0	27.4	
Gross fixed capital formation in Slovakia (constant prices) – year-on-year change (%)	-1.9	16.6	

#### Source:

SO SR: DataCube / Macroeconomic Statistics / National Accounts / Key Indicators / GDP - annual data / Revised and preliminary annual GDP data; the data is in line with the autumn revision of the national accounts 2024.

NBS – Economic and Monetary Developments (winter 2023, spring 2024) / Recent developments in macroeconomic indicators Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic Notes:

<sup>&</sup>lt;sup>1)</sup> ESA 2010 methodology, data from 2022 onwards is refined by quarterly estimates, data for 2022 is semi-definitive; data for 2023 is preliminary

<sup>&</sup>lt;sup>2)</sup> constant prices calculated by chain linking; the reference year is 2020

<sup>3)</sup> calculated from consumer prices, with annual updating of weights since 2005

<sup>&</sup>lt;sup>4)</sup> current prices, FOB values (includes the transaction value of goods and the value of services (transportation and insurance) performed to deliver goods to the border of the exporting country); current prices, FOB values (the transaction value of goods and the value of services (e.g. transportation, insurance, transshipment, storage of goods, etc. performed to deliver goods to the border of the exporting country); the data for 2022 is definitive, the data for 2023 is preliminary

<sup>&</sup>lt;sup>5)</sup> under the new LFS (labour force survey) methodology applicable in the EU from 2021 (IESS), employed persons are all persons between the ages of 15 and 89 who, in the observed (reference) week, perform at least 1 hour of work for a wage, salary, fee or profit, including persons performing work based on agreements, seasonal workers, persons on maternity or parental leave, persons working abroad for less than 1 year, and persons commuting abroad for work abroad in the observed (reference) week; respondents are assigned to sectors according to the economic activity of the local unit, not the entire enterprise; for the calculation of indices for 2021, data for 2020 were adjusted in a way that corresponds to the new methodology as closely as possible

<sup>6)</sup> the percentage of the economically active population who are unemployed

<sup>7)</sup> the data source is NBS (listed above)

#### Chart 1 Development of GDP at constant prices\*

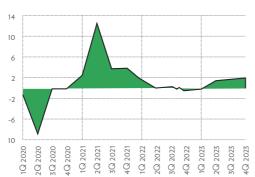


Chart 2 Development of the number of workers\*\*
and nom. wages



Notes: Both graphs show the change (%) compared to the same period of the previous year

- $^{\star}$  GDP development at constant prices calculated by chain linking; the reference year is 2020
- \*\* according to LFS; nom. nominal

Source: SO SR; Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

### Development of the main indicators of the agriculture<sup>1</sup> and food sectors<sup>2</sup>

The data of the SO SR shows that the main economic indicators<sup>3</sup> in the Slovak agriculture in 2023 compared to 2022 mostly grow slightly, with the exception of a small decline in the share of gross fixed capital formation and employment. The increase in the share of agriculture in the gross value added of the Slovak economy at constant prices (+0.27 pp) and the increase in the share of intermediate consumption (+0.32 pp at constant prices and +0.26 pp at current prices) appear to be significant. The largest increase (+0.59 pp) was seen in the share of agriculture in average wages.

For the Slovak food, beverages and tobacco products manufacturing sector, all observed shares for 2023 increased, most notably the share of gross fixed capital formation at current and constant prices.

According to preliminary data, the negative balance of foreign trade in agri-food products of the Slovak Republic in 2023 amounted to  $\leq$  2.2 billion, while in the previous year it was  $\leq$  -1.9 billion.

<sup>&</sup>lt;sup>1</sup> This includes crop cultivation, animal production, hunting and related services; forestry and logging; fisheries and aquaculture

<sup>&</sup>lt;sup>2</sup> This includes production of food, beverages and tobacco products

<sup>&</sup>lt;sup>3</sup> Evaluated indicators: gross value added, intermediate consumption, gross production at current prices, GFCF, employment, average nominal monthly wage

Table 2 Share of the agriculture and food sectors in the basic indicators of the Slovak economy

	F	Percentage sha	re	Difference
Indicator	2021	2022	2023*	2023-2022
Share of agriculture in:				
gross value added (CP)	2.04	2.16	2.19	0.03
gross value added (KP)	1.87	1.60	1.88	0.27
gross production (CP)	2.03	2.01	2.19	0.18
intermediate consumption (CP)	2.02	1.92	2.18	0.26
intermediate consumption (KP)	2.00	1.74	2.06	0.32
gross fixed capital formation (CP)	3.99	4.57	4.53	-0.04
gross fixed capital formation (KP)	3.89	4.74	4.25	-0.49
employment	2.87	2.87	2.84	-0.03
average wage	77.04	77.38	77.97	0.59
Share of production of food, beverages and tobacco products for:				
gross value added (CP)	1.47	1.38	1.64	0.26
gross value added (KP)	1.48	1.27	1.35	0.07
gross production (CP)	2.03	2.17	2.38	0.21
intermediate consumption (CP)	2.43	2.64	2.89	0.25
intermediate consumption (KP)	2.44	2.57	2.85	0.27
gross fixed capital formation (CP)	1.63	1.56	1.88	0.32
gross fixed capital formation (KP)	1.66	1.56	1.85	0.29
employment	2.02	1.99	2.01	0.02
average wage	82.51	82.21	-	-
Share of the foreign agri-food trade in:				
export	4.76	4.74	4.77	0.03
import	6.35	7.09	7.12	0.02

Source: SO SR: requested data from SO SR; breakdown by the SK NACE statistical classification; national accounts methodology

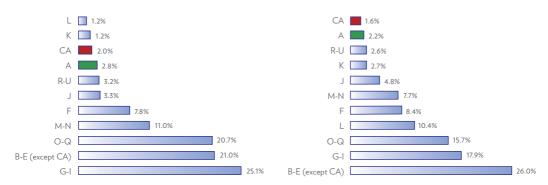
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

 $Explanatory \ notes: *preliminary \ data \ for \ 2023; \ constant \ prices \ (KP) - constant \ prices \ calculated \ by \ chain \ linking;$ 

the reference year is 2020, current prices (CP) – current prices

#### Chart 3 Shares\* of total employment in Slovakia

#### Chart 4 Shares\* in gross value added in the Slovak economy



<sup>\*</sup>shares of individual sectors in the Slovak economy for 2023 Explanatory notes:

A: Agriculture, forestry and fisheries; B-E: Industry (of which B: Mining and quarrying; C: Manufacturing, of which CA: Manufacture of food, beverages and tobacco products; D: Electricity, gas, steam and air conditioning supply; E: Water supply; sewerage, waste management and remediation activities); F: Construction; G: Wholesale and retail trade, repair of motor vehicles and motorcycles; H: Transport and storage; I: Accommodation and catering services; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support services; O: Public administration and defence, compulsory social security; P: Education; Q: Human health and social work activities; R: Arts, entertainment and recreation; S: Other service activities; T: Activities of households as employers; U: Activities of extraterritorial organisations and bodies



# 2. ECONOMIC PERFORMANCE

## 2.1. Sectoral results based on the economic account for agriculture

The results of the second estimate of the 2023 Economic Agricultural Account (EAA) show that the economic performance of the agricultural sector, as measured by the sector's income generation and use, declined year-on-year. Business in agriculture was profitable.

Table 3 Development of the creation and use of income in the agricultural sector (€ million)

Indicator	Average	2022	2023	In	dex
Illuicator	2018 – 2022	final data	second estimate	2023/2022	2023/Ø 2018-2022
Product subsidies	2,220.96	2,723.80	2,593.90	95.23	116.79
CW	23.50	18.50	24.20	130.72	103.14
INASA	156.50	180.30	192.90	106.99	123.28
IIC (-)	150.30	165.30	176.30	106.63	117.27
TAO	68.70	86.86	83.27	95.86	121.21
Intermediate consumption	2,482.60	3,001.10	2,904.00	96.76	116.98
GVA	1,823.50	2,112.40	2,033.00	96.24	111.49
FCC	659.10	888.70	871.00	98.01	132.17
NVA	244.40	274.20	322.70	117.71	132.07
ČPH	414.70	614.60	548.30	89.22	132.22
Generation-of-income account					
Compensation of employees	600.80	618.80	622.90	100.66	103.68
Other taxes on production	52.80	56.90	59.20	104.04	112.07
Other subsidies on production	559.20	507.90	465.70	91.70	83.28
NOS or NIIA	320.30	446.70	332.00	74.31	103.63
Entrepreneurial income account					
Rent	87.50	94.10	97.90	104.04	111.90
Interest	36.40	32.50	33.40	102.77	91.62
NEI	196.50	320.20	200.70	62.69	102.17

Source: EAA SR 2018-2023

Meaning of abbreviations: GAP – gross agricultural production, CW – contract work, INASA – inseparable non-agricultural secondary activities, IIC – intra-industry consumption, TAO – total agricultural output, GVA – gross value added, FCC – fixed capital consumption, NVA – net value added, NOS (NIIA) – net operating surplus (net income from independent activity), NEI – net entrepreneurial income

Income generation in agriculture in 2023 was influenced mainly by the following factors:

- compared to the previous year, the total agricultural output at basic prices fell by 3.24% due
  to a fall in the gross agricultural output by 4.77%, with an estimated 6.99% increase in the
  value of services and a 6.63% increase in the non-separable non-agricultural secondary
  activities,
- the huge increase in price levels on both the input and output side of the previous year was halted, which was reflected in the value of the gross agricultural output, while a fall in the price level by 16.83% and an increase in the produced quantities by 14.77% contributed to the fall in its value.
- gross agricultural production was influenced by a decrease in the gross plant production by 12.47% and an increase in the gross animal production by 11.47%,
- other subsidies on production decreased by 8.30%, while the amount of subsidies on pro-ducts also increased by 30.72%,
- the value of intermediate consumption decreased by 3.76% and was the result of a 3.06% lower volume of quantities consumed, with the price level of inputs being slightly lower, namely by 0.73%,
- the lower value of gross value added, together with a 17,71% increase in fixed capital consumption, was reflected in a lower net value added of 10,78%,
- the fall in the value of net operating surplus as an important category of income generation by 25.69% was mainly influenced by a fall in net value added, with a slight increase in the compensation of employees as well as other output taxes and a fall in other output subsidies, while the net entrepreneurial income in the year-on-year comparison was influenced by this important factor.

# 2.2. Economic outturn in primary agricultural production

According to the preliminary data for 2023, agriculture achieved not just **a positive economic outturn**, but a pre-tax profit of around € 228 million. Compared to 2022, when the agriculture sector made record profits, 2023 saw a significant decline of 38.3%. The economic outturn for 2023 was higher by 40% compared to the five-year average of 2018 – 2022, mainly due to an increase in revenue from sales of own products of animal origin (+28.0%) and plant origin (+20.1%). Sales of own products accounted for an average of 54% of the total revenues of primary agricultural production enterprises.

Subsidies played an important role in the performance of agricultural enterprises, as without them most enterprises would be unprofitable. The total volume of financial support to Slovak agriculture increased year-on-year by 9.6% to  $\leqslant$  807.8 million. Out of this, 63% was provided from EU sources. The share of total subsidies in revenues increased to 18.5% year-on-year, of which the share of direct payments was 7.4%.

Index Average Indicator 2022 2023 2018 - 2022 2023/Ø 2018-2022 2023/2022 Revenue 3,488.4 4,216.0 4,361.8\* 103.5 125.0 Costs 3,325.5 3,846.2 4,133.6\* 107.5 124.3 228.2\* Profit/loss before tax 162.9 369.8 61.7 140.0 Value added 414.2 508.6 522.0 102.6 126.0 Sales of own products 1.914.8 2.352.8 2.360.2 100.3 123.3 - of which: plant products 1,149.0 1,460.0 1,379.8 94.5 120.1 765.8 892.7 980.4 109.8 animal products 128.0 Cost-effectiveness 4.9 9.6 5.5 Income costs 95.3 91.2 94.8 Total subsidies 859.8 736.9 807.8 109.6 94.0 277.3 of which direct payments 416.9 323.7 116.7 77.6

17.5

6.6

85.7

18.5

7.4

71.1

Table 4 Basic agricultural economic indicators (€ million, current prices, percentage share)

24.6

12.0

75.6

Share of total subsidies in revenues

Share of direct payments in revenues

Share of profitable enterprises\*\*

# The economic performance of agricultural enterprises were influenced by several factors in income, expenses and production:

- the rate of growth in **costs exceeded the moderate growth** in the revenues of agricultural enterprises, with a consequent profit for **primary agricultural production**,
- an increase in the sector's production performance, with a 4.8% fall in the gross agricultural output at current prices, mainly due to significantly declining prices of selected crop commodities, while the value of gross livestock output increased (+12%),
- a significant year-on-year fall in the prices of cereals (-32%) and oilseeds (-35%) at the level of primary producers, which subsequently also led to a reduction in the revenues for crop production, despite higher yields per hectare; on the other hand, the prices of livestock commodities increased on average by 15,1% year-on-year, with the highest increase in the price of table chicken eggs (+38,6%),
- stagnant growth in the revenues from the sale of own products (+0.3%), as a result of a slight fall in the revenues for plant products (-5.5%) and a stronger growth in the revenues from the sale of livestock products (+9.8%),
- decrease in the dominant share of plant production (61%) in the structure of gross agricultural production (at current prices) and a matching increase in the share of animal production (39%),
- gradual stabilisation of the prices of agricultural inputs, the index of prices of the supplies

Source: SO SR; Agricultural Paying Agency - data about subsidies and direct payments

 $<sup>^{\</sup>star}$  data for 2023 are estimates based on data from IS MARD SR,  $^{\star\star}$  data from IS MARD SR

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

of products and services to agriculture remained stable year-on-year, while the prices of individual inputs developed differentially. After last year's huge increase, there was a year-on-year decrease in the prices of fertilisers and soil improvers (-16.1%), motor fuels (-11.3%) and animal feeds (-5.4%),

- growth in the total agricultural support, i.e. an increase of 9.6% due to a 20.4% year-on-year increase in the uptake of EU support. A large part of the total support was provided from EU sources in 2023 as well (63%). The volume of the support paid from the Slovak national budget decreased by 4.9% year-on-year,
- production growth of most plant production commodities, mainly due to an increase in hectare yields, with the exceptions being mainly grain legumes, temperate fruits and cider grapes,
- slight increase in the number of pigs (+6.2%) and poultry (+3.5%), with an impact on a slight growth in the production of livestock products. There were slight declines in cattle and sheep numbers,
- reduction in the number of agricultural workers (-11.7%), especially those working in crop
  production and mixed farming; a positive trend was reflected in a reduction in the average
  age of agricultural workers (46.3 years),
- unfavourable weather conditions during the spring and summer months, which manifested themselves at the beginning of the year as unusually warm weather with heavy atmospheric precipitation, with overwintering of winter crops in good condition. Later, soil moisture deficiency was seen in March in south-western and western Slovakia. The cold and wet weather during the spring months resulted in poor flowering and pollination of fruit trees and favourable conditions for the spread of diseases and pests. In the summer months, shorter dry and wet periods alternated, with drought peaking in the second half of July. Normal moisture conditions prevailed during the autumn¹,
- a slight increase in lending (+4.7%) despite a significant year-on-year increase in interest rates from 2.4% to 5.3%; long-term loans were sought after mostly,
- 5.3% year-on-year *increase in the average rent* for agricultural land,
- the tax burden of agricultural land, which rose by 29.2% year-on-year.

In 2023 the level of revenues ( $\leqslant$  4,361.8 million) exceeded the level of costs ( $\leqslant$  4,133.6 million). Despite the gradual stabilisation of agricultural input prices, the costliness of yields increased year-on-year and the profitability of the costs of agricultural enterprises decreased, but the values of these indicators were above average compared to the five-year average.

The most important cost item for agricultural enterprises was the cost of inputs, i.e. material and energy consumption, which accounted for 37.8% of total costs, while the value of their share in total costs remained unchanged year-on-year. In general, the cost structure of material and energy consumption depends on the seasonality and production orientation of the enterprise. Enterprises with a focus on animal production report a higher share of material and energy consumption costs in total costs compared to enterprises with a focus on plant production. The second most important cost item was personnel costs, with a share of 16%.

<sup>1</sup> https://www.shmu.sk/

In 2023 the sales of own products accounted for 54% of the total revenues of enterprises, i.e.  $\leqslant$  2,360.2 million. Of this, the sales of plant products amounted to  $\leqslant$  1,379.8 million and the sales of livestock products amounted to  $\leqslant$  980.4 million. Sales of own products increased by 0.3% year-on-year, mainly due to a dynamic growth in the revenues for products of animal origin (9.8%) and a decrease in the revenues for plant products (-5.5%).

Based on the data of IS MARD SR for 2023, the average value of the economic outturn of agricultural entities, which provided agricultural primary production in the regular operating mode, represented a profit of  $\leqslant$  145.77 per hectare of agricultural land; however, after deduction of the paid subsidies, there was a loss amounting to  $\leqslant$  -158.67 per hectare.

In 2023 as in previous years, total subsidies from European and national sources accounted for a significant share of enterprises' revenues (18.5%); their share increased by 1 pp year-on-year. The growth in the value of the paid subsidies had a positive impact on the economic outturn of enterprises. In terms of ensuring the continuity of financing of the operational needs of agricultural enterprises, the provided support, loans and revenues from the sale of own products were decisive.

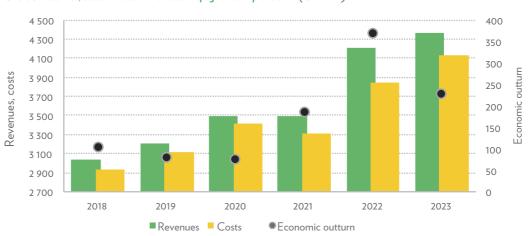


Chart 5 Revenues, costs and economic outturn of agricultural production (€ million)

Source: SO SR, – data for 2018 – 2022 is final; data for 2023 is estimated based on the data from IS MARD SR Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

The majority of both economic outturn and production is now produced by legal persons and operations on rented land. In 2023 the share of profitable enterprises (legal entities) decreased significantly year-on-year (-14.6 pp), while there were no significant changes in the case of SEF enterprises.

Since Slovakia's accession to the EU, agricultural financing and subsidies have played an important role in national development, sustainability, and ensuring the stability of the agricultural sector in Slovakia. The EU CAP reinforced banks' confidence in agriculture and subsidies became a guarantee of loan repayment. Alongside the revenues that enterprises generate themselves and subsidies from the EU and national sources, borrowed capital (loans and leasing) also plays a key role in the financing and stability of enterprises.

#### 2.2.1 **Loans**

The volume of loans provided to the sector in  $2023^1$  reached  $\leq 1,097$  million. This represents a share of 1.33% in total loans to the Slovak economy.

Table 5 Loans for agriculture (€ ´000, index in %, percentage share)

	Average	2022	2027	Inc	dex
Loans	2018 – 2022	2022	2023	2023/2022	2023/Ø 2018-2022
Short-term	331,650	392,535	220,940	56.3	66.6
Mid-term, 1–5 years	160,954	146,978	276,197	187.9	171.6
Long-term, >5 years	406,247	508,399	600,350	118.1	147.8
Total loans	898,852	1,047,912	1,097,487	104.7	122.1
of which: defaulted loans	54,032	55,477	56,791	102.4	105.1
Loans in sector as a percentage of loans in the national economy	1.31	1.32	1.33	-	-

Source: NBS https://www.nbs.sk/sk/statisticke-udaje/financne-institucie/banky/statisticke-udaje-penaznych-financnych-institucii/uvery, Loans by the statistical classification of economic activities

Note: The data includes loans for forestry and fisheries. The data for 2018 – 2022 are final, the data for 2023 is preliminary Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

The largest volume of loans was provided for a period of more than five years to finance tangible assets such as land, buildings and constructions, and machines and equipment. Some loans were used for technical development - mechanisation, automation and robotisation, with the aim of replacing human labour with technology. This made it possible to reduce the number of workers in the sector without any decrease in output.

1 100 000 900 000 800 000 700 000 600 000 400 000 300 000 200 000 0

2021

Short-term — Medium-term — Long-term — Total

2022

2023

Source: NBS; Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

2020

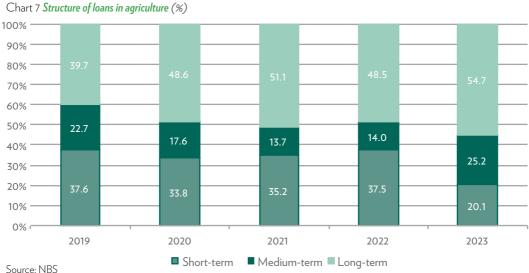
2019

Chart 6 Development of loans in agriculture (€ ′000)

18

<sup>&</sup>lt;sup>1</sup> The data is as at 31 December 2023

Long-term loans with a maturity of over 5 years were granted in the amount of  $\leqslant$  600 million. In 2023 the trend of recent years was reversed, with short-term loans being the second most important group in terms of the total volume of the provided loans in the long term. In 2023 we can see a significant year-on-year decline in the volume of the provided short-term loans with a maturity of less than 1 year, which accounted for  $\leqslant$  221 million of total loans. Medium-term loans with a maturity from 1 to 5 years were granted in the amount of  $\leqslant$  276 million. This represents a significant year-on-year increase. The volume of defaulted loans from the value of total loans amounted to  $\leqslant$  57 million.

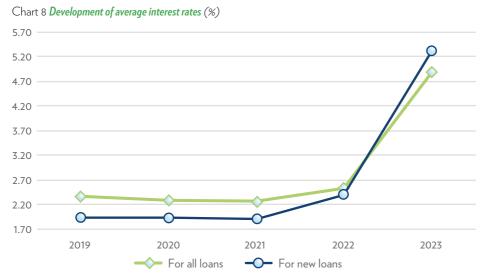


Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

**Short-term loans** made up 20.1% of total granted loans, which represents a year-on-year decrease of 17.3 pp. These loans ensure agricultural enterprises have the necessary liquidity to cover any cash-flow shortfalls. They are important for helping enterprises to get through the period between the time when funds are needed and the time when they receive subsidies, which depends on the system by which the APA reimburses approved payments from EU funds. Loans of up to 100% of the value of the expected direct payments are assessed as less risky loan products for the bank with sufficient repayment guarantees. A significant percentage of enterprises do not have sufficient assets to secure loans. Most loans are of the revolving type, or from the point of view of investments, only of a mid-term nature. In terms of the beneficiaries of short-term loans, SMEs dominated (85.7 %).

As a result of the extended possibilities to draw on bank loans up to 100% - 150% of the expected support from the APA, and probably also due to the slowdown in the process of administration of direct payments for 2023, there was a change in their shares in terms of short- and medium-term loans. **Medium-term loans** with a maturity of 1 - 5 years accounted for 25.2% in the loan structure, with a year-on-year increase of 11.1 pp. In terms of loan beneficiaries, SMEs dominated (92.0%).

The most requested loan, especially among small and medium-sized enterprises (75.4%), was **long-term loans**, which accounted for more than a half of all loans granted (54.7%).



Source: NBS
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Despite the significant increase in interest rates in 2023 (with rates for new loans rising from 2.4% in 2022 to an average level of 5.3% in 2023), there has been a year-on-year increase in loans by 4.7%. The year-on-year increase was 87.9% for medium-term loans and 18.1% for long-term loans. For short-term loans, there was a year-on-year decrease of 43,7%.

Investments in tangible fixed assets in the form of co-participation in RDP projects also help maintain the interest in drawing investment loans over the years; this provides agricultural enterprises with space for the development and expansion of business activities, especially in the following areas:

- acquisition of agricultural machinery, technology and intellectual property,
- procurement of buildings and modernisation and reconstruction of property,
- renewal of their vehicle fleets,
- securing cultivated biological resources,
- financing the purchase of agricultural land, or other land into direct ownership,
- acquisition financing,
- financing of other investment needs.

Guarantees have been made available to banks as a financial instrument to encourage the provision of accessible bridge loans to agricultural enterprises.

Banks may also offer targeted credit products to finance the purchase of agricultural land or to reimburse the cost of prior purchase. Land can be in whole parcels or in the form or co-ownership shares. Built-up land under operational buildings can also be financed. The banks require that special loans can be used for their defined purpose and nothing else. Analysis of credit terms

and conditions shows that the most common security types requested by banks include the pledge of the land for which the loan is provided or other real estate and redirection of insurance benefit (e.g. from harvest insurance) amongst other forms of security acceptable to the bank.

In some products, the maturity period is extended to 25 (30) years. In addition to the standard conditions for obtaining a loan (an acceptable financial situation based on a financial analysis conducted on the basis on financial statements), banks also require certain specific conditions to be met.

#### 2.2.2. Taxes

The development of the agricultural business environment is also affected by the **applicable tax policies**. In the agricultural sector, there are currently special tax concessions under the state aid scheme for the granting of aid in the form of environmental tax concessions (Green Diesel) and tax exemptions for motor vehicles used in agriculture.

The following data is for a sample of IS MARD SR enterprises, which is variable over the years.

In 2023, the total direct taxes paid by the agriculture sector were higher than in the previous year. The payments of agricultural enterprises to state and municipal budgets amounted to  $\leq$  119.5 million, which represents a year-on-year increase of 12.3%.

Table 6 Direct taxes and payments to agricultural funds (€ '000)

la Bastanlaran	Average	2022	2027	dex	
Indicator/year	2018 – 2022	2022	2023	2023/2022	2023/Ø 2018-2022
Direct taxes	70,163	106,364	119,479	112.3	170.3
- income tax	32,491	63,673	64,661	101.6	199.0
- property tax	35,624	40,711	52,296	128.5	146.8
of which on: land*	29,769	35,150	45,424	129.2	152.6
buildings*	5,855	5,561	6,872	123.6	117.4
– motor vehicle tax	2,049	1,980	2,522	127.4	123.1
Payments to funds**	113,972	103,380	169,802	164.3	149.0

Source: Information sheets of MARD SR (IS MARD SR)

Note: Data from a sample of enterprises in IS MARD SR. \* In 2022 and 2023: Taxes and other charges on buildings.

Taxes and other charges on land. \*\* In 2022 and 2023: Employer-paid insurance premiums (on gross wages)

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

In the IS MARD SR enterprises sample we can see a year-on-year increase of 1.6% in income taxes, representing a 54% share in the structure of direct taxes.

Property taxes amounting to  $\leqslant$  52.3 million in 2023 represented a 44% share in the structure of direct taxes, and increased by 28.5% year-on-year. These taxes were crucial for the budgets of towns and villages, which administer them. Real estate tax is regulated by Act No 582/2004 on

local taxes and local fees for municipal waste and minor construction waste, as amended, which specifies real estate tax rates, but at the same time allows municipal authorities to adjust tax rates (lower or higher) in line with local conditions. Of the real estate taxes for agriculture, 86.9% was land taxes ( $\leqslant$  45.4 million), with a year-on-year increase of 29.2%. The tax base for land (arable land, hop gardens, vineyards, orchards, permanent grassland) is the value of the land without vegetation. The tax on buildings rose by 23.6% in 2023. Motor vehicle tax collections are up by 27.4% year-on-year. The volume of payments to the funds in the amount of  $\leqslant$  169.8 million detected a year-on-year increase of 64.3%.

Chart 9 Development of direct taxes in agriculture (€ '000)



Source: Information sheets of MARD SR (IS MARD SR)

#### 2.2.3. Insurance

Agriculture is a high-risk sector not only because of the biological nature of production but also because of changing climatic conditions and price volatility. These factors can have a strong impact on farmers' incomes and the stability and competitiveness of enterprises.

No functional risk management mechanisms have so far been developed on the systemic level to provide compensation for losses due to high risks that commercial insurers do not cover – those that are difficult to insure or uninsurable.

The risks affecting agricultural production in Slovakia are currently addressed in the following ways:

- systemic measures, i.e. insurance of crops, animals and property by commercial insurance companies (insurable risks),
- insurance support: under the state aid scheme for insurance premium payments in the primary production of agricultural products and under the CAP 2023 2027 intervention,
- ad-hoc government measures from the state budget for catastrophic damage.

Commercial **insurance** is a tool for addressing the risks involved in agricultural production, by partially mitigating and eliminating production losses and property damage suffered by agricultural enterprises due to unforeseeable events. It compensates for the loss of revenues resulting from damage to crops, animals and the assets of agricultural enterprises. Damage compensation is mostly of a local rather than general nature. Insurance in agriculture is voluntarily declared in the contractual terms and conditions of commercial insurance companies. It is based on the redistributive process of a centralised fund in insurance companies consisting of the insurance premiums of agricultural enterprises. Not all risks are covered by insurance. In addition to the options offered by commercial insurance, enterprises have also protected themselves against risks by optimising and diversifying their product structure, by building up their own financial reserves, by entering into contracts, and by hedging – using exchange-traded commodity options and futures to protect against losses resulting from large fluctuations in financial markets and commodity prices.

The following data is for a sample of IS MARD SR enterprises, which is variable over the years.

In 2023, agricultural enterprises insured assets, crops and animals with commercial insurance companies. Of the insurance premiums paid in the amount of  $\leqslant$  39.8 million, 39.2% ( $\leqslant$  15.6 million) was paid to agricultural holdings as insurance benefits. Paid insurance premiums increased by 26.5% year-on-year, and insurance benefit increased by 69.2% year-on-year. A year-on-year increase in losses was recorded only in the categories of property and crops. In 2023, the insurance benefit in the case of the insurance claims received for damage to animals reached the approximate level of pre-2021 claims – in 2021 and 2022 these claims were extremely high also due to the compensation of pig farmers who were ordered to take veterinary measures to kill their pigs due to African swine fever.

Table 7 Insurance in agriculture (€ '000)

	Average	2022	2027	Index			
Indicator/year	2018 - 2022	2022	2023	2023/2022	2023/Ø 2018-2022		
Insurance premiums	25,659	31,436	39,782	126.5	155.0		
- property	15,375	16,836	22,582	134.1	146.9		
- crops	8,300	12,001	13,991	116.6	168.6		
- animals	1,984	2,598	3,209	123.5	161.7		
Insurance benefit	10,100	9,231	15,614	169.2	154.6		
- property	5,690	3,981	8,577	215.5	150.7		
- crops	2,818	3,110	6,816	219.2	241.9		
- animals	1,592	2,140	221	10.3	13.9		
Insurance benefit as a percentage of premiums	39.4	29.4	39.2	-	-		

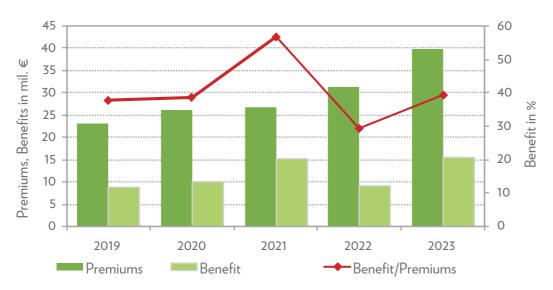
Source: Information sheets of MARD SR (IS MARD SR)

Note: Data from a sample of enterprises in IS MARD SR.

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

In the long term, property insurance is a priority for farmers, it accounted for 56.8% of total insurance premiums in 2023, with a year-on-year increase of 34.1%. It accounted for 38% of insurance benefit. Crop insurance accounts for 35.2% of the total premiums paid, representing a 16.6% increase year-on-year, with a 48.7% share of the insurance benefit paid. Animal insurance increased by 23.5% year-on-year but has long accounted for only a small part of premiums.

Chart 10 **Development of insurance premiums and benefits in agriculture** (€ million, percentage share)



Source: Information sheets of MARD SR (IS MARD SR)

Commercial insurance companies offer insurance products covering a range of risks related to specific commodities, including:

- in crop production, in particular: insurance of grape vines against damage by spring frosts; insurance of crops against damage by ice, against wintering damage, against damage by selected natural hazards, against damage by natural events, against damage by floods, against damage by fires; insurance of pre-grown vegetable, tobacco, spice and aromatic plants; insurance against damage or destruction of fruit crops by ice, storm;
- in livestock production, in particular: insurance of livestock in the event of mass damage; insurance of individual livestock in the event of damage; insurance of cows in the event of individual damage; insurance of cows and high-calving heifers in the event of individual damage; insurance in the event of destruction of eggs in electric hatcheries and day-old poultry; insurance of livestock herds; insurance of livestock against dangerous disease; insurance of livestock against disease; insurance of poultry against disease; insurance of egg stocks of poultry affected by disease; insurance of breeding livestock purchased abroad; insurance of sows against individual damage; insurance of intensively reared rabbits.

In 2023, agricultural enterprises paid  $\leq$  17,200,000 in insurance premiums for crops and animals (excluding property insurance). The insurance benefits paid represented 40.9% of this amount ( $\leq$  7,037,000).

Table 8 Development of insurance premiums and benefits in agriculture in 2023 (€ '000, percentage share)

Indicator	Insurance premiums	Insurance benefit	Insurance benefits / premiums (%)		
Insurance together	39,782	15,614	39.2		
- property	22,582	8,577	38.0		
- crops	13,991	6,816	48.7		
- animals	3,209	221	6.9		
Crop and animal insurance	17,200	7,037	40.9		

Source: Information sheets of MARD SR (IS MARD SR)

Note: Data from a sample of enterprises in IS MARD SR.

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

The state continued to support insurance in 2023 by providing subsidies for insurance premiums in primary agricultural production. The purpose of the scheme is to provide aid to an enterprise active in the primary agricultural production for the payment of insurance premiums. Eligible costs are the costs incurred by the beneficiary of the payment of annual premiums to cover losses caused by any of the following factors:

- a) natural disasters
- b) adverse climatic events which can be compared to natural disasters and other adverse climatic events
- c) animal diseases, plant pests or protected animals

d) compensation for insurance premiums covering the costs of removal and disposal of dead livestock.

The measure allowed 1,016 eligible applicants to benefit from almost € 8 million in funding, with a year-on-year decrease of 2%. This amount was almost the same as in the previous year (0.08% reduction compared to the previous year). The subsidy covered up to 70% of eligible insurance costs.

In connection with the repeal of the Government Regulation No. 83/2017 Coll. and the transition under the CAP Strategic Plan, the submission of applications in the wine and vineyard sector under the National Support Programme 2019 – 2023 (hereinafter referred to as the "NSP") was terminated in the fiscal year 2022. The new European legislation NEPaR (EU) No. 2021/2117 also lays down the rules for the transition from the NSP under the Strategic Plan 2023 – 2027, in particular in relation to multiannual measures in the wine and vineyards sector. In accordance with Regulation (EU) No. 2021/2115, a harvest insurance intervention is also included in the Strategic Plan of the Slovak Republic with implementation of this intervention being expected from fiscal year 2027.<sup>1</sup>

# 2.2.4. Economic outturn of agricultural cooperatives and trading companies

There are substantial differences between agricultural cooperatives and trading companies in economic outcomes and other economic and financial indicators and these persisted in 2023. Based on data from the database of the Information Sheets of MARD SR<sup>2</sup>, 71% of legal entities were profitable, which meant a year-on-year decrease in the share by 15 pp. Based on a legal form, 66% of agricultural cooperatives made a (pre-tax) profit in 2023. Compared to the previous year, the share of profitable cooperatives decreased by 20 pp. The share of profitable enterprises also decreased year-on-year in the case of trading companies, but at a more moderate pace compared to agricultural cooperatives, i.e. by 12 pp to 74%.

Both legal forms achieved profits averaging  $\leq$  127.82 per hectare of utilised agricultural land, which represents a year-on-year decrease of 46.5%. After last year's record growth in agricultural profits, there was a significant reduction in 2023, particularly in the case of agricultural cooperatives, namely by 75% to  $\leq$  47.79 per hectare. The value of profits of trading companies fell by around 30%, dropping to  $\leq$  198.54 per hectare. Despite the marked year-on-year fall in the value of profits, the trading companies exceeded the cooperatives' results by  $\leq$  150.75 per hectare.

Subsidies were provided to both legal forms under the same criteria and conditions in 2023. After falling in the previous year, the subsidies increased by an average of 16% year-on-year (€ 336 per hectare of agricultural land) and made up a larger share of enterprises' total income.

<sup>&</sup>lt;sup>1</sup> Source: Agricultural Paying Agency: APA Annual Report 2023. Available on www.apa.sk

<sup>&</sup>lt;sup>2</sup> The economic and financial indicators are calculated per hectare of usable agricultural land – they were obtained from data collected by the MARD SR in the form of Information Sheets stored in the central database of the MARD SR. The assessed set includes enterprises of both legal entities and natural persons. As the Information Sheets capture data from agricultural entities that manage 86% of the utilised agricultural land area (data for 2023; SO SR), i.e. it is not an exhaustive set, the results are therefore converted to ha pp.

90 85 80 75 70 65 60 55 2019 2020 2021 2022 2023 **─**Total Agricultural cooperatives Trading companies

Chart 11 Profitable enterprises as a percentage of different organisational and legal forms (%)

Source: Information sheets of MARD SR (IS MARD SR)

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

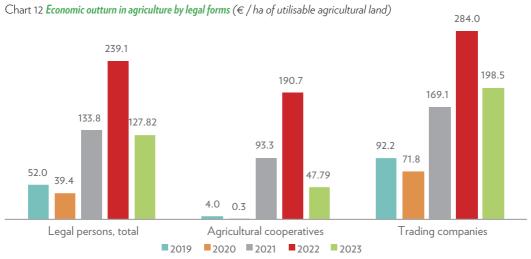
In 2023 the economic indicators deteriorated for both legal forms of enterprises, yet trading companies managed their funds more efficiently compared to agricultural cooperatives, which was reflected in a lower cost-effectiveness of trading companies' revenues. The higher operational efficiency of trading companies may reflect not just lower costs due to a lower level of animal production, and correspondingly lower personnel costs, but also significantly higher turnover of goods and services. Turnover (revenue from the sale of own products and services) was 50% higher for trading companies than agricultural cooperatives in 2023, reflecting higher production intensity, as shown by their material and energy consumption, which was 43% higher compared to production consumption in cooperatives.

Table 9 Economic data for agricultural enterprises - legal persons (€ / ha of utilisable agricultural land)

		Legal entities			cultural co	ooperatives	Trading companies			
Indicator	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	
Value added	511	459	89.7	478	385	80.5	529	512	96.8	
Total subsidies	290	336	115.9	284	320	112.7	296	350	118.2	
- non-investment subsidies	286	321	112.2	281	307	109.3	290	333	114.8	
Net turnover	2,111	2,297	108.8	1,552	1,610	103.7	2,559	2,856	111.6	
Income costs	91.5	95.6	+4.1 p.p.	91.4	97.8	+6.4 p.p.	91.4	94.4	+3.0 p.p.	
Debt-to-assets ratio	47.9	48.5	+0.6 p.p.	40.8	41.0	+0.2 p.p.	53.7	53.8	+0.1 p.p.	
Share of profitable enterprises (%)	85.7	71.1	-14.6 р.р.	85.8	65.6	-20.2 p.p.	86.4	74.1	-12.3 p.p.	

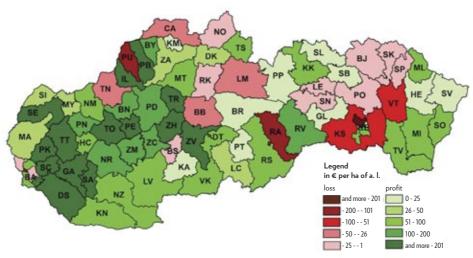
Source: Information sheets of MARD SR, MARD SR Central database (sample)

Differences in the effectiveness of financial management in different organisational and legal forms are the result of the structure of production with a preference for crop production over livestock production and a higher reduction in cost factors, especially personnel costs, which were lower by 11 % in the case of trading companies. The higher borrowing levels in trading companies (53.8%) compared to agricultural cooperatives (41.0%) reflect the higher economic creditworthiness of trading companies for commercial banks, for which a higher cash flow means better prospects for loan repayment.



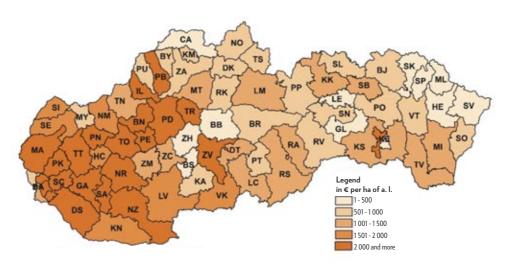
Source: Information sheets of MARD SR (IS MARD SR)
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Map 1 Profit/loss of legal entities in 2023 (in € per ha of agricultural land)



Source: Information sheets of MARD SR (IS MARD SR)
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

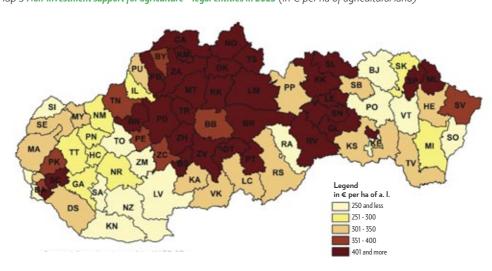
Map 2 Sales from the sale of own products - legal entities in 2023 (in € per ha of agricultural land)



Source: Information sheets of MARD SR (IS MARD SR)

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Map 3 Non-investment support for agriculture - legal entities in 2023 (in € per ha of agricultural land)



Source: Information sheets of MARD SR (IS MARD SR)
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

## 2.2.5. Economic outturn of self-employed farmers

In 2023, the Information Sheets of the MARD SR collected data on 1,140 self-employed farmers (SEF) – natural persons, who farm 9.6% of the total utilised agricultural land. There was significant variation in the economic outturn of SEFs depending on the area farmed. The percentage of profitable enterprises fell slightly from 77.7% to 77.4% year-on-year. In contrast to the previous year, there was a small increase in the proportion of profitable enterprises in the category of SEFs farming lands smaller than 100 hectares pp. There was a slight increase in the proportion of loss-making enterprises in the category of SEFs farming agricultural lands larger than 100 hectares, yet the proportion of profitable enterprises in this category was above average (85%).

The average economic outturn (revenues – expenses) of an SEF was a profit of  $\leqslant$  42 per hectare, a 49% year-on-year decrease. When the farmers' personal incomes are included in expenses at the rate of the average wage in agriculture, SEFs would have a loss of  $\leqslant$  43 per hectare of agricultural land. In average terms, only SEFs farming lands larger than 500 ha would make a profit.

Similarly to previous years, in 2023, according to the acreage of farmed land, the vast majority of SEFs (98%) farmed an area of less than 500 hectares of agricultural land, and 61% SEFs farmed less than 100 hectares. The highest economic outturns (revenues – expenses) were achieved by SEFs farming over 500 hectares of agricultural land ( $\leqslant$  93/ha). After taking into account the farmer's personal pension, SEFs farming lands smaller than 500 hectares would make a loss. As the size of the farmland farmed increased, the level of profit rose, as larger entities can use resources more efficiently, thus reducing costs, which can be seen as an advantage of the economies of scale. The economic outturn was affected by the cost of revenue, which increased by +1.6 pp year-on-year due to a more dynamic decrease in revenue (-12.9%) compared to expenditure (-11.6%).

Table 10 Economic outturn and the number of SEFs by interval of agricultural land acreage (€ / ha of utilisable agricultural land )

Acreage interval	3			conomic ( /enues - e		(revenue	mic outturn s - expenses - nal income)	Cost of revenue*		
1 2022   2024   2022   2023		Index 2023/2022	2022	2023	2022	2023				
up to 50	372	389	138.6	60.2	43.4	-353.2	-237.0	96.0	97.4	
50 - 100	226	301	24.5	26.8	109.4	-140.6	-99.7	98.1	98.0	
101 – 500	347	422	72.3	40.4	55.9	15.8	-12.4	95.5	96.7	
over 500	24	28	139.8	53.5	38.3	125.2	37.7	93.3	96.5	
Total	969	1,140	82.0	41.6	50.7	-15.7	-43.1	95.4	97.0	

Note: Data from a sample of enterprises in IS MARD SR.

After the last year's significant rise, the total revenues of SEFs dropped (-12.9%), mainly as a result of a considerable decrease in revenues for products and services (-31.5%). On the other hand, revenues for the sale of goods rose significantly by 38.1% year-on-year, increasing their share in total SEF income from 9% to 16%. The decrease in revenues was highest for farms up to 50 ha (-33.5%), while enterprises farming more had slower revenue fall. Despite the significant year-on-year decline in revenues for products and services, they continued to represent a decisive item in the income structure of SEFs (64%).

As in previous years, SEFs focused their production activity mainly on plant production, which was more cost-effective than animal production. Plant production sales made up 48% and animal production sales for 8% of total revenues. Income from the diversification of production and services (9%), mainly in the form of forestry and food production, agro-tourism and ancillary activities, also contributed to the growth of SEF income.

Considering the structure of expenses, the items with the largest shares were stocks (46.1%), other expenses (23.2%) and expenses for services (20.3%). Other expenses with lower shares included wages (5.9%), and payments of insurance and contributions to funds (4.4%).

After years of increasing the value of total SEF assets, there was an average 20% year-on-year decline in 2023. The decline in the value of total assets was seen in all size groups of enterprises, with the largest decline seen in the group of enterprises under 50 ha pp (-29.2%).

Table 11 Assets and liabilities of SEFs by agricultural land intervals (€ / ha of utilisable agricultural land)

	Total asset	:S		Total liab	ilities	of which: loans			
Acreage interval of agricultural land	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022
up to 50	4,240	3,002	70.8	901	821	91.1	391	379	96.8
50 - 100	1,762	1,490	84.6	435	382	88.0	193	227	117.2
100 - 500	2,046	1,655	80.9	725	558	76.9	302	290	95.9
over 500	3,015	2,494	82.7	992	880	88.7	419	299	71.5
Total	2,335	1,867	80.0	743	595	80.1	313	289	92.1

Source: Information sheets of MARD SR, MARD SR Central database

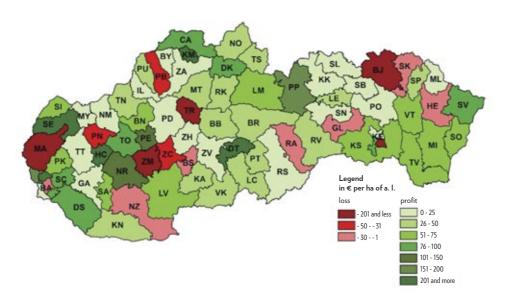
Note: Data from a sample of enterprises in IS MARD SR.

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Total liabilities of SEFs fell by 19.9% year-on-year, while the volume of loans also fell by 7.9 %. The decrease in the value of total liabilities was seen in all size categories of SEFs.

More detailed information on economic outturns, numbers of enterprises and the areas farmed by SEFs in each district can be found in the following maps.

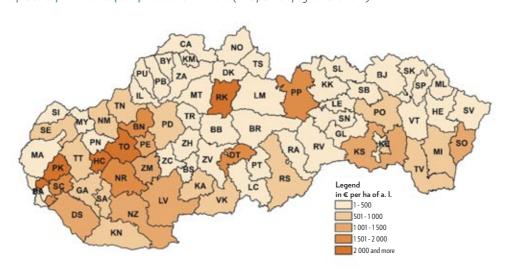
Map 4 Profit/loss of SEF in 2023 (in € per ha of agricultural land)



Source: Information sheets of MARD SR (IS MARD SR)

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Map 5 Sales from the sale of own products - SEF in 2023 (in € per ha of agricultural land)



Source: Information sheets of MARD SR (IS MARD SR)

Map 6 Non-investment support for agriculture - SEF in 2023 (in € per ha of agricultural land)

Source: Information sheets of the MARD SR (IS MARD SR)
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

#### 2.3. Economic outturn in the food sector

According to **preliminary data** from the SO SR for 2023, the Slovak food sector (production of food, beverages and tobacco products) made a pre-tax **profit** of  $\leq$  437.86 million.<sup>1</sup>

 $\textit{Table 12 Development of economic outturn in the production of food, beverages and to bacco products} \ ( \in \mathsf{million})$ 

Indicator	Average* 2018 – 2022	2021 final**	2022 final**	2023 prelim.***
Revenue	5,425.50	5,469.63	6,823.67	6,732.73
Costs	5,259.97	5,280.85	6,601.58	6,294.87
Profit/loss before tax	165.53	188.78	222.09	437.86

Source: SO SR

Note:  $^*$  2018 – 2022: e-database DATAcube, SO SR – from final data;  $^{**}$  from the annual processing of exhaustive statistical surveys of the SO SR for corporations with 20 or more employees and sample surveys for corporations with 0 – 19 employees;  $^{***}$  from SO SR se-publication: Results of quarterly surveys in industry of the Slovak Republic and production of selected products for 4Q 2023

<sup>&</sup>lt;sup>1</sup> The final economic outturn will be specified in Q2 2025.

The largest share in the production of products in Slovakia's food sector¹ belonged to enterprises with 20 or more² employees (324 enterprises), which in 2023 generated a positive pre-tax profit of  $\leqslant$  437.9 million, with a year-on-year increase³ by  $\leqslant$  143.6 million (+48.8%). In the group of enterprises with 100 or more employees, 87.5% were profitable.⁴

For 2023, we present the available preliminary data, which will be specified as final data in Q2 2025. Final values are given for the years 2021, 2022 and the average of the years 2018 to 2022.

Of the aggregated branches of the food and beverages industry listed below, only the processing and preserving of fish, crustaceans and molluscs including the manufacture of vegetable and animal oils and fats made a loss ( $\leq$  -1.9 million).

1,400

1,200

1,000

1,000

115

800

95

400

200

200

Revenues

Costs

Economic outturn

Chart 13 Revenues, costs, (pre-tax) economic outturn for the production of food and beverages in the Slovak Republic by sectors in 2023

Explanatory notes:

- 1 Processing and preserving of meat and meat products
- 2 Processing and preserving of fish, crustaceans and molluscs + manufacture of vegetable and animal oils and fats
- 3 Processing and preserving of fruits and vegetables
- 4 Manufacture of dairy products

- 5 Manufacture of grain mill products, starches and starch products
- 6 Manufacture of bakery and farinaceous products
- 7 Manufacture of other food products
- 8 Manufacture of prepared animal feeds
- 9 Manufacture of beverages

Source: Prod 3-04, SO SR

 $<sup>^1</sup>$  from the quarterly statistical reporting of the SO SR (preliminary); only the sum of food and beverage production

<sup>&</sup>lt;sup>2</sup> The report Prod 3-04 covers enterprises registered in the Companies Register, subsidised organisations that are market producers with 20 or more employees and organisations with 0 to 19 employees with annual revenues from own performance and goods of € 5 million and more (not including organisations with 0 to 19 employees with annual revenues from own performance and goods of less than € 5 million); weighting is applied; the survey covers all food production enterprises except companies producing tobacco products; this applies for the rest of this chapter.

<sup>&</sup>lt;sup>3</sup> Comparison of preliminary data for 2023 with preliminary data for 2022; once final data for 2023 is available, comparison with the 2022 final data will be possible.

<sup>&</sup>lt;sup>4</sup> Findings from the exhaustive part of the statistical survey, since the numbers of enterprises would be distorted in the sample part, as they are counted. The exhaustive survey applies to enterprises with 100 or more employees.

GREEN REPORT 2023 2. Economic performance

The highest profit was achieved by the sector of the manufacture of other food products<sup>1</sup> ( $\leq$  +143.1 million), manufacture of bakery and farinaceous products ( $\leq$  +85.2 million), manufacture of beverages ( $\leq$  +76.9 million) and processing and preserving of meat and meat products ( $\leq$  +49.3 million).

Furthermore, profits, though lower, were achieved by the sector of the manufacture of dairy products ( $\leq$  +37 million), processing and preserving of fruits and vegetables ( $\leq$  +22.2 million), manufacture of grain mill products, starches and starch products ( $\leq$  +18.3 million) and the manufacture of prepared animal feeds ( $\leq$  +7.7 million).

The economic outturn increased year-on-year in the following sectors: manufacture of bakery and farinaceous products ( $\in$  +69.2 million), manufacture of other food products ( $\in$  +44 million), manufacture of beverages ( $\in$  +24.6 million), manufacture of dairy products ( $\in$  +24.1 million), processing and preserving of fruits and vegetables ( $\in$  +19.3 million) and processing and preserving of meat and meat products ( $\in$  +17.8 million).

On the other hand, the economic outturn decreased most significantly in the sector of preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats ( $\leqslant$  -46.8 million), manufacture of grain mill products, starches and starch products ( $\leqslant$  -8.3 million) and manufacture of prepared animal feeds ( $\leqslant$  -0.4 million).

To achieve  $\leqslant$ 100 of revenue, enterprises incurred  $\leqslant$  93.50 in costs, while the income costs for the whole food sector decreased year-on-year (by  $\leqslant$  1.72). This indicator fell most significantly in the manufacture of bakery and farinaceous products sector, namely by  $\leqslant$  8.25. The opposite is the processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats, where this indicator increased by  $\leqslant$  12.00.

The most significant cost item in terms of share of costs was consumption of material, energy and other non-storable supplies (53.7%); additionally, the cost of goods sold contributed 14.1% to the total costs; consumption of purchased services 11.6%; labour costs 8.2%; depreciation of fixed assets 3.1% and mandatory contributions to statutory insurance paid by the employer for employers 2.8%.

Sales of own products and sales of services amounted to € 5,089 million, representing a year-on-year increase of 9.6% and accounted for 75.6% of revenues. Within the structure of total revenues from the sale of own products and services in the processing and preserving of meat and meat products. Revenues from the sale of own products and services increased year-on-year for all sectors, except for the manufacture of grain mill products, starches and starch products (-1.7%) processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats (-23.0%). The highest year-on-year increase in the revenues from the sale of own products and services was recorded in the processing and preserving of fruit and vegetables (+23.6%) and in the manufacture of other food products (+21.1%), followed by the manufacture of beverages (+16.5%), processing and preserving of meat and meat products (+13.5%), manufacture of bakery and farinaceous products (+10.1%), manufacture of prepared animal feeds (+6.5%) and manufacture of dairy products (+6.4%).

<sup>&</sup>lt;sup>1</sup> The sector includes the manufacture of sugar; manufacture of cocoa, chocolate and confectionery; processing of tea and coffee; manufacture of condiments and seasonings; manufacture of prepared meals and dishes; manufacture and preparation of homogenised and dietetic foods; and manufacture of other food products not included elsewhere.

Table 13 Cost of revenues in individual groups of food industries in Slovakia (€)

Výrobný odbor*	2022	2023	Δ 2023-2022
Processing and preserving of meat and meat products	97.08	96.27	-0.81
Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	88.58	100.58	12.00
Processing and preserving of fruits and vegetables	98.86	92.20	-6.66
Manufacture of dairy products	98.66	96.38	-2.28
Manufacture of grain mill products, starches and starch products	93.29	95.37	2.08
Manufacture of bakery and farinaceous products	97.95	89.70	-8.25
Manufacture of other food products	90.89	88.85	-2.04
Manufacture of prepared animal feeds	97.20	97.05	-0.15
Manufacture of beverages	94.24	92.40	-1.84
Manufacture of food and beverages, total	95.22	93.50	-1.72

Source: Prod 3-04, SO SR; calculations made by the MARD SR

Note: Preliminary results for a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, subsidised organisations that are market producers with 20 or more employees and organisations with 0 to 19 employees with annual revenues from own performance and goods of  $\leqslant$  5 million and more (not including organisations with 0 to 19 employees with annual revenues from own performance and goods of less than  $\leqslant$ 5 million); the survey covers all food production enterprises except companies producing tobacco products. The survey is conducted as a sample survey for a set of enterprises with 20 to 99 employees, and as an exhaustive survey for enterprises with 100 or more employees. Data for the sample part are calculated additionally; \*according to the NACE classification

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Revenues for goods accounted for 17.7% of total revenues, and total turnover accounted for 93.3% of revenues.

Value added in the sector as a whole increased by 24.2% year-on-year to € 1,383 million. The most significant increase was recorded in the processing and preserving of fruit and vegetables (+131.7%), and increases were also recorded in the following sectors: manufacture of prepared animal feeds (+56.7%), manufacture of other food products (+52.0%), manufacture of bakery and farinaceous products (+32.7%), processing and preserving of meat and meat products (+19.9%), manufacture of beverages (+18.2%), manufacture of dairy products (+16.6%). Other sectors showed a decrease in the value added: processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats (-74.7%), manufacture of grain mill products, starches and starch products (-9.2%). The largest slice of the sector's value added in 2023 belonged to the manufacture of other food products (24.9%), followed by the manufacture of bakery and farinaceous products (22.1%), processing and preserving of meat and meat products (17.4%), manufacture of beverages (14.4%) and manufacture of dairy products (10.1%).

GREEN REPORT 2023 2. Economic performance

150
130
110
90
70
50
30
10
-10
-30
-70
-70
90
1 2 3 4 5 6 7 8 9

Value added Revenue from own products and services

Chart 14 Year-on-year change 2023–2022 in value added and sales of own products and services in the Slovak food and beverage industry by sector (€ million)

#### Explanatory notes:

- 1 Processing and preserving of meat and meat products
- 2 Processing and preserving of fish, crustaceans and molluscs + manufacture of vegetable and animal oils and fats
- 3 Processing and preserving of fruits and vegetables
- 4 Manufacture of dairy products
- 5 Manufacture of grain mill products, starches and starch products
- 6 Manufacture of bakery and farinaceous products
- 7 Manufacture of other food products
- 8 Manufacture of prepared animal feeds
- 9 Manufacture of beverages

Source: Prod 3-04, SO SR; Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

More detailed data on the economy of the food industry can be found in tables 6-10 in the annexes.



#### 3. PRODUCTION AND THE AGRI-FOOD MARKET

# 3.1. Gross agricultural production

Preliminary data for 2023 indicate that gross agricultural production at current prices decreased by 4.8%. The decrease in gross agricultural production reflected a fall in the gross plant production by 13.0% and a simultaneous increase in the gross animal production by 12.0%. Plant production lost 5.79 pp of its share of gross agricultural production at current prices to reach 61.25%, while the share of animal production increased to 38.75%.

Measured at 2020 constant prices, gross agricultural production increased by 7.51%, with gross plant production increasing by 13.36% and gross animal production decreasing by 2.71%. In the structure of agricultural production at constant prices, the share of plant production grew to 62.03%.

Table 14 Development of gross agricultural production (GAP) (€ million)

Indicator	Average	2022	2023*	Index	Index 2023/	percent	age share
indicator	2018 – 2022	2022	2025	2023/2022	Ø2018-2022	2022	2023
GAP at 2020 prices	1,993.6	1,776.9	1,910.3	107.5	95.8		
of which: pl. p.	1,234.4	1,045.3	1,184.9	113.4	96.0	58.7	62.0
anim. p.	759.6	745.8	725.6	97.3	95.4	41.3	38.0
GAP at current prices	2,221.0	2,723.8	2,593.9	95.2	116.8		
of which: pl. p.	1,433.7	1,826.0	1,588.6	87.0	110.8	67.0	61.2
anim. p.	787.3	897.8	1,005.2	112.0	127.7	33.0	38.8

Notes:\* second estimate 2023; pl. p. – plant production; anim. p. – animal production

Source: SO SR, requested data, calculations made by the MARD SR

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

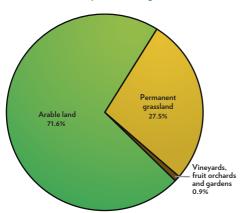
An overview of the commodity structure of agricultural output at current prices in 2022 and 2023 is given in the additional Table 11.

# 3.1.1. Plant production

The sowing area according to data from the SO  $SR^1$  was 1,307 thousand ha as of 20 May 2023, which meant a decrease in the cultivated area by 15,85 thousand ha (-1.2%) compared to the previous year. The share of the sown area in all utilised agricultural land in Slovakia increased slightly (+0.1 pp) to 71.6%.

<sup>&</sup>lt;sup>1</sup> SO SR – Inventory of areas sown with agricultural crops as of 20 May 2023 (www.statistics.sk)

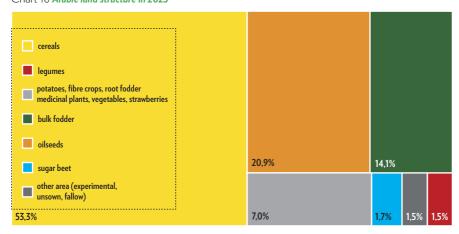
Chart 15 Structure of the utilised agricultural land



Source: SO SR; Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

Compared to 2022, in 2023 the total **cereal** cultivation area decreased by 31.5 thousand ha and reached the level of 697.3 thousand ha, mainly due to a smaller grain maize area (-34.6 thousand ha). Wheat was cultivated on an area by 4.5 thousand ha smaller than the year before. Winter wheat traditionally dominated, accounting for almost 97% of the total wheat cultivation area in 2023. The area where barley (+4.8 thousand ha), rye (+2.3 thousand ha) and grain sorghum (+1.1 thousand ha) was cultivated expanded. Malting barley (winter + spring) accounted for more than a half of the expanded total barley area (54.3%) and was grown on an area of 45.8 thousand ha in 2023.

Chart 16 Arable land structure in 2023



Source: SO SR; Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

In 2023 **oilseeds** were grown on 272.9 thousand a, which was by 22.9 thousand ha less than in the previous year. A lower area was recorded for soya beans by 18.9 thousand ha (-27,8%) and sunflower by 13.1 thousand ha (-17.9%). On the other hand, an increase in the cultivation area was recorded for rapeseed (+6.2 thousand ha), which reached 148.2 thousand ha. Of the other oilseeds, the area of poppy (+2.2 thousand ha) increased to 5.8 thousand ha and of oilseed rape (+1.3 thousand ha) to 2.2 thousand. ha.

**Grain legumes** were grown on 19.2 thousand ha. This represents an increase in the cultivation area by 24.2% (+3.7 thousand ha) compared to the previous year – it is the highest year-on-year increase in the legumes cultivation area since 2000. Peas occupies the largest area (81.4% of the total area of grain legumes), with fodder peas predominating, while its area increased by 2.8 thousand ha (to 9.7 thousand ha) in 2023. Of the edible legumes, the cultivation area of lentils expanded 3-fold (to 0.5 thousand ha) compared to the previous year, and the cultivation area of edible beans was radically reduced to 5.7 ha (-95.4%) – the grain beans cultivation area was compensated by green beans which are reported as a vegetable.

The decreasing trend in **potato** cultivation continued in 2023 as well and their cultivation area decreased by 300 ha to 5.4 thousand ha. Of these, the seed potatoes cultivation area is only 0.1 thousand ha, and the rest is a ware potatoes cultivation area which decreased by 4% year-on-year.

The sown area of **coarse fodder** also decreased. Although the annual fodder crops cultivation area increased by 3.2 thousand ha, mainly due to the expanded area of winter legume-cereal mixtures (+3.7 thousand ha), perennial fodder crops were cultivated on an area of 113 thousand ha, representing a decrease by 9.2 thousand ha compared to 2022. This was mainly due to lower areas of alfalfa (-3.6 thousand ha), perennial grasses (-2.7 thousand ha) and other clover crops (-2.5 thousand ha). The cultivation area of fodder roots decreased by almost a half from 138.9 ha (in 2022) to 79.8 ha (in 2023).

Table 15 Structure of plant sowing on arable land

		in thousand ha		Share of arable land (%)			
Plant group	2022	2023	difference 2023-2022	2022	2023	difference 2023-2022	
Cereals, total	728.83	697.29	-31.54	55.09	53.35	-1.74	
of which: wheat	410.25	405.77	-4.47	31.01	31.04	0.03	
barley	108.78	113.62	4.84	8.22	8.69	0.47	
grain maize	175.97	141.34	-34.63	13.30	10.81	-2.49	
rye	9.45	11.76	2.30	0.71	0.90	0.18	
Industrial sugar beet	19.24	21.89	2.65	1.45	1.67	0.22	
Potatoes	5.75	5.40	-0.35	0.43	0.41	-0.02	
Oilseeds, total	295.79	272.90	-22.89	22.36	20.88	-1.48	
of which: rapeseed	142.07	148.22	6.16	10.74	11.34	0.60	
sunflower	73.22	60.13	-13.09	5.53	4.60	-0.93	
soybean	67.95	49.08	-18.87	5.14	3.75	-1.38	
Grain legumes, total	15.47	19.21	3.74	1.17	1.47	0.30	
Coarse fodder on ar.l.	190.92	184.91	-6.01	14.43	14.15	-0.28	
Fodder roots	0.14	0.08	-0.06	0.01	0.01	0.00	
Fresh vegetables on ar.l.	8.53	8.76	0.22	0.64	0.67	0.02	

Source: SO SR – Inventory of areas sown with agricultural crops as of 20 May 2022 and 20 May 2023 on arable land without an estimate for home gardens
Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

The area of **grape-bearing vineyards** has been stabilised since 2021 and currently stands at 9.1 thousand. ha. There has been a slight increase in the cultivation area for **table vegetables** (+2.6%). A significant increase was seen in the case of **sugar beet** (+13.8%), bringing the total area to 21.9 thousand ha. On the other hand, there was a significant decrease in the area of **aromatic**, **spice and medicinal plants** (-36,7%; -2.7 thousand ha), of which the greatest decrease was seen in the area of medicinal plants, namely by 2.6 thousand ha.

2023 was confirmed as the warmest year since 1850 based on the global planet temperature data. In Slovakia, 2023 will also be remembered as one of the warmest years in the history and certainly wetter than many previous years. After an above-average warm winter at the beginning of the year, frosts in April caused problems in the vegetation development. The number of summer and tropical days was mostly normal to below normal. In early August, locally up to 20% of the annual rainfall fell in 3 days due to heavy thunderstorms with large hail and strong gusting winds. The end of summer was already exceptionally warm and this trend continued into autumn. The end of the year was rich in rainfall. In addition to the weather, growers of field crops also had to deal with the widespread presence of voles.

**Cereal yields** were higher thanks to favourable spring weather with plenty of moisture, resulting in hectare yields significantly above the 5-year average. According to the data of the SO SR<sup>1</sup>, cereal production increased by 921,8 thousand t (+27.3%) to 4.3 million t. The increase in wheat production in the context of the year-on-year decrease in sown area was mainly due to an increase in hectare yields by 1.15 t compared to the previous year. Higher production intensity was achieved in the case of all cereal types except rye, winter barley and oats. In the case of maize, yields above 1 million t were again achieved after low production in 2022, despite significantly smaller harvested areas.

In the **oilseeds** group, the production of all major crops increased year-on-year: rapeseed including canola by 21.8%, soybean by 34.5% and sunflower by 0.6%. The increase in production was significantly driven by higher hectare yields which were above the average of the previous year and also of the last 5 years. The winter rapeseed harvest amounted to 536.2 thousand t. Together with spring rapeseed and canola, the total production of rapeseed amounted to 538,1 thousand t. For sunflower seed, 171.6 thousand t of sunflower seeds were produced despite a 15.5% reduction in the harvested area. The same was true for soya beans, where the harvested area smaller by almost 25% yielded a production of 129.8 thousand t. Of the other oilseeds, mustard seed and linseed production increased year-on-year. The harvest of poppy and pumpkin seed lagged behind the 2022 harvest.

The total production of **legumes** decreased by 13.6% year-on-year, in which the production of edible legumes (peas, lentils, beans) decreased by as much as 33.7% and reached 11.8 thousand t. The production of fodder legumes increased by 2.6% due to an increase in the harvested area (+38%) to reach 22,8 thousand t.

**Potato** production was affected by a reduction in the cultivation area, but in the case of late potatoes the increased production intensity (+14.7 t/ha) resulted in a 10.9% higher yield compared

<sup>&</sup>lt;sup>1</sup> SO SR – Final data on the harvest of agricultural crops and vegetables in Slovakia for 2023.

Table 16 Harvested areas and hectare yields of selected crops

	Har	vested areas ('00	0 ha)		Hectare yield (t)	
Plant group	2022	2023	index 2023/2022	2022	2023	index 2023/2022
Cereals, total	711.49	694.16	97.6	4.75	6.20	130.6
of which: wheat	411.69	406.76	98.8	4.97	6.12	123.2
barley	109.12	114.19	104.6	5.10	5.28	103.5
grain maize	158.69	138.45	87.2	4.31	7.99	185.4
rye	8.96	10.43	116.3	3.55	3.38	95.3
Industrial sugar beet	19.48	22.13	113.6	56.29	63.62	113.0
Potatoes	5.73	5.43	94.7	22.78	25.02	109.8
Oilseeds, total	293.13	272.57	93.0	2.45	3.11	127.1
of which: rapeseed	141.42	148.57	105.1	3.12	3.62	116.1
sunflower	73.13	61.80	84.5	2.33	2.78	119.2
soybean	66.65	50.15	75.2	1.45	2.59	178.3
Grain legumes, total	14.90	18.13	121.7	2.69	1.91	71.0
Fodder roots	0.10	0.08	83.6	29.90	45.95	153.7
Fruit*	4.63	4.72	101.8	8.21	6.94	84.6
of which: apples	1.54	1.54	100.0	20.17	17.14	85.0
peaches	0.26	0.26	99.7	4.74	3.34	70.5
plums	0.58	0.58	99.1	2.15	2.05	95.2
apricots	0.19	0.18	98.8	2.49	1.46	58.8
Fresh vegetables**	8.09	8.72	107.8	16.51	16.40	99.3
of which: tomatoes	0.23	0.22	96.7	75.60	89.26	118.1
sweet pepper	0.09	0.08	90.6	20.91	19.38	92.7
sweet corn	2.92	3.50	120.1	9.41	10.84	115.1
green peas	1.14	1.32	116.0	3.34	2.69	80.4
dry onion	0.57	0.91	159.0	28.38	33.86	119.3
carrot / baby carrot	0.48	0.49	102.1	39.75	39.08	98.3
parsley and parsnip	0.14	0.17	118.3	24.11	22.73	94.3
cabbage***	0.25	0.24	97.3	28.97	28.42	98.1
spinach leaves	0.10	0.08	78.0	6.87	9.11	132.6
beetroot	0.58	0.27	47.6	1.52	4.88	320.5
Cider grapes and hybrids	7.71	8.85	114.8	5.78	4.53	78.4

Note: differences in the data are due to the rounding of numbers

Source: SO SR – Final data on the harvest of agricultural crops and vegetables in Slovakia for 2022 and 2023.

The harvest of fresh market vegetables includes the total harvest from areas where they are sown as a main crop and as a subsequent crop on arable land and/or from repeated areas, including under glass or high accessible cover Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

<sup>\*</sup>CCTIA - data from the Orchard Register (harvested area of registered orchards in thous. ha and average hectare yield in orchards in t/ha)

<sup>\*\*</sup> vegetables on arable land

<sup>\*\*\*</sup> white cabbage, red cabbage, Chinese cabbage

to 2022 (to 107.6 thousand t), while in the case of early potatoes a lower yield (-1 t/ha) resulted in a total production of 25.8 thousand t (-10% year-on-year).

The situation was also favourable for **fodder roots** where despite a decrease in the harvested area, an increase in the production intensity (+53.7%) created conditions for production amounting to 3.8 thousand t (+28.5%). Similarly, in the case of **coarse fodder** an increased yield led to a 25.8% increase in the production of annual fodder and a 36% increase in the production of perennial fodder.

2023 was also good for **sugar beet**, with a 28.4% year-on-year increase in production (to 1.4 million tonnes) and an average yield of 63.6 t/ha (+7.3 t/ha).

Thanks to a larger harvested area compared to 2022, it was possible to slightly increase the production of **edible vegetables** on arable land (+7%) to 143,000 tonnes. The production of sweet corn, which dominates table vegetables, increased by 38.3%, while the harvested area increased by 20.1%. The second crop in terms of harvested area is green peas which, despite an increase in the harvested area, failed to reach the previous year's production (-6.7%). Of the other vegetables, the production of green beans tripled (to 0.3 thousand t), the production of dry onion increased by almost 90% (to 30.8 thousand t) and the production of tomatoes also increased by 14.2% (to 19.5 thousand t).

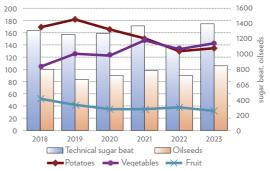
According to CCTIA<sup>2</sup>, the total harvested area of **registered orchards** was slightly higher compared to 2022, reaching 4.72 thousand ha. As for the types, apples dominated; in 2023 they accounted for 81% of the total fruit production from orchards; followed by strawberries with a share of 5%, plums with 4% and pears with 3%. Walnut (+76.1 ha), black rowan (+36.1 ha) and pear (+11.8 ha) areas increased year-on-year. On the other hand, the blackcurrant (-23.7 ha) and strawberries (-13 ha) areas decreased. Average fruit yields per hectare decreased for most types compared to 2022, which is also the reason why total fruit production fell by 13.9% to 32.7 thousand t.

A detailed overview of harvested areas, hectare yields and production for selected types of crops is given in tables 12 and 13 in the annexes.

Chart17 Development of cereal production (kt)



Chart 18 Development of production of other crops (kt)



Source: SO SR, Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

<sup>&</sup>lt;sup>2</sup> CCTIA – requested data

### Supply and demand of major plant commodities

For most cultivated commodities, production was higher in 2023 compared to 2022. As a result, it can be assumed that in the marketing year 2023/24 there will be a rise in the overall supply of the main commodities and a fall in the volume of overall use, i.e. demand. **Production self-sufficiency**, as measured by the share of production in domestic consumption, is expected to exceed 100% only in the case of our most cultivated crops, i.e. cereals and oilseeds.

Cereals are the most important crop in the plant production sector in Slovakia. The balance of production and consumption of cereals has long been positive in Slovakia. The main source of supply for use in the domestic agri-food market and export is production, which was slightly above-average in the marketing year 2023/24.

It is estimated that in the marketing year 2023/24, total cereal imports will decrease by 73.1% year-on-year. The significant reduction in cereal imports is due to the ban on imports of selected agricultural commodities from Ukraine into the Slovak Republic. Currently, the Decree of the Ministry of Economy of the Slovak Republic No. 447/2023, amending the Decree of the Ministry of Economy of the Slovak Republic No. 364/2023 Coll. which prohibits the entry of selected agricultural products and foodstuffs from or originating in Ukraine into the territory of the Slovak Republic, is in force. Of the cereals in question, the following are the subject of the ban on imports into the Slovak Republic: wheat and meslin, barley, maize and, of cereal products, wheat flour. For this reason, it is forecast that the total supply of cereals will decrease by 5.6% to 5.5 Mt in the marketing year 2022/23 compared to the previous year.

With a slight decrease in domestic consumption by 5.2%, self-sufficiency in cereals is forecast to increase significantly by 44.4 pp to 174.2%. Based on current trends, we estimate an increase in the domestic consumption of cereals for food use to 977.8 kt and a small increase in the use of cereals for feed purposes to 794.9 kt. At the same time, a decrease in other consumption by 6.7% is expected, while it is mainly the use of corn and wheat for biofuel production and other energy purposes. Overall, cereal use is forecast to decrease by 9.2%. Due to a higher production and a decrease in exports, we estimate a 17.8% increase in cereal stocks in the Slovak Republic.

Wheat is once again expected to have the highest self-sufficiency among cereals at 251.0%, which represents a year-on-year increase of 37.6 pp. Estimated self-sufficiency for other cereals is 208.2 %, for oats it is 161.3% and for grain maize 124.0%. We will not achieve a lower than 100% self-sufficiency in the marketing year 2023/2024 for any of the cereals under consideration. The cereals with the lowest self-sufficiency are: barley (116.1%) and rye (114.8%). The level of self-sufficiency of cereals reached pre-2022 values, while 2022 was marked by lower production of cereals, mainly grain maize, due to drought. Grain maize self-sufficiency is expected to increase by up to 53.4 pp year-on-year.

On current trends, it can be expected that the supply of cereals will exceed demand by 20.1%. Wheat will have the highest share of the total supply of cereals at 54.5%, followed by maize at 27.9% and barley at 15.1%. The share of wheat, barley and rye will increase by 7.8 pp, 0.6 pp and 0.2 pp respectively. The share of the supply of other cereals and oats in the total cereal supply is expected to be the same as in the previous marketing year, i.e. 1.0% and 0.5% respectively.

According to milling industry statistics, 323 kt of wheat flour was produced in 2023, which represents an increase in production of 5.9% compared to 2022. Rye flour production in 2023

was 14.6 thousand tonnes (+11.9% year-on-year). Malt plants produced 324.5 kt of barley malt, which represents an increase in production by 11.3%.

In the marketing year 2022/23, **oilseeds** production was 848.7 thousand tonnes. It was 18.4% higher year-on-year. Based on the year-on-year increase in domestic production, the total supply of and demand for oilseeds can be expected to be 932.3 thousand tonnes. This is 5.4% more than in the previous marketing year 2023/22. At the same time, domestic consumption can be expected to increase by 2.7% to 325.5 thousand tonnes due to an increase in the consumption for RME by 2.4%. Of the total supply available in the domestic agri-food market, 65.1% is exported for processing outside Slovakia. Of the total oilseed supply in Slovakia, only 3.4% is processed in the food industry for the production of edible oils. Rapeseed is expected to account for 63% of oilseed supply followed by sunflower (18.8%) and soybean (16.8%). The remainder consists of poppy, mustard, linseed and other oilseeds. Self-sufficiency in oilseeds is expected to rise by 34.6 pp compared to the previous marketing year and is estimated to be 260.7% in the marketing year 2023/2024.

Rapeseed has long held a dominant position among oilseeds in the Slovak Republic. It is popular with growers due to high demand in the market and favourable prices in the long term. The rapeseed harvested area increased by 5.1% year-on-year also in the marketing year 2023/2024. This was also reflected in a 21.8% increase in rape seeds production in 2023. For this reason, total supply is estimated to be higher by 13.4%, i.e. 587.2 thousand tonnes. Of the total domestic consumption of 256.9 thousand tonnes, 97.5% is processed into rape-seed oil methyl ester (RME) and 2.5% (6.5 thousand tonnes) is used for the production of edible oil. It is estimated that 330.3 kt of rapeseed will be exported to foreign markets.

In the marketing year 2023/24, we estimate a 12.5% year-on-year decline in <u>sunflower</u> supply to 175.2 thousand tonnes. The 88.0% reduction in imports is a significant contributor to the decline in total supply. As in the case of rapeseed, there is currently minimal processing of sunflower seeds into edible oil in the domestic agri-food market. In 2023/24, total domestic consumption is estimated at 12 kt. 93.1% of the total supply of sunflower seeds is exported outside Slovakia.

In recent years, there has been increased demand for non-genetically modified <u>soybeans</u> in the neighbouring countries. This has also led to increased cultivation in Slovakia. From the 2017/18 marketing year to 2022/23, soybean sowing areas have increased by 54.5%. For several years, soybean growing in Slovakia has concentrated mainly in the Košice Region, where the soil and climate are most suitable for their cultivation. Despite the year-on-year decline in the cultivation areas, in the marketing year 2023/2024 soybeans production increased by 34.5% due to a good hectare yield (2.59 t/ha), which was reflected in only a slight increase in the total estimated supply by 1.7% to 154.6 thousand tonnes. The domestic processing industry cannot absorb the amount of soybeans produced. Total supply will exceed demand in the domestic market more than 3.2-fold and approximately 106.9 kt will be available for export to foreign markets. Production self-sufficiency is forecast to rise year-on-year by 53.1 pp to 272.0%.

The total supply of **grain legumes** decreased only slightly by 0.2% year-on-year to 69.5 thousand tonnes, with the supply of field peas increasing by 1.5% to 55.9 thousand tonnes. Total legumes production in the marketing year 2023/2024 fell by 13.6% (34.6 thousand tonnes), of which peas production fell by 12.6 % to 30.9 thousand tonnes. We also expect moderate

decrease in domestic demand for legumes by 3.3%, increasing the volume of total use to 46.5 kt and thus the final stocks of legumes should decrease year-on-year by 11% to 23 kt. The data on domestic production and forecast demand in the Slovak market points to legumes self-sufficiency of 104.8%, which will represent a 12.5 pp year-on-year decrease. For peas, self-sufficiency is forecast to be 120.5%, a year-on-year decrease of 21.1 pp. In line with the established trend, the legumes with the lowest self-sufficiency are beans (0.4%) and lentils (7.1%) due to long-term low production and a reduction of cultivation areas. Beans are almost no longer cultivated in Slovakia, with the harvested area decreasing by 24.8 % year-on-year to 5.4 ha. The deficit in bean production has to be compensated by imports.

Production of **temperate-zone fruit** decreased by 13.9% year-on-year; however, a rise in imports by 10.8% means that the total supply on the domestic market is expected to increase by 3% to 125.8 thousand tonnes. The production of fruit from orchards made up 26% of supply and will cover 26% of demand. Of the total domestic consumption, which was equal to 82.8% of total use, 8.6% of fruit (9 kt) is consumed in the processing industry. Exports of temperate-zone fruit will reach 17.9 kt, which is 14.2% of overall use.

**Vegetables** were harvested in Slovakia from an area of 20,730 ha¹ in 2023. Production reached 284.3 kt of vegetables, which is 2.1% more than in 2022. Given a 12.4% rise in imports in a total volume of 314.2 kt, the total supply of vegetables is expected to be 598.5 kt, which is 7.3% more than a year earlier. The share of domestic production in total supply will reach 47.5%. Of the total use in domestic and foreign markets, domestic consumption will account for 74.4%. Out of total forecast domestic consumption of 445.3 kt, the processing industry will use 35 kt (7.9%). Vegetable exports are estimated to be 59.2 thousand tonnes, which is 9.9% of total use.

Another year-on-year decline in **potato** growing areas did not have a negative impact on a decrease in potato production in 2023. Potato production increased by 4% year-on-year. The total supply, which can be estimated at 469.8 thousand tonnes, will be higher by 11.4% compared to the previous marketing year. To satisfy domestic demand following this low production, at least 186.4 kt of potatoes and potato products will need to be imported. It is estimated that imports will make up 51.2% of total supply. At the same time, potato consumption can be expected to decrease by 1.4% to 322.2 kt. Potato production self-sufficiency should be 42.2%. Due to the increase in production and lower consumption of potatoes, self-sufficiency is expected to be 2.2 pp higher year-on-year.

The situation in the **wine** sector is currently complicated, with production not reaching the level of previous years. In the marketing year 2023/24, wine production from domestic raw materials will reach 253 thousand tonnes, i.e. 26.4% less than the 2018 – 2022 average. Imports of wine and cider are almost 3 times higher than domestic wine production. Self-sufficiency in wine consumption in the last five years has been around 48.9% and in the marketing year 2023/24, domestic production will cover 42.5% of wine consumption, representing a year-on-year decrease in self-sufficiency by 8.9 pp.

<sup>&</sup>lt;sup>1</sup> Figures including additional calculations for home gardens.

Table 17 Supply and demand of selected agricultural commodities in Slovakia in the marketing year 2023/2024 (preliminary data)

Commodity	unit of measurement	Supply	Demand	Difference	Production*	Consumption	Production self-sufficiency (%)
Cereals, total	′000 t	5,454.7	4,542.1	912.6	4,304.6	2,470.8	174.2
of which: wheat	′000 t	2,975.0	2,567.6	407.4	2,490.6	992.2	251.0
barley	′000 t	825.1	641.0	184.1	603.0	519.4	116.1
grain maize	′000 t	1,521.4	1,217.8	303.6	1,105.7	892.0	124.0
rye	′000 t	49.7	40.7	9.0	35.2	30.7	114.8
oats	′000 t	27.0	24.0	3.0	20.3	12.6	161.3
other cereals	′000 t	56.4	51.0	5.4	49.8	23.9	208.2
Oilseeds, total	′000 t	932.3	932.3	0.0	848.7	325.5	260.7
of which: rapeseed	′000 t	587.2	587.2	0.0	538.1	256.9	209.4
sunflower	′000 t	175.2	175.2	0.0	171.7	12.0	1,426.6
soybean	′000 t	154.6	154.6	0.0	129.8	47.7	272.0
Potatoes, total	′000 t	469.8	369.5	100.3	135.8	322.2	42.2
Legumes, total	′000 t	69.5	46.5	23.0	34.6	33.2	104.4
of which: field peas	′000 t	55.9	35.9	20.0	30.9	25.6	120.5
Fruit, total***	′000 t	125.8	125.8	0.0	33.3	104.1	32.0
Vegetables, total****	′000 t	598.5	598.5	0.0	284.3	445.3	63.8
Wine	′000 hl	1,467.0	937.0	530.0	253.0	597.0	42.4

Note: \*reality; \*\* temperate-zone fruit, \*\*\* data including additional calculations for home gardens

Source: Commodity situation and outlook reports, MARD SR, SO SR, CCTIA

Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic

# 3.1.2. Animal production

# Farm animals, their reproduction, production and sale of animal products

In **cattle** breeding in the Slovak Republic (excluding household breeding), there was a small decrease in animals across categories in 2023. As of the end of 2023, there were 412.7 thousand head of cattle in the Slovak Republic, which represented a year-on-year decrease of 3,1 thousand head (-0.8%). The number of cows reached 180,900, which is 1,500 fewer (-0.8%) than the previous year. The downward trend in the number of dairy cows continued in 2023, when the number reached just 110,200 head at the end of the year, representing a decrease of 1,800 head (-1.6%) compared to 2022. The number of suckler cows increased during the year and reached 70.6 thousand at the end of 2023. Their number increased slightly by 0,3 thousand (+0,4%) year-on-year. The share of suckler cows in the total number of cows increased year-on-year by 0.4 pp to 39%. There were 58,400 head fattening cattle, which represents an increase by 4,500 head (+8.4%) compared to the year before. There was an increase in the number of animals in all weight categories except the 451 – 500 kg category.

Selected reproductive indicators of cattle (excluding households) deteriorated year-on-year, except for the milk yield of cows. The number of calves born per 100 cows decreased by 1.29 head

(-1.4%) and the number of reared calves per 100 cows also decreased by 1.41 head (-1.7%). The average daily weight gain of cattle in fattening decreased by 0.014 kg/FD year-on-year to 0.757 kg per animal per day in 2023. Milk production increased year-on-year to 8,052 kg of milk per cow and year, which was 35.8 kg (0.4%) more.

Despite the increase in yield, the decrease in the number of dairy cows resulted in a drop in the production of raw cow's milk by 1.4 kt (-0.2%) reaching the production of 937 kt. In 2023, primary milk producers sold a total of 857.04 kt (-1.1%) of cow's milk. The volume of milk deliveries was 807.4 kt (-2.0%) while direct sales amounted to 49.6 kt (14.9%).

Sales of slaughter beef from enterprises registered in the SO SR Farm Register in 2023 amounted to 41,393 t l. w., which represents a year-on-year increase of 763 t l. w. (+1.9%). Sales of slaughter calves increased. 13.2 thousand head of calves were sold, which was 1.0% more than in 2022, but the total weight of calves for slaughter decreased to 1,074 head. (-1,1%).

A total of 24,471 cattle for slaughter were killed at Slovak slaughterhouses in 2023, of which 10,200 were bulls, 11,544 cows and 1,800 heifers. The total carcass weight of the slaughtered animals was 7,216.8 t. The number of cattle slaughtered was 2,287 head lower year-on-year with an overall decrease in carcass weight of 560.9 t (-7.2%). Estimated household self-supply was 11,017 slaughtered cattle with a carcass weight of 3,091.7 t. Gross domestic beef production in 2022 was thus 22,485.8 t, which was 1,240 t more than the year before (+5.8%).

The number of animals in **pig** farming in Slovakia increased in 2023. The total number of pigs (excluding households) increased by 22,7 00 head year-on-year (+6.2%) to 386,200 head. The number of sows (excluding households) increased by 400 head (+1.3%) to 24,4 00 head. There was a year-on-year rise in the number of pigs in fattening and pre-fattening by 19,300 head (+6.0%). The highest number of pigs in fattening was in Q3. The number of pigs increased year-on-year, especially in the lower weight categories up to 50 kg and over 110 kg.

Yields (excluding households) improved slightly year-on-year. Both numbers of litters per sow (+0.03 litters) and numbers of pigs born per sow (+0.89 head) increased, similarly to the number of pigs born per litter (+0.19 head). Piglet mortality fell slightly (-0.4%). Average daily gains in fattening and pre-fattening pigs decreased, with average daily gains of 0.622 kg per fattening day, which was 0.014 kg (-2.2%) less than in 2022.

The total live weight of slaughter pigs sold was 67,027 t, which represented a decrease of 5,635 t (-7.8%) compared to 2022. Sows made up 2.8% of the total amount sold. Altogether, 499,313 slaughter pigs were killed at Slovak slaughterhouses in 2023. The total live weight was 59,089 t, which made 46,858 t of carcass weight. Year-on-year, 59,008 fewer pigs were killed (-10.6%) and carcass weight decreased by 5,005.8 t (-9.7%). Household self-supply was estimated at 6,764 t of carcass weight. Gross domestic pork production was 65,740 t (-4.9%). Imports of live animals accounted for 23.8% of this production and exports for 42.2%.

The total number of **poultry** (excluding households) reached 9,669.4 thousand head and increased by 3.5% compared to the situation as at 31<sup>st</sup> December 2022. The number of hens decreased by 14.7% year-on-year to 2,779.500. The share of hens in the total number of poultry decreased to 28.7% (-6.1 pp). The number of turkeys decreased year-on-year by 16,428 (-10.1%) while the number of chickens increased by 786,327 (+13.5%). Year-on-year, the number of geese decreased by 270 (-32.3%) and the number of ducks increased by 16,329 (+105.1%).

As at 31st December 2023, the weight of poultry sold on the agri-food market was 99,258 t, representing an increase of 1.0% (+944 t). Over the whole year, 44,418,400 live birds were sold for processing, trade and export, which was 1.2% more than the previous year (+526,700 birds). The weight of chickens sold decreased by 1.9% (-1,688 t). Sales of hens increased by +53.0% to 6,197 ton. Turkey hen sales grew year-on-year by 18.3% (+514 t). Ducks sales dropped year-on-year by 10.3% (-28 t).

Total chicken egg production fell by 7% year-on-year to 711,238 thousand eggs (excluding the estimate for self-suppliers). Of these, table egg production is estimated to be 9.4% lower, reaching 583,198 thousand. At the same time, the total supply of table eggs on the agri-food market is estimated to decrease by 6.1% to 830,640 thousand eggs. Given the higher volume of table egg exports, total domestic consumption is estimated to decrease by 8.6% year-on-year to 720,560 thousand eggs in 2023 (excluding the estimate for self-suppliers).

**Sheep** farming showed negative signals over the year. As of the end of 2023, there were 264,400 sheep in Slovakia (excluding households), which represents a decrease of 11,100 head (-4.0%) compared to the previous year. The number of ewes decreased year-on-year by 10,100 to 175,300 head (-5.5%).

The fertility indicators of ewes (excluding households) decreased year-on-year. The number of lambs born (72.6) and reared (67.9) per 100 ewes were both lower. Average shear per sheep per year was 1.26 kg of wool (-6.1%). The live weight of slaughter sheep (including lambs) sold in 2023 was 2,009 t, which was 91.3 t less than in 2022 (-4.3%). A total of 78,300 head of slaughter lambs were sold (1,150 t l.w.), which was 3,483 head (-122 t) fewer than the year before.

A total of 41,167 slaughter sheep were killed at Slovak slaughterhouses, comprising 38,267 lambs and 2,900 other slaughter sheep. The total carcass weight of the slaughtered animals was 323.9 t. These numbers represent a 178.2% rise in the number of slaughter sheep killed at slaughterhouses, and a 77% increase in total slaughter weight. Self-supply amounted to 457.4 t in carcass weight. Gross domestic production of sheep meat was 1,126.1 t, up by 25.4% year-on-year.

Production of sheep's milk per ewe increased by 2.09 kg year-on-year ( $\pm$ 3.1%). Total production of sheep's milk amounted to 13,612 t, which was 538.3 t more than in 2022 ( $\pm$ 4.1%). The estimated amount of self-supplied milk was 1,400 t. 11.766 t were sold, representing a rise by 322 t ( $\pm$ 2.8%) year-on-year. Of this, 2,625.7 t of milk (19.3% of total production) was sold to own establishments. The yield of raw sheep's wool was 467 t, which was 2.3% less than in 2022.

In 2022, there were in total 10,700 **goats** in Slovakia (excluding households), of which 7,000 were dams (mother goats) (excluding households). The total number of goats (excluding households) decreased by 300 head year-on-year (-2.6%) and the number of dams (excluding households) decreased by 600 (-7.9%). Altogether, 12 breeds of goats were bred in Slovakia, the most numerous of which was the white short-haired goat. The reproduction rate per one white short-haired goat was 1.68 kids (+0.04 kids). The gross domestic production of goat meat, consisting mainly of self-supply, was 243.6 t by carcass weight, which represents a 10.4% year-on-year decrease. Organisations entered in the Farm Register produced 249.5 t of goat's milk, which was 64.9 t more compared to 2022 (+35.2%).

The change in the statistical survey of livestock numbers to exclude the households of small-holders was a significant factor for the year-on-year increase in reproduction and production indicators, especially the annual milk yield of ewes and egg production.

Commodity	Unit of measurement	Ø2018 - 22	2022	2023	Index 2023/2022	Index 2023/ Ø 2018 - 22
Slaughter livestock, total*	carcass weight (t)	104,261	94,598	106,353	112.4	102.0
of which slaughter cattle	carcass weight (t)	23,102	21,246	22,486	105.8	95.4
slaughter pigs	carcass weight (t)	79,792	69,131	65,740	95.1	104.3
slaughter sheep	carcass weight (t)	1,053	898	1,126	125.4	80.7
slaughter goats	carcass weight (t)	314	272	260	95.6	82.9
Slaughter poultry*	carcass weight (t)	95,657	105,836	105,543	99.7	110.3
Cow's milk	t	935,563	938,380	936,967	99.8	100.2
Chicken eggs	′000 head	970,231	764,737	711,238	93.0	73.3
Sheep's milk	t	12,926	13,074	13,612	104.1	105.3
Sheep's wool	t	529	479	467	97.7	88.3

Table 18 Production of animal products in Slovakia

Source: Animal production and sale of products from primary production, SO SR, MARD SR BM / sectoral report (MARD SR) 1 – 12, Self-supply estimate

### Animal commodity supply, demand and trading system

The supply of animal products increased slightly in 2023 compared to the previous year. The total supply of all meat types reached 546.2 kt, which was 3.7% higher year-on-year. The demand for animal commodities followed the development of the overall supply. Demand increased year-on-year for beef (+8.3%), pork (+1.6%), poultry meat (+5.4%) and decreased for sheep meat (-5%), goat meat (-4.8%), cow's milk (-3.4%) and table eggs (-6.8%). The total demand for meat of all types of animals was lower than the supply by 1%; similarly, the demand was lower than the supply in the case of cow's milk and table eggs by 1.2% and 1.9% respectively.

Total meat production increased year-on-year (+5.7%) due to an increase in pork production (+17%) and decreases in beef (-1.2%), sheep (-5.7%), goat (-4.4%) and poultry meat (-0.3%). At the same time, production of table eggs decreased compared to 2022 (-9.4%), similarly to cow's milk (-1.2%). Sheep's milk production increased (+4.1%).

Domestic production of meat covered 38.8% of total supply, compared to 38% in 2022. Of the individual types of meat, domestic production contributed most to the supply of goat meat (100%) and sheep meat (92.4%). Domestic production covered 48% of the supply of beef, 48.4% of poultry and only 29.6% of pork. There was also a significant shortfall in cow's milk (53.6%), as well as in table eggs, where domestic production covered 70.2% of consumption.

Total estimated meat consumption declined by 3.4% year-on-year in 2023, with domestic consumption of pork (-1.5%), sheep meat (-6.0%), goat meat (-4.8%) and poultry meat (-9.5%) declining, but beef consumption (+12.3%) increasing year-on-year. Domestic production covered just 60.7% of the total consumption of meat, which was 5.3 pp more than in 2022. A year-on-year decrease in consumption was also seen in the case of table eggs (-8.6%), while the consumption of cow's milk increased slightly (+0.5 %).

<sup>\*</sup> Gross domestic production = slaughters in slaughterhouses + estimate of self-supply +/– foreign trade MARD SR

Table 19 Animal production supply and demand

	Unit of measurement	Period	Supply	Demand	Difference	Domestic production	Domestic consumption	Production/ Consumption (%)
		Ø2018-2022	44,184	43,982	-202	23,102	27,199	84.9
	carcass weight (t)	2022	42,390	42,194	-197	22,302	26,721	83.5
Cattle	weight (t)	2023	45,914	45,701	-213	22,037	30,000	73.5
	%	2023/2022	108.3	108.3	108.3	98.8	112.3	88.0
	%	2023/ Ø2018-22	103.9	103.9	105.8	95.4	110.3	86.5
		Ø2018-2022	265,628	263,075	-2,553	79,792	179,351	44.5
	carcass weight (t)	2022	276,996	274,179	-2,816	71,123	200,537	35.5
Pigs	weight (t)	2023	281,022	278,470	-2,552	83,206	197,570	42.1
	%	2023/2022	101.5	101.6	90.6	117.0	98.5	118.7
	%	2023/ Ø2018-22	105.8	105.9	100.0	104.3	110.2	94.7
		Ø2018-2022	1,164	1,164	0	1,053	440	239.4
	carcass weight (t)	2022	968	968	0	901	564	159.9
Sheep	weight (t)	2023	920	920	0	850	530	160.4
	0/	2023/2022	95.0	95.0	-	94.3	94.0	100.3
	%	2023/ Ø2018-22	79.0	79.0	-	80.7	120.5	67.0
		Ø2018-2022	314	314	0	314	314	99.8
	carcass	2022	273	273	0	272	273	99.5
Goats	weight (t)	2023	260	260	0	260	260	100.0
	0,	2023/2022	95.2	95.2	-	95.6	95.2	100.5
	%	2023/ Ø2018-22	82.8	82.8	-	82.9	82.8	100.2
		Ø2018-2022	198,685	196,205	-2,479	95,657	132,753	72.1
	carcass	2022	206,137	204,143	-1,994	105,836	133,207	79.5
Poultry	weight (t)	2023	218,088	215,261	-2,827	105,543	120,498	87.6
	0/	2023/2022	105.8	105.4	141.8	99.7	90.5	110.2
	%	2023/ Ø2018-22	109.8	109.7	114.0	110.3	90.8	121.6
		Ø2018-2022	272	272	0	-8	269	-
	carcass weight (t)	2022	2	2	0	-23	0	-
Horses	weight (t)	2023	4	4	0	-17	0.0	-
	0/	2023/2022	201.5	201.5	-	73.7	0.00	-
	%	2023/ Ø2018-22	1.5	1.5	-	203.6	0.00	-
		Ø2018-2022	1,589,573	1,570,205	-19,368	855,709	1,097,244	78.0
,	t	2022	1,658,556	1,636,098	-22,458	867,108	1,138,720	76.1
Cow's milk		2023	1,599,924	1,580,951	-18,973	857,041	1,144,404	74.9
HIIIK	0/	2023/2022	96.5	96.6	84.5	98.8	100.5	98.3
	%	2023/ Ø2018-22	100.7	100.7	98.0	100.2	104.3	96.0
		Ø2018-2022	1,027,641	1,015,678	-11,963	784,034	957,176	81.9
T	'000 eggs	2022	884,576	873,945	-10,631	643,675	788,121	81.7
Table		2023	830,640	814,594	-16,046	583,198	720,560	80.9
eggs	0/	2023/2022	93.9	93.2	150.9	90.6	91.4	99.1
	%	529	80.8	80.2	134.1	74.4	75.3	98.8

Source: SO SR; ML (MARD SR) 6-12; VOH (MARD SR) 7-12; LIAH (MARD SR) 1-12; Meat (MARD SR) 1-12; Consumption – estimate; Prepared by: MARD SR

Table 14 shows the numbers of farm animals from the SO SR Inventory of Livestock as of 31st December 2022. Selected indicators of the productivity of farm animals in the Slovak Republic are shown in Table 15 in the annexes.

## 3.1.3. Aquaculture

Aquaculture is an important industry that produces aquatic organisms for human consumption, thus providing a healthy diet for the population, contributes to the protection and creation of the environment, helps to preserve the original gene pool of fish, and also provides a range of non-production benefits for society – landscaping, flood protection, water retention in the landscape and rural development.

The development of aquaculture in the Slovak Republic has been guided by the strategic plan for the development of aquaculture in the Slovak Republic to 2030 in two separate specific groups: lowland fish species (pond farming) and salmonid fish species (trout farming), to which a new group has recently been added covering non-traditional fish species such as African catfish or European eel (recirculating aquaculture systems – RAS). In terms of marketing and the final placing of products on the market, a distinction can be made in both pond and trout farming between fish production for direct consumption and the production of stocks used within aquaculture for further breeding or for restocking of fishing grounds. In contrast to trout farming, where the production of fish for direct human consumption dominates, the production of stocks for restocking of fishing grounds is currently more important in pond aquaculture. Production from RAS is mainly focused on the production of fish for human consumption though restocking of fishing grounds is also pursued to a lesser extent.

In 2023, the SO SR collected data from 120 reporting units operating 437 ponds with a total area of more than 2,007 hectares, 108 cages with a total volume of 16,596 m³ of water, 162 hatcheries and nurseries with a total volume of 13,886 m³, 57 RAS with a total volume of 8,103 m³, 1,012 concrete and plastic tanks with a total volume of 254,533 m³ and 163 holding tanks with a total volume of 36,005 m³. The above data also includes fish farms that are approved as breeding grounds for the production of hatching fish for the purpose of restocking fishing grounds. Lowland fish species are also bred in 48 small water reservoirs originally built for another purpose with an area of 615 ha and a total volume of 9,565,777 m³.

Table 20 Number, volume and area of fish farms in Slovakia

		2022			2023	
Indicator	Number	Volume (m³)	Area (ha)	Number	Volume (m³)	Area (ha)
Fish ponds, of which:	502	х	1,958	437	х	2,007
Small water reservoirs	46	10,170,987	651	48	9,565,777	615
Cages	136	16,779	Х	108	16,596	Х
Hatcheries and nurseries	86	12,383	Х	162	13,886	Х
Tanks and raceways, total	578	90,122	Х	574	130,844	Х
of which concrete tanks, channels	434	84,391	Х	438	123,689	х
Recirculation systems	42	10,021	Х	57	8,103	Х
Holding tanks	149	41,542	Х	163	36,005	Х
Other water bodies	20	Х	57	21	Х	105

Source: SO SR

Note: x = no entry possible for logical reasons

Prepared by: MARD SR

Table 21 Year-on-year change in the number, volume and area of fish farms in Slovakia

Indicator	Difference 2023-2022						
Indicator	Number of farms	Volume (m³)	Area (ha)				
Fish ponds	-65	х	49				
Small water reservoirs	2	-605 210	-36				
Cages	-28	-183	Х				
Hatcheries and nurseries	76	1 503	Х				
Tanks and raceways, total	-4	40 722	Х				
of which concrete tanks, channels	4	39 298	х				
Recirculation systems	15	-1 918	Х				
Holding tanks	14	-5 537	Х				
Other water bodies	1	Х	48				

Source: SO SR

Note: x = no entry possible for logical reasons

Prepared by: MARD SR

In 2023, the total catch of fish in the Slovak Republic amounted to 4,788,729 kg, which was 1.6% more than in 2022. Of this, the catches of marketable fish¹ made up 3,002,010 kg and increased by 0.9% year-on-year, and catches in fishing grounds amounted to 1,786,719 kg, which was 2.7% more than in 2022.

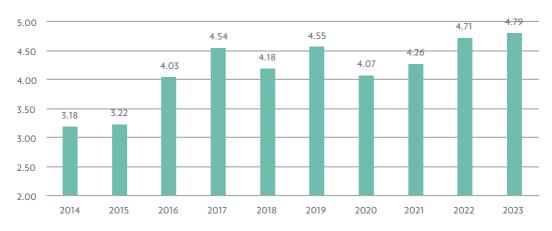
<sup>&</sup>lt;sup>1</sup> Catches of marketable fish mean catches of fish intended for sale or processing.

Table 22 Marketable fish catches in Slovakia (kg)

Fish species	Catches in 2022	Catches in 2023	Change (%)
Pond carp (reared in ponds)	616,743	661,735	7.3
Pond carp (reared in other facilities)	220,690	33,213	-85.0
Rainbow trout (reared in ponds)	781,655	748,131	-4.3
Rainbow trout (reared in tanks and raceways)	243,748	349,768	43.5
White amur	24,585	23,817	-3.1
Goldfish	11,263	7,426	-34.1
Brown trout	9,510	10,749	13.0
Brook trout	11,373	4,553	-60.0
European catfish	18,288	26,535	45.1
Pike	7,601	4,016	-47.2
Silver carp	29,282	23,992	-18.1
Zander	4,756	4,250	-10.6
Other types of fish	995,292	1,103,825	10.9
SK, total	2,974,786	3,002,010	0.9

Source: SO SR Prepared by: MARD SR

Chart 19 Development of total fish catches in Slovakia (kt)



Source: SO SR Prepared by: MARD SR

Among the fish species caught in fishing grounds in the Slovak Republic in 2023, the majority were pond carp, which accounted for to 76.1% of the total volume of fish catches in Slovakia. It was followed by rainbow trout (4.2%), white amur (3.6%) and zander (3.3%).

Table 23 Catches in fishing grounds in Slovakia (kg)

Fish species	Catches in 2022	Catches in 2023	Change (%)
Pond carp	1,337,814	1,358,809	1.6
Rainbow trout	70,673	74,312	5.1
White amur	70,065	63,692	-9.1
Goldfish	30,119	34,206	13.6
Freshwater bream	37,839	52,627	39.1
Brown trout	3,735	4,744	27.0
European catfish	50,170	50,599	0.9
Pike	31,921	35,807	12.2
Zander	40,905	59,614	45.7
Other species	66,396	52,309	-21.2
SK, total	1,739,637	1,786,719	2.7

Source: SO SR; Prepared by: MARD SR

### Employment in the aquaculture sector

Most aquaculture enterprises can be classified as micro-enterprises (often family-owned, with small production targeting the local market). However, large enterprises and several medium-sized enterprises account for the majority of aquaculture production. One special characteristic of Slovak aquaculture is the existence of enterprises where aquaculture is not their main activity, but one of their side activities (e.g. the water management company Slovenský vodohospodársky podnik, š. p., agricultural cooperatives, forestry enterprises such as Lesy SR, š. p. and Vojenské lesy a majetky SR, š. p., or the Tatra National Park Management).

According to the available data from the Statistical Office of the Slovak Republic, the aquaculture sector employed 405 permanent and 374 seasonal employees in 2023. Considering only permanent employees, women accounted for 17.3% of the workforce. When all seasonal employees are taken into account, 9.4% were women. Fish farming facilities are mainly located in the rural areas, where they create employment opportunities for both family members and rural residents. Employment in the sector is important despite the low numbers involved.

Table 24 Number of employees in aquaculture

Indicator	20	022	2023		
Indicator	Men	Women	Men	Women	
Managers and permanent employees (natural persons)	321	60	335	70	
Seasonal employees	376	21	339	35	
Total employees	697	81	674	105	
Private entrepreneurs, including partners who are not employees	23	8	27	10	

Source: SO SR; Prepared by: MARD SR

# Sale and foreign trade of live fish in Slovakia

In 2023, the largest **volume of sales** of the fish species referred to above was found in trout and amur species. The total sales volume amounted to 2,768,215 kg and was 3.3% higher than the year before.

In 2023, a total of 896.9 tonnes of freshwater and marine fish were imported into the territory

Table 25 Sales of selected fish species in SR (kg)

Fish species	Sales in 2022	Sales in 2023	Change (%)
Pond carp (reared in ponds)	537,661	589,080	9.6
Pond carp (reared in other facilities)	90,490	30,998	-65.7
Rainbow trout (reared in ponds)	761,343	733,904	-3.6
Rainbow trout (reared in tanks and raceways)	222,909	328,693	47.5
White amur	15,914	20,869	31.1
Goldfish	8,193	4,476	-45.4
Brown trout	8,890	10,217	14.9
Brook trout	15,821	5,893	-62.8
European catfish	9,293	11,735	26.3
Pike	6,886	4,012	-41.7
Silver carp	19,460	13,980	-28.2
Zander	3,515	2,547	-27.5
Other types of fish	980,379	1,011,811	3.2
SK, total	2,680,754	2,768,215	3.3

Source: SO SR, Prepared by: MARD SR

of the Slovak Republic (including 893.9 tonnes of freshwater fish). Exports of live freshwater fish in 2023 amounted to 316.4 tonnes. Freshwater fish produced by Slovak farms are mainly placed in the market live (especially so in the case of carp). A large part of production is sold at the end of the calendar year in connection with the typical fishing of ponds and seasonal demand on the market related to Christmas traditions.

#### Fish processing and consumption in Slovakia

Fish processing plants are evenly distributed throughout the territory of Slovakia. Most of them are medium-sized enterprises (as defined in Commission Recommendation 2003/361/EC). Freshwater fish are processed in small processing plants. The volume of fish processed by the fish industry in Slovakia in 2023 was 2,250 tonnes (Food Report, MARD SR). A large part of the operations of such enterprises is oriented towards the processing of imported marine fishery and aquaculture products. Freshwater fish made up only 10% of the total amount of fish processed (226 tonnes). The main species processed from freshwater fish farms is trout. Imported seafood products are cheaper for consumers. The price of processed freshwater fish remains high due to the relatively small size of farms and difficult hydrological and climatic conditions, which lead to higher production costs per unit weight.

According to the SO SR's estimates, **fish consumption** in Slovakia was 5.8 kg/person/year in 2023, within which freshwater fish account for less than a kilogram. Domestic fish production in aquaculture is able to cover a relatively small part of the current consumption of freshwater fish, thought there are differences between pond and trout farming. While production capacities of trout farms are able to cover domestic demand and export a significant part of production, lowland fish farms are not yet able to cover domestic demand.

## 3.2. Price development on the agricultural and food market

A comparison of prices across the food production and consumption area showed that the average consumer price indices for food grew most in 2023, followed by the prices of agricultural inputs, while the prices of agricultural products declined year-on-year. Prices of agricultural inputs stabilised in 2023.

Table 26 Development of price indices in the vertical of food production and consumption Same period of the previous year = 100

Indices	2022	2023
Prices of agricultural inputs	139.8	100.0
Prices of agricultural products	136.5	88.6
- vegetable commodities (excluding fruits and vegetables)	153.0	68.8
- fruits, vegetables, nuts and spices	112.4	117.8
– animal commodities	121.1	115.1
Prices of food products, beverages and tobacco	123.9	109.6
- foodstuffs	126.5	109.3
Consumer prices of food and non-alcoholic beverages	118.6	117.3
Consumer prices of alcoholic beverages and tobacco	106.8	108.4
Consumer prices, total – inflation	112.8	110.5

Source: SO SR Prepared by: MARD SR

Price increases moderated in 2023 after a huge growth across the whole food production and consumption area in the previous year. All aggregate year-on-year price indices, except for the agricultural products price index, showed more moderate year-on-year price increases than in 2022. Despite the evolution of input prices, the prices of agricultural products declined by 114 % year-on-year.

The trend of rising prices in 2023 continued also in food products, where the prices increased by 9.6% year-on-year. The most significant year-on-year price growth was recorded for consumer prices of food and non-alcoholic beverages (+17.3%). The consumer prices of alcoholic beverages and tobacco were 8.4% higher compared to 2022.

The price scissors in agricultural production opened up considerably more in 2023 than in the previous year. When comparing price indices, it can be noted that the prices of agricultural products lagged significantly behind the development of prices of purchased means of production.

The **prices of agricultural inputs** stabilised in 2023 after an extreme increase in the previous year. The aggregate index of the prices of agricultural inputs was mainly influenced by the development of prices of fertilisers and soil conditioners, the prices of which fell by 16.1% after a huge increase in the previous year. Prices of nitrogen fertilisers fell in particular (-18,5%).

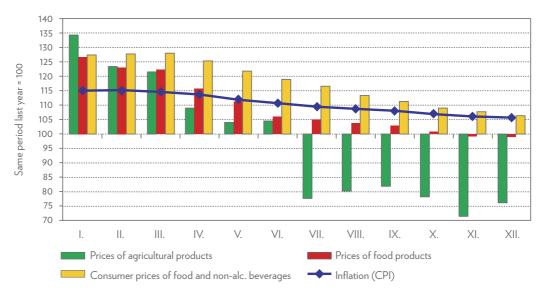


Chart 20 Development of price indices within the food vertical in 2023

Source: SO SR Prepared by: MARD SR

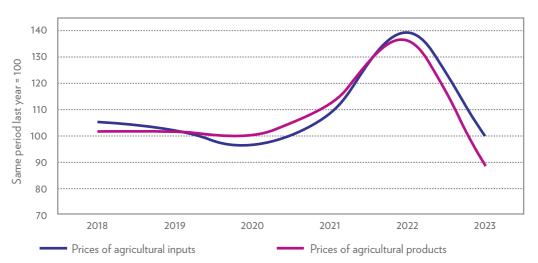


Chart 21 Development of price indices of the inputs and outputs of agricultural production

Source: SO SR Prepared by: MARD SR

Prices of phosphate fertilisers fell by 7.6% and prices of compound fertilisers (N-P-K) by -5.8%. In contrast, year-on-year price increases were recorded mainly for potassium fertilisers (+15%).

The year-on-year price index for agricultural inputs continued to have a significant impact on the development of the prices of supplies of an operational nature. Prices of the energy and

lubricants group grew at a more moderate pace in 2023 than in the previous year (+3.9%). The overall year-on-year price index for energy and lubricants was mainly influenced by the continued strong growth in electricity prices, which increased by 29.6% year-on-year in 2023. Prices of diesel fuel decreased by 11.3% and petrol by 9.4% year-on-year. Electricity prices, which after a huge year-on-year increase in the previous year (+98.6%), increased again in 2023 (+29.6%), had a significant influence on the overall year-on-year energy and lubricants price index.

Animal feeds prices also fell (-5.4%) and prices for veterinary services stabilised with a slight increase (+0.4%). After a huge increase in the prices of agricultural inputs in the previous year, the year-on-year increase in prices of other agricultural inputs continued. The prices of seed and planting stock increased by 7.7% year-on-year, tractor prices increased by 5.1% year-on-year and the prices of plant protection products increased by 4% year-on-year.

Table 27 Development of the price indices of the main inputs to agriculture (same period of previous year = 100)

	2022	2023
Prices of supplies to agriculture in total	139.8	100.0
of which: Seeds and planting stock	118.0	107.7
Motor fuels	176.9	88.7
Electricity	198.6	129.6
Fertilisers and soil conditioners*	239.7	83.9
Plant protection products	118.8	104.0
Animal feeds	143.6	94.6
Tractors	108.1	105.1

Source: SO SR; \* according to the terminology of the SO SR these are soil improvers Prepared by: MARD SR

**Agricultural commodity** prices fell by 11.4% year-on-year in 2023. The overall year-on-year agricultural commodities price index was affected by a decrease in the prices of plant commodities excluding fruit and vegetables (-31.2%). Prices for the grouping of fruits, vegetables, nuts and spices in total were 17.8% higher compared to 2022. In the group of plant commodities, the largest year-on-year decreases were in the prices of oilseeds (-35.0%) and cereals (-32.3%).

In the <u>oilseeds</u> group, the most significant year-on-year price decreases were seen in the case of rapeseed (-37.1%) and sunflower seed (-35.5%). Soybean prices also decreased significantly year-on-year compared to 2022 (-29.1%). In contrast, year-on-year price increases were recorded for flaxseed for technical processing (+4.5%) and mustard seed (+9.3%), while poppy seed prices remained stable with a slight year-on-year decrease (-0.9%).

In the <u>cereals</u> group, the most significant year-on-year price decrease was recorded for industrial wheat (-39.6%). The common wheat price was 34.4% lower compared to the previous year. The price of grain maize also fell significantly year-on-year (-29.7%). Malt barley was 25.3% cheaper in 2023 than in the previous year; the price of food barley was 22.8% lower and the price of feed barley fell by up to 32% compared to the previous year. The price of food rye was down

23.4% year-on-year and food oats was sold 10.4% cheaper than in 2022. No commodity within the cereal group saw a year-on-year price increase in 2023.

Within the <u>legumes</u> group, commodity prices declined at a more moderate pace than oilseed and cereal prices. The prices of edible legumes were only 1.9% lower compared to the previous year. The year-on-year decline in the legumes prices was influenced by the price of edible lentils, which increased by 8.3% year-on-year. Edible pea prices fell by 3.1% year-on-year and fodder pea was 12.7% cheaper in 2023 than in the previous year.

In 2023, significant year-on-year price increases were also seen in the <u>potatoes</u> group, whose prices were up to 41.1% higher than in the previous year. Early potato prices increased significantly year-on-year (+45.9%). The prices of late season potatoes were 39.3% higher compared to 2022. In 2023, year-on-year price growth was also recorded for the prices <u>of sugar beet</u> which was 10.5% more expensive compared to 2022.

In the group of <u>vegetables</u>, the year-on-year price increase was more pronounced compared to the previous two years, with vegetable prices increasing by 23.7% year-on-year in 2023. The prices of onions without leaves had the most significant impact on the year-on-year price index; they increased by 41.2% compared to the previous year. In the group of vegetables other than onions, the year-on-year price increases of more than 30% were recorded for kale (+36.9%), kohlrabi without leaves (+36.7%) and parsley with leaves (+35.7%). The year-on-year price growth of other commodities in the vegetables group ranged from 10% to 27% in 2023. Within vegetables, only onions with leaves showed a year-on-year price decrease (-10.5%) and lettuce prices decreased slightly (-1.7%).

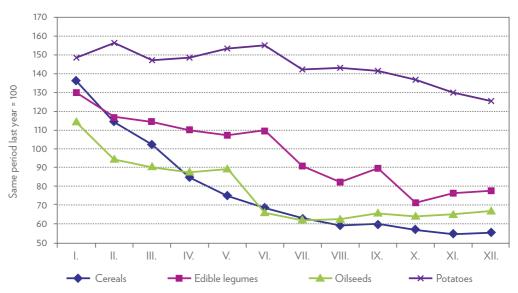


Chart 22 Development of price indices for crop commodities in 2023

Source: SO SR Prepared by: MARD SR The price growth of the <u>fruits</u>, <u>nuts and spices</u> group was more pronounced compared to the previous year (+16.2%). The year-on-year price index for that group was mainly influenced by a huge increase in apricot prices (+53,3%). Significant year-on-year price increases were also recorded for plums (+45,3%) and peaches (+33,1%). Prices of harvested apples rose by 17.4% year-on-year. <u>Grape</u> prices increased by 10.9% compared to 2022, with cider grape prices increasing by 11.7% and table grape prices decreasing by 2.1%. In 2023, year-on-year price growth was seen also for unprocessed spices and peppers (+8.8%).

Year-on-year price growth for livestock commodities continued at a more moderate pace in 2023 compared to the previous year, and prices for the livestock commodity group were 15.1% higher in 2023 compared to 2022. The strongest year-on-year price growth was recorded for chicken eggs, the prices of which were up to 38.6% higher in 2023 than in the previous year. In that group, the most significant year-on-year price increase was recorded for table graded chicken eggs sk. L (+41.8%). The prices of slaughter poultry rose by 6% year-on-year. Of these, Class I broiler turkey prices were up 15% and Class I slaughter chicken prices were up 6% year-on-year in 2022.

Significant year-on-year price increases were also recorded for slaughter <u>pig</u> prices (+19.8%), particularly in the U (+20.6%) and S (+20.2%) commercial classes. Prices for slaughter sheep, rams and wethers held steady with a slight year-on-year increase (+0.5%), while the prices of live animals fell by 1.8% year-on-year in total and rose by 20.4% year-on-year in meat class S. The 2023 prices of slaughter <u>sheep and lambs</u> were 13.5% higher than a year earlier. In that group, the most significant year-on-year price increase was seen in the group of fattening lambs for slaughter (+16.4%). <u>Raw sheep milk</u> (+18%) and cut raw sheep wool (+2.5%) prices also increased compared to 2022.

Slaughter <u>cattle</u> prices, including calves, increased by 5.5% year-on-year in 2023 and by 5.6% excluding calves. In the group of slaughter cattle, the most significant year-on-year price increase was recorded for slaughter heifers (+10.2%), especially in the conformation class U (+18.8%) and in conformation classes E (+15.7%) and R (+15.3%), but this is due to the low number of cows slaughtered in slaughterhouses in this quality. Prices of slaughter cows were 10.1 % higher compared to 2022. Year-on-year price increases were recorded in the above-mentioned group, particularly for slaughter cows in the conformation class U (+13,7%) and the conformation class R (+12,4%). Raw cow milk prices increased by 10.2% year-on-year; of this the price of raw cow milk in the class I increased by 14.9% and the price of milk in the class Q was 9.0% higher in 2023 compared to the previous year. Slight year-on-year price growth was recorded in the slaughter bull group (+2%). In the above-mentioned group, the most significant price increases compared to 2022 were for slaughter bulls in the conformation class E (+8%) and conformation class U (+5%).

A year-on-year price increase was also recorded in the <u>live fish group</u> (+11.2%). In the live fish group, prices were mainly influenced by a significant year-on-year price increase for carp (+22,7%). In 2023, trout prices were 9.3% higher compared to the previous year.

**Prices of the producers of food, beverages and tobacco** were 9.6% higher compared to the previous year. The annual average price index in food, beverages and tobacco production was mainly influenced by a year-on-year price decline in the last quarter of 2023.

140 130 Same period last year = 100 120 110 100 90 80 III. ٧. VII. 1. 11. IV. VIII. IX. Χ. XI. XII. Slaughter bovine animals (excl. calves) ----- Slaughter pigs Slaughter sheeps, rams and wethers -X Slaughter poultries Live fishes

Chart 23 Development of price indices for animal production commodities in 2023

Source: SO SR Prepared by: MARD SR

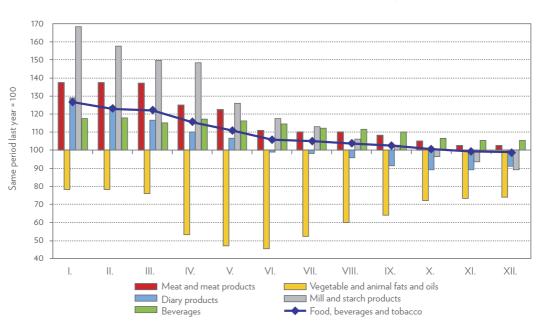


Chart 24 Development of the price indices of selected food sectors in 2023 (without excise duty)

Source: SO SR Prepared by: MARD SR The most significant price increase was seen in the production of mill products, starch and starch products in 2023 (+22.4%). Significant year-on-year price increases were also recorded in the manufacture of bakery and farinaceous products (21.6%). Prices in the processing and preserving of meat and meat products (+17.4%) and fruit and vegetables (+12.4%) also increased in 2023. Similarly, a year-on-year price increase was seen in the manufacture of beverages the prices of which were 12.6% higher in 2023 compared to the previous year. The prices of animal fodder (+3%) and the prices in the manufacture of dairy products (+3.4%) increased more moderately year-on-year. The annual average price index in the manufacture of dairy products was influenced by the year-on-year price decline in the second half of 2023. The overall year-on-year price index for food, beverages and tobacco manufacturing was significantly influenced by the year-on-year price decline in the plant, animal oils and fats manufacturing sector (-35.9%).

Consumer price growth for food and non-alcoholic beverages continued in 2023, with food and non-alcoholic beverage prices increasing by 17.3% year-on-year. Similarly to the previous year, an overall year-on-year increase in consumer prices according to the list of foodstuffs monitored by the SO SR was recorded for almost all monitored commodities in 2023 Edible oil prices stabilised with a marginal decrease (-0.6%) year-on-year. Compared to 2022, the most significant price increases were observed for fresh chicken eggs (+44.4%), crystal sugar (+44.4%) and lard (+31.2%). The prices of Eidam cheese (+23.0%), boneless pork shoulder (+21.7%), pork loin (+21.3%), pork neck (+20.6%), dark bread (+21.2%), pasteurised semi-skimmed milk (+20.6%), sour milk (+20.4%) and fine sausages (+20.4%) also increased significantly year-on-year. Consumer prices for pork belly, beef, gutted chicken, ham and long-lasting sausages, rice, pasta, smoked sheep milk cheese and curd cheese increased between 10% and 20% year-on-year.

A more detailed overview of the development of the prices of inputs, agricultural products and food products is set out in tables 16 to 20 in the annexes.

# 3.3. Food production

According to data from the SO SR, in 2023 the industrial production indicator for production of food, beverages and tobacco products, expressed as an index, both adjusted and not adjusted for the effect of the number of working days, experienced its second steepest decrease in the reference period. Conversely, industrial production increased in both the industry and manufacturing sectors.

In quantitative terms, the production of malt (+11.3%), wheat flour (+5.9%) and drinking milk (+5.1%) increased for the monitored food products. There was a decrease in production for all other food products, in particular for grape wine (-45.7%), bread and fresh pastry (-15.3%), butter (-9.6%), table eggs (-9.4%), fruit products (-6.3%), meat products (-4.2%) and cheese (-3%).

Revenues from the sale of own products and services amounted to  $\leqslant$  5,088.87 million, representing a year-on-year increase of 9.6%, and accounted for 75.6% of revenues. Of this, the sales of own products and services of the meat and meat products processing and preserving sector represented 19.3%. Of the sectors where the share of the revenues from the sales of own

IP (same period of the previous year = 100)	2019	2020	2021	2022	2023			
adjusted for the number of working days:								
Industry, total	93.8	91.0	110.8	95.6	101.8			
Manufacturing	93.4	89.4	110.2	99.0	101.5			
Production of food, beverages and tobacco products	95.9	100.3	104.0	101.5	96.6			
not adjusted, including the number of working days:								
Industry, total	93.7	91.2	110.7	95.5	101.5			
Manufacturing	93.2	89.6	110.1	98.9	101.2			
Production of food, beverages and tobacco products	95.9	100.3	104.1	101.5	96.4			

Table 28 Industrial production (IP)

Source: SO SR - www.statistics.sk, from the data of the Statistical Office of the Slovak Republic updated for industrial production (IP), unadjusted and adjusted for the impact of the number of working days as of 16 August 2024

Note: Industrial production is a short-term indicator of a change in the volume of production in the industrial sectors of the Slovak Republic. Slovak IP is calculated by the SO SR using a method that complies with EU standards.

Prepared by: MARD SR

products and services increased year-on-year, the manufacture of other food products (+1.6%), the manufacture of beverages (+0.8%) and the processing and preserving of meat and meat products (+0.6%) contributed most to the increase. Three branches contributed to the decrease in the share of the revenues from the sales of own products and services of the industry, namely: processing and preserving of fish, crustaceans and molluscs, including the production of vegetable and animal oils and fats (-2.31%), manufacture of grain mill products, starches and starch products (-0.72%) and manufacture of dairy products (-0.51%).

A more detailed overview of food production in kind and in value terms is shown in tables 21 and 22 in the annexes.

Demand for Slovak food products, represented by food turnover in the retail sector at current prices, reached  $\leqslant$  30,085 million in 2023, representing a year-on-year increase by 5.3 %.

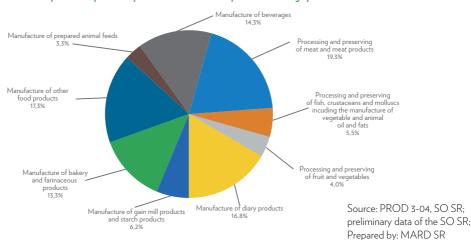


Chart 25 Structure of revenues from own products and services in food and beverage production in 2023

Table 29 Retail turnover (€ million at current prices)

Indicator	Ø2021- 2022	2022	2023	Index 2023/2022	Index 2023/Ø2021-2022
Total retail turnover in Slovakia	24,000	28,576	30,085	105.3	125.4
– RET turnover, non-specialised stores selling mainly food, beverages and tobacco <sup>1)</sup>	5,486	8,209	9,078	110.6	165.5
– RET turnover, food, beverages and tobacco in specialised stores	808	960	988	103.0	122.3
				Difference 2023 - 2022	Difference 2023 - (Ø2018-2022)
Share of RET turnover, non-specialised stores selling mainly food, beverages and tobacco (%)	22.9	28.7	30.2	1.4	7.3
Share of RET turnover, food, beverages and tobacco in specialised stores (%)	3.4	3.4	3.3	-0.1	-0.1

Source: SO SR, Prepared by: MARD SR

Note: RET = retail

This figure for business entities registered in the Commercial Register with 20 or more employees, or up to 19 employees with an annual turnover of more than € 5 million, or natural persons not registered in the Commercial Register with an annual turnover of more than € 5 million

In terms of volume of turnover, non-specialised retailers selling mainly food, beverages and tobacco¹ that had 20 or more employees increased their turnover by 10.6% year-on-year to  $\leq$ 9,078 million. Retail sales of food, beverages and tobacco in specialised stores increased by 3% year-on-year to  $\leq$  988 million. In connection with the development of sales in the Slovak retail sector with foodstuffs and beverages, including nonfood goods, there was an increase in the share of retail sales in non-specialised stores (by 1.4 pp to 30.2%) and a decrease in the share of retail sales in stores specialising in food, beverages and tobacco (by 0.1 pp to 3.3%).

<sup>&</sup>lt;sup>1)</sup> includes the retail sale of a large variety of goods, predominantly food, beverages or tobacco; activities of general stores which, apart from their main sales of food products, beverages and tobacco, also sell several other types of goods such as clothing, furniture, household goods and hardware, cosmetics, etc.;

<sup>\*=</sup> preliminary data from the short-term reporting of the SO SR

<sup>&</sup>lt;sup>1</sup> includes the retail sale of a large variety of goods, but predominantly food, beverages or tobacco; activities of general stores which, apart from their main sales of food products, beverages and tobacco, also sell several other types of goods such as clothing, furniture, household goods and hardware, cosmetics, etc.

## 3.4. Food consumption

In 2022, the disposable income of households increased by 2.5% year-on-year. Net cash expenditure increased by 10.5% and consumption expenditure rose at a similar pace by 11.7%. Food, beverage and tobacco spending increased by 6.5% with a faster growth rate for alcoholic beverages and tobacco (16%) than for food and non-alcoholic beverages (5.3%).

Table 30 Development of incomes and expenditures of Slovak households by COICOP classification (income per person per year)

	Index 2020/19	Index 2021/20	Index 2022/21
Disposable income **	105.2	97.7	102.5
Net cash expenditure *	104.9	103.8	110.5
Consumption expenditure *	97.3	105.2	111.7
Food and non-alcoholic beverages *	102.3	105.3	105.3
Alcoholic beverages and tobacco *	103.4	104.2	116.0
Food, beverages and tobacco *	102.4	105.1	106.5

Source: SO SR, calculations made by MARD SR

Notes: \* Household budget ("HB") statistics; \*\* EU SILC - Statistics on Income and Living Conditions

Prepared by: MARD SR

The share of consumer spending on food, beverages and tobacco (excluding public catering) in total consumer spending in 2022 decreased to 26.24% (1.29 p.p.). The percentage of total spending on food and non-alcoholic beverages decreased to 22.94% and the share of alcoholic beverages and tobacco increased to 3.30%.

Table 31 Share of food, beverages and tobacco in consumption expenditure (%)

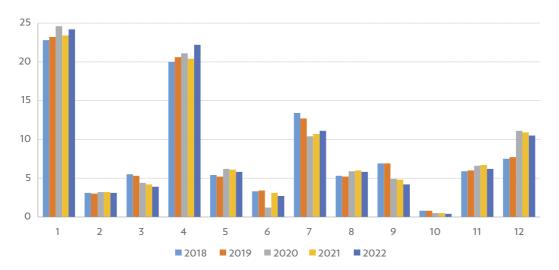
Share of food, beverages and tobacco in consumption expenditure *	2020	2021	2022
Food and non-alcoholic beverages	24.33	24.35	22.94
Alcoholic beverages and tobacco	3.21	3.18	3.30
Food, beverages and tobacco	27.54	27.52	26.24

Source: SO SR, calculations made MARD SR, \* Family accounts statistics (hereinafter referred to as "FA");

Prepared by: MARD SR

The structure of consumption expenditure of Slovak households did not change significantly during the period under review. The shift in consumer spending from basic needs (food, housing) to leisure, transport, travel, etc. that is observed in the EU-15, is not manifested in the Slovak Republic except in a small number of better-off households.

Chart 26 Year-on-year changes in the basic structure of consumption expenditure of private households, 2018 - 2022 (%)



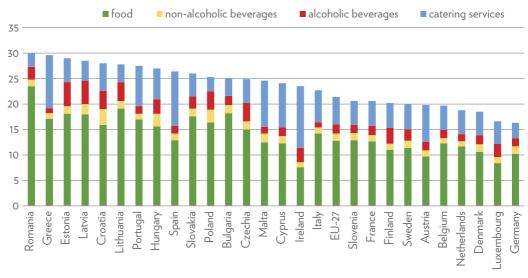
Source: SO SR, calculations made MARD SR,

The data is calculated from the results of a sample survey of household accounts statistics using Eurostat methodology and recommendations for the harmonisation of household budget surveys in the EU

1-Food and non-alcoholic beverages, 2-Alcoholic beverages and tobacco, 3-Clothing and footwear, 4-Housing, water, electricity, gas and other fuels, 5-Furnishings, household equipment and routine household maintenance, 6-Health, 7-Transport, 8- Post and telecommunications, 9-Recreation and culture, 10- Education, 11-Hotels, cafes and restaurants, 12-Miscellaneous goods and services

Prepared by: MARD SR

Chart 27 Share of food, beverages and catering services in total consumption expenditure of EU MS households in 2021 (%)



Source: Eurostat, Key figures on the European food chain, 2023 Prepared by: MARD SR There are significant differences between EU Member States in the shares of household expenditure spent on food and beverages and catering services. The average EU household spends 21.4% of its consumption budget in this category. In 2021, the lowest shares for such consumer spending were recorded in Germany (16.3%), Luxembourg (16.6%) and Denmark (18.5%). The highest shares were recorded in Romania (30%), Greece (29.6%) and Estonia (29%). In most EU member states, the proportion of the expenditure on food was the largest. The exception was Ireland, where more was spent on catering services. Catering services were generally the second largest item of expenditure, although in Poland, Latvia and Lithuania expenditure on alcoholic beverages was higher.

#### Level of food consumption

In 2023, meat consumption (by carcass weight) rose by 1.5 kg to 72.5 kg per person per year. Beef consumption fell by 0.2 kg to 5.8 kg per person per year, which continues the long-term negative trend for this category of consumption significantly below the reference intake (RI). Pork meat consumption increased by 1.6 kg to 40.6 kg per person per year. Conversely, poultry consumption decreased year-on-year by 2.3 kg to 22.2 kg per person per year.

A positive phenomenon is an increase in the consumption of milk and milk products by 6.8 kg to 191.6 kg per person per year, as well as an increase in cereal consumption in the value of flour by 2.2 kg to 78.3 kg per person per year. There was a negative trend in the consumption of vegetables and vegetable products, with the consumption falling by 4.3 kg year-on-year to 97.1 kg per person per year. There was a slight increase in the consumption of fruit and fruit products by 0.3 kg to 70.8 kg per person per year. Potato consumption decreased by 0.8 kg to 53.5 kg per person per year. There was a slight increase in fish consumption by 0.1 kg to 5.8 kg per person per year. Fats consumption increased as well, namely by 1.7 kg to 23.9 kg per person per year. Sugar consumption also grew, rising by 2.4 kg to 34.2 kg per person per year.

Table 32 Consumption of selected types of food per capita in Slovakia (kg per person per year)

Food town	Actual amount			Estimate	Difference	RI <sup>1)</sup>	Recommended range	
Food type	2010	2015	2020	2022	2023	2023-22	KI 7	of consumption
Meat (carcass weight)	55,8	50,6	69,9	71,0	72,5	+1,5	57,3	51,6-63,0
Fish	5,1	5,3	5,9	5,7	5,8	+0,1	6,0	
Milk and milk products, total (milk, without butter)	162,8	169,2	180,1	184,8	191,6	+6,8	220,0	206,0-240,0
Cereals (flour)	80,3	81,2	77,9	76,1	78,3	+2,2	98,5	94,0-103,0
Edible fats and oils, total	23,1	21,1	21,9	22,2	23,9	+1,7	22,0	19,8-23,1
Potatoes	47,6	48,9	54,2	54,3	53,5	-0,8	80,6	76,3-84,9
Legumes	1,6	1,5	1,5	1,8	2,0	+0,2	2,6	2,1-3,2
Vegetables and vegetable products	94,6	100,9	107,0	101,4	97,1	-4,3	127,9	116,9-138,9
Fruits and fruit products, total	53,6	65,7	69,6	70,5	70,8	+0,3	96,7	86,7-106,7

Source: SO SR, data for 2023 = preliminary data of the SO SR;  $^{1)}$  RI = reference intake Prepared by: MARD SR

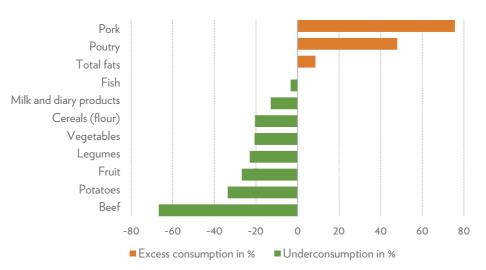


Chart 28 Comparison of consumption of selected types of food in the Slovak Republic with reference intakes (RI) for 2023

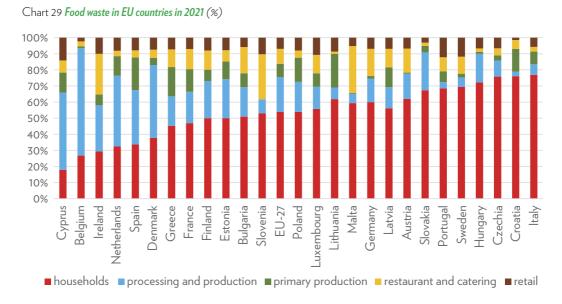
Source: SO SR, data for 2023 – SO SR  $\acute{}$  s estimate, calculations made by MARD SR Prepared by: MARD SR

According to preliminary data of the Statistical Office of the Slovak Republic on food consumption, overconsumption, i.e. consumption above the reference intake, was measured only in the case of pork, poultry and fats in total, where consumption exceeded the RI¹ by 75.7%, 48% and 8.6% respectively. Underconsumption below reference intake was most prominent in the case of beef meat (-66.7%) but was also recorded potatoes, legumes, fruits and vegetables. A more detailed overview of the development of food consumption is presented in Table 23 in the annexes.

A very serious topic currently being addressed is **food waste** and how it is disposed of. On average, an EU citizen generates 131 kg of food waste per year. More than half of food waste comes from households.

On average, the Countries with the highest per capita food waste are Cyprus (397 kg per person), Belgium (262 kg per person) and Denmark (230 kg per person), according to Eurostat data. The lowest amounts were found in Slovenia (68 kg per person), Croatia (71 kg per person) and the Czech Republic (85 kg per person). In most EU member states, households accounted for more than half of all food waste collected. Cyprus, Belgium, Netherlands and Denmark were the exception, where the share of waste collected from treatment and production was larger than the share of waste from households, while in Ireland and Spain the share of treatment and production was the same as the share of waste generated by households.

<sup>&</sup>lt;sup>1</sup> Reference intakes (RIs) are a measure to assess the actual and projected level of food consumption in terms of the requirements for rationalizing the diet of the population. Recommended intakes are intended as a benchmark for production planning, statistical monitoring of food consumption, education on good nutrition, and for updating national food and nutrition policy. RIs are not intended to be a strict, dogmatic definition of consumption levels, but are primarily intended to show the necessary rates of development of consumption of particular types of food. That is why we are not talking about consumption norms, but about recommended intakes, which are regularly revised.



Source: Eurostat, Key figures on the European food chain, 2023 Prepared by: MARD SR

## 3.5. Safety and quality of food

Ensuring the highest level of health and consumer protection with regard to food safety is a priority for the Slovak Republic and the European Union. The competent inspection authorities of all EU member states monitor, inspect and verify whether operators comply with the relevant requirements of food law and whether they meet the requirements for food safety at every level of production, processing, distribution and the sale of food to end consumers. Official food inspection is an instrument to enforce and implement food legislation on the national and European levels.

In 2023, inspectors from District Veterinary and Food Administration under the supervision of the **State Veterinary and Food Administration of the Slovak Republic**, inspected a total of 8,068 organisations. They conducted a total of 44,525 official inspections of foodstuffs at all levels of the chain, while violations were identified by 2,368 inspections. In 341 out of a total of 11,602 tested samples, foodstuffs or other products of plant, animal and mixed origin were found not to be in accordance with applicable legislation.

In 2023, State Veterinary and Food Institute analysed 5,694 samples in commodities of plant origin, of which 162 samples, i.e. 2.8%, did not meet the requirements of European legislation, the Food Code of the Slovak Republic, the Decrees of the Ministry of Agriculture and Rural Development of the Slovak Republic or other applicable legislation in the field of food safety and quality. Of the total number of analyses performed on samples of food of plant origin without wine, 86 did not comply with the legislation in labelling, 52 in sensory indicators, 56 in additives, 31 in physical-chemical indicators, 22 in allergens, 7 in contaminants and 8 in microbiological indicators.

In 2023, a total of 4,513 samples of food of animal origin were taken, while 120 samples failed (2.7%), which is an improvement of 0.4 pp compared to 2022. The highest number of samples, 40 samples, failed in microbiological requirements and 21 samples failed in physical-chemical indicators. 16 samples failed in labelling requirements, 9 samples were found to contain contaminants, 5 samples failed in the special additive NaCl, 5 samples failed in allergen labelling requirements, 2 samples failed in additive requirements, 1 sample failed in the residue requirements for veterinary medicinal products and 1 sample failed in other indicators.

The majority of inspections (43,861) were routine inspections during working hours. Of these, 2,132 routine inspections (4.8%) identified deficiencies. 664 inspections were conducted after the end of working hours. Of these, 236 identified deficiencies, representing 35.5% of the number of inspections conducted after the end of working hours.

Out of the total number 14,653 inspected establishments belonging to 8,068 inspected legal entities, deficiencies were found in 1,939 establishments, i.e. 13.2% (the infringement rate in 2022 was 13.3%). Deficiencies in the hygiene of buildings and establishments (1,602 deficiencies), sales after the use-by date or expiry date (1,083 deficiencies), labelling (1,039 deficiencies), hygiene of technological equipment and work equipment (933 deficiencies), deficiencies in the hygiene of storage (757 deficiencies), deficiencies in the hygiene of sales (714 deficiencies), as well as other deficiencies were the most frequently identified deficiencies in the course of the official inspections.

The highest number of deficiencies was found in hypermarkets and supermarkets, which had 3,675 deficiencies across 381 establishments. The deficiencies concerned the hygiene of buildings and establishments, the hygiene of storage, the hygiene of sales, the hygiene of technological equipment, work equipment, labelling, sales after the use-by date or expiry date.

In 2023, many activities were carried out and new rules and measures were implemented in relation to the situation in Ukraine.

Detailed information on official food inspections (in Slovak) can be found in the 2023 Annual Report on the website of the State Veterinary and Food Administration of the Slovak Republic.

#### Activities of public health authorities

In 2023, a total of 28,430 inspections (including 13,342 official inspections and 15,088 inspections within the framework of state health surveillance) were carried out by the public health authorities in the Slovak Republic in 15,803 food establishments, including catering establishments, out of a total of 50,939 establishments registered by the public health authorities. In addition to the above-stated inspections, 2,365 inspections were carried out in establishments registered with the Slovak State Veterinary and Food Administration authorities, such as food shops, newsagents, etc. A total of 6,023 non-compliances with the currently applicable legislation were found during the inspections. Deficiencies were detected in 2,784 establishments, which represents a slight deterioration compared to 2022. The highest number of inspections, namely 23,340 in total, were carried out in 12,372 catering establishments (out of the total number of 44,013 registered catering establishments, which represents 28% of the inspected establishments), while non-conformities were found in 2,551 inspected establishments.

The most common causes of non-compliance in general were shortcomings in operational

hygiene (1,149 establishments), food storage (848 establishments), the HACCP/GMP system (686 establishments), food handling (429 establishments), food labelling (398 violations) and food after its use-by date or expiry date (381 establishments). Compared to 2022, we recorded a higher number of establishments with deficiencies in operational hygiene, with more deficiencies identified relating to food storage, improper food handling and food labelling.

In 2023, a total of 10,932 samples of food, foodstuffs and food additives were taken and tested in accordance with the Multiannual National Official Control Plan. The largest group of such samples (5,929 samples) came from meals or fast food. Of the total inspected samples, 798 samples were non-compliant, which is 7.3%, while the most common cause of non-compliance was microbial contamination, mainly due to breaches of production process criteria, which was detected in 744 non-compliant samples (93.2%). The largest numbers of microbiologically unsatisfactory samples were in the categories of ice cream, meals and fast food. 27 samples failed due to other contamination, of which 17 food samples, mainly ice cream, failed due to additives, 8 food samples failed due to sodium chloride content, 2 food samples were found to contain an allergen that was not indicated on the menu for those dishes.

The highest percentages of non-compliant samples, compared to the other food samples, were recorded in the case of non-alcoholic beverages (64.3%), delicatessen products (19.1%), fast food (15.9%), and ice cream and desserts (14%). 27 food samples (most often food supplements) did not comply with food labelling requirements.

The MARD SR promotes food quality by means of two schemes, a national Quality Label and the EU Quality Policy.

## **Quality Label**

The label logo and graphic design were changed in 2019. The system of assessment and granting of the Quality Label remain unchanged. The Quality Label was replaced by the Quality Label Level 1. The GOLD Quality Label was replaced by the Quality Label Level 2. According to the new rules, products with superior quality properties (i.e. whose quality parameters are







found to be significantly above those of similar products by professional assessment) which are recommended by the committee, are awarded the Quality Label Level 2, as well as the right to use the Quality Label Level 2, which will identify products with superior quality parameters. In May 2020, the MARD SR issued Guidelines for the Assessment and Awarding of the Quality Label for agricultural products and foodstuffs.

The use of the Quality Label for food helps consumers to orientate themselves in the quantity of offered food production and draws their attention to homemade products of high quality with outstanding characteristics. The agriculture and food sectors consider the Quality Label to be a key tool for the visibility of quality domestic products, which increases their competitiveness in the home market. At present, the Quality Label is applied to 1,272 products. The product groups

where the labels are most used are bakery, dairy and meat products. The Logo manual can be found on http://znackakvality.sk

The EU Quality Policy is a philosophy of the development of the quality of original, traditional agricultural products and foodstuffs and of the promotion of the cultural traditions and regions where these products are produced. The system was developed in response to increasing counterfeiting of products and the misuse of traditional names that guaranteed the reputation of traditional regional products. The EU Quality Policy means the protection of agricultural products and foodstuffs and the promotion of their sale. These foodstuffs must meet certain qualitative parameters that distinguish them from other similar products based on the precisely defined requirements for their ingredients and the technological procedure for their production. As part of the EU Quality Policy, the EU accepts, protects, supports, registers and inspects products divided into the following three categories:



Protected geographical indication - PGI (Chránené zemepisné označenie CHZO)



Protected designation of origin - PDO (Chránené označenie pôvodu CHOP)



Traditional speciality guaranteed - TSG (Zaručená tradičná špecialita ZTŠ)

Table 33 List of Slovak products with European designations of origin as of 3 October 2024

	PDO	PGI	TSG	Geographical indications of spirits and aromatic wines
Bardejovský Med / Med z Bardejova (honey)	0			
Hrušovský lepník (flat cake)		•		
Liptovské droby (potato sausages)		*		
Skalický rubín (wine)	0			
Stupavské zelé (cabbage)	0			
Levický slad (barley malt)				
Klenovecký syrec (cheese)		•		
Zázrivské vojky (cheese)				
Paprika Žitava / Žitavská paprika	0			
Karpatská perla (wine)	0			
Slovenská / Slovenské / Slovenský (wine)		0		
Oravský korbáčik (cheese)		•		
Tekovský salámový syr (Tekov salami cheese)		•		
Zázrivský korbáčik (cheese)		•		
Slovenský oštiepok (cheese)				
Slovenská bryndza (cheese)		•		
Slovenská parenica (cheese)				
Skalický trdelník (Skalica chimney cake)		•		
Stredoslovenská / Stredoslovenský / Stredoslovenské (wine)	0			
Tokaj wine-growing area				
Nitrianska / Nitrianske / Nitriansky (wine)	0			
Malokarpatská / Malokarpatské / Malokarpatský (wine)	•			
Južnoslovenská / Južnoslovenské / Južnoslovenský (wine)	0			
Východoslovenská / Východoslovenský / Východoslovenské (wine)	0			
Spišská borovička (spirits)				
Ovčí salašnícky údený syr (smoked sheep's cheese from the sheepfold)				
Bratislavský rožok / Pozsonyi kifli (biscuit)				
Ovčí hrudkový syr - salašnícky (lump sheep's cheese from the sheepfold)				
Spišské párky (sausages)				
Traditional špekáčky (sausages)			0	
Liptovská saláma (salami)			0	
Tradičná lovecká saláma (salami)				
TOKAJSKÉ VÍNO zo slovenskej oblasti (wine from Slovak area)				
Trenčianska borovička "JUNIPERUS"/Trenčianska borovička "JUNIPERIES" – TRENČÍN DISTILLERY (spirits)				
Liptovská bryndza (cheese)	•			
Liptovské šialence (tripe sausage)		0		
Brhlovské podlievané buchty (buns)		8		
Muránske buchty (buns)		<b>(3)</b>		
Spišský šípkový lekvár (jam)	•			
Trnavský slad (malt)		•		

Source: MARD SR, Prepared by: MARD SR



### 4. FOREIGN TRADE IN AGRICULTURAL AND FOOD PRODUCTS

### 4.1 Agri-food foreign trade in the slovak republic in 2023

In particular, two main factors had impacts on foreign trade in 2023. After the development of foreign trade in 2022, accompanied by a rapid rise in the prices of production inputs such as exported and imported agri-food commodities, 2023 was characterized by a substantial easing of inflationary pressures, which was reflected in the cessation of price increases and, for some items, even price declines.

The second factor was the ongoing military conflict in Ukraine, which in 2023 was accompanied by a 34.1% year-on-year decline in the value of imports to € 124.1 million. The decline in imports can be attributed to the introduction of measures and exemptions to protect the internal market of the Slovak Republic in the form of restrictions on imports of selected commodities. Many of the measures aimed at supporting Ukraine and put in place in previous periods have remained in place, such as the suspension of the application of import duties, anti-dumping duties and quotas on imports from Ukraine to the European Union market and the provision of guarantees for Ukrainian exports to the European Union under autonomous trade measures.

Total foreign trade had slightly different characteristics than agri-food foreign trade. Total foreign trade showed a year-on-year increase in exports but a slight decrease in imports. Agrifood foreign trade showed an increase in both exports and imports. Compared to last year, the increases slowed down and were no longer in double digits. In contrast to the previous year, the growth rate of agri-food exports was lower than that of agri-food imports. In total foreign trade, the growth rate was higher for total exports. Total exports of the Slovak Republic increased by 5.3% year-on-year, while the value of total imports decreased by 3%. Agri-food imports of the Slovak Republic increased by 8.6% year-on-year and agri-food exports increased by up to 5.4%. The share of the agri-food sector in the Slovak foreign trade in total imports increased to 7.1% (by 0.76 pp), in total exports to 4.77%.

The increase in the turnover of the foreign trade balance for both total and agri-food foreign trade brought about a different development of their balance, when in the case of total foreign trade a positive balance was achieved, while in the case of agri-food foreign trade the negative balance deepened year-on-year. The final trade balance is the result of all the developments in the exchange of goods. Total foreign trade moved from a negative trade balance to a positive trade balance in 2023, resulting in a positive balance of  $\in$  4,524 million. In the case of agri-food commodities, a negative trade balance was achieved with a simultaneous increase in the value of both exports and imports, with the negative trade balance deepening by  $\in$  321.6 million year-on-year and the total negative balance amounting to  $\in$  -2,238.3 million.

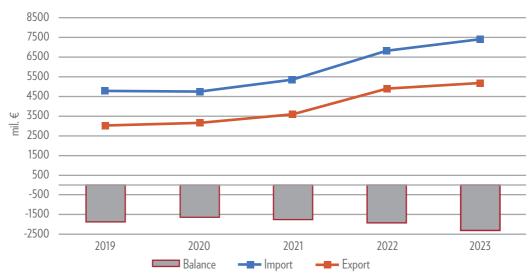
Table 34 Foreign trade development (€ million)

Indicator		Ø 2018-2022	2022	20231)	Index 2023/ 2022	Index 2023/Ø2018-2022
	Export	85,347	102,786	108,265	105.3	126.9
Total foreign trade	Import	84,539	107,310	104,063	97.0	123.1
for Slovakia HS 01-99	Turnover	169,886	210,096	212,328	101.1	125
	Difference	808	-4,524	4,202	Х	520.1
of which: agri-food	Export	3,508	4,896	5,160	105.4	147.1
sector for Slovakia	Import	5,238	6,813	7,399	108.6	141.3
overall	Turnover	8,746	11,709	12,559	107.3	143.6
HS 01-24	Difference	-1,730	-1,917	-2,238	116.8	129.4
of which: foreign	Export	3,313	4,642	4,860	104.7	146.7
trade of the Slovak	Import	4,688	6,000	6,624	110.4	141.3
agri-sector with the EU	Turnover	8,001	10,642	11,484	107.9	143.5
HS 01-24	Difference	-1,375	-1,359	-1,764	129.8	128.2

Source: SO SR, 1) preliminary data for 2023, valid as of June 2024

Prepared by: MARD SR

Chart 30 Development of Slovakia's foreign agri-food trade



Source: SO SR Prepared by: MARD SR During 2023, the Slovak Republic imported € 586 million (8.6%) more agricultural and food products.

Year-on-year, imports of swine meat, fresh, chilled or frozen increased the most, namely by € 66.7 million (17.7%), preparations of species used as animal feeds by € 50.9 million (23.2%), bread, sweet pastry, cakes, biscuits and other bakery products by € 46 million (14.6%), animal or vegetable fats and oils by € 44.4 million (108.6%), waters, including mineral waters and carbonated waters by € 37.9 million (19.8%), meat and edible offal, of poultry, fresh, chilled or frozen by € 36.8 million (16.5%), sausages, salamis and similar products, of meat, meat offal or blood by € 25.8 million (20.5%), potatoes, fresh or chilled by € 24.5 million (61,8%), other prepared or preserved meat, meat offal or blood by € 20.4 million (17.0%), cane or beet sugar and chemically pure sucrose by € 20.1 million (42.8%), vegetables (uncooked or cooked by steaming or boiling in water), frozen by € 15.0 million (52.7%), confectionery (including white chocolate), not containing cocoa by € 13.3 million (21.1%), wine from fresh grapes, including fortified wine; grape cider by €13.3 million (19.4%), sauces and preparations for sauces; pickling and seasoning mixtures by € 11.9 million (18.7%) and animal products not specified elsewhere by € 11.7 million (292.3%).

The development of the balance was positively influenced by a year-on-year decrease in imports of mainly coffee, roasted or decaffeinated as well, by  $\leqslant$  45.5 million (18.1%), chocolate and other food preparations containing cocoa by  $\leqslant$  25 million (7.9%), sunflower oil, safflower oil or cottonseed oil by  $\leqslant$  25 million (31.1%), animal or vegetable fats and oils and their fractions by  $\leqslant$  25.0 million (28.6%), corn by  $\leqslant$  25.0 million (17%), ethyl alcohol, undenatured, with an alcoholic strength by volume of 80% vol. by  $\leqslant$  23.5 million (63.6%) and rapeseed seeds by  $\leqslant$  23.4 million (45.8%).

# 4.2 Product structure of foreign trade

Within the product structure of Slovak imports of agricultural and food products, the leading positions were occupied by finished food products and semi-finished products which occupied the first twelve positions in 2023: food preparations not specified elsewhere with a share of 6.3%, pig meat, fresh, chilled or frozen with a share of 6%, bread, sweet pastry, cakes, biscuits and other bakery products with a share of 4.9%, chocolate and other food preparations containing cocoa with a share of 3.9%, cheese and curd cheese with a share of 3.8%, preparations of species used as animal feed with a share of 3.7%, meat and edible offal, of poultry, fresh, chilled or frozen with a share of 3.5%, waters, including mineral waters and carbonated waters containing added sugar with a share of 3.1%, coffee, roasted or decaffeinated as well; coffee husks and skins; coffee substitutes with a share of 2.8%, sausages, salamis and similar products, of meat, meat offal or blood with a share of 2%, other prepared or preserved meat, meat offal with a share of 1.9% and undenatured ethyl alcohol with an alcoholic strength by volume of less than 80% vol. with a share of 1.7% in the total agri-food imports.

Significant changes also occurred in the agri-food imports from Ukraine, not only in terms of volume growth, but also in the structure of imports from Ukraine. The most important items of agri-food imports from Ukraine in 2023 included maize worth  $\in$  38.2 million, meat and edible offal, of poultry worth  $\in$  34.6 million, soybeans worth  $\in$  9.6 million, sunflower oil worth  $\in$  8.7 million,

wheat and meslin worth  $\in$  5.6 million, waters, including mineral waters and carbonated waters, containing added sugar  $\in$  4.5 million, press cake and other solid residues worth  $\in$  2.1 million, and sunflower seeds worth  $\in$  1.9 million.

Exports of agricultural and food products in 2023 reached  $\leq$  5,160.4 million with a  $\leq$  264.2 million year-on-year increase (5.4%).

The increase in the exports of the following items had a decisive share in the increase in the value of agri-food exports: bread, sweet pastry, cakes, biscuits and other bakery products by € 100.4 million (53.8%), food preparations not specified elsewhere by € 96.8 million (35.3%), preparations of species used as animal feed € 60.6 million (145.7%), meat and edible offal, of poultry, fresh, chilled or frozen by € 41.4 million (45.7%), malt, also roasted, by € 33.7 million (28.2%), wheat and meslin by € 26.3 million (6.5%), other prepared or preserved meat, meat offal or blood by € 21.2 million (46%), confectionery (including white chocolate) not containing cocoa by € 19.8 million (16.1%), sausages, salamis and similar products, of meat, meat offal or blood by € 18.5 million, (22%) denatured ethyl alcohol with an alcoholic strength by volume of less than 80 % by € 15.6 million (45.6%), live pigs by €14.2 million, (26.1%), other sugars including chemically pure lactose, maltose, glucose and fructose by € 13.7 million (12%) and fruits, nuts and other edible parts of plants, otherwise prepared or preserved by € 13.1 million (41.5%).

On the other hand, less maize was exported from the Slovak Republic year-on-year by  $\in$  174.3 million (50.4%), rapeseed seeds by  $\in$  32.4 million (16.1%), coffee, roasted or decaffeinated as well; coffee husks and skins; coffee substitutes by  $\in$  28.7 million (17.1%), sunflower seeds by  $\in$  28.7 million (23.1%), soya bean oil and its fractions by  $\in$  19.6 million (26.8%), wheat or meslin flour by  $\in$  18.2 million (31.2%), other animal fats and oils and their fractions by  $\in$  10.9 million (43.6%), sunflower oil, safflower oil or cottonseed oil and their fractions by  $\in$  10.9 million (43.6%), animal or vegetable fats and oils and their fractions by  $\in$  10.9 million (61.7%), milk and cream, concentrated or containing added sugar or other sweeteners by  $\in$  9.3 million (52.3%), natural honey by  $\in$  8.3 million (52.9%), milk and cream, not concentrated nor containing added sugar or other sweeteners by  $\in$  7.3 million (6.5%), starches; inulin by  $\in$  6.7 million (20.2%), crude glycerol; glycerol water and glycerol liquor by  $\in$  5.9 million (61.9%).

The most important category in the product structure of agricultural and food exports in 2023 was wheat and meslin with a share of 8.3% in total exports. This was followed by food preparations not specified elsewhere with 7.2%, chocolate and other food preparations containing cocoa with 6%, bread, pastry, cakes, biscuits and other bakery products with 5.6%, cheese and curd cheese with 3.8%, maize with 3.3%, rapeseed or oilseed with 3.3%, malt, also roasted, with 3%, confectionery (including white chocolate) not containing cocoa with 2.8%, coffee, roasted or decaffeinated as well; coffee husks and skins; coffee substitutes with 2.7%, meat and edible offal, of poultry of item 0105, fresh, chilled or frozen with 2.6%, other sugars, including chemically pure lactose, maltose, glucose and fructose 2.5%, undenatured ethyl alcohol with an alcoholic strength by volume of 80% with 2.4%, soups and broths and preparations for them and homogenised compound food preparations with 2.4%, and waters, including mineral waters and carbonated waters, containing added sugar or other sweeteners with 2.4%, milk and cream, not concentrated nor containing added sugar or other sweeteners with 2%, sausages, salamis and similar products,

of meat, meat offal or blood with 2%, preparations of species used as animal feed with 2%, sunflower seeds with 1.9%, live bovine animals with 1.5% and live pigs with 1.3% in the total agri-food exports.

Of the above 21 top export commodities, 15 of them are final and semi-processed food products (28.5% of total agricultural exports).

The increase in trade could be seen not only in the development of Slovakia's foreign trade in agricultural products, but also in processed food products.

In 2023, agricultural products with a total value of  $\leqslant$  1,447.8 million were imported in the Slovak Republic. This means a year-on-year increase by  $\leqslant$  12.2 million (0.8%). Substitutable agricultural products accounted for 74.3% of this total compared to 74.4% in 2022. These products were exported in the same period of time for  $\leqslant$  1,511.7 million, i.e. by  $\leqslant$  143.5 million (8.7%) less than in 2022.

The significant year-on-year increases in both import and export of agricultural products was reflected in a continuing positive trade balance. In 2022 the foreign trade in agricultural products generated a surplus of  $\leqslant$  219.6 million, while in 2023 it was a surplus of  $\leqslant$  63.9 million. In the trade in goods with substitutable agricultural products, the Slovak Republic achieved an active trade balance: at the level of  $\leqslant$  442.3 million in 2022 and at the level of  $\leqslant$  268.4 million in 2023 (an overall decrease of 39.3%). The value of imports of the so-called substitutable agricultural commodities increased slightly year-on-year from  $\leqslant$  1,068.7 million to  $\leqslant$  1,075.7 million. Foreign trade in agricultural products developed less favourably for the Slovak Republic with a year-on-year decline in exports and the fact that the exports of domestically grown temperate agricultural commodities were not able to fully eliminate the negative trade balance with the so-called irreplaceable commodities. The negative balance of the foreign trade in agricultural products was caused by a lower rate of exports and the simultaneous significant decline in the exports of substitutable commodities.

Unfavourable trends persist in Slovakia's foreign trade in food products because final or semi-processed food products generated 97.2% of Slovakia's total agri-food balance in 2023 compared to 89.7% in 2022. In 2023, food products were imported into the Slovak Republic for a total of € 5,950.9 million (a year-on-year increase of 10.7%) of which up to 78% (78.6% in 2022) were imports of substitutable food products. The value of food exports increased in this period. The value of products placed on foreign markets in 2023 was € 3,648.6 million, which is by 12.6% more than in 2022. Exports of substitutable food products accounted for up to 87.5% of this value (85.7% in 2022). While in 2022 the manufacturing industry generated a negative balance of €2,136.3 million (of which 67.7% is attributable to substitutable commodities), in 2023 the negative balance slightly deepened to € 2,302.2 million, i. e. by € 165.9 million, or by 7.8% (of which 63.0% is attributable to substitutable products). Exports were predominantly products with a lower value added whereas imports were mainly products with higher value added. This trend may continue in the coming years and could push the trade balance further into deficit.

## 4.3 Territorial structure of foreign trade

EU Member States remain the key foreign markets for Slovakia's trade in agri-food products, consistently holding a dominant position in this trade sector. The orientation of Slovakia's foreign agri-food trade towards EU countries is demonstrated by the fact that imports from the other EU-27 countries made up 89.5% of total imports to Slovakia in 2023 (88.1% in 2022), and exports to the other EU-27 countries accounted for 94.2% of Slovakia's total agri-food exports (94.8% in 2022).

The balance of foreign trade between the Slovak Republic and the EU member states (EU-27) for 2023 reached a negative value of  $\in$  -1,764 million. This represents a widening of the deficit by  $\in$  404.7 million compared to 2022 (29.8%).

Slovakia also recorded a deficit in its trade with non-EU countries (third countries) amounting to € -557.8 million in 2023. The passive balance of the Slovak Republic with third countries decreased year-on-year by up to € 83.1 million (14.9%). Similarly to previous years, Slovakia's imports from third countries consists mainly of non-substitutable products that Slovakia does not have the right conditions to produce: special food preparations, fruits and nuts, beverages and spirits, cocoa preparations, coffee and spices, fish and crustaceans, vegetables and preparations from vegetables and fruits, and animal feed. Slovakia's exports to third countries focus mainly on semi-processed foodstuffs and products: milk and dairy products, various food preparations, beverages and spirits, sugar and confectionery, live animals and cereal preparations. Agri-food products worth € 775 million were imported in the Slovak Republic from non-EU countries. This was a decrease by as much as € 37.4 million compared to 2022 (-4.6%).

In 2023, Slovakia's exports to third countries mainly included agricultural and food products worth  $\in$  300.3 million. This was an increase of  $\in$  45.7 million (18%) compared to the previous year. More detailed data on foreign trade are presented in tables 24 – 28 in the annexes.





#### 5. PRODUCTION INPUTS IN THE AGRICULTURE AND FOOD SECTOR

### 5.1. Agricultural inputs

#### Fixed capital in agriculture

According to preliminary data of the SO SR, agricultural enterprises invested  $\leqslant$  1.1 billion in upgrading their assets in 2023, representing the highest amount for the last 10 years. Gross fixed capital formation increased by 13.4% year-on-year ( $\leqslant$  +124.7 million). Investments in cultivated biological resources increased significantly ( $\leqslant$  +34.6 million), in buildings and constructions ( $\leqslant$  +35.1 million) and in transport equipment ( $\leqslant$  +32.8 million). There was also a significant increase in other investments: in machinery and equipment ( $\leqslant$  +20.5 million) and in intellectual property products ( $\leqslant$  +1.7 million).

In the structure of the gross fixed capital invested in 2023, investment in machinery and equipment dominated (42.7%), followed by the investment in transport equipment with a share of 26.9%. The share of investments in cultivated biological resources increased from 13.4% in 2022 to 15.1%.

The increase in gross fixed capital formation is a reflection of structural changes in the production programmes of agricultural enterprises, which focus mainly on plant production, new technologies and modernisation.

Indicator	Ø 2018-2022	2021 1)	2022 1)	2023 <sup>2)</sup>	Index 2023/2022	Index 2023 / Ø (2018-2022)
GFCF	684,966	690,427	931,406	1,056,157	113.4	154.2
of which	132,149	134,814	122,076	157,148	128.7	118.9
: total buildings and structures	176	253	-2,711	332	-12.2	188.6
of which - residential buildings	243,175	254,768	430,729	451,202	104.8	185.5
: machinery and equipment	241,355	251,422	428,917	449,130	104.7	186.1
of which - other machinery and equipment	206,887	202,154	251,462	284,310	113.1	137.4
: transport equipment	98,199	92,181	124,421	159,038	127.8	162.0
: cultivated biological resources	4 556	6 510	2 718	4 459	164,1	97,9

Source: SO SR / GFCF data after revision valid from 18 October 2024,

The gross stock of fixed assets at deemed cost in  $2022^1$  amounted to  $\leq$  17,050 million, representing an increase of  $\leq$  2,364 million compared to 2021 (+16%). The net stock of assets, which is derived from gross assets net of fixed capital consumption, increased by  $\leq$ 1,798 million to  $\leq$  12,806 million. The development of gross fixed capital formation and its structure in agriculture is presented in Table 29 in the annexes.

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 $<sup>^{1)}</sup>$  Preliminary data,  $^{2)}$  Data from preliminary quarterly reports; Prepared by: MARD SR

<sup>1</sup> the latest available data of the SO SR – preliminary data

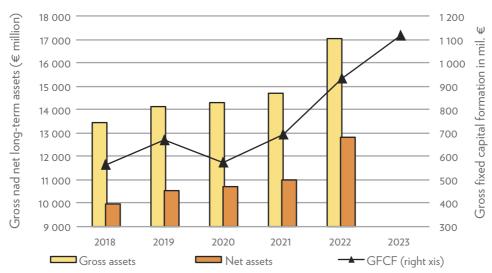


Chart 31 Development of gross and net assets and GFCF

Source: SOSR/GFCF data after revision valid from 19 April 2024; data on the state of assets for 2023 is not available, Prepared by: MARD SR

Consumption of seeds and planting stock of the main plant commodities decreased in 2023 compared to the previous year for almost all monitored crops, except for rapeseed and cereals. The volume of consumed seeds and planting stock depends on the size of the sown area (which fell by as much as 15,800 hectares year-on-year), the specific type/hybrid of seed used, the agrotechnical procedure and, last but not least, the weather (adverse weather can negatively affect the germination of plants, with the result that it is sometimes necessary to plough up the sown areas and sow them again).

Table 36 Consumption of selected seeds and planting stock in Slovakia (t)

Crop type	2018	2019	2020	2021	2022	2023
Wheat, combined	107 712,9	106 119,6	97 343,1	127 727,5	114 506,4	105 754,7
Rye, combined	3 123,9	2 890,0	2 385,1	2 387,5	3 103,6	2 984,4
Barley, combined	32 708,9	37 224,6	32 194,4	37 641,4	32 002,7	31 465,9
Oats	3 547,5	3 126,3	2 645,6	3 303,6	2 007,3	1 677,6
Grain maize	13 346,6	11 191,9	7 313,5	9 589,6	5 866,0	5 012,6
Other cereals	3 087,0	2 814,6	2 615,2	3 110,9	3 018,6	3 276,5
Oilseeds, total	8 233,7	8 505,2	8 220,8	9 859,9	10 486,9	8 889,3
of which: sunflower	561,8	320,2	344,4	455,4	437,0	354,5
rapeseed	1 088,0	1 140,8	860,7	1 140,7	1 061,9	1 965,7
soybean	6 210,6	6 596,0	6 654,6	7 931,3	8 679,0	6 030,1
other oilseeds	373,3	448,2	361,1	332,5	309,0	-

Source: SO SR/ Crop balance in SR / Breakdown of crop losses in the Slovak Republic in tonnes Prepared by: MARD SR

The total **consumption of N-P-K fertilisers** is surveyed annually by the CCTIA and based on the currently available data for 2022, the consumption of N-P-K fertilisers dropped by 21,000 tonnes compared to 2021 to 157,300 tonnes. Usage of pure nutrients per hectare of agricultural land<sup>2</sup> dropped compared to 2021 as follows: the level of nitrogen (N) decreased from 72 kg/ha to 66.2 kg/ha, the level of phosphorus (P) from 7.4 kg/ha to 6 kg/ha, and the level of potassium (K) from 9.8 kg/ha to 8.6 kg/ha. Use of organic fertilisers has been relatively stable throughout the last 7 years, averaging 2.6 t/ha. An overview of fertiliser consumption from 2016 to 2022 is presented in Table 30 in the annexes.

Potatoes were the only monitored crop to achieve a positive balance of all N-P-K pure nutrients. The conversion of the net nutrient balance from oxides to elements in kg/ha is shown in Table 31 in the annexes.

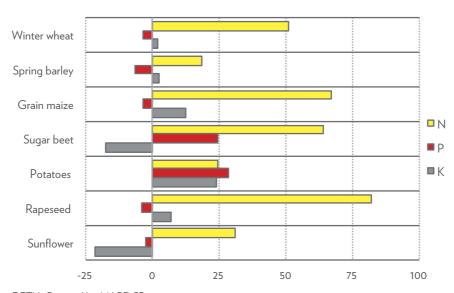


Chart 32 N-P-K nutrient balance in selected crops (kg/ha) (2022)

Source: CCTIA; Prepared by: MARD SR

A similar trend as in the case of N-P-K fertiliser consumption was observed in the consumption of plant protection products. According to the latest available data for 2022 from the CCTIA, the consumption of plant protection products decreased year-on-year to 4.7 thousand tonnes (in terms of active substances: 1.5 thousand tonnes), surpassing the 5-year minimum of 2021.

In the structure of plant protection products consumed in 2022, herbicides had the largest share (55.7% in terms of active substances), followed by fungicides (27.1%), insecticides accounted for 4.4%, and other plant protection products accounted for 12.5%. In the long term, we can observe an increasing trend in the consumption of insecticides, especially pyrethroids and carbamates, while the consumption of insecticidal mordants is significantly decreasing or stagnating. The consumption of herbicides and fungicides did not change significantly between 2018 and 2022.

<sup>&</sup>lt;sup>2</sup> the area surveyed represents 94.24% of the total utilised agricultural land in the Slovak Republic

6 000 5 500 5 000 1 102 1 057 4 500 429 4 000 .... 1244 3 500 .... 3 000 2 500 .... 2 000 .... 2 670 2 507 2 679 2 651 2 742 1500 .... 1 000 500 .... 475 437 0 2018 2019 2020 2021 2022 Herbicides Fungicides Other products Insecticides

Chart 33 Development of consumption of plant protection products (t)

Source: CCTIA; Prepared by: MARD SR

The consumption of plant protection products in terms of active substances is shown in the table below, together with the consumption per hectare of agricultural land<sup>3</sup>.

Table 37 Overview of the use of plant protection products in Slovakia in 2022

	according to	FAO groups	(active substances (OECD))		
	kg	kg/ha	kg	kg/ha	
Insecticides	635,606	0.67692	66,474	0.07080	
Herbicides	2,506,557	2.66950	839,931	0.89453	
Fungicides	1,154,323	1.22936	408,973	0.43556	
Other preparations	383,092	0.40800	189,163	0.20146	
Fungicidal mordants	34,748	0.03701	3,119	0.00332	
Insecticidal mordants	1,201	0.00128	533	0.00057	
Rodenticides	10,220	0.01088	255	0.00027	
Plant protection products, total	4,725,747	5.03295	1,508,448	1.60651	
Monitored agricultural area (ha)	938,961		_		

Source: CCTIA; Prepared by: MARD SR

Consumption of feed materials for the production of complete compound feed (CCF) increased by 5 kt (+0.7%) in 2023 to 680.3 kt. The largest ingredient is grains (63.3% of all raw materials used in feed 430.7 kt), which breaks down as follows: wheat (205.5 kt), maize (119 kt) and barley (95.2 kt). Consumption of most grains increased year-on-year (wheat the most by 37.1 kt), but excluding maize (-31.1 kt) and oats (-0.4 kt).

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 $<sup>^{3}</sup>$  the area covered by the data collection represents 50.8 % of the total agricultural land used in the Slovak Republic

There was also a decrease in the volume of meals and pomace consumed, which fell by 14.7 kt to 151.9 kt. The consumption of mineral additives also decreased by 3.4 kt. Of the meals and pomace, soya meal accounts for the largest volume (85,8 kt) with a share of 22.3% in the total consumption of feed materials, while the share of genetically modified soya meal fell from 74% to 64%. Rapeseed meal, pomace and rapeseed oil also have a significant share, with a volume of 46.1 kt.

Compared to 2022, the share of compound feed consumption for dried products of the food industry increased by 4.3 kt and other feed materials of plant origin (mainly grass straw) by 9.1 kt.

The share of genetically modified material used as ingredients in CCF (excluding mineral supplements and premixes) was 32.3% in 2023.

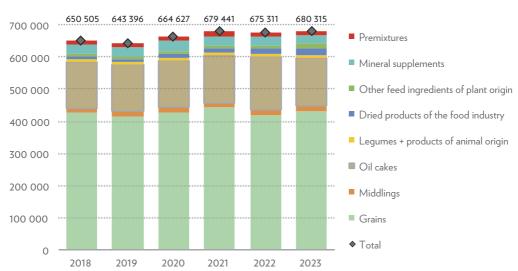


Chart 34 Overview of feed materials used in the production of CCF (t)

Source: MARD SR / Quarterly report on the production of complete compound feed and the raw materials used in its production (KRMZ 1-04) Prepared by: MARD SR

The total **volume of sales and consumption of CCFs in agriculture¹** increased significantly compared to 2022 by 29.9 kt to 690.6 kt. An increase in the consumption of CCFs was recorded for pigs (+30.4 kt), cattle (+19.4 kt) and other compound feed (+2.5 kt).

Of the total CCF volume for pigs (197.5 kt), fattening pigs consumed the most (111.9 kt). In cattle, out of the total volume of 198.9 kt of CCF, dairy cows consumed the most (153.8 kt). For poultry (including turkeys and ducks), the volume of CCF sales and consumption decreased by 7.7% year-on-year.

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<sup>&</sup>lt;sup>1</sup> Monitoring at the compound feed manufacturers in the cited report (KRMZ 1-04)

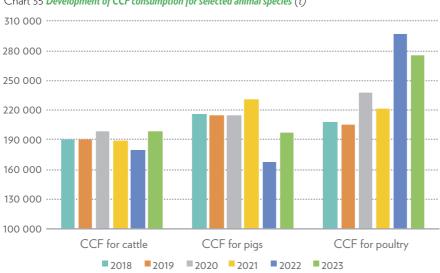


Chart 35 Development of CCF consumption for selected animal species (t)

Source: MARD SR / Quarterly report on the production of complete compound feed and the raw materials used in its production (KRMZ 1-04); Prepared by: MARD SR

#### State irrigation systems

In the pre-1989 period, a network of high-pressure sprinkling systems was constructed to irrigate 321,000 ha of agricultural land in Slovakia. The network's technical infrastructure included 481 pumping stations and 9,531 km of underground pressure pipeline terminating at hydrants at ground-level on the farmland. The systems were built to reduce moisture deficits during growing seasons and ensure stability of agricultural production. Due to the update of the acreage caused, e. q. by building up during the expansion of municipal districts, the construction of motorways, industrial and logistics parks, etc., the built-up area was further reduced by 2,591 ha between 2014 and 2022. The area of constructed irrigation systems as at 31 December 2022 was 318,010 ha and the number of pumping stations was 442.



The network is owned by the state and can be seen as a backbone network for land improvement and irrigation, delivering water to farmers through the network's technical and operational units (primary irrigation nodes), to which the primary agricultural producers connect their private surface irrigation systems as sub-networks for land improvement and irrigation.

The main factors adversely affecting the current technical and technological condition of the state-owned facilities and their resulting level of operability are the fact that the backbone network is now several decades old, but also the loosening of irrigation requirements in agriculture.

Table 38 Current condition of infrastructure

Irrigation capacity	Area (ha)	Pumping stations
functional	51,504	78
partly functional	89,571	130
non-functional	176,935	234

Source: Hydromeliorácie, š. p.; Prepared by: MARD SR

Since 2007, the use of the state irrigation facilities has been permitted by lease only. The capacities were offered to interested parties for a symbolic rent of one Slovak crown ( $\leqslant$ 0.0332) per hectare of the built-in irrigable area of a specific irrigation structure with the condition that the lessee maintain and protect the infrastructure at their own expense within an acceptable and contractually agreed method of use, and also that the lessee pay from their own funds the actual costs for the supply of irrigation water.

2015 was the first year when the system was exclusively operated in line with the "Blueprint for revitalisation of hydromelioration systems in Slovakia" ("Blueprint") prepared by the Ministry of Agriculture and Rural Development of the Slovak Republic ("MARD SR") and approved by the government of the Slovak Republic on 20 November 2014.

An increase in the price for renting state irrigation facilities to € 3.00 - 6.00 per hectare per

Table 39 Size of leased irrigation systems at the end of 2022 and 2023

Regional network	Leased a	Leased area (ha)		The number		Index	Number of contracts
	2022	2023	2023/2022	2022	2023	2023/2022	of contracts
Záhorie	7,369	7,369	100.00	9	8	88.89	6
Podunajsko	17,745	17,135	96.56	49	47	95.92	42
Dolné Považie	16,301	16,301	100.00	36	36	100.00	28
Horné Považie	8,610	8,610	100.00	32	33	103.13	22
Ponitrie	2,627	2,627	100.00	24	24	100.00	16
Pohronie and Poiplie	2,533	3,153	124.48	9	11	122.22	11
Bodrog Hornád	165	165	99.99	3	2	66.67	3
TOTAL	55,350	55,361	100.02	162	161	99.38	128

Source: Hydromeliorácie, š. p.; Prepared by: MARD SR

year may seem to be a negative change from the point of view of tenants. The rental price is not based on the area in which irrigation is installed as it was until now, but now on a defined irrigable area. At present, average irrigable areas are 34.35% of the areas where rented infrastructure is installed.

An overview of changes in the area of rented irrigation infrastructure since 2007 when the unified method for utilisation of the state irrigation systems was introduced reveals a pattern of declining interest in leases and corresponding decrease in the system's use by primary agricultural producers.

Table 40 Development of the area of rented irrigation infrastructure in the Slovak Republic

Year	2007	2014	Ø 2018-2022	2022	2023	Index 2023/2022	Index 2023/ Ø2018-2022
Leased area (ha)	226,548	154,698	55,430	55,350	55,360	100.02	99.87
Unleased area (ha)	94,746	166,174	263,066	262,931	262,650	99.89	99.84
TOTAL	321,294	320,872	318,496	318,281	318,010	99.91	99.85

Source: Hydromeliorácie, š. p.; Prepared by: MARD SR

The data in the table on individual years show that during the period under review the area of leased irrigation systems decreased by 171,200 ha, which represents a decrease of 75.6% from the baseline situation in 2007. Since implementation of the 2014 Blueprint, the leased area has fallen by 99,300 ha, which represents a decrease of 64.2%.

One of the key indicators for assessing use of leased state irrigation infrastructure is the actual offtake of irrigation water from these facilities. Irrigation water offtake in the 2023 season by volumes reported by tenants in each region is shown in the following table.

Table 41 Irrigation water offtake in the 2023 season

Regional network	Actual water offtake (m³)	Irrigated area (ha)	Irrigated m³/ha	Leased area with offtake (ha)	Leased m³/ha	Utilisation of the leased area with offtake (%)
Záhorie	502,819.00	197.00	2,552.38	7,368.72	68.24	2.67
Podunajsko	4,443,309.00	4,707.00	943.98	17,135.16	259.31	27.47
Dolné Považie	8,091,376.00	6,875.00	1,176.93	16,301.32	496.36	42.17
Horné Považie	1,781,301.00	1,942.00	917.25	8,610.19	206.88	22.55
Ponitrie	326,346.00	285.00	1,145.07	2,626.70	124.24	10.85
Pohronie and Poiplie	537,661.00	707.00	760.48	3,153.16	170.51	22.42
Bodrog Hornád	8,364.00	9.00	929.33	165.02	50.68	5.45
SPOLU	15,691,176.00	14,722.00	1,065.83	55,360.27	283.44	26.59

Source: Hydromeliorácie, š. p.; Prepared by: MARD SR

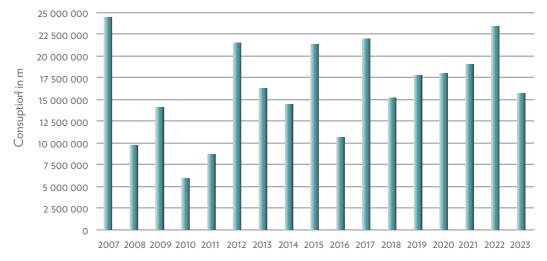


Chart 36 Irrigation water offtake trends over the last 17 years

Source: Hydromeliorácie, š. p. Prepared by: MARD SR

In the last 10 - 15 years, there have been significant qualitative and quantitative changes in the types and acreage of irrigated crops. The acreage of fodder crops on arable land has decreased, and the irrigation of those that have been preserved is kept to a minimum. The same applies to technical crops, maize and other field crops.

This development reflects the fact that in recent years irrigation has been used primarily by growers of intensively irrigated crops for which demand and prices are sufficiently high to cover the not inconsiderable costs of irrigation water.

In the current financial situation, which necessitates higher irrigation charges, growers of field crops and fodder for which there is heavy competition are probably forced to choose the risk of a lower volume and quality of harvest due to drought.

# 5.2. Investments in the food industry

In the last two years we have seen a year-on-year increase in investment as measured by **gross fixed capital formation** (GFCF) for the purpose of asset renewal in the "production of food, beverages and tobacco products" sector. Compared to 2022, we saw an increase in GFCF in 2023, when it increased by 58.0% year-on-year ( $\leqslant$  179.4 million) to  $\leqslant$  515.2 million.

Table 42 Gross fixed capital formation in the production of food, beverages and tobacco products (EUR '000, current prices)

Indicator	Ø 2018-2022	2022 1)	2023 <sup>2)</sup>	Index 2023/2022	Index 2023 / Ø (2018-2022)
Gross fixed capital formation	326 058	335 835	515 224	153,4	158,0
of which buildings and constructions, including housing buildings	71 880	104 901	132 757	126,6	184,7
of which residential buildings	130	110	95	86,4	73,1
- machinery and equipment	187 457	164 250	280 289	170,6	149,5
of which, other machinery and equipment	182 103	160 038	275 368	172,1	151,2
- transport equipment	28 747	33 107	56 292	170,0	195,8
– cultivated biological resources	9 818	25 613	33 971	132,6	346,0
– intellectual property	12 090	7 964	11 915	149,6	98,6

Source: SO SR

Explanatory notes: 1) Preliminary data; 2) Data from preliminary quarterly reports of the SO SR

Prepared by: MARD SR

Year-on-year, investments in machinery and equipment (70.6%), transport equipment (70.0%), intellectual property products (49.6%) increased the most. The smallest year-on-year increase was recorded in investments in buildings and structures, including residential buildings (26.6%), of which investments in residential buildings decreased by (13.6%).

The categories of gross fixed capital<sup>1</sup> formation with the highest shares in 2023 were machinery and equipment (48.9%), buildings and structures including residential buildings (31.2%), transport equipment (9.9%), cultivated biological resources (7.6%) and intellectual property products (2.4%).

In 2023, gross fixed capital formation was above the average for the period 2018 – 2022 (58.0%). Investments were higher in all assets components, mostly in cultivated biological resources (246.0%), transport equipment (95.8%), buildings and structures, including residential buildings (84.7%). There is a 1.4% decline in GFCF in the investments in intellectual property products in 2023 compared to the 2018 – 2022 average.

Gross fixed assets in the "production of food, beverages and tobacco products" sector amounted to  $\in$  9,013 million in 2022². This was an increase of  $\in$  1,167 million year-on-year compared to 2020 (14.9%). Net fixed assets grew by (15.5%) to  $\in$  6,307 million (by  $\in$  848 million).

The development of gross fixed capital formation and its structure in the food, beverage and tobacco products sector is presented in table 29 in the annexes.

<sup>&</sup>lt;sup>1</sup> Data for GFCF procured from foreign sources was not available

<sup>&</sup>lt;sup>2</sup> latest available data of the SO SR

10,000 550 9,000 500 8,000 450 Gross and net fixed assets 7,000 400 6,000 350 5,000 300 4,000 250 3,000 200 2,000 150 1,000 100 50 0 2018 2019 2020 2021 2022 Gross state of property Net property status GFCF (right axis)

Chart 37 Development of gross and net fixed assets and GFCF in the food, beverages and tobacco sector (€ million)

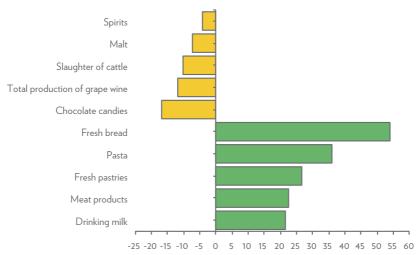
Source: SO SR

Note: The SO SR has data on the gross and net value of long-term assets no more recent than one year earlier, i.e. currently only up to 2022; GFCF = GCCC gross fixed capital formation

Prepared by: MARD

The Slovak food industry had a sufficient volume of production capacity in 2023. Capacity utilisation was 60% or more in over a half of the statistically monitored food production industries.





Source: food statement (MARD SR), MARD SR calculations,  $^{\star}$  difference between 2023 and 2022 in pp Prepared by: MARD SR

The relevant food types can be sorted into groups based on ranges of capacity utilisation as follows:

- in the range 100.00% 90.00%: production of pasta, bread, pastries, meat products and malt
- in the range 89.99% 80.00%: slaughtering of slaughter poultry, production of preserved pastry goods
- in the range 79.99% 70.00%: production of alcoholic beer without mixed drinks and chocolate confectionery
- in the range 69.99% 60.00%: production of cheese in total without processed cheese, sterilised vegetables except pickled gherkins, wheat pomace and drinking milk
- in the range 59.99% 50.00 %: production of pickled gherkins and grape wine
- in the range 49.99% 40.00%: slaughtered pigs, carbonated sweetened soft drinks, spirits, butter (from 80% to 90% fat, not more than 16% water)
- below 40%: cattle slaughtering, acidified milk products (including yoghurts), rye milling

The most significant year-on-year decline in the utilisation of selected production capacities of food products was observed in the production of chocolate confectionery (-16.8 pp), grape wine (-11.8 pp) and cattle slaughter (-10.1 pp).

The highest year-on-year increases in the utilisation of selected food production capacities were recorded in the production of fresh bread (54.0 pp), pasta (36.0 pp) and fresh bakery products (26.7 pp).

More detailed information on production capacities and their utilisation can be found in table 32 in the annexes.





#### 6. STRUCTURAL CHANGES AND OWNERSHIP

#### 6.1. Business structure

The development of the business structure in the assessed sectors of the agricultural sector was differentiated in the past period. The previous trend of growth of registered business entities engaged in agricultural services continued, which was mainly influenced by the growth in the number of natural persons providing services related to crop production. In agricultural primary production, the number of natural persons engaged in business activities declined over the past period, which affected the development of the total number of entities engaged in primary production. The total number of entities doing business in the food sector also decreased slightly year-on-year.

The number and structure of farms in **primary agricultural production** can be monitored based on the existing system of statistical surveys of the business structure in agricultural primary production. After the Structural Survey of Farms for 2016, the SO SR carried out the Agricultural Census of Farms 2020, which was part of a European Union project on agricultural statistics, led by the EU statistical office – Eurostat. The census covered all agricultural farms engaging in plant and animal production, regardless of the scale of production, as well as households that reached any of the threshold values for a farm set in Annex II of Regulation (EU) 2018/1091<sup>1</sup>. According to the latest available results of the 2020 Integrated Farm Survey, the number of registered farms in primary agricultural production fell by 2.7% compared to 2016. In 2020, there were a total of 19,632 farms engaging in agricultural primary production. Of the total number of farms in primary agricultural production in 2020, a share of 54.7% were operated by unregistered natural persons - self-suppliers, households (legal form unspecified). Their total number, 10,743, represented a 35.0 % fall compared to 2016. The structure of registered primary agricultural production entities in Slovakia has long been dominated by natural persons, whose number decreased by 11.1% between 2016 and 2020, and commercial farms of legal persons (LP) – trading companies (TC) - whose number increased by 16.9% between 2016 and 2020. Among trading companies, the largest increase (+17.7%) was recorded in limited liability companies, which have made up the majority of trading companies for a long time.

The total area of cultivated agricultural land decreased by 1.4% to 1,862,653.72 ha between 2016 and 2020. The average farm size was 94.88 ha in the most recent reporting period, which represents an increase of 21.23 ha compared to 2016. Trading companies continued to farm the largest share of utilised agricultural land. They had 46 % of the total area in 2020. The area of agricultural land farmed by trading companies increased by 2.8% to 855,297.35 ha between 2016 and 2020. In contrast, the area farmed by agricultural cooperatives was lower (-3.2%) than in 2016

<sup>&</sup>lt;sup>1</sup> utilised agricultural land ≥5 ha, arable land ≥2 ha, potatoes ≥0,5 ha, fresh vegetables and strawberries ≥0,5 ha, aromatic, medicinal and culinary plants, flowers and ornamental plants, seeds and seedlings, nurseries ≥0,2 ha, fruit trees, berries, nut trees, other permanent crops with the exception of nurseries & vineyards ≥0,3 ha, vineyards ≥0,1 ha, greenhouses ≥100 m², cultivated mushrooms ≥100 m², livestock ≥1,7 livestock unit.

in the last review year, with the agricultural land that they farmed being 641,505.77 ha in 2020. Other legal entities farmed 21,355.46 ha. Land farmed by registered natural persons decreased by 5.8% between 2016 and 2020, taking their total holdings to 285,589.21 ha. The area farmed by unregistered natural persons (households, self-suppliers) also shrank between 2016 and 2020, when they farmed 58,905.93 ha (-16.2%).

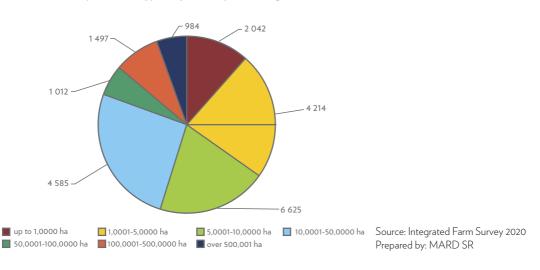
Table 43 Numbers of enterprises in agriculture and agricultural services by legal form

	Agriculture				Agricultural services			
Legal form	2016	2020	Index 2020/16	Average 2016-20	2022	2023	Index 2023/22	Index 2023 / Ø 2018-22
State enterprises	4	4	100.0	4	1	1	100.0	100.0
Cooperatives	558	558	100.0	558	30	28	93.3	89.7
Trading companies, total	2,373	2,773	116.9	2,573	992	972	98.0	97.0
of which: public companies	3	3	100.0	3	0	0	-	-
limited liability companies	2,235	2,630	117.7	2,433	981	963	98.2	97.2
joint stock companies	130	135	103.8	133	10	9	90.0	90.0
commandites	5	5	100.0	5	1	0	0.0	0.0
Other legal persons	265	277	104.5	271	1	1	100.0	6.6
Legal persons, total	3,200	3,612	112.9	3,406	1,024	1,003	97.9	95.6
Registered natural persons*	5,935	5,277	88.9	5,606	3,494	4,487	128.4	157.7
Total registered enterprises	9,135	8,889	97.3	9,012	4,518	5,490	121.5	141.0
Unregistered natural persons	16,523	10,743	65.0	13,633		-	-	-

<sup>\*</sup>Natural persons not registered in the Commercial Register

Source: Agriculture: SOSR - Structural survey of farms 2016, Integrated survey of farms 2020; Agricultural services: SOSR - Prepared by: MARD SR

Chart 39 Structure of the number of farms by the size of cultivated agricultural land in 2020



The growth in the number of registered entities engaged in agricultural services continued in 2023, and their number increased by 972 enterprises (+21.5%) year-on-year. In the last year under review, there were a total of 5,490 enterprises engaged in agricultural services. Agricultural services have long been dominated by enterprises of registered natural persons, which accounted for 82% of the total number of enterprises providing agricultural services. In 2023 the number of natural persons in agricultural services increased by 993 enterprises (+28.4%) compared to the previous year. The number of legal persons providing agricultural services decreased by 21 enterprises (2.1%) year-on-year. Among legal entities, limited liability companies retained their long-held dominant position, making up 96.9% of all legal persons providing agricultural services in 2023. The number of trading companies providing agricultural services fell by 20 enterprises (2%) year-on-year. Of these, 18 limited companies ceased to carry on agricultural services business. Among the businesses of both legal entities and registered natural persons, services related to crop cultivation have predominated for a long time. In 2023, enterprises providing crop cultivation services accounted for 86.2% of all agricultural service enterprises. Services related to animal husbandry were provided by 13.4% of enterprises, harvesting by 2.3% and processing of seeds for planting by just 0.1% of the total number of enterprises in agricultural services.

In the **food sector**, the total number of registered enterprises dropped slightly (-1.9%) year on year in 2023. In the last year under review, a total of 5,169 entities were doing business in the food sector, of which 3,041 were legal entities and 2,128 were businesses of natural persons. The number of legal entities in the food sector decreased by 34 entities in 2023 compared to the previous year (-1.1%). 66 natural persons finished their business activities in the food sector in 2023 (-3.0%). The structure of legal entities in the food industry is dominated by small enterprises (with fewer than 20 employees and with sales of less than  $\leq$  5 million). They accounted for 89.4% of the total number of business entities in the food industry. Among legal entities in the food industry, limited liability companies continued to dominate, accounting for 95.7% of the total number of legal entities in the industry in 2023.

According to the production focus of legal entities in the food industry, enterprises focused on the manufacture of other food products have long dominated, accounting for 34.9% of the total number of legal entities operating in the food industry in 2023. Their number increased by 46 entities (+4.6%) in the last year under review. Enterprises focused on the manufacture of beverages accounted for 22.3% and enterprises focused on the manufacture of bakery and farinaceous products accounted for 17.9% of the total number of legal entities in the food industry. The most significant year-on-year decline in legal entities in the food industry was recorded in the manufacture of prepared animal feeds (-16.4%), accounting for 39 enterprises. Similarly, 39 legal entities (-5.5%) stopped their business activities in the manufacture of beverages. The number of entities engaged in the processing and preserving of fruits and vegetables (-6.7%) decreased by 13 enterprises year-on-year, and 9 fewer legal entities were engaged in the production of mill products, starch and starch products (-12%) in the previous year.

Table 44 Number of food industry enterprises by economic activity

Food industry / economic activity	2022	2023	Index 2022/2021
Manufacture meat and meat products	201	207	103.0
Processing of fish and fish products (incl. preservation)	3	4	133.3
Processing and preserving of fruits and vegetables	186	174	93.3
Manufacture of vegetable and animal oils and fats	25	24	96.0
Manufacture of dairy products	73	79	107.8
Manufacture of mill products, starch and starch products	75	66	88.0
Manufacture of bakery and farinaceous products	537	546	101.7
Manufacture of other food products	1,016	1,062	104.6
Manufacture of prepared animal feeds	239	200	83.6
Manufacture of beverages	719	679	94.5
Manufacture of tobacco products	2	1	-
Legal persons, total	3,075	3,041	98.9
Registered natural persons*	2,194	2,128	97.0
Total registered enterprises	5,269	5,169	98.1

<sup>\*</sup>Natural persons not registered in the Commercial Register

Source: SO SR

Prepared by: MARD SR

## 6.2. Structure of agricultural land and the land market

There is a continuous decreasing trend in the acreage of agricultural land; several thousand hectares of agricultural land are lost every year. According to the Statistical Yearbook of the Land Fund, we have 2,370,201 ha in Slovakia in 2023 which is 2,140 ha less than in 2022. Utilised agricultural land had an area of 1,825,253 ha in 2022, which is 23,941 ha less than in 2022 (-1.29%). There was also a significant decrease of 15,848 ha (1.2%) in the area of arable land in use. The area of permanent grassland and permanent meadows and pastures decreased by 402 ha (2.4%) and 7,691 ha (1.5%) respectively.

Table 45 Acreages of land use in Slovakia (ha)

Indicator	Ø 2018/2022	2022	2023	Index 2023/2022	Index 2023/ Ø2018-2022
Utilised agricultural land	1,890,127	1,849,194	1,825,253	98.71	96.57
including: arable land	1,342,470	1,322,966	1,307,119	98.80	97.37
permanent crops <sup>1)</sup>	17,494	16,660	16,258	97.59	92.94
home gardens	24,284	618	618	100.02	2.55
permanent meadows and pastures	518,171	508,950	501,258	98.49	96.74

Note:  $^{1)}$  tree nurseries, vineyards, wine-growing areas under remediation, orchards, orchards in recultivation, hops, other permanent crops; Source: SO SR - Inventory of areas sown with agricultural crops, own calculations Prepared by: MARD SR

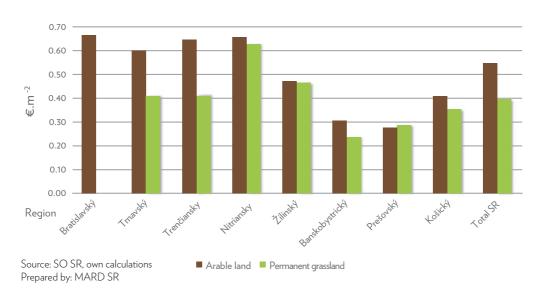
Table 46 Average price for sale/purchase of agricultural land by land type in the regions of Slovakia in 2023 (€ per m²)

D : 4 3	Type of land		
Region (kraj)	Arable land	PG	
Bratislava	0.66	-	
Trnava	0.59	0.41	
Trenčín	0.64	0.41	
Nitra	0.65	0.62	
Žilina	0.47	0.46	
Banská Bystrica	0.30	0.24	
Prešov	0.28	0.29	
Košice	0.41	0.35	
Slovakia, total	0.54 0.40		

Source: SO SR, own calculations Prepared by: MARD SR

According to the available data from the Slovak Statistical Office, the average price in 2023 for the sale/purchase of arable land in the Slovak Republic was  $\leqslant$  0.54 m<sup>-2</sup>, i.e.  $\leqslant$  0.13 m<sup>-2</sup> higher year-on-year. Arable land was sold for the highest price in the Bratislava, Nitra, Trenčín and Trnava regions. The lowest average price for the purchase/sale of arable land was in the Prešov region. Permanent grassland was sold at an average price of  $\leqslant$  0.40 per m<sup>-2</sup>. Compared to 2022, the average price of permanent grassland in the Slovak Republic increased by  $\leqslant$  0.12 m<sup>-2</sup>. On average, buyers in the Nitra and Trnava regions paid the highest price per m<sup>2</sup> of permanent grassland. In 2023, the lowest average price for permanent grassland was in the Banská Bystrica region.

Chart 40 Average price for sale/purchase of agricultural land by land type in the regions of Slovakia in 2023 (€ per m<sup>-2</sup>)



A tenancy relationship is a bilateral legal act between a tenant and a landlord. Its conditions are mutually agreed upon by the parties in the lease agreement, which is governed by the provisions of Sec. 663 et seq. of the Civil Code. Other terms and conditions of agreements for the lease of land for agricultural purposes are laid down Act No. 504/2003 on the lease of agricultural land, agricultural enterprises and forest land and amending certain acts, as amended (hereinafter referred to as the "Act on Agricultural Leases"), which is considered lex specialis having precedence over other laws. The Act has been amended several times. With the adoption of the Act No. 291/2017 Coll., effective from 1 May 2018, the institute of the "customary rent" was introduced.

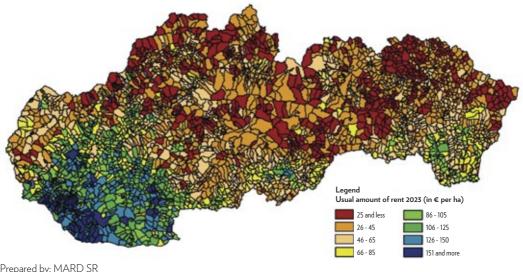
<u>Under Sec. 1(3) of the Act on Agricultural Leases:</u> "For the purposes of this act, the usual amount of rent for the use of agricultural land in the operation of a business is understood to mean the amount of rent for one hectare of agricultural land published annually by the relevant district office for each cadastral area on 30 June based on data obtained for the previous year from the records of agreed and paid rent under <u>Section 14(3)</u> as the average amount of rent for the use of agricultural land in the operation of a business in the previous year."

Table 47 Average customary rent in the Slovak regions in 2023 for agricultural land (€ per ha<sup>-1</sup>)

Region (kraj)	Ø 2018/2022	2022	2023	Index 2023/2022	Index 2023/ Ø2018-2022
Bratislava	76.07	78.66	80.84	102.8	106.3
Trnava	96.56	102.41	108.56	106.0	112.4
Trenčín	37.61	39.09	42.62	109.0	113.3
Nitra	93.16	101.10	106.36	105.2	114.2
Žilina	31.87	33.65	35.41	105.2	111.1
Banská Bystrica	42.55	44.61	46.62	104.5	109.6
Prešov	28.55	29.60	31.38	106.0	109.9
Košice	46.84	50.23	51.86	103.2	110.7
Slovakia, total	51.37	54.45	57.31	105.3	111.6

Prepared by: MARD SR

In 2023 the average customary rent per hectare of agricultural land in Slovakia was  $\leqslant$  57.31 per hectare. The highest rents per hectare of rented agricultural land were paid by entities in the Trnava Region ( $\leqslant$  108.56 per ha) and in the Nitra Region ( $\leqslant$  106.36 per ha). On the contrary, the lowest rent was paid by tenants for agricultural land in the Žilina Region ( $\leqslant$  35.41 ha) and in the Prešov Region ( $\leqslant$  31.38 ha).



Map 7 Average customary rent in the Slovak Republic in 2023 for agricultural land (€/ha)

Prepared by: MARD SR

## 6.3. Settlement of land ownership

## Renewed registration of land and its ownership, handling of land ownership claims, including restitution, land consolidation

Land ownership in 1,218 cadastral areas out of a total of 3,559 cadastral areas is subject to consolidation proceedings under state authorities. 759 cadastral territories included in the competence of the Ministry of Agriculture and Rural Development of the Slovak Republic were dealt with in the proceedings under the Act of the National Council of the Slovak Republic No. 330/1991 Coll., as amended.

As of 31 December 2023, a total of 3,537 registers were approved and entered in the real estate cadastre by decision of the administrative body, which represents an increase by one register entered in the real estate cadastre compared to 2022.

### Adjustment of land ownership relations

By 31 December 2023, 48,627 decisions were issued in restitution proceedings under the Act No. 229/1991 Coll., as amended. These proceedings determined the ownership of 211,343 ha of land. The area of land that was not returned due to legal impediments and for which the entitled persons are entitled to compensation either in financial form or in land owned by the state, was 33,145 ha. The number of issued decisions granting ownership was higher by 562 compared to 31 December 2022, the area of issued land was higher by 346 ha compared to the end of 2022 and the area of land not issued due to legal impediments was higher by 20 ha. A total of 12,488 decisions were issued in land associations, which was 7 more decisions than in the previous year. The decisions recognised ownership of land with an area of **124,162** ha, which was **62 ha** more than in 2022. Due to legal impediments, plots of land with an area of 20,164 ha were not returned. These cases were resolved through compensation. Compared to the situation as of 31 December 2022, the area of land unissued due to legal obstacles is higher by 6 ha.

As a result of restitution proceedings under the Act No. 503/2003 Coll., as amended, 36,937 decisions were issued as of 31 December 2023, restoring ownership of 14,466 ha of land and awarding compensation for 14,472 ha of land. Comparison with the situation as of 31 December 2022 shows that 338 more decisions were issued, the area returned was 71 ha higher and the land for which compensation was awarded increased by 31 ha. Within land associations, a total of 8,677 decisions had been issued restoring ownership of land with an area of 10,181 ha. There were 338 more decisions compared to the previous year and the area of land issued was 1 ha higher. Recognised rights to compensation applied to 2,987 ha of land, which was 93 ha more than in 2022.

#### Land consolidation

In 2020, contracts were concluded for 141 new land consolidation (LC) projects, 11 of which are financed from the state budget whereas the other 130 use funds from the RDP SR 2014 – 2020.

As of the end of 2023, the total number of land consolidation projects undertaken was 559, of which the number that had been completed, approved by decision of the competent state authorities and entered in the real estate cadastre was 417. There were 147 ongoing land consolidation projects. Land consolidation to address ecological damage to the landscape is being carried out only in the High Tatras and Spišská Magura regions in 4 cadastral areas. Proceedings were halted in 1 cadastral area.

Another 11 projects are funded from the state budget, including 8 cadastral areas in the Tokaj region based on Resolution No. 601 of the Government of the Slovak Republic of 4 November 2015.

From a total of 442 LC projects financed by EU funds, the number completed and registered as of 31 December 2023 was 312. This completes all the projects started in RDP SR 2007 – 2013. In 2023 only 130 new land consolidation projects contracted from the RDP SR 2014 – 2020 were in the process of implementing land consolidation.

In 2023 it was possible to contract the processing and implementation of land consolidation projects in the last 27 cadastral territories, out of 171 cadastral territories from the public tender published by the notification in the EU Journal 2018/S 068-150998 dated 7 April 2018, which will be financed from the state budget.

An overview of the renewal of land registration, settlement of ownership relations and land consolidation is given in the table 33 in the annexes.

#### 6.4. Labour force

According to the LFS¹, the total number of workers in Slovakia increased by 0.2% to 2,610,000 in 2023, which represented an increase in the share of the total economically active population from 93.9% to 94.2%. Agriculture (farming, forestry, fishing) was not one of these sectors, and the number of workers fell from 66.1 thousand persons to 61.9 thousand persons. (-6,4%). Farm workers decreased by 11.7% (-5,500 persons) to 41,500 persons.

Agriculture's overall share of the number of workers in Slovakia dropped year-on-year (-0.1 pp) and represented 2.4%. The share of farm workers also dropped year-on-year to 1.6% (-0.2 pp). Farm workers' share of total jobs in agriculture fell by 4.1 pp to 67.0%.

The development of the number of farm workers depends primarily on the need for work related to the quantity and structure of crop cultivation and animal production.

In 2023 there is a decrease in the number of people working in crop production (non-perennial by 3.0 thousand persons and perennial by 1.2 thousand persons), especially men. There was also a fall in workers in mixed farming, i.e. without specialised production of crops and animals (-1,700 persons).

From a regional point of view, the largest decrease in workers was recorded in the Trnava Region (-2,400 persons), followed by the Banská Bystrica Region (-2,300 persons) and the Bratislava Region (-1,800 persons). The increase in the number of workers persons was seen mainly in the Žilina Region (+1.1 thousand persons).

In organisations with 20 or more employees<sup>2</sup> the number of employees in farming (growing crops, animal husbandry) decreased year-on-year by 0.4% (-60 persons) to 17,547 persons.

	Year				Year YoY change 20			2023/2022
	2020	2021	2022	2023	difference	index		
Workers	48.5	45.4	47.0	41.5	-5.5	88.3		

Table 48 Development of the number of workers<sup>3</sup> in agriculture ('000 persons)

SO SR, Employment in Q4 2023; Zamestnanci\_a\_priemerne\_mesacne\_mzdy\_2023 (2).zip, March 2024 under the new methodology applicable in the EU from 2021 (IESS), employed persons are all persons between the ages of 15 and 89 who, in the observed (reference) week, perform at least 1 hour of work for a wage, salary, fee or profit, including persons performing work based on agreements, seasonal workers, persons on maternity or parental leave, persons working abroad for less than 1 year, and persons commuting abroad for work abroad in the observed (reference) week; respondents are assigned to sectors according to the economic activity of the local unit, not the entire enterprise; the data for the sample is calculated using new integrated weights on the population adjusted for persons in collective establishments.

<sup>&</sup>lt;sup>1</sup> SO SR, Employment in Q4 2023

<sup>&</sup>lt;sup>2</sup> Zamestnanci\_a\_priemerne\_mesacne\_mzdy\_2023 (2).zip, March 2024

<sup>&</sup>lt;sup>3</sup> under the new methodology applicable in the EU from 2021 (IESS), employed persons are all persons between the ages of 15 and 89 who, in the observed (reference) week, perform at least 1 hour of work for a wage, salary, fee or profit, including persons performing work based on agreements, seasonal workers, persons on maternity or parental leave, persons working abroad for less than 1 year, and persons commuting abroad for work abroad in the observed (reference) week; respondents are assigned to sectors according to the economic activity of the local unit, not the entire enterprise; the data for the sample is calculated using new integrated weights on the population adjusted for persons in collective establishments.

According to the LFS, in 2023 the number of men employed in agriculture decreased by 5.5 thousand year-on-year (-11,7%) to 28,6 thousand. The number of women remained at the level of 2022 (12.9 thousand). As a result, men's share of the farm workforce decreased by 4 pp to 68.9%.

In terms of employment status, the number of employees fell by 13.8% to 33.6 thousand persons (-5.4 thousand persons). Of these, the number of men fell by 20.5% to 22.5 thousand. The number of women increased by 4.8% to 11.2 thousand. The number of self-employed workers decreased by 1.3% and reached 7,800 persons. Of these, the number of male entrepreneurs increased by 5.3% to 6.0 and the number of female entrepreneurs decreased by 18.2% to 1.8 thousand.

The increase in the age or ageing of farmers stopped in 2023. The average age in that year reached 46.3 years, representing a decrease of 0.7 years. The age of men decreased by 1.3 years to 45.2 years and the age of women increased by 0.6 years to 48.7 years. The largest decreases in working people occurred in the 55 - 59 year old category (-1,900 persons), in the 40 - 44 year old category (-1,300 persons) and in the 45 – 49 year old category (-1,300 persons). Somewhat favourable is the increase in the number of farmers in the age group of 30 - 34 years old (+800 persons) and 20 – 24 years old (+500 persons).

The increase in workers in agriculture also involved changes in the structure of educational qualifications<sup>1</sup>. Education and classification are basic factors of human capital that affect a worker's income. A higher educational level is also expected to lead to the transfer of innovative methods and technologies into the production process, thereby increasing the prosperity of agricultural enterprises.

In 2023 the share of persons with a university degree in the total number of workers decreased by 2.1 pp to 14.7% year-on-year, with the share of university-educated men in the total number of working men decreasing by 4.0 pp to 13.6%. The share of university-educated women in all women increased by 3.8 pp to 17.8%.

The share of workers who graduated from upper secondary education with the maturity diploma, including those with higher vocational education, decreased by 5.6 pp year-on-year to

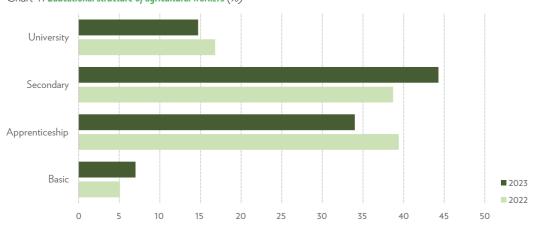


Chart 41 Educational structure of agricultural workers (%)

Source: SO SR, LFS; Prepared by: MARD SR

<sup>1</sup> SO SR. LFS

44.3%. In particular, the number of men increased in this category by 8.0 pp to 40.6%. The number of women fell by 1.6 pp to 52.7%. The share of workers with apprenticeship qualifications decreased by 5.4 pp to 34.0% and the percentage with only lower secondary education increased by 1.9 pp to 7.0%.

The average monthly wage in agriculture² rose year-on-year by 9.8% ( $\leqslant$  97) to  $\leqslant$  1,086. The average wage in agriculture was 75.9% of the average wage in the Slovak economy as a whole, which represents a rise of 0.1 pp (wage disparity). The average wage for primary agricultural production (growing crops, animal husbandry) also rose in organisations with 20 or more employees³, increasing by 8.9% to  $\leqslant$  1,321.

Year YoY change 2022/2021 2020 2021 2022 2023 difference index Slovak economy, total 1,133 1,211 1,304 1,430 126.0 109.7 in which, farming, forestry 872 933 1.009 106.0 110.5 1.115 and fisheries of which, farming 896 929 989 97.0 109.8 1,086

Table 49 Average monthly wages of agricultural workers (€)

Source: SO SR, calculations of MARD SR; Prepared by: MARD SR

**In food production**<sup>4</sup>, the Labour Force Survey indicates that the number of workers decreased by 4.3% (-2,400 persons) year-on-year to 52,800 persons. The number of male workers increased by 4.8% to 28,400 persons, which resulted in a 4.7 pp increase in their share in the total number of workers to 53.8%. The number of women workers decreased by 13.5% to 24,300 persons.

According to data from the SO SR, as far as the food production sector is concerned, the biggest increase in the number of workers was seen in the manufacture of other food products (+2,300 persons); mainly the number of women increased. There was also an increase in the manufacture of bakery and farinaceous products (+1.4 thousand persons), where mainly the number of men increased.

There was a significant decrease in the number of workers in the processing and preserving of meat and meat products (-5.4 thousand persons). The number of men and women decreased by the same proportion in the region (-2.7 thousand men and women). There was also a decrease in the manufacture of dairy products (-2.3 thousand persons), where the number of women decreased mainly.

Regionally, the largest decrease in the number of workers was seen in the Košice Region (-1.6 thousand persons) in the manufacture of bakery and farinaceous products and in the Banská Bystrica Region (-1.4 thousand persons) and the Prešov Region (-1.3 thousand persons) in the processing and preserving of meat and meat products. Overall, the largest increase was seen in the Trenčín Region (+1,4 thousand persons) in the manufacture of bakery and farinaceous products.

<sup>&</sup>lt;sup>2</sup> Average monthly wages by industry [pr0205qs] - DATAcube. (statistics.sk)

<sup>&</sup>lt;sup>3</sup> SO SR, Employees and average monthly wages in the Slovak Republic in 2023, SO SR, March 2024

<sup>&</sup>lt;sup>4</sup> SO SR, Classification of economic activities (SKNACE Rev. 2-10,11), production of food and beverages

Changes were also noted in the number and structure of workers as regards employment status. The number of employees fell by 3.7% year-on-year to 50.1 thousand, mainly women by 14.1% to 23.1 thousand. The number of men increased by 7.6% to 27,000. There was also a decrease in self-employed workers by 15.6% to 2,700 persons in 2023. The self-employed made up 6.1% of the total number of workers, representing a year-on-year decrease of 0.2 pp. Family workers helping in the household were not counted.

Table 50 Development of worker numbers in food production ('000 persons)

		Year				2023/2022
	2020	2021	2022	2023	difference	index
Regular employees	50.0	50.1	52.0	50.1	-1.9	96.3
Entrepreneurs	3.9	2.8	3.2	2.7	-0.5	84.4
Workers, total	53.9	52.9	55.2	52.8	-2.4	95.7

Source: SO SR, LFS; Prepared by: MARD SR

**The average age of workers** in food production (production of food and beverages) was 44.5 years, which represents a year-on-year increase of 1.3 years. The average age of male workers went up by 3.3 years to 44.8 years, while the average age of female workers went down 0.9 years to 43.9 years.

As in 2022, the largest age category was workers aged 40 - 44, who made up 18.6% of all workers (9,800 persons). Likewise, as in 2022, the majority of them were women (55.1%). The second largest age group was workers aged 45 - 49 (16.1%), which consisted of 8,500 persons, mostly women (50.6%).

The smallest age group was workers aged 15 - 19 (200 persons). The number of workers in this age group also registered a significant rise by 100 persons. Significant increases were observed in the number of workers in the 55 - 59 year old category (+1,400 persons). The age groups with the largest decreases in workers were the 25 - 29 year old category (-2,000 persons) and the 45 - 49 year old category (-1,400 persons).

The overall level of education in food and beverage production improved, as the percentage of workers with a university education increased by 4.4 pp to 16.7%. On the contrary, the share of workers with upper secondary education decreased by 3.0 pp to 47.2%. The share of workers with an apprenticeship also decreased by 3.2 pp to 30.3%. The share of workers with elementary education increased by 1.9 pp to 5.9%.

In food production enterprises with 20 or more employees<sup>1</sup>, the number of employed persons decreased by 1.0% year-on-year to 27,818 persons. According to the same source, the average monthly wage in food production per worker increased year on year faster than in the previous year by 9.7% (+ $\in$  118.0) to  $\in$  1,337, which was 79.6% of the average wage of a worker in the economy of the Slovak Republic, a lower percentage by 0.4 pp. The average monthly wage in beverage production increased year-on-year by 12.2% year-on-year to  $\in$  1,697 per person.

<sup>&</sup>lt;sup>1</sup> SO SR, Employees and average monthly wages in SR, 2020, 2021.2022, 2023

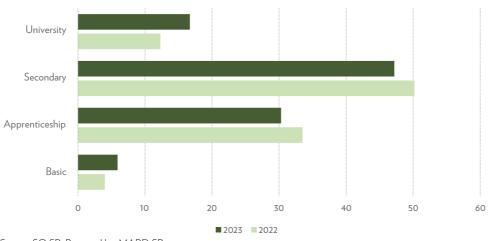


Chart 42 Educational structure of persons working in food production (%)

Source: SO SR; Prepared by: MARD SR

#### Unemployment

According to data from the Central Office of Labour, Social Affairs and Family (COLSAF) in 2023 (status as of 31 December), the number of job seekers in agriculture decreased year-on-year by 185 persons (-7.5%) to 2,291¹. The share of job seekers in agriculture in the total number of job seekers from all sectors decreased year-on-year by 0.04 pp to 1.35%. These developments were related to the decrease in the total number of job seekers by 4.6% to 169,933 persons, while persons who were unemployed immediately before registration decreased by 7.2% to 91,306.

In the ranking of sectors by the largest number of job seekers in the records of employment offices, in 2023 the agriculture sector is in the same place as in recent years (11<sup>th</sup>).

As in the previous year, the sectors with the highest number of job seekers were manufacturing, wholesale and retail trade, motor vehicle and motorcycle repair, public administration and defence and compulsory social security.

Indicator as of 31 December	2019	2020	2021	2022	2023
Number of job seekers	2 470	3 066	2 748	2 476	2 291
Total number of job seekers	165 455	227 341	200 225	178 143	169 933

Table 51 Job seekers with last employment in agriculture, forestry and fishing

Source: COLSAF, www.upsvr.gov.sk

Percentage of all job seekers

An overview of numbers of employees and the development of monthly wages is presented in tables 34 and 35 in the annexes.

1,35

1,37

1.39

1.49

1,35

<sup>&</sup>lt;sup>1</sup> COLSAF, Monthly statistics on the number and structure of job seekers for December 2023

## 6.5. Production of biomass and renewable energy sources

In 2022, we could see a decline in electricity generation from selected renewable energy sources, except for electricity generation from the combustion of municipal solid waste. A significant decrease in production was recorded mainly in the generation of electricity from the incineration of industrial waste by 60.2%. Hydroelectric power plants produced 12.9% less electricity year-on-year. There was an increase of 400.0% in heat production from heat pumps and 89.8% in industrial waste. Geothermal plants produced 27.9% more heat than in 2021. Compared to 2021, 12.4% less electricity and 7.4% less thermal energy was produced from renewable sources in 2022.

Table 52 Energy produced from selected types of renewable resources

	2021		2022		Index 2022/2021	
RES	Electricity (GWh)	Heat (TJ)	Electricity (GWh)	Heat (TJ)	Electricity	Heat
Geothermal	-	136	-	174	-	127.9
Solar energy	-	2	-	2	-	100.0
Heat pumps	-	10	-	50	-	500.0
Hydroelectric power plants	4,552	-	3,963	-	87.1	-
Solar photovoltaics	671	-	650	-	96.9	-
Wind power	5	-	4	-	80.0	-
Industrial waste	123	98	49	186	39.8	189.8
Municipal solid waste	78	152	78	182	100.0	119.7
Wood / wood waste / other solid waste	1,325	6,382	1,118	5,828	84.4	91.3
Biogas	487	741	440	479	90.3	64.6
Total	7,195	7,453	6,302	6,901	87.6	92.6

Source: SO SR - Energy,

Prepared by: MARD SR – data not available.

In Slovakia, 7 crops were grown exclusively for energy purposes in 2023 using 0.36% of the total sown area. The number of growers decreased by 20.6% and the acreage decreased by 20.6%, with maize and its silage mixes occupying the largest acreage. Silage maize accounted for 86.1% of the acreage of crops grown exclusively for energy purposes.

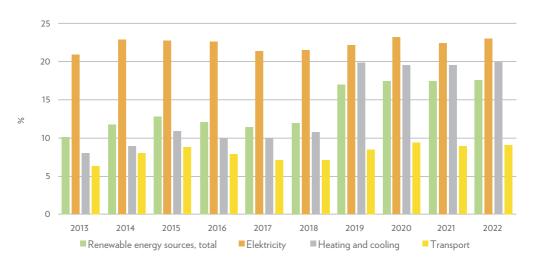
Table 53 53 Crops grown exclusively for energy purposes in 2023

Name of crop	Area (ha)	Number of farms	Estimated yield (t)
Grain maize (without sweet corn)	D	D	-
Grain sorghum	D	D	-
Winter rapeseed	D	D	-
Maize and its green mixes and silage	4,041.21	19	127,096.1
Spring legume-cereal mixes	D	D	-
Other annual fodder crops	D	D	-
Meadow clover	D	D	-

Explanatory notes: D – confidential data, because of the low number of respondents (less than 3 farms) the data is not publishable and it should not be possible to calculate the data even e.g. from a summary. Source: SOSR – Definitive harvest of agricultural crops, Prepared by: MARD SR

In 2022, the total share of energy from renewable sources in Slovakia increased by only 0.08 pp to 17.5%, though this is still the highest share of energy produced from renewable sources since 2004. Differences in the use of electricity from renewable sources were minimal compared to 2021; the largest were in the electricity sector. This sector used 0.5 pp more renewable energy compared to 2021. In Slovakia, transport is still the sector with the smallest share of energy from renewable sources (8.9%). The electricity sector had the highest share of renewable energy (22.9%).

Chart 43 Share of energy from renewable sources by sector in Slovakia (%)



Source: Eurostat, Prepared by: MARD SR

### 6.6. Organic farming

According to the data from the Central Control and Testing Institute in Agriculture (UKSUP), a total of **1,305 operators** were registered in the organic agricultural production system (hereinafter referred to as EPV) as of 31 December 2022, which represents by 4.0 % more than in 2022. More than half of the organic farming operators were limited liability companies (56.8%), followed by self-employed farmers (SEFs) (29.9%), agricultural co-ops (7.8%), joint stock companies (3.3%) and others (2.2%).

Among registered farmers (938), the largest representation in terms of legal forms was limited liability companies (46.9%), followed by SEFs (39.9%), agricultural co-ops (10.6%), joint-stock companies (1.6%) and other forms (1.1%).

Table 54 Operators and farmers, by legal form, registered in the organic farming system in Slovakia as of 31 December 2023

	Operators registered in EPV in 2023					
Legal form	Number of	Of which	Percentage of all legal forms (%)			
Legarionii			registered operators, total	farms, total		
Со-ор	102	99	7.8	10.6		
limited liability company	741	440	56.8	46.8		
joint-stock company	43	15	3.3	1.6		
SEF	390	374	29.9	39.9		
Other (self-employed, other forms of enterprise)	29	10	2.2	1.1		
Slovakia, total	1,305	938	100.0	100.0		

Source: ÚKSÚP, MARD SR; Prepared by: MARD SR

In 2023, the total area of agricultural land registered for organic farming in Slovakia (including areas in conversion) was 261,060 hectares. Year-on-year, the agricultural land area increased by 7,904 hectares (3.1%). Broken down by type of land in the EPV, the area of permanent grassland (hereafter: PG) increased by 7,158 ha, registered arable land by 749 ha and vineyards by 119 ha. The area of orchards in the EPV decreased by 57 ha year-on-year.

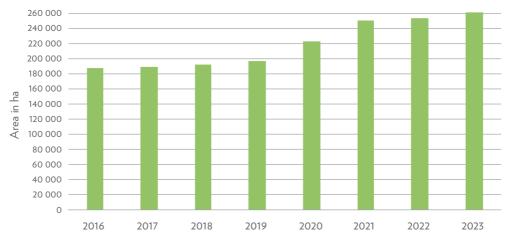
Table 55 Agricultural land registered for organic farming in the Slovak Republic (including areas in conversion) as of 31 December of the relevant year (ha)

Agricultural land by type	2022	2023	Difference (ha) 2023-2022	
Arable land	86,044	86,793	749	
Permanent grassland	164,711	171,869	7,158	
Orchards	1,871	1,412	-57	
Vineyards	531	583	53	
Agricultural land, total	253,156	261,060	7,904	

Source: ÚKSÚP, MARD SR; Prepared by: MARD SR

The area of registered agricultural land has been increasing since 2017 and in 2023 it reached its highest level in the last eight years.

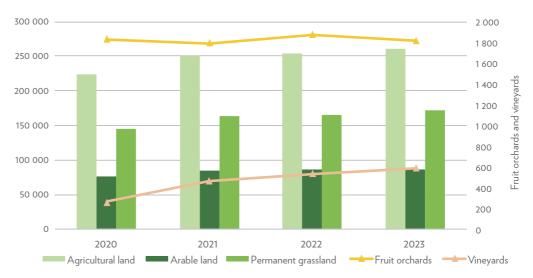
Chart 44 Agricultural land registered for organic farming in Slovakia in the years 2016 - 2023 (ha)



Source: ÚKSÚP, MARD SR

Note: The chart shows the total acreage of farmland registered for organic farming – including areas in conversion Prepared by: MARD SR

Chart 45 Agricultural land for organic farming by land type in Slovakia 2020 - 2023 (ha)



Source: ÚKSÚP, MARD SR

Note: The chart shows the acreage of agricultural land registered for organic farming (including areas in conversion) Prepared by: MARD SR

## Harvested area, production and yield of selected crops in the EPV in the Slovak Republic in 2023

With a total harvested area of 21,329 ha, cereals and oilseeds were among the most cultivated crops in the EPV in 2023, grown on an area of 4,496 ha in 2023. Legumes were harvested from a much smaller area of 2,743 ha in 2023. Temperate fruits and nuts were grown on 1,225 ha, while vegetables and strawberries were harvested from an area of 1,111 ha. More detailed data on the harvested areas, yields and production of selected crops grown in the EPV is presented in the table below.

Table 56 Harvested area, production and yield of selected crops in EPV in SR

		2022			2023	
Crop	Harvested area (ha)	Production (t)	Yield (t/ha)	Harvested area (ha)	Production (t)	Yield (t/ha)
Cereals	22 100	122 669	5,55	21 330	67 591	3,17
Wheat and spelt	13 997	80 542	5,75	12 839	40 043	3,12
Rye	1 094	4 676	4,27	1 363	5 495	4,03
Barley	1260	2 687	2,13	2 003	3 746	1,87
Oats	2 053	4 222	2,06	1 343	1 688	1,26
Grain maize	1 459	5 404	3,70	1 433	8 811	6,15
Triticale	1 727	5 984	3,46	1 957	3 933	2,01
Grain legumes	1 595	3 569	2,24	2 743	3 483	1,27
Peas	1 465	3 502	2,39	2 179	2 859	1,31
Beans	-	-	-	40	85	2,14
Potatoes (including seed potatoes)	44	806	18,37	42	521	12,26
Oilseeds	5 052	7 746	1,53	4 496	9 104	2,02
Rapeseed	136	94	0,69	263	580	2,21
Sunflower	2 135	4 253	1,99	1 730	3 749	2,17
Soybean	2 781	3 399	1,22	2 474	4 759	1,92
Vegetables and strawberries	628	635	1,01	1 111	1 357	1,22
Tomatoes	1	6	8,21	0	1	3,07
Carrot	2	17	7,57	68	207	3,06
Onion	2	2	1,25	1	7	4,74
Strawberries	54	342	6,37	48	347	7,23
Temperate fruits	450	1 379	3,06	462	370	0,80
Apples	328	1 345	4,10	326	337	1,03
Pears	18	8	0,47	17	9	0,55
Peaches	2	2	0,86	2	1	0,44
Apricots	7	1	0,11	10	1	0,06
Cherries	38	5	0,13	38	0	0,01
Plums	57	18	0,32	67	13	0,20
Nuts	960	102	0,11	763	129	0,17

Source: ÚKSÚP, Prepared by: MARD SR

#### Numbers of livestock in organic farming in Slovakia in 2023

From all livestock species registered in organic farming (including land in conversion), sheep (98,599 head) were the most numerous, as in the previous year. They were followed by cattle (91,193), poultry (12,262), goats (1,938), Bee colonies (1,740), pigs (1,380), and horses (806). Compared to 2022, sheep numbers fell most significantly by 4.6 %. The numbers of other types of farm animals listed in the table 47 increased on average from 7% (bee colonies) to 37 % (poultry) year-on-year.

Table 57 Total numbers of the main species of livestock in organic farming (including land in conversion) in Slovakia (head)

Livestock type	2022	2023	Difference 2023-2022
Sheep	103,342	98,599	-4,743
Cattle	83,701	91,193	7,492
Poultry	8,946	12,262	3,316
Goats	2,049	1,938	-111
Bee colonies	1,629	1,740	111
Pigs	1,282	1,380	98
Horses	728	806	78
Others (donkeys, ponies, rabbits,)	242	351	109

Source: ÚKSÚP, Prepared by: MARD SR

## Organic certification in Slovakia in 2023

Throughout 2023, there were two inspection organisations with authorisation to perform organic control and certification in the Slovak Republic. Besides inspecting operators, the inspection organisations Naturalis SK, s. r. o. (SK-BIO-002), Biokont CZ and s. r. o. (SK-BIO-004) also provided certification for organic farming products.

According to the available information, a total of 1,089 certificates were issued in 2023, which represents a year-on-year increase of 11.0 %. The organisations (Naturalis SK, s. r. o. (SK-BIO-002) and Biokont CZ, s. r. o. (SK-BIO-003)) carried out supervision of certified organic farming products as part of their activity as inspection organisations. A certificate is issued based on an request by an organic farming operator.

As in previous years, also in 2023 the issuer of the most certificates was **Naturalis SK**, **s. r. o.**, which issued 695 certificates, i.e. 119 certificates fewer year-on-year. **Biokont CZ**, **s. r. o.** issued 275 certificates in 2023, i.e. by 196 certificates more than in the previous year.

The main commodity orientation of the organic farming system (fully organic and in conversion) remained the same as in previous years in 2023. For agricultural products in plant production (non-perennial crops), fodder prevailed, where the largest certified volume was recorded (404,192 t), followed by cereals (41,314 t), cereal straw and husks (11,099 t) and oilseeds (3,345 t). The group highest share of certified products – fodder – is related to the high share of registered permanent grassland because every operator engaging in animal production certifies fodder from permanent grassland. In the category of perennial crops, grapes (692 t) and pome fruits

and stone fruits (368 t) were the biggest groups. They were followed by spices, aromatic, medicinal and pharmaceutical products (305 t), other tree and shrub fruit and nuts (142 t) and berries and Vaccinium fruits (36 t).

Table 58 NMost numerous certified products in EPV in Slovakia in 2023, by main commodity groups (t)

Contilled and destrict FDV	Total quantity b	Total quantity by inspection and certification organisation				
Certified products in EPV	Naturalis SK, s.r.o.	Biokont CZ, s. r. o.	Slovakia, total			
1. Non-perennial crops						
a) Cereals	23,223.66	18,090.35	41,314.01			
Cereal straw and chaff	11,099.19	-	11,099.19			
b) Legumes	3,809.86	976.82	4,786.68			
c) Oil seeds	886.98	2,658.09	3,545.07			
d) Vegetables and melons, roots and tubers	499.23	148.90	648.13			
e) Fodder crops	379,302.82	24,889.66	404,192.48			
2. Perennial crops						
a) Grapes	453.73	238.24	691.97			
b) Pome fruits and stone fruits	329.94	38.00	367.94			
c) Berries and fruits of the genus Vaccinium	0.00	35.75	35.75			
d) Other tree and bush fruits and nuts	55.40	87.01	142.41			
e) Spices, aromatic, drug and pharmaceutical crops	261.89	43.04	304.93			

Source: ÚKSÚP Prepared by: MARD SR





#### 7. THE IMPACT OF AGRICULTURE ON THE ENVIRONMENT

# 7.1. Use of natural resources in agriculture

In 2022, the (paid) abstraction of surface water for agriculture reached the level of 17.4 million m<sup>3</sup>. Under Sec. 78 of Act No. 364/2004 on waters (and amending Act No. 372/1990 of the Slovak National Council on infractions as amended) (Water Act) as amended, no charge is applied for small abstractions not exceeding 1,250 m<sup>3</sup> per month or 15,000 m<sup>3</sup> annually (up to 50,000 m<sup>3</sup> may be abstracted annually for irrigation of agricultural land). Data on water consumption for irrigation of agricultural land are presented in greater detail in Part 5.1. Agricultural inputs.

Table 59 Development of (paid) surface water use (million m<sup>3</sup>)

Indicator	2020	2021	2022	Index 2022/21
Surface water supply, total	236,9	240,3	240,0	99,9
of which: farming	12,4	13,0	17,4	133,8
percentage of total consumption	5,23	5,41	7,25	+ 1,84 p. b.

Source: VÚVH Prepared by: MARD SR

Groundwater abstractions increased by 2.67% year-on-year in 2022. Within agriculture, the volume of groundwater abstraction increased year-on-year in both plant production by 17.46% and in animal production by 1.04%. In the food industry, a decrease in groundwater abstraction by 15.06% was recorded.

Table 60 Development of groundwater abstraction by purpose of use (l.s<sup>-1</sup>)

Purpose of use	2020	2021	2022	Index 2022/21
Total groundwater consumption	10,578.58	10,873.80	11,163.74	102.67
of which: agriculture – pl. p.	205.48	195.63	229.78	117.46
agriculture – a. p.	222.35	227.23	229.60	101.04
food sector	245.69	265.82	225.80	84.94

Source: VÚVH Prepared by: MARD SR

In 2022, there was a year-on-year increase in consumption within agriculture only in the case of natural gas (12.8%). The consumption of selected other types of fuels and electricity decreased, with the largest decreases being for firewood (-40.2%), coal (-15.3%) and petrols (-14.0%).

Table 61 Consumption of selected types of fuels, electricity and heat in agriculture

Fuel name	Measuring unit	2020	2021	2022	Index 2022/21
Firewood	t	10,379	13,035	7,800	59.8
Coal	t	884	808	684	84.7
Petrol	t	1,450	1,388	1,193	86.0
Diesel	t	82,640	78,498	71,439	90.9
Light heating oil	t	2	-	-	-
Natural gas	thousand m³	31,189	33,818	38,145	112.8
Electricity	MWh	252,263	227,915	199,807	87.8
Heat	GJ	240,114	249,725	230,279	92.2

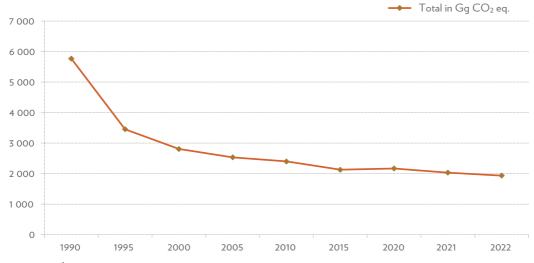
Source: SO SR Prepared by: MARD SR

# 7.2. Impact of agriculture on the quality of air and water resources

The agricultural sector accounts for about 7.3% of the total volume of greenhouse gas emissions produced in Slovakia.

The Slovak Hydrometeorological Institute (SHMÚ) has calculated that in 2022 the volume of greenhouse gas emissions from agriculture decreased by 4.9% year on year to 2,934.4 Gg of  $CO_2$  equivalent. The development of greenhouse gas emissions from agriculture has been on a downward trend since 1990, and since 2005 there have been only minimal changes with a slightly decreasing tendency.

Chart 46 Development of greenhouse gas emissions from agriculture between 1990 and 2022



Source: SHMÚ - Air Quality Section

Note: 1 Gg = 1 000 t Prepared by: MARD SR Approximately 29.2% of the generated volume of emissions consists of nitrous oxide emitted into the air mainly from utilised agricultural land and, to a lesser extent (9.3%), as a consequence of livestock farming (losses from animal manure) in Slovakia.



Chart 47 Development of nitrogen oxide emissions from agricultural soil management and animal waste management between 2016 and 2022

Source: SHMÚ – Air Quality Section; Prepared by: MARD SR

Another large share of emissions (53.2%) is methane (CH4), which is emitted into the air mainly as a direct product of the metabolism of herbivorous animals (enteric fermentation) and losses from animal manure (5.2%).

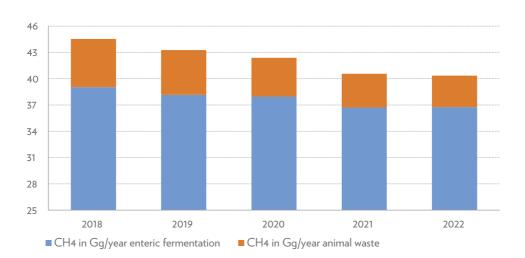


Chart 48 Development of methane emissions from enteric fermentation and animal waste management between 2016 and 2022

Source: SHMÚ – Air Quality Section Prepared by: MARD SR

Ammonia emissions from agriculture decreased by 5.4% in 2022 compared to the previous year. The development of ammonia emissions from agriculture has been on a downward trend since 1990, and since 2010 there have been only minimal changes with a slightly decreasing tendency.

 Agricultural sector in Gg 

Chart 49 Development of ammonia emissions from agriculture between 1990 and 2022

Source: SHMÚ – Air Quality Section

Note: 1 Gg = 1 000 t Prepared by: MARD SR

Total ammonia emissions produced in agriculture include the volume of ammonia produced from animal production and the use of mineral fertilisers and livestock manure in crop production.

Farmland was the source of nearly of ammonia emissions from agriculture (75.2%). Animal production generated 24.8% of ammonia emissions. The highest share of ammonia from animal production was generated by broilers (25.5%), laying hens (20.1%), other cattle (18.3%), dairy cows (15.4%) and pigs (12.5%).

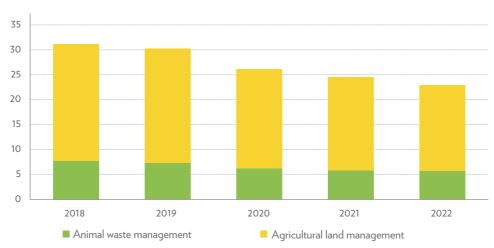


Chart 50 Development of ammonia emissions from animal waste management and agricultural land management between 2017 and 2021 (Gg)

Source: SHMÚ – Air Quality Section Prepared by: MARD SR

Agricultural emissions of ammonia account for the majority of national NHz emissions.

#### Vulnerable zones

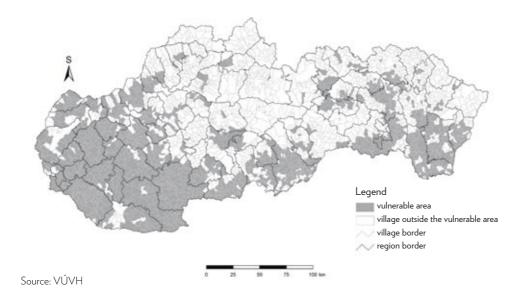
Vulnerable zones consist of land utilised for agriculture (including plots of land or parts thereof in municipalities) where rainwater flows into surface waters or seeps into groundwater, where the concentration of nitrates is higher than 50 mg/l or could exceed this threshold in the near future.¹ Agriculture is one of the sources of nitrate and other pollutants contaminating groundwater and surface water.

In accordance with Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources, vulnerable zones in Slovakia are established under Government Regulation No. 174/2017 establishing sensitive zones and vulnerable zones, as amended by Government Regulation No. 62/2022. Vulnerable zones are established on the lands of 1,395 municipalities as of 1 July 2022. The area of utilised agricultural land in vulnerable zones is 12,336.18 km², which represents 63.9% of the total utilised agricultural land in the Slovak Republic.²

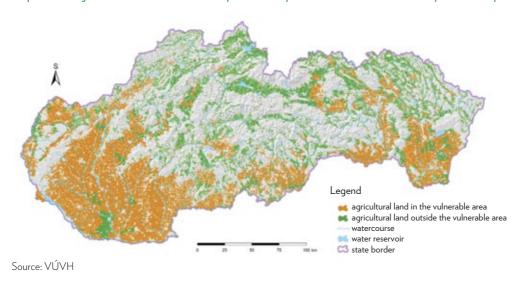
 $<sup>^1</sup>$  Act No. 364/2004 on waters and amending Act of the Slovak National Council No. 372/1990 on infractions, as amended (the Water Act).

<sup>&</sup>lt;sup>2</sup> Joint Final Report "Review of Vulnerable Areas for Council Directive 91/676/EEC". Bratislava: VÚVH, 2020.





Map 9 Utilised agricultural land in vulnerable zones of the Slovak Republic and outside vulnerable zones of the Slovak Republic



The Vulnerable Zones Management Programme is set out in Act No. 136/2000 on fertilisers, as amended, specifically in the provisions of Sections 10b and 10c. It sets forth measures related to the application of nitrogen fertilizers during the calendar year depending on farming conditions on agricultural land. Vulnerable areas are divided into three categories with varying degrees of restriction on nitrogen compound application and management methods.

Under Act No. 364/2004 on waters and amending Act No. 372/1990 of the Slovak National Council on infractions, as amended (the Water Act), as amended, and Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources, it is necessary to inspect vulnerable zones and, if necessary, revise or extend them at least every four years to take account of changes and factors unforeseen at the time of their designation. In 2025, the vulnerable zones will be reviewed in accordance with the periodic reassessment of groundwater and surface water quality, including eutrophication.

# 7.3. Financial indicators related to environmental protection

Overall, current expenditure on environmental protection went up by 5.4% year-on-year in 2022 under the influence of a year-on-year increase in intra-company expenditure by 28.3% and environmental protection costs paid to other entities rising by 2.3%.

Table 62 Agricultural enterprises' financial indicators in the field of environmental protection (€ thousand)

Indicator	2020	2021	2022	Index 2022/21
Environmental protection investment	45,26	D	D	-
Current expenditure on environmental protection in total	2 206,71	2 500,67	2 634,66	105,4
of which: intra-company costs	332,56	294,56	377,91	128,3
env. protection expenditure paid to other entities	1 874,15	2 206,10	2 256,75	102,3

Source: SO SR Prepared by: MARD SR



#### 8. EXPENDITURE ON AGRICULTURE AND RURAL DEVELOPMENT

Both EU funds and the state budget of the Slovak Republic were used to provide financial support for agriculture and rural development in line with the principles of the EU Common Agricultural Policy (CAP).

The single legal framework for CAP financing for 2023 – 2027 is set out in the Regulation (EU) 2021/2116 of the European Parliament and of the Council of 2 December 2021 on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No. 1306/2013, as amended.

On 1 December 2023, the CAP Strategic Plan 2023 – 2027 for the Slovak Republic entered into force with the European Commission Decision No. C (2022) 8337, according to which  $\leqslant$  3.38 billion will be redistributed to farmers from the EU agricultural funds and  $\leqslant$  866.8 million from the state budget.

On 30 November 2023, the 1<sup>st</sup> modification of the CAP SP 2023 – 2027 was approved by the Commission Implementing Decision (EU), which included changes in the areas of:

- definition of an active farmer,
- Good Agricultural and Environmental Condition (GAEC) standards,
- eco-schemes,
- agroforestry systems,
- sectoral interventions.

# 8.1. Organisation of the market with agricultural commodities, including sectoral interventions of cap sp 2023 – 2027

Market related expenditures (MRE) are financed from the European Agricultural Guarantee Fund (EAGF), which is a part of the general EU budget, with co-financing from the Member State's budget in some cases. Since MREs are expenditures earmarked for financing various measures and support programmes aimed at stabilising and supporting agricultural markets, their use reflects the situation in the market for agricultural and food commodities and depends on the number of applications received and the implementation of the measures in question. In the case of some programmes (e.g. apiculture support, wine promotion, the schools programme), the Commission sets annual limits. Market organisation activities in Slovakia are managed by the Agricultural Paying Agency (APA) – Market Organisation and State Aid Section.

Until the end of 2022, support schemes were governed by the Regulation (EU) 1308/2013, and selected articles of the Regulation (EU) 1306/2013 of the European Parliament and of the Council, as amended, continue to apply to the completion of national and operational programmes under market-oriented expenditure in accordance with the Regulation (EU) 2021/2117 of the European Parliament and of the Council.

€ 4.31 million was paid to the **wine sector** in 2023. This represents an increase of 24.7% compared to 2022. Of this, the largest share (as much as 90.9%) was allocated to the <u>restructuring</u> and <u>conversion of vineyards</u>. Other forms of support for this sector have included support for

<u>investments</u> in processing facilities, winery infrastructure and the marketing of wine, as well as for the <u>promotion of wine in third country markets</u>, and for information and <u>promotion measures for EU wines in Member States</u> intended to inform consumers about responsible wine consumption and about EU rules for designations of origin and geographical indications. The aim of these measures is to align production with market conditions and to improve and streamline the wine sector in Slovakia and the entire amount of the support paid comes from the EAGF.

€ 24.6 million was paid for the <u>school programme</u> (which includes the sub-programmes of school **fruit and vegetables** and school **milk**), of which € 12.6 million to school milk and € 12.1 million to school fruit and vegetables (EU funding represents 12% of the total amount). Compared to 2022, the use of the state budget increased significantly, namely by 84% for school fruit and vegetables and four times for school milk. Both sub-programmes of the school programme are aimed at children in kindergartens and pupils in primary, secondary or practical schools and vocational schools with special educational needs in the 3-18 age group, with the aim to increase their consumption of milk, fruit and vegetables and raise their awareness of the positive health effects of these products. This support is granted to approved entities that apply for the supply of fruit, vegetables, milk and milk products to schools for a particular school year, as well as for the implementation of accompanying educational measures. On the positive side, the involvement of school establishments in the school programme is increasing year-on-year.

In the **fruit and vegetables** sector, € 4.96 million has been paid for <u>operational programmes</u> drawn up by producer organisations. This represents a twofold increase compared to 2022.

In the **beekeeping** sector, the National Programme for the Stabilisation and Development of the Slovak Beekeeping Sector for 2019/2020 to 2021/2022 was supported, while funds from the CAP Strategic Plan 2023 – 2027 also started to be used. Beekeeping received a total amount of  $\leqslant$  1.8 million (in equal proportions from the state budget and EU funds), while both beekeepers and beekeeping organisations were supported.

Under the <u>sectoral interventions</u> of the CAP SP 2023 – 2027, EU funds to support **potato** producers amounting to  $\leq$  0.49 million were used.

In 2023, in the context of Russia's invasion of Ukraine and the establishment of solidarity corridors between the EU and Ukraine, which allowed Ukraine to sell its products on global markets, while causing considerable problems for EU Member States neighbouring Ukraine in terms of transport logistics and saturation of storage capacities, imports of selected commodities to Bulgaria, Hungary, Poland, Romania and Slovakia were banned under the Commission Implementing Regulations (EU) 2023/903 and 2023/1100, while the solidarity corridors were maintained. Following this situation, the Commission Implementing Decision (EU) 2023/1343 made available **exceptional aid** to Slovakia to compensate for a part of the real economic loss caused by the imports of cereals and oilseeds from Ukraine in the amount of  $\leqslant$  5.24 million with the possibility of granting additional national aid up to a maximum of 200%. In Slovakia, this support totalling  $\leqslant$  15.51 million was mainly directed to wheat growers.

In 2023 a total of  $\leqslant$  51.7 million was granted for MRE. This represents an increase of 60% compared to the previous year, mainly due to the increase in the allocation from the state budget for school programmes and the granting of exceptional aid.

Table 63 Overview of market-related expenditures (MRE) in 2022 - 2023 (€)

Type of support (source of funding)	2022	2023
Restructuring of vineyards (EU)	2,765,094	3,917,604
Harvest insurance (EU)	144,222	0
Investments in enterprises (EU)	438,633	292,551
Promotion on third country markets (EU)	6,788	48,289
Promotion of wine in EU Member States (EU)	100,000	50,000
Support for F&V operational programmes (EU)	2,283,558	4,961,643
Support for F&V operational programmes (SB)	1,555	2,211
School fruit and vegetables (EU)	1,758,095	1,872,965
School fruit and vegetables (SB)	5,533,527	10,192,636
School milk (EU)	967,712	1,070,557
School milk (SB)	2,621,526	11,484,237
Support for beekeepers (EU)	933,161	902,609
Support for beekeepers (SB)	933,161	902,609
Sectoral interventions under the CAP SP		
Support for potato producers (EU)	-	494,894
Support for potato producers (SR)	-	0
Extraordinary support for selected sectors	milk, dairy products, pork and sheep meat	cereals and oilseeds
Exceptional aid (EU)	4,616,178	5,171,407
Exceptional aid (SB)	9,232,240	10,342,814
MRE, TOTAL	32,335,451	51,707,026
of which: EU funds	14,013,442	18,782,519
state budget funds	18,322,009	32,924,508

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2022, 2023, MARD SR; Note: EU - funds provided by the European Union; SB – funds provided from the state budget through the PPA Prepared by: MARD SR

# 8.2. Direct payments

Direct payments representing direct financial support and stabilisation of farmers' incomes are generally granted to farmers as flat-rate support decoupled from production, although a part of the EAGF can be linked to specific sectors and commodities through coupled direct payments. 2023 was a transition year, when payments in the original structure were intermingled with payments in the CAP Strategic Plan 2023 – 2027 structure.

The applications submitted in 2022 were the last ones under the application of the direct payment structure introduced by the CAP for 2014 – 2022, with the direct payment scheme and the rules for granting them governed by the Regulation (EU) No. 1307/2013 of the European Parliament and of the Council, as amended. The administration of direct payments for the calendar year 2023 was carried out through the PPA – Direct Support Section in accordance with

the Regulation (EU) 2021/2115 of the European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No. 1305/2013 and (EU) No. 1307/2013.

For the entitlement year 2022, payments in the form of decoupled direct payments could be granted on the basis of the Government Regulation No. 342/2014 Coll. laying down the rules for granting support in agriculture in connection with decoupled **direct payment schemes**, as amended:

- single area payment scheme (SAPS);
- redistributive payments;
- payments for climate and environment-friendly agricultural procedures;
- payments for young farmers;

The provision of coupled direct payments for the entitlement year 2022 was regulated by the Government Regulation No. 36/2015 Coll., laying down rules for the provision of support in agriculture in connection with coupled direct payment schemes, as amended, and on that basis coupled **direct payments were provided**:

- payment for growing sugar beet;
- payment for growing hops;
- payment for growing selected fruits with high labour intensity;
- payment for growing selected fruits with very high labour intensity;
- payment for growing selected vegetables;
- payment for growing selected protein crops;
- payment for growing tomatoes;
- payment for breeding ewes, ewe lambs and goats;
- payment for fattening selected categories of bovine animals;
- payment for dairy cows reared under a market milk production system.

Provision of transitional national payments is regulated by the Government Regulation No. 152/2013 Coll. on the conditions for granting support in agriculture in the form of **transitional national payments**, as amended, whereby only the complementary national payment for livestock units is applied.

According to the <u>Slovak Government Regulation No. 436/2022 Coll.</u>, laying down the rules <u>for granting support in agriculture in the form of direct payments</u>, which was adopted in accordance with the CAP Strategic Plan 2023 – 2027, from the entitlement year 2023 **decoupled direct payments** include:

Basic Income Support for Sustainability (BISS), which builds on the Single Area Payment Scheme (SAPS),

complementary redistributive income support for sustainability (CRISS) – a new payment granted to all claimants for the first 150 ha of used agricultural area, subject to eligibility for BISS,

complementary income support for young farmers (CIS YF) is granted to applicants who have not reached the age of 41 in the calendar year in which they submit their application for payment; the payment is granted for a maximum of 5 years until 2027 for an area of no more than 100 ha,

- support in the form of a whole-farm eco-scheme,
- support for improving animal welfare by promoting pastoral farming.

#### The coupled direct payments include:

- coupled income support for the cultivation of selected protein crops,
- coupled income support for cows reared under a market milk production system,
- coupled income support for sheep and goats,
- coupled income support for the cultivation of hops,
- coupled income support for sugar beet cultivation,
- coupled income support for the cultivation of selected fruits,
- coupled income support for the cultivation of selected vegetables.

Table 64 Direct payments paid out (€ million)

	2022	2023
Decoupled direct payments / Income support from 2023	224.756	268.456
Basic payment under transitional simplified support scheme	134.993	113.975
Basic income support for sustainability		61.485
Redistributive payment	7.094	18.639
Payment for climate an d environment-friendly agricultural procedures (greening)	79.199	66.984
Payment for young farmers	1.177	1.355
Direct aid reimbursement in respect of financial discipline	2.293	6.018
Coupled direct payments / Coupled income support from 2023	49.038	51.665
Payment for growing sugar beet	4.958	7.223
Payment for growing hops	0.019	0.020
Payment for growing selected fruits with high labour intensity	0.261	0.290
Payment for growing selected fruits with very high labour intensity	0.580	0.459
Income support for selected fruits		0.554
Payment for growing selected vegetables	1.892	
Income support for selected vegetables		1.224
Payment for growing selected protein crops	5.612	6.635
Payment for growing tomatoes	0.010	0.087
Payment for breeding ewes, ewe lambs and goats	3.454	1.117
Income support for sheep and goats		3.599
Payment for fattening selected categories of bovine animals	6.565	1.930
Payment for dairy cows	25.687	28.529
Transitional national payments	3.514	3.614
Complementary national payment for livestock units	3.514	3.614
Total direct payments	277.308	323.735

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2022, 2023 Prepared by: MARD SR

The overview of direct payments paid shows that in 2023,  $\leqslant$  323.7 million was paid for direct payments (+ 16.7% year-on-year), while the highest increase (+ 19.4%) was recorded for decoupled direct payments. The rates of the individual direct payments are shown in the table 65.

In 2023, the APA received 46,492 requests for direct payments from the EAGF. Of this number, 26,013 applications were approved by the end of 2023, representing 56%. In that year, the PPA also continued to administer applications for direct payments for 2022, with 99% of such applications approved by the end of 2023. The rest are unapproved applications where administrative procedures are pending (mainly due to multiannual commitments and pending appeals).

In the 2022 campaign, the PPA carried out a total of 4,209 checks, of which 3,392 were checks targeting the main sample of checks (risk analysis and random selection by conventional and remote sensing methods), checks targeting the extensions of LPIS land blocks (areas with the "R", "V" and "RV" attribute) and checks for EV (explicit selection relating to verification of cultivation, multiple declarations, requests and suggestions from the direct support section, requests and suggestions from the site inspection section, suspected permanent grassland, verification of grazing areas, etc.). Over 140,000 hectares were subject to SAPS site inspections, using for the first time photo-interpretation based on aerial orthophotos and drone imagery to speed up and streamline the performance of site inspections.

Source: MARD SR Journals 2022 – 2024; Prepared by: MARD SR

<sup>\*</sup> The coefficient for financial discipline reimbursement is the ratio between transferred budget funds not used in year n-1 (due to a percentage reduction of direct payments) and direct payments in year n based on applications from farmers exceeding € 2,000.

<sup>\*\*</sup> A young farmer who has set up a holding no more than two years before applying for support is eligible for support. The planned rate in 2023 was  $\leqslant$  101/ha, the real rate was  $\leqslant$  90.39/ha. The maximum number of hectares for which support is paid is 100 ha and payment is granted for a maximum of 5 years. The minimum rate is  $\leqslant$  71/ha and the maximum rate is  $\leqslant$  133/ha. The total budget for the intervention amounts to  $\leqslant$  12.2 million for the entire programming period.

Table 65 Direct payment rates (€)

	unit of measurement	2022	2023
Decoupled direct payments / Income support from 2023			
Transitional simplified basic payment scheme (single area payment) / Basic Income Support for Sustainability (BISS)	ha	113.07	105.06
Redistributive payment: less than 4.99 ha (incl.)	ha	60.81	
5.00 ha – 14.99 ha (incl.)	ha	44.19	
more than 15.00 ha (incl.)	ha	33.27	
Complementary redistributive income support for sustainability (CRISS): interval up to 100.99 ha	ha		81.50
interval from 101 ha to 150 ha (incl.)	ha		41.50
Payment for climate and environment-friendly agricultural procedures	ha	65.54	
Support in the form of a whole-farm eco-scheme: outside the protected area			64.00
in the protected area			118.18
Payment for young farmers / Complementary Income Support for Young Farmers (CIS YF)**	ha	118.41	90.39
Support for the improvement of animal welfare in the form of pastoral farming: under Section 22 (5) (a)	DJ		122.00
under Section 22 (5) (b)	DJ		289.87
under Section 22 (5) (c)	DJ		65.00
Financial discipline disbursement coefficient for 2022: 1.669034%*			
Coupled direct payments / Coupled income support from 2023			
Payment for growing sugar beet / Coupled income support for sugar beet cultivation	ha	377.55	507.17
Payment for growing hops / Coupled income support for the cultivation of hops	ha	540.39	880.00
Payment for growing selected fruits with high labour intensity	ha	400.11	
Payment for growing selected fruits with very high labour intensity	ha	545.86	
Coupled income support for the cultivation of selected fruits			585.47
Payment for growing selected vegetables	ha	392.99	
Coupled income support for the cultivation of selected labour-intensive vegetables	ha		550.00
$\label{lem:coupled} \textbf{Coupled income support for the cultivation of selected highly labour-intensive vegetables}$	ha		819.61
Payment for the cultivation of selected protein crops / Coupled income support for the cultivation of selected protein crops	ha	76.29	79.98
Payment for growing tomatoes	ha	456.48	
Payment for breeding ewes, ewe lambs and goats / Coupled income support for sheep and goats	ks	16.68	22.92
Payment for fattening selected categories of bovine animals	DJ	174.72	
Payment for dairy cows reared under a market milk production system / Coupled income support for dairy cows reared under a market milk production system	ks	267.46	264.78
Transitional national payments			
Complementary national payment for livestock units under Regulation No. 152/2013 of the Government of the Slovak Republic: under Sec. 4(2)(a), (b), (c) and (f):	DJ	0.00	0.00
under Section 4 (2) (d)	DJ	70.00	70.00
under Section 4 (2) (e) (coefficient per LU: 1.00)	DJ	45.50	45.45

# 8.3. Rural development rdp sr 2014 - 2022 and rural development interventions cap sp 2023 - 20277

Expenditure financed by the European Agricultural Fund for Rural Development (EAFRD) serves to finance rural development programmes with budgetary commitments for 2014 – 2022 as well as the Common Agricultural Policy Strategic Plans for 2023 – 2027. The EAFRD is part of the general budget of the EU.

In relation to the expenditure incurred by beneficiaries and payments made by the APA in the framework of the implementation of the RDP SR 2014 – 2022 under the Regulation (EU) No. 1305/2013 of 17 December 2013 on support for rural development through the EAFRD and repealing Council Regulation (EC) No. 1698/2005, as amended, selected articles of the Regulation (EU) No. 1306/2013 of the European Parliament and of the Council, as amended, continue to apply. The RDP SR 2014 – 2022 was modified 12 times and approved by the EC. It was implemented in the form of project and non-project measures.

In relation to the expenditure incurred by beneficiaries and to payments made by the APA in the framework of the **implementation of the CAP SR 2023** – **2027**, financial support from the EAFRD is granted on the basis of the rural development interventions set out in the CAP SR pursuant to the Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2<sup>nd</sup> December 2021 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No. 1305/2013 and (EU) No. 1307/2013, as amended.

The CAP SR Strategic Plan 2023 – 2027 concerning the EU support financed by the EAGF and the EAFRD was approved by Commission Decision No. C(2022) 8337 of 24 November 2022, which set the maximum contribution from the EAFRD at  $\in$  1.317 billion. It is implemented in the form of supports/interventions (41 in total + technical assistance) which can be divided into the following groups in accordance with the Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021:

- Art. 70 Environmental, climate-related and other management commitments
- Art. 71 Natural or other area-specific constraints
- Art. 72 Area-specific disadvantages resulting from certain mandatory requirements
- Articles 73 and 74 Investments, including investments in irrigation
- Art. 75 Setting-up of young farmers and new farmers and rural business start-up
- Art. 76 Risk management tools
- Art. 77 Cooperation
- Art. 78 Knowledge exchange and dissemination of information
- Art. 94 Technical assistance

At the national level, the Slovak Government Regulation No. 3/2022 Coll. was adopted, which establishes the rules for the provision of support for non-project measures of the CAP SP 2023 – 2027.

Table 66 Expenditure under RDP SR 2014 – 2022 in 2022 and 2023 (€ million)

	ехре	enditure for I	2022	ехре	expenditure for 2023		
Measure	total	of which: EAFRD	State budget	total	of which: EAFRD	State budget	
Project measures	39.991	29.460	10.532	65.077	48.641	16.436	
01 - Knowledge transfer and information actions	0.170	0.127	0.042	0.042	0.031	0.010	
02 - Consulting services	0.035	0.023	0.012	0.200	0.127	0.073	
04 - Investments in tangible assets	7.750	5.360	2.390	27.929	20.665	7.264	
05 - Restoration of agricultural production potential - prevention	0.000	0.000	0.000	0.000	0.000	0.000	
06 - Development of agricultural enterprises and business activities	6.861	5.132	1.729	6.179	4.634	1.545	
07 - Basic services and renewal of villages in rural areas	12.736	9.513	3.223	6.404	4.803	1.601	
08 - Investment in the development of forest areas and in the improvement of the viability of forests	3.575	2.681	0.894	3.740	2.805	0.935	
16 - Cooperation	0.299	0.224	0.075	5.364	3.928	1.435	
19 - LEADER	2.490	1.842	0.647	7.496	5.560	1.937	
20 - Technical assistance	6.051	4.539	1.513	7.724	6.088	1.635	
21 - Temporary support related to COVID-19	0.025	0.019	0.006	0.000	0.000	0.000	
Non-project measures	139.118	105.448	33.670	163.423	121.415	42.007	
10 - Agri-environmental-climatic measures	21.437	15.781	5.656	19.730	14.551	5.180	
11 - Organic farming	27.750	22.635	5.115	27.306	22.497	4.809	
12 - Payments under NATURA 2000 and the Water Framework Directive	0.942	0.705	0.237	0.879	0.659	0.220	
13- Payments to areas facing natural or other specific constraints	52.313	39.107	13.206	78.287	56.058	22.228	
14 - Animal welfare	35.632	26.378	9.254	36.296	26.895	9.401	
15 - Forest environment payments	1.043	0.841	0.202	0.925	0.755	0.170	
Payments, total	179.109	134.907	44.202	228.500	170.057	58.443	

Source: APA (www.apa.sk) – Current overview of the paid funds for 2022, 2023 Prepared by: MARD SR

In 2023, the APA received 9,244 applications for CAP SP 2023 - 2027 measures. As a first step, at the end of November 2023, the APA started approving and subsequently paying advance payments (amount to 50%) for the ANC non-project measure.

Total support for rural development in 2023 increased by 27.6% year-on-year, with the largest part of the support paid to beneficiaries of the non-project measure 13, amounting to  $\leqslant$  78.3 million. The second largest amount ( $\leqslant$  36.3 million) was directed to livestock production under measure 14. Of the project measures, the highest amount of  $\leqslant$  27.9 million was paid for investments in tangible assets.

Restrictions on agricultural production and the need for extensive farming in the interests of nature protection, which reduce farmers' incomes, are compensated by the MARD SR under the RDP SR 2014 – 22 and CAP SP 2023 – 2027. These are increased costs and reduced revenues

for permanent grassland farmers in Natura 2000 sites falling under the protection levels 4 and 5. The planned level of support under the new programming period is  $\leq$  84 per hectare, representing an increase of 34% compared to RDP SR 2014 – 22.

The share of protected bird areas and sites of European importance together with the national system of protected areas NATURA 2000, protected landscape areas and national parks accounts for 30% of the area of the Slovak Republic. The share of NATURA 2000 areas on agricultural land is 16%.

# 8.4. Operational programme for the fisheries sector

On 13 March 2023 the European Commission approved the Fisheries Programme of the Slovak Republic 2021 – 2027 (FP SR 2021 – 2027) by the EC Decision No. C(2023) 1795 final. The FP SR 2021 – 2027 is an instrument for the use of the European Maritime, Fisheries and Aquaculture Fund in the programming period 2021 – 2027 and national resources in the amount of EUR 21.7 million. The programme contributes in particular to the implementation of the objectives of the EU Common Fisheries Policy, the European Green Deal and the Strategic Aquaculture Development Plan of the Slovak Republic until 2030.

In the Slovak Republic, the FP SR 2021 – 2027 is focused on the freshwater aquaculture sector and its main objective is to promote competitive and sustainable aquaculture, to ensure a high level of public health and to create a higher added value for aquaculture products, as well as to raise awareness of the aquaculture sector and improve data collection, which is also the main objective for the aquaculture sector as defined in the Green Deal and the European Commission's "Farm to Fork" strategy.

The FP SR 2021 – 2027 is divided into the following priorities:

- Priority 1 Promoting sustainable fisheries and restoring and protecting aquatic biological resources,
- Priority 2 Promoting sustainable aquaculture activities and the processing and marketing of fishery and aquaculture products.
- Technical assistance.

Table 67 Expenditure under OP F in 2022 and 2023 (€)

14	expenditure for 2022			expenditure for 2023		
Measure	total	of which: EMFF	State budget	total	of which: EMFF	State budget
Union Priority 2	419,373	314,530	104,843	756,746	567,559	189,186
Union Priority 3	0	0	0	14,351	11,481	2,870
Union Priority 5	24,094	18,071	6,024			
Union Priority 7	0	0	0	2,541	1,905	635
Union Priority 8	50,929	40,744	10,186			
Payments, total	494,397	373,344	121,053	773,638	580,946	192,692

Source: MARD SR, Department for Project Assessment and Implementation of the Fisheries Operational Programme Prepared by: MARD SR

In 2023, last payments were made under the Operational Programme Fisheries 2014 – 2020 (OP Fisheries 2014 – 2020), which was drawn up in accordance with the Annex I to the Commission Implementing Regulation (EU) No. 771/2014 of 14 July 2014 laying down rules pursuant to Regulation (EU) No. 508/2014 of the European Parliament and of the Council on the European Maritime and Fisheries Fund (EMFF).

The main project implementation activities in 2023 were aquaculture construction works, supply of various types of technology and equipment related to activities in aquaculture, coverage of personnel costs and expenditure related to the activity of the national correspondent.

### 8.5. State aid and national support

State aid and national support were provided in accordance with the national legislation:

- Act No. 277/2023 Coll. on the provision of subsidies within the competence of the Ministry of Agriculture and Rural Development of the Slovak Republic and on amendments and supplements to certain acts (effective from 1 August 2023)
- Act No. 280/2017 on the provision of support and subsidies in agriculture and rural development and amending Act No. 292/2014 on the contribution provided from the European Structural and Investment Funds and on amendments and supplements to certain acts, as amended
- Act No. 358/2015 on certain aspects of state aid and de minimis aid and on amendments and supplements to certain acts (the State Aid Act)
- Act No. 39/2007 on veterinary care, as amended
- Act No. 326/2005 on forests, as amended
- Act No. 523/2004 Coll. on the budget rules of public administration and on amendments and supplements to certain acts, as amended,
- Act No. 194/1998 on the improvement, breeding and registration of farm animals, as amended
- Ordinance No. 660/2014-100 of the MARD SR of 10 December 2014 on the provision of support for agriculture, the food sector, forestry and fisheries,
- Ordinance No. 536/2011-100 of the MARD SR on details for the provision of support in agriculture and rural development, as amended

Under Ordinance No. 660/2014-100 of the MARD SR of 10 December 2014 on the provision of support for agriculture, the food sector, forestry and fisheries, state aid and de minimis aid may be provided for activities in primary agricultural production; activities in the processing of agricultural products and food production; activities in the marketing of agricultural and food industry products; investments in the protection of cultural and natural heritage in agricultural enterprises; repair, in accordance with applicable legislation, of damage which adverse weather and natural catastrophes cause in the agricultural sector; research and development in agriculture and forestry; activities in forestry; rural development activities; the employment of disadvantaged employees and severely disadvantaged employees; and fish farming.

In 2023, state budget funds amounting to  $\leq$  53.5 million were spent on the above-stated activities. This represents only 51.4% compared to 2022. The highest amount of state aid was paid in the form of environmental tax credits, but compared to 2022 it was lower by  $\leq$  1.7 million. The second highest item was state aid for insurance premium payments in the primary production of agricultural products, which amounts to  $\leq$  8 million from 2022.

Table 68 State and de minimis aid paid in 2022 and 2023 (€)

Titles	2022	2023
Enabling breeders and growers to participate in exhibitions	150,000	250,000
Establishment and keeping of a breeding book and breeding register*	874,992	699,993
Performance assessment, testing and estimation of the breeding value of livestock*	1,986,276	1,594,261
Enabling a processor to participate in an exhibition (de minimis aid)	150,000	285,025
Support for the fulfilment of non-production functions of forests in forestry (de minimis aid)	5,977,746	5,999,966
Subsidy for the removal and destruction of fallen livestock (carcasses)*	1,699,968	2,449,965
State aid for insurance premium payments in the primary production of agricultural products	7,999,991	7,993,759
Compensation for damages caused by animal diseases and reimbursement of certain costs for the eradication of animal diseases in the form of a subsidy	1,724,747	0
State aid in the form of reductions in environmental taxes (green diesel 2019+)	32,028,473	30,866,980
Compensation for damages caused by adverse weather comparable to a natural disaster (DROUGHT 2022)	41,676,446	0
Support for the food sector	9,855,202	3,398,419
Payments, total	104,123,842	53,538,367

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2022, 2023, MARD SR Notes: \* the above amounts for 2022 represent the amounts of the subsidy provided for the purpose in question, which can be used from 1 January 2022 to 31 March 2023

Prepared by: MARD SR

Table 69 National support - transfers to non-financial entities in 2022 and 2023 (€)

	2022	2023
Subsidy for the protective breeding of pedigree horses - Národný žrebčín "Topoľčianky" š.p.	1 984 000	2 500 000
Subsidy for the activity of the horse racing authority and prizes for the winners of races - Závodisko, š.p.	1 283 726	1 518 279
Subsidy for the administration and preservation of the operational condition of irrigation infrastructure owned by the state and for the disposal of non-functional parts of the system - Hydromeliorácie, š.p.	2 250 000	2 728 000
Subsidy for the protective breeding of horse breeds, development and preservation of state property for the protective breeding of horse breeds and for animal welfare - LESY SR, š.p.	100 000	100 000
National support - subsidies to state enterprises, total	5 617 726	6 846 279

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2022, 2023, MARD SR Prepared by: MARD SR

Ordinance No. 536/2011-100 of the MARD SR regulates the provision of subsidies to non-financial, non-commercial entities for activities of public benefit in the area of agricultural and rural development. The eligible recipients are state enterprises, civic associations and interest associations.

In 2023, funds amounting to  $\leqslant$  6.8 million were directed to state-owned enterprises. This represents an increase of  $\leqslant$  1.2 million compared to 2022. Almost 40% of this amount went to the state enterprise Hydromeliorácie and another 37% to the National Stud Topoľčianky.

Other national support funds were directed to individuals and non-profit legal entities engaging in public benefit rural development activities, civic associations, foundations and chambers. The volume of these funds (Table 70) was comparable to 2022.

A total of  $\in$  62.5 million was spent on state aid and national support in 2023. This represents a 44.2% decrease compared to 2022, mainly in state aid to businesses.

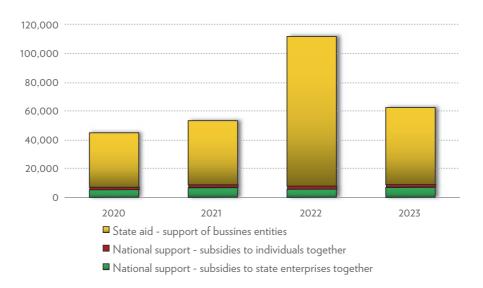


Chart 51 National support and state aid in 2020 - 2023 (thous. €)

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2020 – 2023, MARD SR

Prepared by: MARD SR

Table 70 National support - transfers to individuals in 2022 and 2023 (€)

	2022	2023
Pollination activity of bees (Slovak Association of Beekeepers)	994,596	971,521
Pollination activity of bees (Slovak Beekeepers)	201,444	199,376
Pollination activity of bees – Slovak Beekeeping Society of J. Čajda	0	28,357
Slovak Agricultural and Food Chamber	180,000	221,122
Slovak Forestry Chamber	60,820	65,400
Slovak Hunting Chamber	110,000	60,000
Slovak Falconry Club at the Slovak Hunting Chamber	10,000	0
Agrarian Chamber of Slovakia	30,600	27,080
Union of Regional Associations of Non-state Forest Owners Slovakia	26,000	41,220
Gemer Regional Association of Owners of Non-state Forests	5,000	5,000
Association of Owners of Public and Private Forests of the Banská Bystrica Region	5,000	5,000
Association of Slovak Young Farmers (ASYF)	16,319	27,338
Slovak Union of Primary Producers of Milk (SZPM)	9,443	9,535
Slovak Breeders' Association	22,664	29,821
Slovak Association of Gardeners National Committee	13,645	13,897
Fruit Growers Union of the Slovak Republic	8,499	10,489
Union of Vegetable and Potato Growers of Slovakia	4,722	7,628
Slovak Association of Horse Breeders – civic association	7,083	7,151
Zeleň - živá lúka (Greenery - Living Meadows) – civic association	3,600	4,100
Podunajská vínna cesta (Danube Wine Route)	2,361	4,040
Association of Fish Breeders in Slovakia	7,083	5,735
Potato and Vegetable Growers' Association of the Slovak Republic	11,493	5,850
All-Slovak field days	4,722	4,768
Association of Sheep and Goat Breeders – civic association	20,398	21,330
Organic Fertiliser Producers Association	0	25,268
WATER & FISH - Spoločnosť pre ochranu vodných biotopov Slovenska, n.o.	968	4,577
Vidiecka platforma (Rural platform)	80,000	57,891
Pro Silva Slovakia	7,315	10,000
Slovak Agri-Forestry Association	10,000	21,645
Association of Forest Tree Nurserymen of the Slovak Republic	12,265	0
S ROZUMOM DO HORY	0	9,280
Club of Agricultural Journalists	5,000	4,631
Compensation for animal losses due to prescribed veterinary measures for breeders (non-entrepreneurs) – bee plague	249,897	161,494
National support - subsidies to individuals, total	2,120,937	2,070,542

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2022, 2023; Prepared by: MARD SR

# 8.6. General support for agriculture and the food industry

Overall expenditure on agriculture and rural development also includes general services, which are mainly provided by specialised agricultural institutions. These include the following:

Research and development: research institutes under the ministry, national measures (preservation and care of animal gene pools, research and development for the preservation and care of plant gene pools, research and development for the preservation and extension of the genetic base of cultivated plants).

Agricultural advice and training: The Institute of Knowledge-Based Agriculture and Innovation in Nitra and the Institute of Postgraduate Education of Veterinary Surgeons in Košice (contributory organisations of the MARD SR) provide training activities,

Services of specialized state administration provided through

budgetary organisations: State Veterinary and Food Administration of the SR (SVFA SR), Central Control and Testing Institute in Agriculture in Bratislava (CCTIA), Slovak Breeding Inspection in Nitra,

subsidised organisations: State Veterinary and Food Institute (SVFI), National Agricultural and Food Centre (NPPC), National Forestry Centre (NFC),

and a **state enterprise**: Plemenárske služby SR, š. p. (expenses related to the Central Livestock Register - CEHZ)

Infrastructure: land consolidation from the budget of the MARD SR,

*Marketing and promotion:* promotion of the sector, marketing activities for agricultural products and food, including the SK Quality label.

Other services: institutional expenditure of the Office of the MARD SR, the APA, use of information and communication technologies in the sector, sectoral statistics, foreign cooperation of sector, subsidy for the Museum at Svätý Anton.

Table 71	Structure	f subsidies for general	services in 2022 and 2023 (€)
Table / I	Jul ucture o	i subsidies foi defierat	services ill ZUZZ dilu ZUZS (E)

	2022	2023
Education	433,177	1,246,001
Services of specialised state administration organisations (including research and development)	80,759,893	80,951,731
Infrastructure	17,328	20,809
Marketing and promotion	1,678,089	700,685
Other services	52,897,627	57,745,634
Total	135,786,115	140,664,859

Source: Report of the Slovak Republic for OECD Agricultural Policy Monitoring and Evaluation 2022, 2023 Note:\* funds for science and research are listed separately in table 73; Prepared by: MARD SR

Services of specialised state administration institutes focused primarily on inspecting compliance with phytosanitary, veterinary and hygienic regulations in order to preserve food safety accounted for the largest share of general services in 2022 and 2023. There were increases

in the volume of subsidies paid for other services, among which the largest items were support for the activities of the APA and the Office of the MARD SR.

Table 72 Support for specialised state administration services and other services in 2023 (€)

Services of specialised state administration		Other services	
SVFA	39,883,919	expenditure of the Office of MARD SR	20,401,371
CCTIA	18,216,804	APA	32,784,417
Breeding inspection	397,969	information and communication technology in agriculture	2,654,119
SVFI	4,812,718	sectoral statistics	108,984
NPPC	7,130,683	foreign cooperation	1,360,902
NFC	9,657,638	Museum at Svätý Anton	435,841
Plemenárske služby, š.p.	852,000		
Total	80,951,731		57,745,634

Source: Report of the Slovak Republic for OECD Agricultural Policy Monitoring and Evaluation 2022, 2023 Prepared by: MARD SR

Table 73 Expenditure for science and research in the area of competence of the MARD SR in 2023 (€)

Organisation name	Institutional form	Specific purposes	Total use	Number of projects
NPPC	1,843,413	1,445,417	3,288,830	14
NFC	217,600	307,700	525,300	5
Total	2,061,013	1,753,117	3,814,130	19

Source: Draft final account of the budgetary chapter of the Ministry of Agriculture and Rural Development for 2023, MARD SR Prepared by: MARD SR

Expenditure in the Slovak agricultural sector in 2023 increased compared to the previous year from  $\leqslant$  736.9 million to  $\leqslant$  807.8 million (+9.6 %).

Expenditures for direct payments made up the largest share of total expenditures in agriculture (40.1%). The second group of support which accounted for 28.3% of total expenditure was rural development funds. And the third largest volume of expenditure (17.4%) was directed to general services.

Table 74 Total expenditure on agriculture and rural development in 2022 - 2023 (€ million)

	E:	xpenditure in 20	22	Expenditure in 2023			
	EU	SR	Total	EU	SR	Total	
Market Related Expenditures	14.01	18.32	32.34	18.78	32.92	51.71	
Direct Payments	273.79	3.51	277.31	320.12	3.61	323.73	
Rural Development	134.91	44.20	179.11	170.06	58.44	228.50	
Fisheries	0.37	0.12	0.49	0.58	0.19	0.77	
State Aid and National Support	0.00	111.86	111.86	0.00	62.46	62.46	
General Services	0.00	135.79	135.79	0.00	140.66	140.66	
Total	423.09	313.81	736.89	509.54	298.29	807.84	

Prepared by: MARD SR





# 9. SCIENCE, RESEARCH, EDUCATION AND CONSULTING IN THE AGRICULTURE AND FOOD SECTORS

### 9.1. Science and research

The National Agricultural and Food Processing Centre (hereinafter referred to as "NPPC"), which was established on 1 January 2014 (by the Decision of the Ministry of Agriculture and Rural Development of the Slovak Republic No. 4818/2013-250) currently consists of four research institutes, namely the Research Institute for Plant Production, Research Institute for Animal Production, Food Research Institute and Soil Science and Conservation Research Institute.

NPPC activities in 2023 were provided in accordance with the charter of establishment, medium-term priorities and the concept of research and development in the area of responsibility of the Ministry of Agriculture of the Slovak Republic.

As a departmental research centre, NPPC is a complex research organisation capable of addressing a wide range of issues from soil, water and genetic resources through plant and animal production systems, food production and biomass processing for non-food purposes to the economic, ecological and social aspects of the whole sector.

An important part of the NPPC's mission is the development of international cooperation and integration with the international scientific research community, primarily through participation in projects under the EU's H2020/Horizon Europe programmes. It is no less important to publish (more information may be found in the Section 4.3.2 and in Tables 11, 12) and provide expert services and consulting related to agriculture and food production in five key areas: a) planning (development of technological procedure designs), b) field consultancy, c) services, d) mass consulting activities (seminars, conferences, exhibitions, lectures, workshops, etc.) and e) printed materials (publication of professional literature; instruction leaflets; academic and specialist articles). Information activities (training) in the field of crop cultivation, livestock farming, food quality and safety and soil protection are also important.

In 2023, NPPC dealt with 14 departmental science and research projects, 46 technical assistance tasks and 4 special tasks with a total contracted amount of EUR 9,917,226.07. Of this amount, EUR 560,820.07 was assigned to the task "Implementation of selected measures under the state aid scheme to support the storage of agricultural primary production products as a result of Russia's aggression against Ukraine" and these funds were provided to the business community.

Funding received from sources outside the ministry included EUR 780,214.00 for 18 projects of the Slovak Research and Development Agency (including funds for co-investigators in the amount of EUR 156,184.00), EUR 55,114.94 for H2020 projects and EUR 3,782,649.31 for other projects and grants (including funds for co-investigators in the amount of EUR 542,321.85).

The following projects and grants were addressed:

- 18 Slovak Research and Development Agency projects,
- 5 international projects under Horizon 2020,
- 4 within the Interreg Cross-Border Cooperation Programme,

- 8 projects under OP II,
- 3 RDP education projects,
- 1 project of Official Development Assistance of the Slovak Republic SAIDC.

In 2023, 30 Slovak Research and Development Agency projects were developed and submitted and were subject of the approval process.

# In 2023, the NPPC carried out specific activities at the national level:

- Active participation in the implementation of the upgraded Smart Specialisation Strategy RIS3 SK 2021 - 2027 - visionary of the Healthy Food and Environment domain. Cooperation with the Horizon Europe National Focal Point for Cluster 6, information workshops at VAIA implementation of Domain 5, linking with Missions and the living labs concept. Expert activities and commenting on materials for the implementation of the Recovery Plan, e.g. Science and Research Funding Plan.

# Implementation of specific activities at the international and EC level:

- Representation of the Slovak Republic in the Standing Committee for Agricultural Research
  of the EC SCAR national delegate, participation in the SCAR Steering Committee (4 meetings),
  in SCAR plenary meetings (2 times a year) and active participation in events related to the preparation of the Horizon Europe 2021 2027 programme. Participation in EC meetings with stakeholders preparation of Horizon Europe Partnerships (Agroecology Living Labs Partnership).
- Active participation in the international BIOEAST platform BIOEAST national focal point, participation in BIOEAST Council meetings, consultation on BIOEAST documents, 03/2023 Final Conference of the BIOEASTsUP project; (https://bioeast.eu/documents/).
- Preparation of various working documents, cooperation with the Permanent Representation of the Slovak Republic to the EU in Brussels, with the MARD SR and expert documents for the representatives of the MARD (e.g. for the Agriresearch Conference held from 30 May 1 June 2023 in Brussels).
- Meetings of the BIOEAST Council focused mainly on the active promotion of the interests of the initiative (searching for partners in Horizon Europe projects, communication with actors in the Slovak Republic).

Cooperation with the MARD SR on the preparation of documents for the speeches of high-ranking state representatives, e.g. the EC conference on agricultural research held from 30 May – 1 June 2023 and others.

- Work in the MARD SR NEXUS Steering Committee Carbon and Water Bank, preparation of the concept, working sessions, working groups, consultations for the Secretary of State's office, co-organization, working group on foreign relations.
- Solution of the BIOEASTUP project (together with the MARD SR and NLC) participation of Slovak experts in the work of thematic working groups TWG Agroecology, TWF Food Systems, preparation of the SRIA BIOEAST (Strategic Research and Innovation Agenda).
- Coordination of involvement of NPPC organizational units and institutes in other international platforms (e.g. Alliance for Pesticide Free).

# Significant results of activities for SK included:

- Involvement in the H2020 programme "European Joint Programming on Soil" (EJP Soil), the Science and Research Management Unit provides project publicity and administrative management, participates in some of the work packages of the programme focused on prioritisation and mapping (https://cordis.europa.eu/article/id/418201-preserving-crop-diversity-for-future-generations-launch-of-eu-research-project-agent); involvement in projects within internal calls of EJP Soil, (http://www.nppc.sk/index.php/sk/projekty).
- Successful 2 new Horizon Europe projects AELLRI Partnership, AGROECOLOGY project (RIA), BOOST4BIOEAST project (CSA, contract signed, started in 1/2024). NPPC is a partner of the projects.
- The LIFE-2023-STRAT-two-stage SIP (Strategic Integrated Projects) NatAdaptSK project has passed the EC evaluation to the  $2^{nd}$  round, the project is in preparation (NPPC -VÚPOP, NPPC-VÚP are partners of the project).

NPPC's professional assistance in 2023 aligned with social and economic needs identified by management and production specialists in the sector and the national and sectoral development strategies of the Slovak Republic. They were largely addressed in international scientific and technical cooperation.

Professional assistance tasks carried out for MARD SR in 2023 resulted in 199 deliverables, of which 62 were tangible and 137 intangible.

Alongside its research and development activity in Slovakia, NPPC has also established a significant presence in the international arena. This is documented by engagement in 8 international projects and the active participation of NPPC staff in 52 international scientific and professional organisations.

NPPC employees worked actively in 77 bodies and commissions of the central state administration, 61 professional and interest associations, unions and similar organisations, 29 bodies of other agricultural organisations, 23 scientific councils of scientific research centres and 34 editorial boards of periodicals (Section 4.2). In the course of 2023, in response to requests from MARD SR and its specialist departments, NPPC prepared and delivered to management bodies on the national and regional level 27 documents for the drafting of legislation and 37 conceptual, forecasting and expert materials for management bodies.

NPPC organised conferences, seminars, trainings, courses and lectures as well as monitoring, accreditation, testing and control activities. It also provided training in the areas of the activity. In 2023, NPPC workplaces held several events with international participation.

An important evaluation criterion for NPPC was publication activity. In 2023, NPPC staff published (according to recalculated employee shares) 781.35 works alongside their participation in scientific education and pedagogical activities. In 2023, there were 18 tutors from NPPC working in the pedagogical process; they taught 1,392 hours at 12 Slovak and foreign universities and supervised 14 doctoral students and 40 master's and bachelor's students.

NPPC is the coordinator of National Programs for the Conservation of the Gene Pool of Native and Endangered Species of Plants and Breeds of Livestock, with responsibilities including the creation of national databases. NPPC - VÚRV coordinated the National Programme for the Conservation of Plant Genetic Resources (PGR) for Food and Agriculture and ensured

the operation of the Gene Bank of Seed Cultures of the Slovak Republic. NPPC - VÚŽV Nitra performed the tasks of the national focal point for animal genetic resources resulting from international agreements and conventions ratified by the Slovak Republic.

On the basis of the achieved scientific and research knowledge, rich publishing, consulting, scientific and educational, pedagogical, conceptual and professional activities of the NPPC for 2023, its activities can be evaluated very positively. It has an important position in the society as its personnel are fully qualified and equipped to undertake high quality scientific research in all areas of agriculture and food production, including international collaboration at the most advanced levels.

NPPC is an established and accepted research institute, with well-developed international cooperation. Private interest in cooperation is also growing.

In 2023, NPPC supplied legislative, planning, forecasting and expert assessment material to management, decision-making and control bodies in the agricultural sector (MARD SR, the Ministry of Environment, the Ministry of Education, Science, Research and Sport, SAFC, SVFA SR, CCTIA, CSTI, FA SR, Štatistický úrad SR, š. p., Hydromeliorácie, š. p., regional centres of the Agricultural Paying Agency, land and forest departments of district offices).

MARD SR drew on the expertise of the Centre's staff in coordinating National Programme for the Protection of Plant Genetic Resources and Endangered Breeds of Livestock and in many ministerial selection and recognition committees. The Centre also collaborated with MARD SR in the drafting of several pieces of legislation and prepared opinions on issues related to the competence of NPPC. In addition to MARD SR, the European Food Safety Authority (EFSA) made use of NPPC's professional assistance services.

A wide range of stakeholders, including natural persons and legal entities performing their business activities in the area of agriculture, universities, secondary vocational schools, professionals, and the public, have benefited from NPPC's research and development results, which span animal and plant production, soil science and protection, food science, and biomass utilization for energy purposes. The forestry departments of district offices used outputs from the Research Institute for Animal Production Nitra in the advisory councils and breeding boards of hunting areas.

The results of the research and development were presented to the public on RTVS in the Farmers' Review programme..

#### 9.2. Education

The Institute of Knowledge-Based Agriculture and Innovation was established on 1 January 2023 in accordance with the decision of the Ministry of Agriculture and Rural Development of the Slovak Republic No. 8570/2022-250 by incorporating the tasks and activities of the state enterprise Agroinstitute Nitra into the state contributory organization of the Agency for Rural Development and the subsequent change of the organizational structure and the name of the Agency for Rural Development to the Institute of Knowledge-Based Agriculture and Innovation (hereinafter referred to as the "IZPI").

IZPI is aimed at providing comprehensive information and advisory services to actors operating in agriculture and rural areas. In addition, it also performs tasks to stimulate and promote

innovation in the sector, streamlining knowledge exchange and networking of actors in the sector with the aim of modernising agriculture and rural areas. On the basis of the Regulation (EU) No. 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No. 1698/2005, IZPI is defined in the Rural Development Programme of the Slovak Republic 2014 – 2022 as the host body of the National Rural Development Network unit for the above-mentioned programming period. At the same time, following the Chapter 8 of the Common Agricultural Policy Strategic Plan 2023 – 2027, IZPI is designated as the implementing body of AKIS (Agricultural Knowledge and Innovation Systems).

The main objective of the Institute as well as the Regional Agricultural Knowledge-Based Institutes (RIZPI) for 2023 was to collect, analyse and disseminate information for actors in agriculture and rural areas, to promote the activities of the organisation, to structure the AKIS, to promote cooperation at regional, national and transnational levels, to streamline the exchange of knowledge and the networking of actors in the sector with the aim of modernising agriculture and rural areas. The defined objective was implemented through the performance of 7 tasks financed from the contract between IZPI and MARD for 2023 and tasks financed from other sources.

In 2023, the funds for IZPI tasks from the state budget from the chapter of the Ministry of Agriculture and Rural Development of the Slovak Republic amounted to EUR 1,278,259 and were spent in the amount of EUR 1,084,075.42. A substantial part of the funds was used for institutional financing of IZPI and provision of necessary information to MARD SR. The underspent amount of  $\leqslant$  194,183.58 was used to finance the current expenditure of IZPI in the first quarter of 2024 in accordance with the budgetary rules.

Table 75 Evolution of the number of training activities and the number of trainees between 2016 and 2023

	2016	2017	2018	2019	2020	2021	2022	2023
Number of educational activities	153	199	127	105	87	89	80	75
Number of education participants	4,440	3,806	3,337	2,915	2,161	2,554	2,611	2,239

Source: IZPI



Source: IZPI

In 2023, the AKIS Department organised a total of 75 educational activities in which 2,239 persons participated. In connection with the requirements of practice, RDP 2014 – 2022 and CAP SP, IZPI employees carried out 26 different training activities.

In organising educational activities, IZPI cooperated with numerous organisations and institutions operating within and outside agricultural administration. In cooperation with the Agrarian Chamber of Slovakia, professional training in the field of application of plant protection products was organized for managers and applicators in Dunajská Streda, in cooperation with the Agriculture Section of the Ministry of Agriculture of the Slovak Republic, a professional discussion on the use of drones for the application of plant protection products was organized, which took place on 5 September 2023 at IZPI. In cooperation with the Department of Direct Payments and Administrative Activities of the MARD SR, an on-line expert seminar "Rules of the new CAP for 2023 – 2027" was organised for 690 attendees. A recording of the event on YouTube received a further 1,800 views by the end of 2023.

Professional competence certification in the field of plant protection products under the Section 32 (6) of the Act No. 405/2011 on plant protection under Authorisation No. 224/22023 of MARD SR of 9 January 2023 was granted to a total of 860 persons (214 managers, 498 application technicians and 148 salespeople) in 2023.

Under accreditation from the Ministry of Education, Science, Research and Sport of the Slovak Republic pursuant to Section 9(2) of Act No. 568/2009 on lifelong learning, IZPI organised educational activities attended by a total of 346 participants in 2023.

Table 76 Overview of accredited educational courses organised in 2023

Course name	accreditation number	duration (hours)	number of participants
Professional training for work with disinfectants for professional use and to work with animal pest control products for professional use	3801/2023/1/6	20	3
Refresher training for work with disinfectants for professional use and to work with animal pest control products for professional use	3801/2023/1/6	16	20
Operation of a distillery for cultivated fruits	3801/2023/1/1	80	11
Professional training for verification of professional competence to work with highly toxic substances and mixtures and toxic substances and mixtures	3801/2023/1/7	10	58
Refresher training for work with highly toxic substances and mixtures and toxic substances and mixtures	3801/2023/1/7	10	34
Beginner beekeeper	3801/2023/1/4	56	10
Cultivation and processing of medicinal plants	3801/2023/1/3	20	46
Pig care	3801/2023/1/2	16	20
Business fundamentals and support measures in the agricultural sector	3801/2023/1/5	38	144
TOTAL	_		346

Source: IZPI

vocational training in the agricultural sector; 854; 38%

A total of 179 persons participated in educational activities in the field of occupational safety and health (OS&H) and in the field of fire protection (FP) in 2023.

Educational activities were aimed at:

- refresher professional training of technicians based on a certificate from the National Labour Inspectorate of the Slovak Republic No. VVZ-0010/23-01.2, (25 graduates);
- basic professional training of fire protection technicians under a certificate from the Presidium of Fire and Rescue Services, certificate No 6/2023, (16 graduates);
- recurrent professional training of fire protection technicians under a certificate from the Presidium of Fire and Rescue Services, certificate No. 6/2023, (73 graduates);
- OS&H for distillery managers (37 participants);
- BT preparatory course for the NIP examinations (28 participants).

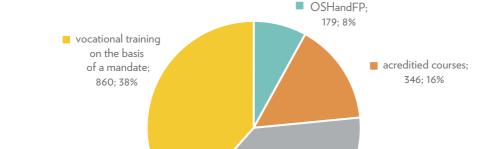


Chart 53 Educational activities by area and numbers of participants in 2023

Further vocational training implemented in 2023 focused on:

- the Waste Act (36 participants),

Source: IZPI

- Training of water managers (20 participants),
- the New Air Protection Act (19 participants),
- Cultivation of honey-bearing plants (10 participants),
- Land communities (79 participants),
- Rules for the new CAP for 2023 2027 (690 participants).

The following table shows the number of participants by each area of training activities for 2018 – 2023.

Table 77 Evolution of the number of participants in all training activities in 2018 - 2023

	2018	2019	2020	2021	2022	2023
GSAA application information seminars	604	103	0	0	0	0
Vocational education based on authorisation (plant protection)	520	831	1,077	1,126	971	860
Vocational education in the agricultural sector	1,337	1,208	198	281	723	854
OS&H and FP education	451	345	260	330	318	179
Accredited courses	425	428	596	817	599	346
Others	0	0	30	0	0	0
Total number of participants in educational activities	3,337	2,915	2,161	2,554	2,611	2,239
Number of implemented educational activities	127	105	83	89	80	75
of which the number of GSAA seminars	46	16	0	0	0	0
Number of person-hours of training	39,615	41,911	31,555	41,046	41,206	25,939

Source: IZPI

# Consulting system in agriculture

In the context of the call under the sub-measure 2.1 Advisory services to help farmers and forest managers, a new catalogue of advisory products was created in 2023 and published on www.izpi.sk and also on www.agroporadenstvo.sk. The aim was to allow easier navigation through the product catalogue, reducing administration, as the advisory products in the call announced in 2019 were very narrowly specified and did not create room for flexibility in the advisory services. The duration of each counselling product is in the range of 26 hours of which field counselling is a minimum of 6 hours and preparation for the counselling service a maximum of 2 hours.

The new catalogue of advisory services will help to ensure a more effective participation of advisors in the upcoming call for sub-measure 2.1, a more efficient use of funds and ultimately, above all, more advisory services for farmers. The AKIS Department sent out all relevant information concerning the new catalogue of advisory products to all agricultural advisers registered in the Central Register of Agricultural Advisers (hereinafter referred to as "CRAA"). The advisors selected from the new catalogue the products they plan to implement under the new call. The CRAA subsequently published information on which advisory products in the new catalogue each advisor will offer.

- 154 agricultural advisers as of 1 January 2023,
- 7 agricultural advisers who applied to be removed from the CRAA during 2023,
- 147 agricultural advisers as of 31 December 2023,
- 38 forestry advisers as of 1 January 2023 and also as of 31 December 2023.

The information and communication portal for the dissemination of authorised databases and information related to the agricultural consulting system www.agroporadenstvo.sk was functional in 2023. In the period under review the site received over 45,000 views, of which approximately

80% were new visitors and 20% returning visitors. Visitors from Slovakia accounted for 88% of the total. Altogether, 297 specialised articles of various kinds and topics, and 84 new legislative or regulatory documents were uploaded to the site in 2023, 381 updates altogether. The following table provides an overview of the number of published articles and legal regulations during 2018 – 2023 on www.agroporadenstvo.sk.

Table 78 Number of published articles and legal regulations

	2019	2020	2021	2022	2023
Number of specialist articles published	251	292	328	325	297
Number of legislative instruments published	49	71	63	61	84
TOTAL	300	363	391	386	381

Source: IZPI

### International projects

IZPI develops international connections and cooperation primarily through the ERASMUS+ programmes. It engages in international science and research cooperation through joint projects, especially in the European space, as well as e-learning education projects and the sharing of information and knowledge having regard for the direction of agricultural policy, the implementation of new legislation, EU regulations and the practical needs of the agricultural sector.

In 2023, IZPI finished the implementation of the project AgriSmart: Sustainability and digital skills for the agricultural sector. This was an ERASMUS+ project. The aim of the project was to adapt the provision of VET and WBL (work-based learning) to existing and emerging work needs and to strengthen the climate-smart and digital skills of farmers.

# The specific objectives of the project were the following activities:

- design a study programme of courses, focused on climate-smart and digital practices in agriculture, taking into account current and emerging work needs;
- implement a variety of educational delivery methods and innovative open access pedagogical resources, tailored to industry characteristics, in order to strengthen the provision of VET and WBL:
- increase capacities and expand cooperation between public and sectoral stakeholders, support the integration of climate-smart and digital skills development into training offers and regional policies.

# Project partners included:

Universita Degli Studi di Milano (Italy)

Exelia E.E. (Greece)

Innovela sprl (Belgium)

Stowarzysenie ARID (Poland)

Deula-Nienburg GmbH (Germany)

The project implementation period was from December 2020 to May 2023.

Project website: <a href="https://agri-smart.eu/">https://agri-smart.eu/</a>

In 2023, IZPI continued to implement the following projects:

 Project BeePro: Rational use of plant protection products and fertilizers in terms of the impact on bees in the ecosystem.

The main goal of the project is to update and improve the knowledge and awareness of students in VET, organisations operating in VET, farmers and people working in agricultural production regarding organic beekeeping and the correct use of plant protection products and fertilisers. A further aim of the project is to create a curriculum and content for interactive education focused on ecological beekeeping and the development of interactive training materials and tools for ecological beekeeping and rational use of plant protection products.

#### Project partners:

- Stowarzysenie ARID (Poland)
- New Edu, n. o. (Slovakia)
- SERVIMA servicios ambientales y recursos educativos SL (Spain)
- CPIP Comunitatea pentru Invatarea Permanenta (Rumania)
- STANDO LTD (Cyprus).

Project duration: November 2021 – March 2024

Website: https://beepro.sk/

Project CAPTIVATE: CAP Transfer of Information Via Assessment, Training and Extension.

The CAPTIVATE project aims to provide an innovative, comprehensive and targeted methodology for agricultural producers and providers of agricultural consulting services, aimed at improving their knowledge in the key area of sustainable agriculture, which is the focus of the new CAP and at the same time attracts considerable social attention from customers. The aim of the project is to develop an evaluation and training system for farmers, in which the new requirements of the CAP are better connected with innovative best practices in ecological management to ensure better implementation of the various measures, greater uptake of support, improved production efficiency and environmental protection.

# Project partners:

- ÖMKi (Hungary) coordinator
- FiBL-AT (Austria)
- IPS Konzalting (Czech Republic)
- Neumann János University (Hungary).

Project duration: November 2021 – November 2024

Website: https://cap-tivate.eu/

# Project FASTool: Developing Blended Training programme For Specialist Advisors In The EU Farm Advisory System.

The FASTool project focuses on "developing the professional profile of specialist agricultural advisors at EQF level 6" and "curriculum design for combined education programmes", aiming to provide the required competences for qualified agricultural advisors in the EU context through a flexible form of education. Specialised agricultural consultants are a vital link in the system for increasing overall efficiency. The FASTool project will provide solutions for human resource management in the framework of agricultural advisory systems. The main beneficiaries of the FASTool projects are: providers of lifelong vocational education, authorities and actors in the national and regional agricultural advisory system.

# Project partners:

- Uluslararasi Tarimsal Egitim Merkezi Mudurlugu (Turkey) coordinator
- Ondokuz Mayıs Universitesi (Turkey)
- Bundesanstalt für Agrarwirtschaft und Bergbauernfragen (Austria)
- Universidad Politécnica de Madrid (Spain)
- Turkiye Damizlik Siqir Yetistiricileri Merkez Birliqi (Turkey)
- Hochschule für Agrar- und Umweltpädagogik (Austria).

Project duration: December 2021 - February 2024

Website: https://www.fastoolproject.org/

# Project Spiritualist: Studies Practice in Agricultural High School Students

The project focuses on the development of educational tools in the field of hydroponic agriculture as part of vocational education and training. Thanks to the SPIRITUALIST project, students of secondary agricultural schools, teachers, students of secondary vocational and agricultural universities as well as farmers will gain the necessary knowledge and skills for hydroponic farming.

#### **Project partners:**

- Liceul Tehnologic Nicolae Balcescu (Rumania) coordinator
- Osmangazi Ilce Milli Egitim Mudurlugu,(Turkey)
- UNIVERSITA DEGLI STUDI DELLA TUSCIA (Italy)
- Bilecik Seyh Edebali University (Turkey)
- Srednja skola Dalj (Croatia)

Project duration: October 2022 - September 2024

Website: https://www.hydrospiritualist.eu/

Another important activity of IZPI, the AKIS Department, is hosting the **EUROPE DIRECT** information centre. EUROPE DIRECT (hereafter referred to as ED) is a pan-European information network consisting of more than 480 regional information centres and 400 documentation centres.

The main activities consist of:

- information services: information is provided by phone, email, in person at the visitor centre on the premises of the host organisation, in the library,
- promotional activities: presenting information about the activities and services of ED Nitra through regional media, e.g. RTVS regional broadcasting, the university newspaper "Poľnohospodár", the newspaper for farmers "Roľnícke noviny", the websites of the Nitra Tourist Information Centre and the Nitra Tourism Organisation,
- operation of the website https://agroinstitut.sk/europedirect/: thematically organised articles, links to the European Commission portal, and information on events organized by the ED Nitra information centre,
- publishing posts via social media: social networks have an impact on public opinion formation. Posts are published on the existing Facebook, Instagram and Twitter profiles to reach as many people as possible,
- newsletter: a monthly newsletter is published with up-to-date information from the EU and information about events and activities of ED Nitra. The newsletter is sent to a mailing list of people who have registered their interest in receiving the newsletter on https://izpi.sk/europedirect/ a https://izp.sk/.

In 2023, 250 complaints from citizens (in person, by phone or email) were handled, 12 monthly newsletters were issued and 4 articles were published in the regional press.

Full information about the above-mentioned projects can be found on IZPI's website http:/izpi.sk/aktualne-vzdelavacie-projekty/ and information on recent international cooperation projects is published on http://www.izpi.sk/ukoncene-vzdelavacie-projekty/.

# 9.3. Lifelong learning provided by the institute of postgraduate education of veterinary surgeons

The Institute of Postgraduate Education of Veterinary Surgeons (hereinafter referred to as "IPEVS") as a contributory organisation of the Ministry of Agriculture and Rural Development of the Slovak Republic is an educational institution, primarily focused on human resources development. In accordance with the Veterinary Care Act and within the framework of its statute, the IPEVS provides lifelong training for veterinary surgeons carrying out state veterinary activities and training for other employees of veterinary administration bodies and official veterinary laboratories, primarily through the **National Training Programme**, structured according to the professional activities of the SVFA SR in the areas of animal health and protection, foreign relations, imports and exports, feed control, ecology, veterinary pharmacy, hygiene of products of animal origin, control of foodstuffs of plant origin, laboratory diagnostics, legislation, audit and control, rapid alert system and certification.

The training programmes in 2023 were based on the requirements of the material tasks and needs of the SVFA SR, proposals of the regional veterinary and food administrations, the SVFI, the Institute for State Control of Veterinary Biologicals and Medicaments and the offer of the IPEVS.

In 2023 most of the training courses were delivered in a face-to-face format. A total of 20 training activities for 1,948 employees of the structure of the SVFA SR were carried out within the National Training Programme. 1,085 inspectors were trained in 12 activities, of which 940 inspectors attended in person and 145 inspectors attended remotely, as some of the activities were conducted in a combined form of in-person and online training. 863 inspectors were trained by distance learning in 8 activities.

One of the activities of the Institute of Postgraduate Education of Veterinary Surgeons in the field of lifelong learning is the provision of attestation training for the 1st and 2nd level attestation examination. This form of education finishes with an oral examination before an examination board or examination committee and it is carried out in accordance with Decree No. 480/2007 Coll. on postgraduate education. 25 employees of the SVFA SR organisations and one employee of the Ministry of Defence of SR successfully passed the attestation training for the 2nd level attestation examination. Five of those graduates successfully defended their attestation theses and passed the attestation examinations on two dates.

In addition to the training of employees of the SVFA SR structure, the IPEVS carried out training programmes also for other target groups, where 2,672 participants were trained in 100 training activities in 2023. Trainings were provided in the following areas:

- Protection of animals during transport, i.e. a training programme designed mainly for drivers and attendants involved in the transport of animals within the meaning of the Council Regulation (EC) No. 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No. 1255/97,
- Prevention of hoof and claws diseases in horses, cattle and pigs was carried out in two modules. The module "Grooming" is intended for persons involved in the breeding or training of horses, equine health care, groomers, farmers and other agricultural workers. The module "Hoof care" is intended for persons involved in the breeding, care and treatment of cattle with the intention of working in the field of prevention of limb diseases.
- Training of hunters on game hygiene and protection of human health was carried out in accordance with the Veterinary Care Act. The aim of the training was to prepare the participants to acquire specific professional knowledge and to meet the competence requirements for the initial on-site and post-mortem examination of wild animals.
- Retraining of hunters as part of the five yearly retraining of previously trained persons, 29 retraining sessions were carried out with the participation of 983 persons. The legislative framework of the training consisted of selected regulations of the European Parliament, Decree of the MARD SR No. 13/2012 which establishes the details of hunters' examinations on game hygiene and protection of the health of persons, on record keeping and on the required reports, and the Methodological Instruction of the SVFA SR No. 09/2020/330 of 24 June 2020.
- Protection of animals during slaughter, within the framework of the regulation on the protection

- of animals during slaughter and the resulting obligation for animals to be killed only by a trained person, which was provided on three dates in the year in question with a total of 62 participants.
- Protection of animals used for scientific or educational purposes, which was intended in particular for the staff of research and scientific institutions involved in experiments or procedures in which animals are used for scientific or educational purposes. In accordance with the Regulation for the protection of animals used for scientific or educational purposes and the amendment to the Veterinary Care Act No. 65/2021 Coll., the training of persons to obtain professional competence is divided into a theoretical part, practical training and a final test. The theoretical part of the training was attended by 109 people on one date and the training was conducted online.
- Protection of animals used for scientific or educational purposes refresher training after 4 years in accordance with applicable legislation and Section 37b (4) of the Veterinary Care Act. In the year in question, 334 persons were trained online on five dates.
- Capture of stray animals, in the period under review the training was carried out in accordance with the Act on Veterinary Care and the Decree of MARD SR No. 283/2020 Coll. on details on the protection of pets, requirements for capturing stray animals and requirements for quarantine stations and animal shelters. The training programme is intended mainly for those who wish to carry out stray animal capture at the level of towns and municipalities. In the past year 77 people were trained on two dates.
- Retraining of bee-keepers assistants to official veterinary surgeons, the training was carried out in accordance with the Act No. 39/2007 Coll., as amended by the Act No. 184/2018 Coll. and the Government Regulation No. 10/2023 Coll. The course was intended for bee-keepers who had already completed the basic, two-day course for assistants to official veterinary surgeons and their licenses had expired. Bee-keepers assistants are obliged to undergo the retraining in question once every five years. This training was provided in cooperation with the Slovak Bee-keepers' Association. A total of 481 bee-keepers were retrained in five activities (Košice twice, Nitra, Bratislava, Banská Bystrica).

Overall, there were 125 educational activities with a total of 4,755 participants. Through the above-mentioned educational activities, IPEVS responded proactively to new legislative changes and the need for education in these areas. The implementation of educational activities was carried out to the required extent and quality, mainly thanks to 60 qualified teachers from the ranks of employees of the SVFA SR, its subordinate organisations and MARD SR, who perform tuition as part of the National Education Programme without any remuneration. Education for other target groups was provided by 36 teachers.

Table 79 Educational activities organized by the IPEVS in 2023

No.	Name of educational activity	Number of activities	Number of participants
I. Lifelong	learning of employees of the SVFA SR organisations		
A: Nation	al Education Programme by professional activity		
1.	Animal health and welfare	2	300
2.	Foreign relations, imports and exports	4	310
3.	Feed control, ecology and veterinary pharmacy	1	68
4.	Hygiene of animal origin products	6	568
5.	Control of foodstuffs of plant origin	4	412
6.	Legislation and law	1	101
7.	Laboratory diagnostics, rapid alert system and certification	2	189
National p	orogramme, total:	20	1,948
B: Further	education		
8.	Attestation preparation, level 1	Under point A	32
9.	Attestation preparation, level 2	Under point A	1
10.	Legal issues	1	27
11.	Level 2 attestation exams	2	5
12.	Management training	2	70
Further ed	lucation, total:	5	135
Total A+E	B: Employees of SVFA SR organisations	25	2,083
II. Educati	ional activities for other target groups		
13.	Protection of animals during transport	22	167
14.	Training of hunters on wild game hygiene and human health protection	9	221
15.	Examinations for hunters	20	217
16.	Refresher training for hunters	29	983
17.	Protection of animals during slaughter	3	62
18.	Protection of animals used for scientific or educational purposes – theoretical part	1	109
19.	Protection of animals used for scientific or educational purposes – refresher training	5	334
20.	Capture of stray animals	2	77
21.	Grooming	3	11
22.	Hoof care	1	10
23.	Retraining of bee-keepers – assistants to official veterinary surgeons	5	481
Other tar	get groups, total	100	2,672
Total nui	nber of activities and participants as of 31 December 2023	125	4,755

 $\mathsf{Source}_{:}\,\mathsf{IZPI}$ 



# 10. LIST OF PRIMARY AND SECONDARY LEGISLATION

### Primary legislation

- Act No. 2/2023 Coll. amending Act No. 220/2004 Coll. on the protection and use of agricultural land and amending Act No. 245/2003 Coll. on integrated pollution prevention and control and on amendments and supplements to certain acts, as amended, and amending and supplementing certain acts
- Act No. 58/2023 Coll. amending Act No. 282/2020 Coll. on organic agricultural production, as amended by Act No. 350/2020 Coll.
- Act No. 106/2023 Coll. amending Act No. 229/1991 Coll. on the regulation of ownership relations to land and other agricultural property, as amended
- Act No. 194/2023 Coll. amending Act No. 180/1995 Coll. of the National Council of the Slovak Republic on certain measures for the arrangement of land ownership, as amended
- Act No. 240/2023 Coll. amending Act No. 504/2003 Coll. on the lease of agricultural land, agricultural enterprises and forest land and amending certain acts, as amended
- Act No. 277/2023 Coll. on the provision of subsidies within the scope of powers of the Ministry
  of Agriculture and Rural Development of the Slovak Republic and on amendments and
  supplements to certain acts

# Secondary legislation

- Regulation No. 3/2023 Coll. of the Government of the Slovak Republic establishing rules for the provision of support for non-project measures of the Common Agricultural Policy Strategic Plan
- Regulation No. 4/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 50/2007 Coll. of the Government of the Slovak Republic on the registration of varieties of cultivated plants, as amended
- Regulation No. 10/2023 Coll. of the Government of the Slovak Republic establishing the rules for the provision of support for the implementation of the measures of the Common Agricultural Policy Strategic Plan in the apiculture sector
- Regulation No. 120/2023 Coll. of the Government of the Slovak Republic, laying down the rules for the submission of applications and reduction of direct aids of the Common Agricultural Policy Strategic Plan
- Regulation No. 121/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 436/2022 Coll. of the Government of the Slovak Republic laying down the rules for the granting of support for agriculture in the form of direct payments
- Regulation No. 165/2023 Coll. of the Government of the Slovak Republic, laying down the rules for the provision of support for the implementation of the measures of the Common Agricultural Policy Strategic Plan in selected agricultural sectors
- Regulation No. 227/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 50/2007 Coll. of the Government of the Slovak Republic on the registration of varieties of cultivated plants, as amended

- Regulation No. 245/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 56/2007 Coll. of the Government of the Slovak Republic laying down requirements for the marketing of propagating material of ornamental plants, as amended
- Regulation No. 314/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 236/2022 Coll. of the Government of the Slovak Republic on the provision of support under the common organisation of agricultural markets for the financing of support measures to assist the wine sector
- Regulation No. 319/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 221/2016 Coll. of the Government of the Slovak Republic laying down requirements for the marketing of fruit plant propagating material and fruit plants intended for fruit production, as amended
- Regulation No. 320/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 200/2019 Coll. of the Government of the Slovak Republic on the provision of assistance for the delivery and distribution of fruits, vegetables, milk and products thereof to children and pupils in schools, as amended.
- Regulation No. 346/2023 Coll. of the Government of the Slovak Republic on the provision of support to compensate for the economic loss to farmers as a result of increased imports of cereals from Ukraine
- Regulation No. 407/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 3/2023 Coll. of the Government of the Slovak Republic laying down the rules to provide support for non-project measures of the Common Agricultural Policy Strategic Plan
- Regulation No. 517/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 152/2013 Coll. of the Government of the Slovak Republic on the conditions for providing support in agriculture in the form of transitional national payments, as amended
- Regulation No. 519/2023 Coll. of the Government of the Slovak Republic, amending Regulation No. 50/2007 Coll. of the Government of the Slovak Republic on the registration of varieties of cultivated plants, as amended
- Decree No. 40/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic lying down the details of the special qualification prerequisite for a civil servant in the field of land management, the procedure for its acquisition and the examination
- Decree No. 154/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic laying down the details of the conditions for killing farmed animals and cattle reared in the open air with a firearm with a free projectile at the place where the animal is kept and at the farm slaughterhouse
- Decree No. 175/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic, amending Decree No. 172/2018 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic, laying down details on the manner and extent of keeping and providing records and determining the usual amount of rent, as amended by Decree No. 113/2019 Coll.

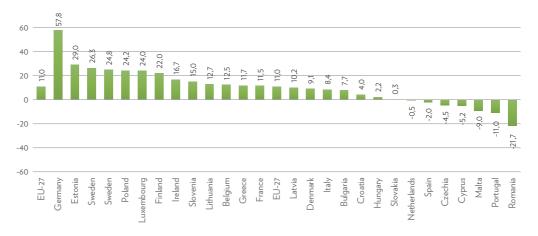
- Decree No. 303/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic, supplementing the Decree No. 350/2009 Coll. of the Ministry of Agriculture of the Slovak Republic, implementing certain provisions of the Act No. 313/2009 Coll. on viticulture and viticulture, as amended
- Decree No. 306/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic amending Decree No. 20/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic laying down details on the identification and registration of bovine animals, as amended
- Decree No. 307/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic amending Decree No. 17/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic on the identification and registration of pigs, as amended
- Decree No. 308/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic amending Decree No. 18/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic on the identification and registration of sheep and goats, as amended
- Decree No. 397/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic which establishes details of the declaration of the grower or supplier of biomass
- Decree No. 435/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic amending Decree No. 83/2016 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic on meat products
- Decree No. 436/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic, amending Decree No. 18/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic on the identification and registration of sheep and goats, as amended
- Decree No. 437/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic amending Decree No. 20/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic laying down details on the identification and registration of bovine animals, as amended
- Decree No. 441/2023 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic, amending Decree No. 17/2012 Coll. of the Ministry of Agriculture and Rural Development of the Slovak Republic on the identification and registration of pigs, as amended.



# 11. THE AGRICULTURE AND FOOD SECTORS IN COUNTRIES OF THE EUROPEAN UNION

During 2022, **Agricultural income**<sup>1</sup> on average per worker - annual work unit (indicator A) in the EU-27 increased year on year by 11.0%. Indicator A increased in most EU-27 Member States, most notably in Germany (57.8%), Estonia (29.0%) and Sweden (26.3%). It fell in seven EU-27 member states, most of all in Romania (-21.7%), Portugal (-11.0%) and Malta (-9.0%).





Source: Eurostat, online data, 2024 Prepared by: MARD SR

In 2022, the total agricultural income per annual labour unit for the EU overall was 43.8% higher than in 2015. In terms of individual member states, the highest increases compared to 2015 were recorded in Bulgaria (125.7%), Poland (95.2%) and Denmark (87.2%). The most significant decreases compared to 2015 were recorded in Malta (-36.3%), the Netherlands (-11.6%) and Slovenia (-2.4%).

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<sup>&</sup>lt;sup>1</sup> Agricultural income includes income derived from agricultural activities (as well as integral non-agricultural and ancillary activities) for a given accounting period (i.e. calendar year)

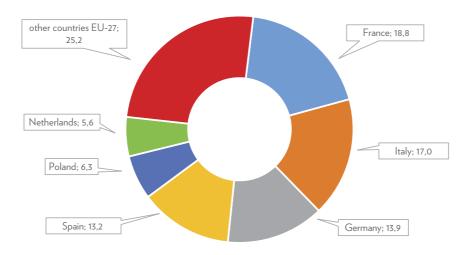
Table 80 Changes in agricultural income per worker (%)

Country / grouping	2022/2015	2022/2021	Country / grouping	2020/2015	2021/2020
EU-27	43.8	11.0	Latvia	66.0	10.18
Germany	78.9	57.82	Denmark	87.2	9.08
Estonia	51.7	29.00	Italy	22.6	8.37
Sweden	45.1	26.32	Bulgaria	125.7	7.72
Austria	44.7	24.82	Croatia	75.6	3.96
Poland	95.2	24.18	Hungary	35.2	2.16
Luxembourg	51.1	23.97	Slovakia	69.0	0.26
Finland	46.4	22.00	Netherlands	-11.6	-0.47
Ireland	70.6	16.70	Spain	-2.2	-1.97
Slovenia	-2.4	15.04	Czechia	26.9	-4.51
Lithuania	56.6	12.72	Cyprus	16.1	-5.20
Belgium	7.3	12.48	Malta	-36.3	-9.03
Greece	43.7	11.70	Portugal	23.2	-10.96
France	33.6	11.46	Romania	30.5	-21.66

Source: Eurostat, 2023, Prepared by: MARD SR

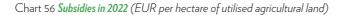
**Gross value added** in the EU-27 in 2022 reached € 215.6 billion, i. e. 12.3% more than in 2021. The largest part of its total volume was created by the countries of the original EU-15, most notably France (18.8%), Italy (17.0%), Germany (13.9%) and Spain (13.2%). Slovakia's gross value added amounting to € 870.2 million accounted for 0.4% of the EU-27 million.

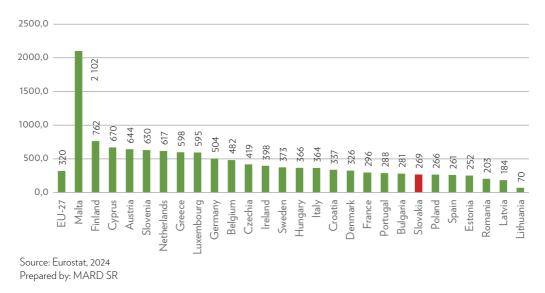
Chart 55 Gross value added for the agricultural sector, % of total value, at current prices



Source: Eurostat, 2024; Prepared by: MARD SR

The agricultural **support** of EU-27 countries totalled  $\in$  53.3 billion in 2022, representing an increase of 5.6% ( $\in$  2,839 million) compared to the previous year. The majority of this amount was allocated to the original member states. The largest shares of subsidies from the total EU-27 subsidies were allocated to countries with the most significant production, namely Germany (16.7%), France (16.3%), Spain (12.0%), Italy (9.1%) and Poland (7.6%). Slovakia received 1.0% of the total EU-27 subsidies, which meant  $\in$  268.7 per ha of utilised agricultural land. Slovakia's level of support was below the EU-27 average.





**Utilised agricultural land** in the EU-27 countries reached 156.7 million ha, which is 38.0% of the total land of the EU-27. Within countries, the share of farmland varied from less than one tenth in Sweden and Finland through more than half in Luxembourg, Hungary, Romania, France and Denmark to a level of 69.8% in Ireland.

The largest year-on-year decreases in the area of utilised agricultural land were in Spain (-684,000 ha), Poland (-378,500 ha), Portugal (-322,200 ha), Romania (-260,300 ha) and Hungary (-251,200 ha). The largest increases were recorded in Greece (+637,200 ha) and France (+449,500 ha). The countries with the largest shares of the total utilised agricultural land of the EU-27 are France (17.8%), Spain (14.8%) and Germany (10.7%). Slovakia's share of the total utilised agricultural land was 1.2%.

More than three-fifths (62.3%) of the EU's utilised agricultural area was arable land, on which crops were grown for human and animal consumption. Permanent grassland represented almost a third (30.5%) of the utilised agricultural land and was mainly used to provide forage for animals. The remaining share was used mainly for permanent crops (7.1%), such as fruits, olives and grapes.



Chart 57 Uses of utilised agricultural land\* in 2020 (%)

Source: Eurostat, 2024

Note:  $^*$  Arable land (orange), permanent grassland (dark green), permanent crops (pale green), others (red) Prepared by: MARD SR

**Employment in agriculture** in the EU-27 countries has been showing a long-term decline. While in 2012, a total of 10.3 million people were employed in the agriculture sector in the EU-27, by 2022 there were only 7.6 million agricultural workers in the EU-27, which gives an average of 4.9 workers per 100 ha of utilised agricultural land. Employment in agriculture in the EU-27 countries dropped by 1.8% year on year, i.e. around 141,900 persons. The highest rates of employment in agriculture in the EU-27 were in Poland (18.4%), Romania (13.1%) and Italy (13.1%) due to the scale of agricultural production in these countries, which have a larger number of smaller, individual farms. Slovakia's percentage reached 0.5%. Further details are given in table 36 in the annexes.

**Agricultural production** in the EU-27 reached € 531.9 billion in 2022, representing an increase of € 103.0 billion, i. e. 24.0% more than in 2021. The majority of the EU's agricultural output came from the four countries with the largest production: France (18.0%), Germany (14.3%), Italy (13.4%) and Spain (11.7%). Slovakia contributed 0.6% of the EU-27 countries' total production, with a volume of € 2,983 million.

The harvested area of **cereals** in the whole EU was 51.5 million hectares in 2022, from which 270.9 million tonnes of crops were produced. France accounted for more than one fifth (22.1%) of the EU cereal production. Other major contributors to the total were Germany (16.1%) and Poland (12.9%). The relative shares of **wheat**, **barley and grain maize** are presented in the following charts and in Table 38 in the annexes.

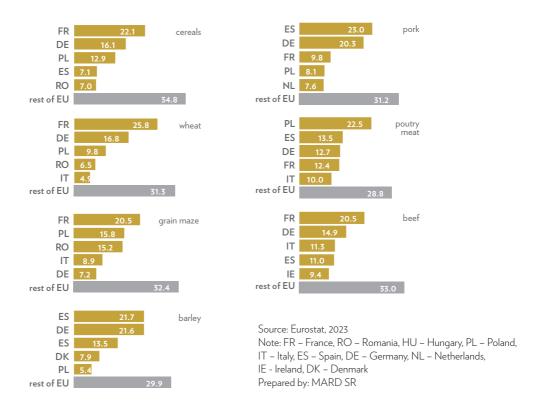


Chart 58 Production shares of the main producers of selected plant and animal commodities in the total production in the EU-27 in 2021 (%)

In 2022, more than one fifth (23.0%, 5.1 million tonnes) of the EU's **pork** was produced in Spain. Another fifth was produced in Germany (20.3%).

The country with the highest **poultry meat** production was Poland (22.5% of the EU total, or 2.7 million tonnes). Other major producers were Spain (13.5%) and Germany (12.7%).

More than one fifth of all **beef meat** in the EU was produced in France (20.5%, or 1.4 million tonnes), while significant shares of production also came from Germany (14.9%), Italy (11.3%) and Spain (11.0%).

More detailed data on the agriculture of the EU-27 countries are presented in Tables 36 - 38 in the annexes.

The food industry is an important manufacturing sector of the EU-27<sup>1</sup>, both from the point of view of production-economic indicators, and in terms of employment.

1

<sup>&</sup>lt;sup>1</sup> Manufacturers of food and beverages

In 2022, the EU-27 food sector consisted of over 306,000 enterprises with a turnover of  $\in$  1,457 billion. As a result, the food sector represents the most significant manufacturing sector in the EU. Furthermore, it is the world's largest exporter of food and beverages and a top importer. Of the total turnover, 85% consisted of food production itself (i.e. without the production of beverages).

In 2021, the EU-27 food industry had gross production of almost  $\leqslant$  1,105.3 billion, which represented a year-on-year increase of 7.4%. The largest volume of gross food production in 2022 was generated by Germany ( $\leqslant$  201 billion), France ( $\leqslant$  192 billion), Italy ( $\leqslant$  156 billion), and Spain ( $\leqslant$  137 billion). Malta ( $\leqslant$  462 million) and Luxembourg ( $\leqslant$  882 million) generated the least gross production.

The EU food sector<sup>2</sup> employed<sup>3</sup> approximately 4.3 million persons in 2022. The countries with the largest numbers of such workers were Germany (904,700 persons), France (676,900 persons), Poland (439,400 persons), Italy (438,900 persons) and Spain (436,800 persons).

The amount of gross investment in tangible assets in the EU-27 food industry is in line with both production and employment. The countries that invested most in property in 2021 included France ( $\leqslant$  8.2 billion), Germany ( $\leqslant$  5.6 billion), Italy ( $\leqslant$  4.4 billion) and Spain ( $\leqslant$  4.2 billion). The countries that invested least included Malta ( $\leqslant$  9.0 million), Luxembourg ( $\leqslant$  38.2 million) and Cyprus ( $\leqslant$  47.3 million)

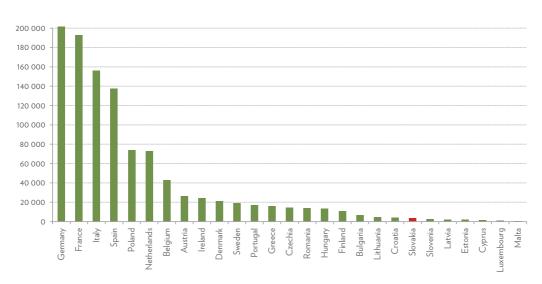


Chart 59 Gross production in the food and beverage sector in the EU-27 in 2021 (€ million)

Source: Eurostat 2024 Prepared by: MARD SR

<sup>&</sup>lt;sup>2</sup> including tobacco products

<sup>&</sup>lt;sup>3</sup> ESA 2010 methodology

In 2021, the highest value added per employee in food production was recorded in Ireland ( $\leqslant$  154,700), the Netherlands ( $\leqslant$  103,500), Belgium ( $\leqslant$  89,700) and Denmark ( $\leqslant$  79,500). On the contrary, the lowest value added per employee was in Romania ( $\leqslant$  13,200) and Bulgaria ( $\leqslant$  15,100). In beverages production, the highest value added per employee was recorded in Austria ( $\leqslant$  278,900), Sweden ( $\leqslant$  165,900) and the Netherlands ( $\leqslant$  153,100). On the contrary, the lowest value added per employee was found in Bulgaria ( $\leqslant$  24,800) and in Latvia ( $\leqslant$  25,600).

Selected economic indicators of the food industry in the EU-27 are presented in the Tables 39 - 40 in the annexes.



# 12. CONCLUSIONS AND RECOMMENDATIONS

#### 12.1. Conclusions

- There were mixed developments in the macroeconomic indicators of the Slovak agriculture and food sectors. In the case of agriculture, its share, in current prices, has increased for the following indicators: GVA, gross output, intermediate consumption and average wages, and in constant prices for GFCF. In the food industry it increased for GFCF at both constant and current prices.
- The economic performance of agriculture declined, with a decrease in the value of gross plant production and an increase in the value of gross animal production. Animal production slightly increased its share in the structure of gross agricultural production.
- Gross agricultural production decreased as a result of a significant decrease in the prices of
  plant commodities and a slight increase in the prices of animal commodities, despite an increase
  in the hectare yields of key plant commodities (wheat, corn maize, oilseeds) and stagnation in
  the production of beef and poultry for slaughter, decrease in the production of pigs for slaughter,
  but an increase in the production of sheep for slaughter.
- Revenues from the sale of own products stagnated as a result of a slight decline in the revenues from the sale of plant products and a more pronounced increase in the revenues from the sale of animal products.
- Revenues from the sale of own products and from the sale of services in the food industry increased in all sectors of production, reaching € 5,089 million, representing a year-on-year increase of 9.6%.
- Despite the gradual stabilisation of agricultural input prices, the cost of revenues increased year-on-year and the profitability of farm costs decreased, but the values of these indicators were above average compared with the five-year average.
- In 2023 as in previous years, total subsidies from European and national sources accounted for a significant share of enterprises' revenues (18.5%); their share increased by 1.0 pp year-on-year, having a positive effect on revenues and enterprises' bottom lines.
- The share of profitable enterprises decreased significantly year-on-year for legal entities (-14.6 pp), while in the case of SEF enterprises it remained at the previous year's level.
- Investment in gross fixed capital formation increased in both agriculture and the food sector.
- Employment in both agri-food sectors decreased, but growth was faster in agriculture than in
  the food sector. Higher age categories of workers remained the largest. In both sectors, average
  wages were below the average for the whole Slovak economy, significantly more so in agriculture.
- Preliminary data point to both sectors being profitable. In agriculture it increased to € 228.0 million, in the food sector it increased to € 437.9 million. The economic outturn within the food industry was increased year-on-year¹ mainly by the manufacture of bakery and farinaceous products, manufacture of other food products, manufacture of beverages and manufacture of dairy products.

<sup>&</sup>lt;sup>1</sup> Comparison of preliminary data for 2022 with preliminary data for 2021; once final data for 2022 are available, comparison with the 2021 final data will be possible

- The growth rate of revenues exceeded the rapid increase in the costs of agricultural enterprises with a subsequent profit in primary agricultural production.
- Prices of agricultural products stagnated at 2022 levels, while agricultural product prices
  declined. Prices of the producers of food, beverages and tobacco were higher compared to
  the previous year. The most significant year-on-year price increases were recorded for consumer
  prices of food and non-alcoholic beverages. The inflation rate increased.
- The following alternatives are used to cover the risks in agricultural production in the Slovak Republic: commercial insurance, insurance contribution under the CAP Strategic Plan 2023 – 2027 and aid through state aid schemes which, in addition to the insurance premium contribution, allow (in the form of subsidies) the repair of damage caused by animal diseases and the reimbursement of certain costs for the eradication of animal diseases, compensation of the costs of the removal and disposal of dead livestock and elimination of damage caused by adverse weather events.
- Total expenditure on the agricultural and food sectors from European and national sources amounted to € 807.84 million and increased year-on-year by 9.6%. Funding from the EU budget covered the majority of it. The largest share of total expenditure (40.1%) consisted of direct payments. Rural development accounted for 24.3% and the third largest item of expenditure (17.4%) was general services.
- The competitive environment in the EU single market was affected by the different levels of subsidies. The overall level of direct payments in Slovakia, calculated per hectare of agricultural land, remains below the EU-27 average.
- In the business structure of the agricultural sector there was an increase in the number of natural persons providing agricultural services. The number of legal entities decreased in both agricultural services and the food sector. Natural persons dominated the business structure of the agricultural sector, while the food sector was mainly dominated by legal entities.
- There were slight decreases in area for both utilised agricultural land and arable land. The ownership of land still remains uncertain in some cases.
- There were no significant changes in the structure of sowing; the share of cereals, especially grain maize, and oilseeds (especially soybean and sunflower) decreased. In particular, the share of rapeseed, barley and sugar beet increased.
- Harvested areas of legumes, table vegetables (mainly dry onions and sweetcorn), cider grapes, sugar beet, rye and barley increased. On the other hand, the harvested areas of soybean, sunflower, potatoes and grain maize decreased.
- Cereal yields increased by more than 30% on average, with the most significant increase in grain maize yields, where yields per hectare exceeded those of 2021 by 85.4%. Hectare yields also increased by 53.7% for fodder roots and by 27.1% for oilseeds.
- Of all livestock species, numbers of pigs (6.2%), horses (4.6%) and poultry (3.5%) increased. Numbers of sheep (-4.0%), goats (-2.6%) and cattle (-0.8%) decreased. In the case of cattle, reproductive performance remained stable at the previous year's level. For pigs, pig rearing increased by 3.2% and pig births by 2.8%.
- The turnover of agri-food foreign trade has a continuing upward trend. Imports of agricultural and food products increased by € 586 million year-on-year (8.6%). Exports grew by € 264 million (5.4%).

- The negative foreign trade balance in agri-food products continued to widen, reaching a deficit of € -2,238 million.
- The share of the household expenditure on foodstuffs, beverages and tobacco in total consumption expenditure went up slightly to 26.24%, which is a high share compared to the EU-27 average, especially considering people's low incomes in Slovakia.
- Meat consumption (by carcass weight) per person per year increased year-on-year. The consumption of beef decreased year on year and remains at a long-standing low level below recommended dietary intake. Consumption of pork increased, while poultry consumption decreased year-on-year. On the positive side, consumption of milk and dairy products increased, as well as the consumption of cereals in the value of flour. The consumption of vegetables and vegetable products decreased year-on-year, while the consumption of fruit and fruit products increased slightly.
- Irrigation systems do not fully meet contemporary technical and technological standards.
  The irrigable acreage has decreased since 2014, when the "Blueprint for revitalisation of hydromelioration systems in Slovakia" was implemented. The highest utilisation of irrigation water was recorded in the Dolné Považie and Podunajsko. Irrigation is mainly used by growers of intensive crops whose market prices are able to compensate for the costs of irrigation water and the lease of irrigation equipment.
- Electricity and heat production from selected renewable sources increased. Energy crops were sown on 0.36% of the total sown area with maize and its silage mixes occupying the largest acreage. This group accounted for 96.1% of the acreage of crops grown exclusively for energy purposes.
- The agricultural sector accounts for about 7.3% of the total volume of greenhouse gas emissions produced in Slovakia. Almost 40% of the generated volume of emissions consists of nitrous oxide emitted into the air mainly from utilised agricultural land and to a lesser extent as a consequence of livestock farming (losses from animal manure) in Slovakia. Methane (CH4), which is emitted into the air mainly as a direct product of the metabolism of herbivorous animals (enteric fermentation) and losses from animal manure, represents almost 58% of emissions.

#### 12.2. Recommendations

In the next period, when drafting measures or seeking instruments to strengthen the productivity of the agriculture and food sector and its competitiveness in the single EU market, it will be necessary to implement recommendations of a long-term nature that will take more than a single year, namely:

A key factor is the implementation of the CAP Strategic Plan 2023–2027, including financial instruments in line with EU strategic documents, the Green Deal, the Farm to Fork Strategy, the Biodiversity Strategy, the Recovery and Resilience Instrument 2021 – 2024 – Next Generation EU, the Strategy for Increasing Food Self-Sufficiency, Greener Slovakia – the Environmental Policy Strategy of the Slovak Republic to 2030, the Water Policy Concept of the Slovak Republic to 2030 and others, which must be developed into an integrated system of instruments and support for the agricultural sector in order to increase the share of Slovak products on the domestic market (see the diagram below).

- » promote equal CAP conditions and instruments for all EU member states, especially equality in the level of direct payments provided in the EU,
- » increase the volume of support for livestock production, create better conditions for stabilising the number of livestock and reduce the administrative burdens that livestock farmers face when identifying and registering livestock,
- » intensify support for cultivation and processing in the fruit and vegetable sector to increase domestic production and processing to boost employment and consumption and decrease imports,
- » support investment in irrigation systems and revitalise hydromelioration systems,
- » continue supporting land consolidation as a basic systemic instrument for the rational settlement of ownership and use of agricultural land and for revitalisation of the countryside,
- » continue in the creation of conditions (development and introduction of new technologies, financial security) for expanding the production of renewable energy sources

- » develop and implement state aid notifications to establish a stable legal framework for state aid to the Slovak food industry at a comparable level to that in neighbouring countries.
- » revise the strategic objectives of the future CAP to give greater recognition to the role of the food industry and ensure adequate funding for measures in which food producers are eligible applicants,
- » encourage the creation of marketing associations for farmers and food producers in order to use domestic raw materials for the production of final foodstuffs with higher added value.
- » promote traditional, regional specialties and their presentation at international events.
- » simplify sale from farms without compromising food safety,
- » support investments in the food sector to increase the processing of domestic primary agricultural products into food

PLAN AND IMPLEMENT SUPPORT FOR VERTICAL STRUCTURES
ENABLING DOMESTICALLY PRODUCED COMMODITIES OF PLANT
AND ANIMAL ORIGIN TO BE PROCESSED DOMESTICALLY INTO FOOD,
THEREBY GENERATING HIGHER VALUE ADDED

- » support financial instruments (interest subsidies, loan guarantees, partial principal forgiveness) with pre-defined conditions to increase the affordability of commercial bank loans and for insurance premiums paid to insurance companies,
- » systematically address the high-risk aspects of agricultural production, especially the impacts of uninsurable risks that cause commercial insurance companies not to cover certain crops
- » create favourable conditions for the development of agricultural and food research and its connection with production practice,
- » encourage the introduction of innovative technology and precision farming





GREEN REPORT 2023 13. Abbreviations

# 13. ABBREVIATIONS

.sk ag.l. agr., agri. AGRIS an. p. APA ar. l.	. agricultural land . agricultural . International System for Agricultural Science and Technology . animal production . Agricultural Paying Agency
a. s	. joint-stock company
AT	. Austria
BG	. Bulgaria
bn	. billion
CAP	
carcass weight (t)	
car. w	. carcass weight
cattle	
CCF	
	. Central Control and Testing Institute in Agriculture
CD	
CEHZ / FACR	. Central Livestock Register / Farm Animals Central Register (in Slovak "Centrálna evidencia hospodárskych zvierat")
coeff	. coefficient
COICOP-HBS	international classification of individual consumption by purpose,
CLSAF	recommended by Eurostat for use in household budget surveys  Centre of Labour, Social Affairs and Family
	. Common Market Organisation
Coll	
Со-ор	
CP	
CP	
CZ	
CW	contract work
EAA	Economic accounts of agriculture of the Slovak Republic
EAFRD	European Agricultural Fund for Rural Development
EAGF	. European Agricultural Guarantee Fund
EFSA	European Food Safety Authority
Env	<b>.</b> Environment
EP	
ES	. Spain
	. European System of National Accounts 2010
EU	
	. EU Farm Accountancy Data Network
	currency of the European Monetary Union
EUROSTAT	. Statistical office of the EU

ΕA	farm animals
FA	
	Food and Agriculture Organization of the United Nations Organisation
FCC	
	. Foreign Coordination Department of MARD SR
FD	
FOR	value includes the transaction value of goods and the value of services (e.g. transportation, insurance, transshipment, storage of goods, etc.) performed to deliver goods to the border of the exporting country
FP	
	. income for harvest from futures markets
F&V	
	Gross agricultural production
GDP	
GFCF	
	expression of emissions in aggregate CO <sub>2</sub> equivalents
GJ	
	genetically modified organisms
GSAA	
GVA	
GWh	
ha	
	. Hazard analysis and critical control points
head	
Hedging	<u> </u>
hl	
HU	
	Integrated administration and control system
IB	
i.e	
IIC	
	inseparable non-agricultural secondary activities
IP	
	Institute of Postgraduate Education of Veterinary Surgeons
IS	
	. Information sheets of MARD SR (IS MARD SR)
ĮΤ	
kg	
km	
kW	
1	
LEADER	a European initiative to bring together activities that support rural
	economic development
	Liaison Entre Actions de Développement de le Économie Rurale
LFS	
	monthly report on hatchings, hatching eggs and chicks
	slaughter (animal for slaughter)
LPIS	. Land Parcel Information System

GREEN REPORT 2023 13. Abbreviations

LUlivestock unit
I.wlive weight
<b>m</b> <sup>2</sup> square metre
<b>m</b> <sup>3</sup>
MARD SR Ministry of Agriculture and Rural Development of the Slovak Republic
Mäso (MPRV SR) 1-12 monthly report on the slaughter of animals for food, their purchase value
by quality class, on the balance of carcass meat and meat products
MESRS SR Ministry of Education, Science, Research and Sport of the Slovak Republic
ME SR Ministry of Economy of the Slovak Republic
mil million
ML (MARD SR) 6-12 monthly report on the purchase of milk and cream and the production
of dairy products
MRE Market related expenditures
MU unit of measurement
MW megawatt
MWh megawatt hour
NaClsodium chloride
NATURALIS SK, s.r.o inspection organizations authorised for control and certification
(SK-BIO-002) in organic farming in Slovakia
Biokont CZ, s.r.o.
(SK-BIO-003)
NBS
NEInet entrepreneurial income
NFC National Forest Centre
NOS (NIIA)net operating surplus (net income from independent activity)
NPK inorganic fertilisers – nitrogen, phosphorus, potassium
NPPC-VÚP (FRI) National Agricultural and Food Centre – Food Research Institute
NPPC-VÚPOP (SSCRI) National Agricultural and Food Centre Slovakia – Soil Science
and Conservation Research Institute
NPPC-VÚRV (RIPP) National Agricultural and Food Centre – Research Institute
for Plant Production
NR SR (NC SR) National Council of the Slovak Republic
NVA net value added
OForganic farming
OHSoccupational health and safety
OPOperational programme
<b>OP F</b> Operational Programme for the Fisheries Sector
PDOProtected designation of origin
PHA SR Public Health Authority of the Slovak Republic
PG permanent grassland
PGIProtected geographical indication
<b>PL</b> Poland
p.p percentage point
PPPPlant protection products
PS pumping station
RDP SR 2007 – 2013 Rural Development Programme of the Slovak Republic 2007 – 2013
RDP SR 2014 - 2022 Rural Development Programme of the Slovak Republic 2014 - 2022

RES	renewable energy sources
RET	retail
RI	recommended intake
pl. p	plant production
RO	·
ROME	
	Regional Public Health Authority
SB	
SEF	
	Slovak Hydrometeorological Institute
SI	
	Statistical classification of economic activities
	in the European Community
	Statistical Office of the Slovak Republic
SP	
š. p	
	Slovak Agricultural and Food Chamber
SR	
s. r. o.; spol. s r. o	
	State Veterinary and Food Administration of the Slovak Republic
TAO	·
thou	
TJ	
t l.w	•
	Traditional specialty guaranteed
u.ag.l	
	United Kingdom (of Great Britain and Northern Ireland)
UN	
	monthly report on the production, sales and aggregate supply
	of slaughter poultry and table eggs
	Water Management Research Institute
www	





# 14. ADDITIONAL TABLES

Table 1

SELECTED ECONOMIC INDICATORS IN PRIMARY AGRICULTURAL PRODUCTION (EUR per ha of agr. land) (land according to LPIS)

	Primary	Primary agricultural production, total	oduction, total	Ă	Agricultural cooperatives	peratives		Trading companies	panies
Indicator	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022
Total revenues	2 821,6	2 932,4	103,9	2 2 2 0 , 6	2163,4	97,4	3,005,5	3 553,9	107,7
- revenue from sale of goods	368,1	341,5	92,8	83,9	93,6	111,6	613,4	556,8	8'06
- revenue from sale of own products and services	1 796,6	1 931,7	107,5	1500,8	1 505,4	100,3	2 017,2	2 262,1	112,1
Value added	511,5	458,6	89,7	477,9	384,9	80,5	528,9	512,3	6'96
Net turnover	2 110,9	2 296,9	108,8	1 551,7	1 610,2	103,8	2 559,1	2 856,1	111,6
Revenue from the sale of long-term assets and material	109,9	155,1	141,1	95,2	92,0	2'96	123,5	212,3	171,9
Other business income	423,0	430,8	101,8	396,7	383,4	96,6	440,2	464,2	105,4
of which: subsidies received	290,5	336,1	115,7	284,0	320,4	0,0	295,8	350,2	0,0
Revenue from the sale of securities and shares	20,2	8,1	40,2	3,6	3,0	84,2	34,9	12,7	36,4
Income from financial assets	4,4	2,7	62,2	1,1	1,6	139,7	7,2	3,8	51,9
Income interest	4,5	7,0	156,4	2,0	3,5	175,8	6,7	10,1	151,6
Exchange rate profit	0,3	0,4	171,5	0,0	0,0	91,7	0,5	0,8	170,4
Total costs	2 582,5	2 804,6	108,6	2 0 2 9,9	2115,6	104,2	3 016,6	3 355,4	111,2
Cost of goods sold	319,6	292,7	91,6	72,7	87,3	120,1	534,4	472,5	88,4
Material and energy consumption	975,6	1 059,8	108,6	835,4	861,0	103,1	1 092,9	1 227,5	112,3
Personnel costs	407,2	447,3	109,8	447,0	466,9	104,5	359,4	417,6	116,2
- labour costs	288,9	317,3	109,9	318,0	332,0	104,4	254,9	296,5	116,3
Taxes and fees	29,4	32,5	110,5	28,6	30,3	105,9	29,7	34,1	114,5
Depreciation of long-term intangible and tangible assets	208,6	231,2	110,8	188,9	198,8	105,2	221,9	255,7	115,2
Sold securities and shares	10,6	3,4	32,3	3,7	1,0	27,5	16,8	5,6	33,4
Interest expenses	25,0	46,2	185,4	15,2	26,2	173,1	33,3	63,5	190,8
Exchange rate losses	0,5	0,4	87,5	0,1	0,0	34,9	6,0	0,8	93,1
Total subsidies	290,5	336,1	115,7	284,0	320,4	112,8	295,8	350,2	118,4
Non-investment subsidies	286,3	320,8	112,0	281,3	306,6	109,0	290,4	333,3	114,8
Investment subsidies	4,1	15,4	371,3	2,7	13,8	516,0	5,4	16,9	312,2
Total number of enterprises	1130,0	1 375,0	121,7	407,0	442,0	108,6	0,769	897,0	128,7
Share of profitable enterprises	85,7	71,1	83,0	82'8	9'59	76,5	86,4	74,1	85,8

Source: IS MARD SR 2022, 2023 - double entry bookkeeping, CD of MARD SR. Note: the set of enterprises includes state property and specialised state property, agricultural cooperatives and trading companies (joint stock co., limited liability co., etc.); Prepared by: MARD SR

## ${\tt SELECTED}\ ECONOMIC\ INDICATORS\ IN\ PRIMARY\ AGRICULTURAL\ PRODUCTION\ by\ district$

(EUR per ha of agr. land) (based on LPIS) or employee

Table 2

District, region	Profit (€ per ha	t/loss a of ag.l.)	Revenue fr of own p (€ per ha		sup	estment port a of aq.l.)	from pr	roductivity oduction rker (€)	subsidies	estment per worker E)
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Bratislava I	256	-185	1794	1368	314	330	148 847	134 453	15 798	17 671
Bratislava II	156	-7	2 919	2 319	198	367	258 743	253 733	13 373	20 428
Bratislava III	195	76	7 398	4 514	388	344	113 977	124 597	4 644	6 528
Bratislava IV	383	-25	1 343	877	336	193	277 099	171 228	45 393	21 890
Bratislava V	770	87	1 730	1 3 6 2	249	143	169 698	166 015	12 327	12 982
Malacky	221	49	1709	2 254	261	347	195 928	198 987	18 305	19 708
Pezinok	420	343	4 445	5 166	405	371	118 401	190 092	7 631	10 562
Senec	319	774	2 779	4 550	156	451	196 941	244 887	5 815	12 570
Bratislava Region	307	246	2 548	3 097	256	358	169 028	207 890	10 574	14 358
Dunajská Streda	546	324	2 842	3 112	303	308	206 108	244 684	13 242	14 465
Galanta	272	217	1 918	2 081	192	276	120 068	160 463	9 623	15 451
Hlohovec	-5	81	2 134	1 596	394	262	85 297	58 942	9 838	7 146
Piešťany	264	114	2 822	2 789	339	266	74 987	136 759	5 647	8 558
Senica	312	217	1 723	1 805	309	345	113 239	139 423	15 006	19 744
Skalica	125	41	1868	1 686	333	243	113 008	124 604	10 769	9 870
Trnava	338	455	2 375	2 735	251	268	159 804	217 444	12 429	14 982
Trnava Region	356	274	2 349	2 475	284	289	138 909	177 475	11 126	13 604
Bánovce nad Bebravou	285	131	1 915	2 070	257	400	78 247	110 931	7 292	14 166
llava	160	372	1346	2 033	409	257	86 761	128 920	16 914	9 424
Myjava	68	37	510	575	195	312	71 080	96 965	11 179	19 960
Nové Mesto nad Váhom	305	73	1 735	1 623	345	277	86 431	114 372	11 589	12 662
Partizánske	517	277	2 655	2 850	531	384	108 171	127 144	13 831	11 763
Považská Bystrica	ı	3 420	ı	15 479	ı	1 135	ı	304 647	П	12 058
Prievidza	339	145	2 173	2 083	338	422	130 687	144 494	12 055	17 848
Púchov	1	-172	1	991	1	309	ı	47 211	П	6 382
Trenčín	154	-33	1 507	1 463	416	352	85 530	102 541	15 671	16 077
Trenčín Region	264	146	1853	1 989	366	361	94 301	121 242	11 480	13 576
Komárno	218	55	1 815	1 819	224	199	188 255	112 313	7 698	7 668
Levice	212	74	1 589	1 765	214	222	141 587	197 873	12 976	15 876
Nitra	533	149	2 914	2 859	231	262	163 138	184 664	9 059	12 219
Nové Zámky	338	75	1 966	2 055	283	210	149 670	153 324	13 631	10 621
Šaľa	460	213	1 962	2 113	105	177	214 156	207 673	8 099	12 283
Topoľčany	474	325	2 572	2 823	215	223	132 100	161 345	8 305	10 526
Zlaté Moravce	437	120	1 507	1 432	178	200	125 752	145 787	9 319	11 919
Nitra Region	351	118	2 036	2 109	224	217	159 541	159 192	10 235	11 162
Bytča	ı	I	1	I	ı	ı	ı	- 1		I
Čadca	-8	-26	242	402	440	702	28 878	37 723	12 458	25 644
Dolný Kubín	1	47	777	714	394	594	57 276	64 741	15 070	24 927
Kysucké Nové Mesto	- 1	I	ı	1	I	I	I	1	Т	I
Liptovský Mikuláš	-13	-47	994	1 304	455	402	63 380	83 829	16 292	14 988
Martin	154	76	1 417	1 414	260	434	115 215	146 833	10 653	22 316
Námestovo	23	-19	833	750	371	495	61 083	62 646	12 995	19 361
Ružomberok	86	-11	1 145	779	311	611	57 081	50 813	9 156	19 997
Turčianske Teplice	285	314	4 187	2 613	468	434	117 157	139 638	8 741	15 050
Tvrdošín	118	80	973	967	348	493	71 321	79 124	13 511	20 484
Žilina	-2	29	1 058	831	507	474	82 272	71 361	23 535	25 356
Žilina Region	52	30	1 090	1 127	385	478	73 731	85 344	13 897	19 392

### SELECTED ECONOMIC INDICATORS IN PRIMARY AGRICULTURAL PRODUCTION by district

(EUR per ha of agr. land) (based on LPIS) or employee

Table 2 continued

District, region	Profii (€ per ha	t/loss a of ag.l.)	Revenue fr of own p (€ per ha			estment port a of ag.l.)	from pro	roductivity oduction rker (€)	subsidies	restment per worker €)
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Banská Bystrica	-61	-28	590	322	441	397	51 189	43 951	17 988	19 618
Banská Štiavnica	- 1	-25	1	276	1	523	- 1	56 194	- 1	23 750
Brezno	94	11	667	550	294	601	57 402	60 373	11 356	26 425
Detva	29	66	1 310	1 359	323	451	87 429	103 397	10 230	15 444
Krupina	49	24	538	935	322	324	110 176	112 654	14 677	12 950
Lučenec	182	37	1 479	1 309	316	325	150 913	158 858	15 814	18 983
Poltár	29	20	640	882	134	443	62 933	83 481	7 235	23 298
Revúca	7	-122	882	1 101	326	206	58 359	105 604	13 076	13 499
Rimavská Sobota	223	97	892	1164	313	302	124 835	155 574	19 227	18 305
Veľký Krtíš	348	98	1 677	1 619	289	329	158 157	120 120	13 828	16 084
Zvolen	132	693	2 497	6 475	210	684	102 888	244 649	5 986	13 202
Žarnovica	341	180	1 248	1 033	377	383	130 111	154 205	16 839	23 744
Žiar nad Hronom	44	1 535	229	337	192	470	202 322	273 093	39 814	44 404
Banská Bystrica Region	146	195	1 150	1 574	304	399	107 749	147 545	13 757	17 578
Bardejov	30	-4	485	603	384	221	55 770	77 306	19 471	13 223
Humenné	51	3	349	186	580	344	56 532	76 595	43 833	31 276
Kežmarok	68	55	863	1 058	258	473	62 470	84 115	9 711	17 973
Levoča	24	-6	405	345	244	488	46 511	38 589	11 786	26 073
Medzilaborce	1	71	1	109	1	436	1	52 898	1	31 546
Poprad	68	11	977	763	470	320	81 261	77 221	22 368	16 950
Prešov	58	-24	898	779	382	242	77 772	82 738	19 930	14 581
Sabinov	81	14	1 000	1 024	329	338	59 906	72 868	12 782	14 626
Snina	- 1	I	I	- 1	- 1	- 1	1	1	I	1
Stará Ľubovňa	45	18	582	680	433	478	62 396	84 639	19 499	21 033
Stropkov	15	-19	450	459	261	434	59 851	66 538	12 551	24 664
Svidník	46	-16	264	220	386	274	67 738	60 937	30 070	25 706
Vranov nad Topľou	89	-76	863	824	342	223	75 012	81 988	18 003	13 707
Prešov Region	51	-5	716	635	363	329	65 339	75 874	17 154	18 626
Gelnica	-54	24	137	80	444	611	48 680	49 383	23 421	34 377
Košice I	I	I	I	I	I	I	1	1	I	1
Košice II	I	I	I	I	I	I	I	I		1
Košice III	-	-	-	-	-	-	-	-	-	-
Košice IV	I	I	I	I	1	I	I	I	I	
Košice - okolie	135	-75	947	1 133	208	343	117 979	141 029	14 315	23 537
Michalovce	426	67	1 331	1 168	207	256	146 438	141 234	12 145	17 632
Rožňava	218	115	639	842	272	427	145 280	145 288	9 773	15 545
Sobrance	150	64	1 177	912	300	153	91 388	99 322	14 766	8 005
Spišská Nová Ves	84	-14	799	749	388	441	54 340	60 857	13 002	16 751
Trebišov	218	74	1 135	1 175	188	316	130 201	131 594	11 813	21 550
Košice Region	220	34	1 024	1 053	238	323	120 527	125 374	12 483	18 321
TOTAL SLOVAKIA	239	128	1 610	1 727	286	321	121 443	140 291	12 323	15 346

Note: data are average values for all the enterprises in the database of Information Sheets of the MARD SR - double-entry bookkeeping

Source: IS MARD SR 2022, 2023, CD of MARD SR

I - Protection of individuals' data

Table 3

FINANCIAL INDICATORS IN PRIMARY AGRICULTURAL PRODUCTION in Eper ha of ag.I.(land according to LPIS)

		/ G	'n	,					
L. Proseco	Primany	Primary agricultural production, total	tion, total	A	Agricultural cooperatives	ives		Trading companies	
Indicator	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022
Total assets	3 819,9	4 112,2	107,7	2 971,3	3 001,1	101,0	4 355,0	4 904,2	112,6
Non-current assets	2 118,5	2 334,3	110,2	1570,9	1 613,2	102,7	2 418,1	2 806,8	116,1
- long-term intangible fixed assets	15,8	5,2	33,2	1,5	1,8	122,4	26,4	5,8	21,9
- long-term tangible fixed assets	1865,5	2 078,1	111,4	1 484,4	1 518,7	102,3	2 020,0	2 407,9	119,2
- long-term financial assets	237,3	251,0	105,8	85,0	92,7	109,0	371,6	393,2	105,8
Current assets	1 675,5	1 72 9,4	103,2	1 383,0	1 353,7	6,76	1 903,4	2 036,2	107,0
- stocks	710,7	715,9	100,7	670,2	647,6	9,96	745,6	772,7	103,6
- receivables	769,1	834,3	108,5	527,9	568,5	107,7	968,1	1 054,2	108,9
long-term receivables	43,1	47,6	110,4	19,5	27,3	140,2	64,3	66,1	102,8
short-term receivables	726,0	786,7	108,4	508,5	541,2	106,4	903,8	988,1	109,3
Financial accounts	186,5	161,9	8'98	173,4	130,0	75,0	182,2	183,0	100,4
Equity and liabilities	3 819,9	4 112,2	107,7	2 971,3	3 001,1	101,0	4 355,0	4 904,2	112,6
Equity	1810,3	1 909,8	105,5	1 643,0	1 637,2	966	1806,7	2 032,3	112,5
- registered capital	555,7	559,6	100,7	435,0	420,3	9,96	497,8	549,7	110,4
- capital funds	506,1	563,6	111,4	678,2	682,1	100,6	366,1	467,7	127,8
- legal reserves	175,5	193,6	110,3	321,3	351,0	109,2	53,0	59,0	111,3
- other profit funds	77,9	83,5	107,3	111,1	123,2	110,9	45,9	48,4	105,5
- profit/loss of previous years	275,8	398,6	144,5	-54,3	34,6	414,2	564,7	722,7	128,0
- profit/loss for accounting period	193,5	91,4	47,3	154,8	29,3	18,9	229,8	146,8	63,9
Liabilities	1 828,2	1 995,5	109,2	1 213,6	1 230,7	101,4	2 3 4 0, 4	2 636,3	112,6
- long-term liabilities	303,4	339,9	112,0	221,3	234,2	105,8	369,2	425,4	115,2
- long-term reserves	3,9	3,3	83,8	2,2	1,8	82,3	2,5	2,0	79,9
- short-term liabilities	799,8	816,4	102,1	542,6	526,9	97,1	1 012,8	1050,4	103,7
- short-term reserves	27,8	28,6	102,8	31,8	30,7	96,5	21,1	23,7	112,5
- current bank loans	322,1	381,0	118,3	7,722	240,4	105,6	403,4	206,7	125,6

Source: IS MARD SR 2022, 2023- double entry bookkeeping, CD of MARD SR
Note: the set of enterprises includes state property and specialised state property, agricultural cooperatives and trading companies (joint stock co., limited liability co., etc.)
Prepared by: MARD SR

INCOME AND EXPENSES OF SELF-EMPLOYED FARMERS in € perha of aql. (land according to LPIS)

INCOME AND EXPENSES OF SELF-EMPLOYED	ELF-EMP	LOYED	FARMERS in € perha of ag.l. (land according to LPIS)	ı € perha α	of ag.l. (lar	nd according	to LPIS)								Table 4
		≥ 50 ha			51-100 ha	е.		101-500 ha	а		> 500 ha			Total	
Indicator	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022
Sale of goods	733,4	599,1	81,7	1.77	275,8	355,0	117,9	175,4	148,8	112,7	57,7	51,2	158,5	218,8	138,1
Sale of products and services	2 086,1	1 355,7	65,0	9767	784,9	84,4	1196,4	8'982	65,8	1 640,0	1160,8	8'0/	1 301,2	891,0	68,5
Other income	9'0/9	367,6	54,8	307,5	260,6	84,7	302,4	259,6	82,8	343,4	309,0	0,06	338,0	276,8	81,9
Total income	3 490,1	2 322,5	66,5	1 314,7	1 321,2	100,5	1 616,7	1 221,7	75,6	2 096,1	1 527,5	72,9	1797,6	1386,6	1,11
Inventory	1 611,1	1165,6	72,3	485,7	588,4	121,1	673,7	546,6	81,1	882,0	592,8	67,2	753,9	620,2	82,3
Services	627,0	421,6	67,2	281,0	277,0	9,86	326,4	244,0	74,8	460,9	288,1	62,5	365,4	272,9	74.7
Payroll	178,5	120,4	67,4	43,6	79,1	181,5	74,0	61,0	82,4	168,8	131,8	78,1	93,5	79,3	84,8
Payments of insurance and contributions	170,4	107,9	63,3	26,7	68,2	120,3	50,1	46,0	91,8	0,06	71,3	79,2	6,99	59,7	88,6
Social fund creation	1,6	0,5	30,2	7,0	0,1	9,8	9,0	2,3	389,1	9,0	0,5	79,1	0,7	1,5	215,1
Other expense items	762,9	446,4	58,5	422,4	281,7	2'99	419,6	281,5	67,1	353,9	389,6	110,1	435,2	311,8	71,6
Total expenses	3 3 5 1, 5	2 262,3	67,5	1290,1	1 294,5	100,3	1544,4	1181,4	76,5	1956,3	1 474,0	75,3	1715,6	1345,0	78,4
Income - expenses	138,6	60,2	43,4	24,5	26,8	109,2	72,3	40,4	55,8	139,8	53,5	38,3	82,0	41,6	20,7
Share of profitable enterprises	71,2	71,5	100,4	73,5	73,8	100,3	86,2	84,4	6,79	8'56	676	6'96	77.7	77,4	9,66
Share of loss-making enterprises	28,8	28,5	1,66	26,5	26,2	0'66	13,8	15,6	113,3	4,2	7,1	1,0/1	22,3	22,6	101,5
SEF's personal income *	491,8	297,2	60,4	165,2	126,5	76,6	2'95	52,7	93,3	14,6	15,8	108,2	7,76	84,7	86,7
I - E - personal income	-353,2	-237,0	149,0	-140,6	-66'	141,0	15,8	-12,4	35,9	125,2	37,7	30,1	-15,7	-43,1	36,5
Expenses / income	0,96	97,4	101,5	98,1	0'86	6,66	95,5	2'96	101,3	93,3	96,5	103,4	95,4	97,0	101,7
Total number of SEFs	372,0	389,0	104,6	226,0	301,0	133,2	347,0	422,0	121,6	24,0	28,0	116,7	0'696	1140,0	117,6

Note.  $^{\circ}$  allowing for annual income of  $\in$  11,868in 2022 and  $\in$  13,032868 in 2023,  $^{\circ}$  including enterprises without land Source: Information sheets of MARD SR 2021, 2022, CD of MARD SR Prepared by: MARD SR

Table 5

ASSETS AND LIABILITIES OF SELF-EMPLOYED FARMERS (land according to LPIS) in € per ha of agl.

		≤ 50 ha **	1		51-100 ha	<i>m</i>		101-500 ha	БÍ		> 500 ha			Total	
Indicator	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022	2022	2023	Index 2023/2022
Long-term intangible assets	26,6	20,7	190,7	21,5	17,9	83,1	5,6	31,0	553,5	2,8	2,9	101,8	8,9	56,9	302,1
Long-term tangible assets	2206,9	1 545,8	70,0	879,9	808,5	91,9	1169,3	982,0	84,0	1 406,0	1247,0	88,7	1 247,9	1 041,0	83,4
Long-term financial assets	1,7	0,0	0,0	0,5	0,0	0,0	3,0	0,0	0,1	5,7	4,9	86,2	3,0	9,0	21,6
Total inventory	582,3	332,4	57,1	251,8	213,1	84,6	367,3	246,1	67,0	8'969	526,3	79,8	422,5	289,5	68,5
Material	75,6	29,6	39,1	41,0	23,9	58,3	56,5	30,1	53,3	107,7	29,6	55,4	64,3	32,9	51,1
Goods	217,4	115,8	53,3	24,2	78,4	324,0	44,2	31,5	71,3	13,4	44,8	334,5	49,6	49,7	100,3
Unfinished production	289,3	187,0	9,49	186,6	110,8	59,4	266,5	184,5	69,2	575,8	451,8	78,5	308,6	206,9	67,0
Receivables	589,3	553,8	94,0	240,6	215,2	89,4	272,8	232,7	85,3	783,8	583,9	74,5	377,4	307,1	81,4
Short-term financial assets	818,0	510,8	62,4	365,0	235,0	64,4	225,7	162,8	72,1	119,6	6'86	82,7	272,4	201,0	73,8
Money and valuables	187,0	104,4	55,8	8'59	49,8	75,6	61,0	32,3	52,9	33,3	16,0	48,2	9,99	40,7	60,4
Bank accounts	628,1	405,2	64,5	297,9	185,1	62,1	161,5	129,6	80,2	82,8	87,8	96,5	203,3	160,0	78,7
Other short-term financial assets	2,9	1,2	41,0	1,2	0,1	10,3	3,2	6'0	29,4	0,4	0,1	23,1	2,5	0,7	28,4
Suspense account (+ /-)	13,0	8,0	61,3	2,3	0,7	32,0	1,7	0,5	31,5	0,0	0,0		2,4	1,2	50,9
Provision for procured assets	2,4	0,0	0,0	0,0	0,0		0,7	0,0	0,0	0,0	0,0		9,0	0,0	0,0
Total assets	4 240,3	3 001,5	70,8	1 761,6	1 490,4	84,6	2 046,1	1 655,2	80,9	3 014,6	2 493,8	82,7	2 335,2	1 867,3	80,0
Reserves	1,2	0,0	0,0	0,0	0,0		0,4	0,0	0,0	0,0	0,0		0,3	0,0	0,0
Liabilities	506,4	442,2	87,3	241,1	155,7	64,6	422,4	267,7	63,4	573,7	580,7	101,2	429,0	306,1	71,3
Loans	391,1	378,5	8'96	193,4	226,6	117,2	302,2	289,9	95,9	418,5	299,4	71,5	313,3	288,5	92,1
Provision for procured assets	2,4	0,0	0,0	0,0	0,0		0,0	0,0		0,0	0,0		0,2	0,0	0,0
Total liabilities	901,1	820,7	91,1	434,5	382,3	88,0	724,9	527,5	6,97	992,2	880,1	88,7	742,7	594,6	80,1

Source: Information sheets of MARD SR 2022, 2023, CD of MARD SR Note: \*Induding enterprises without land Prepared by: MARD SR

#### BASIC ECONOMIC AND FINANCIAL INDICATORS for the production of food and beverages in Slovakia\* (EUR million)

Table 6

Indicator	2021	2022	2023	Index 2023/22
Total revenues	4 739	6 151	6 733	109,5
Total costs	4 501	5 857	6 295	107,5
Consumption of material, energy and other non-storable supplies	2 327	3 260	3 378	103,6
Consumption of services purchased	543	656	733	111,6
- Cost of goods sold	607	758	887	117,1
- Depreciation	174	195	197	100,9
Profit/loss before tax	238	294	438	148,8
Value added	1 027	1 113	1383	124,2
Stocks of material	251	345	320	92,8
Stocks of unfinished production and semi-fin. prod.	82	94	114	122,1
Stocks of products**	156	216	267	123,4
Financial assets	186	169	209	123,6
- Cash	26	21	20	97,4
- Bank accounts	159	143	178	124,2
Receivables	752	1 017	1 119	110,1
Liabilities	1 016	1 295	1 307	100,9

Source: Prod 3-04, SO SR; calculations by MARD SR

Note: \* Sample survey (preliminary results) of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations with 0 to 19 employees with annual turnover for own performance and goods of €5 million and more (not including organisations with 0 to 19 employees with annual sales for own performance and goods of less than €5 million); the survey covers all food production enterprises except companies producing tobacco products; based on SK NACE classification; \*\* For 2022 Stocks of products and animals

Table 7

ECONOMIC OUTTURN, REVENUES AND COSTS for the production of food and beverages in Slovakia\* (EUR million)

		Profit/loss	\$5		Revenues				Costs			Cost of revenue (€)	evenue (	Return on revenue (%)	revenue	Revenues Assets	ies/ ts
Production sector**	2022	2023	Differ- ence 2023-22	2022	2023	Index 2023/22	over ni enad2 ZOS % ni	2022	2023	Index 2023/22	o ni 916d2 202 % ni	2022	2023	2022	2023	2022	2023
Processing and preserving of meat and meat products	31,6	49,3	17,8	1 080,1	1 321,3	122,3	19,6%	1 048,5	1272	121,3	20,2%	97,1	5'96	2,9	3,7	2,4	2,2
Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	44,9	-1,9	-46,8	393,2	324,6	82,5	4,8%	348,3	326,4	93,7	5,2%	88,6	100,6	11,4	9'0-	1,8	1,6
Processing and preserving of fruits and vegetables	2,8	22,2	19,3	250,2	284,5	113,7	4,2%	247,4	262,3	106	4,2%	6'86	92,2	1,1	7,8	1,5	1,6
Manufacture of dairy products	12,9	37	24,1	1,996	1 023,2	105,9	15,2%	953,2	986,2	103,5	15,7%	7,86	96,4	1,3	3,6	1,9	1,8
Manufacture of grain mill products, starches and starch products	26,5	18,3	-8,3	395,7	394,8	8'66	2,9%	369,2	376,6	102	%)%	93,3	95,4	6,7	4,6	1,5	1,5
Manufacture of bakery and farinaceous products	16	85,2	69,2	781,5	827,6	105,9	12,3%	765,4	742,3	26	11,8%	86	2'68	2	10,3	1,2	1,3
Manufacture of other food products	7'66	143,1	44	1 088,7	1 284	117,9	19,1%	9,686	1140,9	115,3	18,1%	6'06	6'88	1,6	11,1	1,3	1,4
Manufacture of prepared animal feeds	8,1	7,7	-0,4	288,4	261	90,5	2,9%	280,4	253,3	90,4	4,0%	97,2	76	2,8	3	1,8	1,8
Manufacture of beverages	52,2	76,9	24,6	907,4	1 011,6	111,5	15,0%	855,1	934,8	109,3	14,8%	94,2	92,4	5,8	7,6	1,1	1,1
Manufacturers of food and beverages, total	294,3	437,9	143,6	6 151,4	6 732,7	109,5	100,0%	5 857,1	6 29 4,9	107,5	100,0%	95,2	93,5	4,8	6,5	1,5	1,5

Source: Prod 3-04, SO SR; calculations by MARD SR

Note.\* Sample survey (preliminary results) of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations with 0 to 19 employees with annual sales for own performance and goods of less than €5 million); the survey covers all food production with 0 to 19 employees with annual sales for own performance and goods of less than €5 million); the survey covers all food production enterprises except companies producing tobacco products; \*\* based on SK NACE classification Prepared by: MARD SR Table 8

OWN CAPITAL AND DEPRECIATION for the production of food and beverages in Slovakia\* (EUR million)

***************************************		Equity		SZ9 Spare	Return on	Return on equity (%)	Equity / a	Equity / assets (%)		Depreciation	
Yroduction sector	2022	2023	Index 2023/22	γjiup∃ 20	2022	2023	2022	2023	2022	2023	Index 2023/22
Processing and preserving of meat and meat products	171	262,8	153,7	13,2%	18,5	18,8	39,1	47,2	22,6	26,7	118,3
Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	61,4	39,2	63,9	2,0%	73,1	4,8	62,8	36	6,1	6,7	109,8
Processing and preserving of fruits and vegetables	52,2	54,6	104,4	2,7%	5,4	40,7	48,6	49,5	4,9	6,5	133
Manufacture of dairy products	198,8	217,4	109,3	11,0%	6,5	17	33	34,5	32,6	29,9	91,6
Manufacture of grain mill products, starches and starch products	118,2	114,7	6	2,8%	22,4	15,9	33,8	30,5	12,7	13	102,3
Manufacture of bakery and farinaceous products	243,6	329,1	135,1	16,6%	9,9	25,9	36,5	43,5	38,3	35,6	93
Manufacture of other food products	424,6	502,7	118,4	25,3%	23,4	28,5	58,8	65	35,9	37,9	105,8
Manufacture of prepared animal feeds	8'09	63,7	104,7	3,2%	13,3	12,1	54,3	58,1	5,2	3,6	6,89
Manufacture of beverages	341,1	399,6	117,2	20,1%	15,3	19,2	37,1	39,9	36,8	36,9	100,5
Manufacturers of food and beverages, total	1671,8	1983,7	118,7	100,0%	17,6	22,1	41,6	44,8	195	196,8	100,9

Note: "Sample survey (preliminary results) of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations with 0 to 19 employees with annual tumover for own performance and goods of £5 million); the survey covers all food production enterprises except companies producing tobacco products: "based on SK NACE classification
Prepared by: MARD SR

Table 9

VALUE ADDED, SALES OF OWN PRODUCTS AND SERVICES, COST OF GOODS SOLD for the production of food and beverages in Slovakia\* (EUR million)

*	Sales of ov	Sales of own products and services	nd services	nwo ło	Ö	Cost of goods sold	Pl	N <sub>a</sub>	Value added (VA)	(t	re 2023
rroduction secon	2022	2023	Index 2023/22		2022	2023	Index 2023/22	2022	2023	Index 2023/22	ishs AV
Processing and preserving of meat and meat products	864,8	981,3	113,5	19,3%	122,4	207	169,1	200,3	240,1	119,9	17,4%
Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	360,4	277,5	11	2,5%	2,3	15,1	671,1	19	15,4	25,3	1,1%
Processing and preserving of fruits and vegetables	162,9	201,3	123,6	4,0%	55,4	26,7	102,3	22,8	52,8	231,7	3,8%
Manufacture of dairy products	803,2	854,7	106,4	16,8%	94,2	93	8'86	119,9	139,9	116,6	10,1%
Manufacture of grain mill products, starches and starch products	322,7	317,2	98,3	6,2%	41,8	42,5	101,7	1,69	62,8	8'06	4,5%
Manufacture of bakery and farinaceous products	9'919	6,879	110,1	13,3%	5'86	9'08	82	230,2	305,5	132,7	22,1%
Manufacture of other food products	728,3	882,1	121,1	17,3%	166,5	207	124,3	226,8	344,7	152	24,9%
Manufacture of prepared animal feeds	156,3	166,4	106,5	3,3%	68,2	60,1	88,1	14,3	22,4	156,7	1,6%
Manufacture of beverages	626,4	729,6	116,5	14,3%	108,8	125,3	115,2	169,1	199,9	118,2	14,4%
Manufacturers of food and beverages, total	4 641,4	5 088,9	109,6	100,0%	757,9	887,4	117,1	1113,5	1 383,5	124,2	100,0%

Source: Prod 3-04, SO SR; calculations by MARD SR

Note: "Sample survey (preliminary results) of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations with 0 to 19 employees with annual sales for own performance and goods of €5 million); the survey covers all food production enterprises except companies producing tobacco products; "based on SK NACE classification
Prepared by: MARD SR

Table 10

EMPLOYMENT, LABOUR PRODUCTIVITY, WAGES AND NUMBER OF ENTERPRISES for the production of food and beverages in Slovakia by sector\*

reterprises (	Share of e	15,7%	2,2%	4,2%	7.7%	3,1%	36,0%	15,7%	3,1%	12,4%	100,00%
Number of enterprises****	2023	51	7	14	25	10	117	51	10	40	324
Num	2022	48	9	13	76	11	113	49	=	40	316
Statutory insur. payments (EUR million)	2023	38	2,9	5,1	20,4	<i>L</i> '9	40,8	36,8	2,5	24	177,3
Statuto payi (EUR	2022	34,1	2,8	4,4	161	6,2	40,6	32,2	2,4	21,8	163,5
Average monthly wage (EUR)	2023	1 283,4	1 475	1311,5	1 506,7	1702,6	1183,3	1 547,6	1 647,6	1715,5	1397,9
Average	2022	1170,1	1357	1167,3	1364,4	1 587,0	1 087,6	1 402,1	1 517,6	1 527,6	1 268,1
ctivity nue 0)	Index 2023/22	120,2	86,1	110,1	109,6	101,7	113,3	112,5	86	113,6	110,9
Labour productivity from revenue (EUR '000)	2023	184,2	699,1	300,3	312,6	421,4	98,1	223	705,4	296,6	218,8
Lal	2022	153,2	812	272,8	285,3	414,2	9,98	198,3	719,8	261	197,3
uctivity A (0)	Index 2023/22	117,8	26,4	224,3	120,7	9'76	142	144,9	169,7	120,5	125,9
Labour productivity from VA (EUR '000)	2023	33,5	33,3	55,7	42,7	<i>L</i> 9	36,2	59,9	60,5	58,6	45
Lat	2022	28,4	126	24,8	35,4	72,4	25,5	41,3	35,6	48,7	35,7
ent share	Employm 202	23,3%	1,5%	3,1%	10,6%	3,0%	27,4%	18,7%	1,2%	11,1%	100,0%
/ers***	Index 2023/22	101,8	95,9	103,3	2'96	1,86	93,5	104,9	92,4	98,1	7'86
Number of employers*** (persons)	2023	7172,4	464,3	947,5	3273,7	937	8 438,4	5 757,1	370,1	3 410,4	30 770,8
Numb	2022	7 048,2	484,3	917,3	3 386,7	955,4	9 025,1	5 489,4	400,7	3 476,3	31 183,5
:	Production sector	Processing and preserving of meat and meat products	Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	Processing and preserving of fruits and vegetables	Manufacture of dairy products	Manufacture of grain mill products, starches and starch products	Manufacture of bakery and farina- ceous products	Manufacture of other food products	Manufacture of prepared animal feeds	Manufacture of beverages	Manufacturers of food and beverages, total

Source: Prod 3-04, SO SR; calculations by MARD SR

with 0 to 19 employees with annual turnover for own performance and goods of 65 million and more (not including organisations with 0 to 19 employees with annual sales for own performance and goods of ess than 65 million); the survey covers all food production enterprises except companies producing tobacco products. "based on SK NACE classification "" calculated average number of registered employees; "" number of enterprises is based on the average number of respondents per quarter. Note: \*Sample survey (preliminary results) of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations Prepared by: MARD SR

### GROSS AGRICULTURAL PRODUCTION AT CURRENT PRICES (EUR million)

Table 11

	Average 2018 - 2022	2022	2023*	Index 2023/2022	Index 2023/ Ø2018-2022
Gross plant production, total	1 433,70	1 826,00	1 588,60	87	110,8
of which: cereals	736,8	1 000,20	812,5	81,2	110,3
commercial crops	359,9	517,5	407,2	78,7	113,2
feeds	135,9	95,2	121,7	127,8	89,5
vegetables	96,9	104,7	114,3	109,2	118
potatoes	50,3	48,1	74	154	147,1
fruit	23,3	28,8	29,6	102,6	126,8
grapes	23,4	23,1	23,5	102	100,4
other plant production	7,1	8,3	5,8	69,9	81,2
Gross animal production, total	787,3	897,8	1005,2	112,0	127,7
of which: cattle	110,7	127,6	133,2	104,4	120,3
pigs	127,7	126,0	143,8	114,2	112,6
sheep and goats	7,5	9,2	9,7	105,8	129,1
poultry	109,9	129,1	133,5	103,4	121,5
raw milk	321,8	382,7	421,1	110,0	130,9
eggs	81,2	83,6	110,1	131,7	135,6
other animal production	28,4	39,6	53,7	135,6	189,2
Gross agricultural production	2 108,4	2 723,8	2 593,9	95,2	123,0

Source: SO SR; \* note: second 2023 estimate Prepared by: MARD SR

#### DEVELOPMENT OF HARVESTED CROP AREAS, HECTARE YIELDS AND PRODUCTION FOR SELECTED CROPS IN SLOVAKIA Table 12

I b .								Index
Indicator	2017	2018	2019	2020	2021	2022	2023	2023/22
Crop areas ('000 ha)								
Cereals, total	717,5	743,2	769,1	747,3	717,7	711,5	694,2	97,6
of which: wheat, total	373,7	403,4	406,8	387,1	357,0	411,7	406,8	98,8
Barley, total	120,3	124,2	126,4	130,9	117,2	109,1	114,2	104,6
Rye, total	10,0	12,2	13,9	12,5	10,2	9,0	10,4	116,3
oats	14,8	12,9	12,1	12,3	16,3	10,2	9,7	95,2
grain maize	187,8	179,0	197,2	191,5	203,2	158,7	138,4	87,2
Industrial sugar beet	22,4	21,9	21,7	21,1	21,8	19,5	22,1	113,6
Potatoes, total	7,4	7,8	8,2	7,0	6,1	5,7	5,4	94,7
Oilseeds, total	291,2	280,9	257,1	265,5	289,8	293,1	272,6	93,0
of which: rapeseed, total	150,1	154,2	147,0	146,6	136,0	141,4	148,6	105,1
sunflower seed	87,3	68,8	48,5	53,5	73,4	73,1	61,8	84,5
soya	43,9	45,3	47,6	51,1	64,1	66,7	50,2	75,2
Vines in production	8,5	8,0	7,9	7,7	7,8	7,8	9,0	115,9
Hectare yields (t/ha)		,				*	·	
Cereals, total	4,9	5,4	5,3	6,1	6,0	4,8	6,2	130,6
of which: wheat	4,7	4,8	4,8	5,5	5,6	5,0	6,1	123,2
barley	4,5	3,9	4,7	5,2	5,1	5,1	5,3	103,5
rye	3,3	3,4	3,5	3,9	3,5	3,6	3,4	95,3
oats	2,4	2,3	2,6	2,7	2,2	2,4	2,1	87,9
grain maize	5,7	8,5	7,3	8,6	7,9	4,3	8,0	185,4
Industrial sugar beet	55,0	59,9	57,6	60,4	62,6	56,3	63,6	113,0
Potatoes	20,1	21,9	22,3	23,8	24,9	22,8	25,0	109,8
Oilseeds	2,7	2,8	2,6	2,7	2,7	2,5	3,1	127,1
of which: rapeseed, total	3,0	3,1	2,8	3,0	3,1	3,1	3,6	116,1
sunflower seed	2,5	2,9	2,6	2,5	2,7	2,3	2,8	119,2
soya	2,3	2,3	2,5	2,5	2,5	1,5	2,6	178,3
Wine grapes	5,5	6,6	5,5	6,2	5,8	5,8	4,5	78,4
Production ('000 t)								
Cereals, total	3 484,1	4 037,8	4 104,1	4 580,9	4 308,0	3 382,8	4 304,6	127,2
of which: wheat	1 770,7	1 927,9	1 939,1	2 133,3	2 002,2	2 048,2	2 490,6	121,6
barley	545,3	486,9	599,6	679,4	592,7	556,5	603,0	108,4
rye	32,5	41,0	48,7	48,6	36,1	31,8	35,2	110,7
oats	34,9	29,8	31,9	33,0	36,6	24,2	20,3	84,0
grain maize	1 066,2	1 515,8	1 444,8	1 642,7	1 597,7	683,7	1 105,7	161,7
Industrial sugar beet	1 230,8	1 312,0	1 251,7	1 273,0	1 364,4	1 096,7	1 407,7	128,4
Potatoes	149,7	170,0	182,4	166,2	151,1	130,6	135,8	104,0
Oilseeds	775,9	794,7	671,3	716,1	786,3	716,9	848,7	118,4
of which: rapeseed, total	448,7	480,0	417,6	440,9	420,1	441,7	538,1	121,8
sunflower seed	218,8	201,6	128,3	135,7	195,2	170,7	171,7	100,6
soya	102,4	104,5	116,9	129,2	161,4	96,5	129,8	134,5
Wine grapes	45,1	51,0	42,7	46,3	43,7	44,6	40,1	90,1
Fruit*	38,1	51,7	41,8	34,1	35,7	38,0	32,7	86,1
Vegetables**	96,2	105,6	125,8	123,3	147,8	133,6	143,0	107,1

Source: Final data on the harvest of agricultural crops, fruits and vegetables in Slovakia, SO SR; Prepared by: MARD SR
\* data on fruit orchards - Source: CCTIA (register of fruit orchards and hop gardens); \*\* vegetable production on agricultural land, total vegetables for human consumption Note: discrepancies in the data are due to the rounding of numbers

FODDER CROP AREAS AND YIELDS IN SLOVAKIA

		2021			2022			2023		뜨	Index 2023/2022	
Fodder crop type	crop area	yield (t)	Œ	crop area	yield (t)	( <del>)</del>	crop area	yield (t)	Œ	crop area	yield (t)	Œ
	(ha)	total	1 ha	(ha)	total	1 ha	(ha)	total	1 ha	(ha)	total	1 ha
Fodder roots	37,4	860,7	23,0	1'86	2 934,3	6'67	82,0	3 769,1	45,9	83,6	128,5	153,7
of which: fodder beet	29,9	737,9	24,7	38,3	1 533,9	40,0	36,8	1 127,1	30,6	0,96	73,5	76,6
Annual fodder crops	76 949,7	2 002 959,1	26,0	83 688,4	1 785 867,4	21,3	6'256 92	2 247 207,1	29,2	92,0	125,8	136,8
of which: green maize and cross-breeds	65 853,2	1 835 342,9	27,9	6'661 01	1 581 144,7	22,3	63 186,7	1 987 166,8	31,4	89,2	125,7	140,8
legumes-cereal mixes	3 615,6	53 172,2	14,7	4 361,2	55 725,2	12,8	4 795,1	79 267,0	16,5	109,9	142,2	129,3
other annual fodder crops	7 480,9	114 444,0	15,3	8 527,3	148 997,5	17,5	8 976,1	180 773,3	20,1	105,3	121,3	115,3
Perennial fodder crops on ar.l.	124 078,3	525 803,3	4,2	116 153,3	405 756,9	3,5	108 637,4	551 776,5	5,1	93,5	136,0	145,5
of which: red clover	11 786,2	48 294,3	4,1	1,779 11	41 478,3	3,5	10 792,4	61 204,6	5,7	1,06	147,6	163,9
lucerne	51 922,3	279 026,7	5,4	48 334,7	223 912,7	4,6	46 560,1	302 080,3	6,5	96,3	134,9	140,1
other clovers	11 753,6	45115,8	3,8	12 127,7	40 008,4	3,3	10 015,5	46 623,2	4,7	82,6	116,5	141,1
perennial grasses	48 335,2	152 652,8	3,2	43 535,9	8'068 66	2,3	40 341,0	138 182,9	5,4	92,7	138,3	149,6
other perennial fodder crops	281,0	713,6	2,5	178,0	466,7	2,6	928,5	3 685,5	4,0	521,6	7,687	151,5

Source: Final data on the harvest of agricultural crops and vegetables in Slovakia, SO SR Prepared by: MARD SR Note: discrepancies in the data are due to the rounding of numbers

#### NUMBER OF FARM ANIMALS AND PRODUCTION OF ANIMAL PRODUCTS IN SLOVAKIA

Table 14

				as of				
	Meas. unit	31/12/ 2019	31/12/ 2020	31/ 12/ 2021	31/12/ 2022	31/12/ 2023	Difference 2023 - 2022	Index 2023/2022
Number of farm animals	*)				•		,	
Cattle	000 head	432,3	424,8	418,2	415,8	412,7	-3,1	99,2
of which:	'000 head	191,9	184,0	184,4	182,4	180,9	-1,5	99,2
of cows: dairy	'000 head	125,8	117,2	115,7	112,1	110,2	-1,8	98,4
other	'000 head	66,0	66,8	68,7	70,3	70,6	0,3	100,4
Pigs, total	'000 head	589,2	521,7	432,8	363,5	386,2	22,7	106,2
of which: sows	'000 head	37,7	32,8	27,2	24,0	24,4	0,4	101,3
Sheep, total	'000 head	320,6	271,0	269,4	275,5	264,4	-11,1	96,0
of which: ewes	'000 head	219,8	188,1	184,4	185,4	175,3	-10,1	94,5
Goats	'000 head	35,6	10,6	10,4	11,0	10,7	-0,3	97,4
Poultry, total	'000 head	13 131,9	10 603,6	10 364,5	9 340,7	9 669,4	328,7	103,5
of which: hens	'000 head	5 537,2	3 251,8	3 096,1	3 257,4	2 779,5	-477,9	85,3
Horses, total	'000 head	7,0	6,1	6,7	7,0	7,4	0,3	104,6
Production as of 31 Dece	mber		*					
Slaughter cattle, total **)	carc. w. (t)	22 716	22 011	24 145	21 246	22 486	1 240,0	105,8
Slaughter pigs **)	carc. w. (t)	83 716	80 882	86 723	69 131	65 740	-3 391,0	95,1
Slaughter sheep **)	carc. w. (t)	1 150	1 022	1 028	898	1 126	228,0	125,4
Slaughter goats **)	carc. w. (t)	332	333	301	272	244	-28,3	89,6
Slaughter poultry **)	carc. w. (t)	91 766	92 669	95 856	105 836	105 543	-292,7	99,7
Cow's milk	t	932 237	944 793	929 815	938 380	936 967	-1 412,7	99,8
Hen eggs *)	′000 head	1 191 752	824 352	822 258	764 737	711 238	-53 499,0	93,0
Sheep's milk	t	12 448	12 795	12 787	13 074	13 612	538,3	104,1
Sheep's wool	t	568	511	480	479	467	-11,2	97,7

<sup>\*)</sup> Since 2020, the data on the number of farm animals does not include data on non-commercial owners (households and smallholders) who keep animals for self-supply

<sup>\*\*)</sup> Gross domestic production = slaughters in slaughterhouses + estimate of self-supply +/- foreign trade

Source: Inventory of farm animals, SO SR, Animal production, sales of farmers' produce from primary production and the balance of crops SO SR,

MARD SR sectoral statement BM (MARD SR) 1-12 and Meat (MARD SR) 1-12, Estimate of self-supply, SO SR

#### SELECTED INDICATORS OF EFFICIENCY AND REPRODUCTION PROPERTIES

Table 15

	Unit of			As of			Index
Indicator	measurement	31/12/2019	31/12/2020	31/12/2021	31/12/2022	31/12/2023	2023/2022
Calves born	head / 100 cows	86,0	88,5	89,0	89,1	87,8	98,6
Calves reared	head / 100 cows	82,1	84,4	84,6	85,0	83,6	98,3
Annual milk yield	kg / dairy cow	7 372,7	7 762,9	7 781,9	8 016,2	8 052,0	100,4
Weight gains in cattle fattening	kg / feeding day	0,763	0,785	0,765	0,771	0,757	98,2
Number of litters per sow	х	2,263	2,487	2,188	2,148	2,180	101,5
Piglets born per litter	рс.	14,16	13,22	14,76	15,00	15,19	101,3
Piglets born	head / sow	32,05	32,88	32,29	32,22	33,11	102,8
Piglets reared	head / sow	28,89	29,68	29,09	28,31	29,23	103,2
Gains during pre-fattening and fattening	kg / feeding day	0,633	0,633	0,625	0,636	0,622	97,8
Lambs born	head / 100 ewes	69,5	72,3	74,3	79,9	72,6	90,9
Lambs reared	head / 100 ewes	64,5	67,2	68,1	74,6	67,9	91,0
Average wool clip	kg / sheep as of 1/1	1,24	1,31	1,31	1,34	1,26	93,9
Sheep's milk production	kg / ewe as of 1/1	49,4	59,2	63,4	67,7	69,7	103,1
Egg yield	eggs / hen	200,7	253,6	253,4	260,0	235,4	90,5

Note: Since 2020, the table excludes data on non-commercial owners (households and smallholders) who keep animals for self-supply Source: Animal production and sales of farmers' produce from primary production, SO SR Prepared by: MARD SR

### DEVELOPMENT OF PRICE INDICES OF THE MAIN AGRICULTURAL INPUTS IN SLOVAKIA

Same period of the previous year = 100

Table 16

	Same pe	eriod of the previous ye	ear = 100
	2021	2022	2023
Seeds and planting stock	104,8	118,0	107,7
Energy and lubricants	124,9	179,5	103,9
of which: (motor) fuel	139,4	176,9	88,7
lubricants	155,1	139,0	80,2
electricity	106,9	198,6	129,6
Fertilisers and soil conditioners	125,0	239,7	83,9
of which: nitrogen fertilisers	128,7	249,2	81,5
phosphorus fertilisers	117,7	199,2	92,4
potassium fertilisers	101,9	198,4	115,0
combined fertilisers (NPK)	113,7	210,0	94,2
other fertilisers and soil conditioners	106,2	124,7	102,5
Plant protection products	98,7	118,8	104,0
of which: fungicides	97,7	112,5	100,9
insecticides	99,7	110,7	103,2
herbicides	98,2	110,7	105,2
Veterinary services	102,0	106,8	100,4
Material and small tools	104,6	126,3	102,3
Animal feeds	114,7	143,6	94,6
of which: cereals and secondary milling products	121,5	150,9	86,2
Tractors	103,1	108,1	105,1
Price index of inputs into agriculture, overall	108,5	139,8	100,0

Source: SO SR Prepared by: MARD SR

### DEVELOPMENT OF PRICES OF SELECTED CROP COMMODITIES IN SLOVAKIA

Table 17

		Prices in EUR per tonne			ndices previous year = 100)
	2021	2022	2023	2022	2023
common wheat	192,69	307,76	202,41	159,7	65,6
industrial wheat	167,53	277,06	166,85	165,4	60,4
malting barley	185,79	324,17	243,81	174,9	74,7
food barley	166,80	268,93	207,62	161,2	77,2
food rye	148,99	276,75	211,91	185,7	76,6
grain maize	192,37	281,90	191,59	147,0	70,3
edible peas	265,20	338,52	334,56	127,8	96,9
rapeseed	441,40	686,59	431,40	155,7	62,9
sunflower seeds	428,38	587,26	377,64	137,3	64,5
soya	476,60	573,78	407,62	120,3	70,9
sugar beet	24,71	25,65	28,49	104,1	110,5
early potatoes	345,08	462,86	676,65	134,5	145,9
late ware potatoes	297,98	370,93	510,73	122,6	139,3

Source: SO SR Prepared by: MARD SR

#### DEVELOPMENT OF PRICES OF SELECTED ANIMAL COMMODITIES IN SLOVAKIA

Table 18

		ices in EUR per ton 1,000 I / eggs in EU			e indices e previous year = 100
	2021	2022	2023	2022	2023
slaughter bulls of conformation class U	3 110,19	3 597,31	3 777,47	115,7	105,0
slaughter heifer of conformation class U	2 248,26	2 539,32	3 018,85	113,0	118,8
slaughter cows of conformation class U	2 365,71	2 872,77	3 262,17	121,3	113,7
slaughter milk-fed calves of meat class I	3 128,25	3 498,24	3 823,02	111,8	109,3
slaughter pigs of commercial class U	1 470,99	1 602,54	1 931,20	109,0	120,6
slaughter fattened lambs of meat category L	3 055,17	3 334,15	3 797,10	109,1	113,9
slaughter sheep, rams, wethers of meat category S	1 614,58	1 971,40	2 372,91	121,8	120,4
cow's milk of class Q	334,68	425,96	468,24	127,8	109,0
cow's milk of class I	299,68	363,13	417,15	121,9	114,9
slaughter chickens of class I	854,75	1166,04	1 235,43	136,4	106,0
hen eggs for human consumption, sorted, class L	89,96	114,86	162,71	127,7	141,8
raw sheep's wool	180,88	177,56	182,20	98,1	102,5

Source: SO SR Prepared by: MARD SR DEVELOPMENT OF SALE PRICES OF SELECTED PRODUCTS OF FOOD PRODUCERS IN SLOVAKIA (EUR/kg, excluding VAT)

Table 19

Products	2021	2022	2023
Full-fat UHT drinking milk, 1-litre carton	0,53	0,68	0,71
Half-fat UHT drinking milk, 1-litre carton	0,41	0,56	0,57
Cream (over 29 % f.d.m.)	2,60	3,27	3,60
Soft curds	2,42	2,74	3,00
Edam cheese 45 % f. d. m.	4,63	5,70	6,21
Bryndza (sheep-milk product)	4,85	6,22	8,00
Skimmed milk powder with fat cont. ≤1.5%	2,49	3,47	2,95
Fresh butter (consumer package 100-250 g)	5,07	7,32	6,21
Boneless beef chuck/shin	6,00	7,30	8,09
Boneless beef round	7,09	8,32	9,19
Beef tenderloin culinary preparation	20,77	24,4	24,63
Pork chop on the bone	2,75	3,31	4,00
Pork neck on the bone	2,91	3,30	4,22
Pork belly on the bone	3,00	3,52	4,17
Boneless pork leg	3,37	3,79	4,54
Boneless pork shoulder	3,21	3,64	4,33

Source: Sectoral statistics of the MARD SR, APA - SAMI Milk: Report ML (MARD SR) 6-12 Meat: APA - ATIS

### **DEVELOPMENT OF CONSUMER PRICES OF SELECTED TYPES OF FOOD** in EUR

Table 20

	2020	2021	2022	2023
White rice, kg	1,51	1,57	1,91	2,22
Plain wheat flour selection, kg	0,50	0,50	0,78	0,83
Brown bread, kg	1,49	1,53	1,89	2,29
Plain white bread roll, pc. (40 g)	0,07	0,07	0,10	0,11
Egg pasta, 500 g	1,29	1,31	1,63	1,87
Beef chuck on the bone, kg	5,32	5,59	7,25	8,14
Boneless beef chuck, kg	7,03	7,27	8,97	10,24
Boneless beef round, kg	8,88	9,09	11,01	12,32
Boneless pork chops, kg	5,34	4,85	5,58	6,77
Boneless pork neck, kg	5,31	4,83	5,59	6,74
Pork belly, kg	4,80	4,47	5,04	5,88
Boneless pork leg, kg	4,98	4,51	5,14	6,12
Boneless pork shoulder, kg	4,58	4,06	4,71	5,73
Gutted chicken, kg	2,46	2,48	3,23	3,63
Mild frankfurters, kg	6,15	6,38	7,34	8,84
Ham salami, kg	6,02	6,22	7,15	8,46
Dry salami, kg	8,89	9,03	10,43	12,14
Pasteurised semi-skimmed milk, I	0,77	0,80	0,97	1,17
Sour milk, 500 g/ml	0,73	0,75	0,88	1,06
Edam block cheese, kg	6,96	7,16	9,22	11,34
Smoked ostiepok cheese, kg	11,43	11,62	13,53	15,50
Curd, 250 g	1,20	1,18	1,30	1,47
Fresh hen eggs, pc.	0,15	0,16	0,21	0,30
Fresh butter, 125 g	1,16	1,25	1,70	1,71
Edible oil, I	1,75	1,97	3,16	3,14
Lard, kg	2,94	2,92	3,78	4,96
Apples, kg	1,40	1,26	1,25	1,37
Ware potatoes, kg	0,72	0,72	0,91	1,17
Granulated sugar, kg	0,73	0,74	0,99	1,43

Source: SO SR Prepared by: MARD SR

#### DEVELOPMENT OF PRODUCTION IN THE FOOD INDUSTRY OF SLOVAKIA

Table 21

Product type <sup>2)</sup>	Meas. unit	2018	2019	2020	2021	2022	2023	Index 2023/2022
Meat products 1)	'000 t	105,4	103,0	96,5	93,3	94,2	90,2	95,8
Drinking milk 3)	'000 t	243,8	229,1	256,4	245,4	231,3	243,2	105,1
Cheese, total 3) 3a) *	'000 t	51,6	52,3	52,5	54,0	53,1	51,5	97,0
Butter 3) **	'000 t	13,5	13,8	14,5	14,2	14,6	13,2	90,4
Wheat flour 4)	'000 t	318,1	329,4	320,9	294,5	305,0	323,0	105,9
Bread and fresh pastry goods 5)	'000 t	134,2	122,7	111,3	104,1	136,0	115,2	84,7
Pasta 5)	'000 t	14,0	13,4	14,1	14,1	13,7	13,5	98,5
Slaughtered poultry 6) ***	'000 t	92,2	91,8	92,7	95,9	105,8	105,5	99,7
Table eggs <sup>6)***</sup>	million pcs.	1 115,3	745,3	717,5	698,3	643,7	583,2	90,6
Malt <sup>4)</sup>	'000 t	292,7	295,6	267,1	283,3	291,6	324,5	111,3
Fruit products 5)	'000 t	9,0	6,2	6,4	7,6	9,5	8,9	93,7
Vegetables products 5)	'000 t	36,3	38,1	40,4	36,6	35,7	34,8	97,5
Grape wine 5)	million litres	65,2	41,8	49,9	47,5	43,1	23,4	54,3

#### Source:

Prepared by: MARD SR

#### SALES OF OWN PRODUCTS AND SERVICES in the food industry by sector\* (EUR million)

Table 22

Sector**	2022	2023	Index 2023/2022
Processing and preserving of meat and meat products	864,8	981,3	113,5
Processing and preserving of fish, crustaceans and molluscs including manufacture of vegetable and animal oils and fats	360,4	277,5	77,0
Processing and preserving of fruits and vegetables	162,9	201,3	123,6
Manufacture of dairy products	803,2	854,7	106,4
Manufacture of grain mill products, starches and starch products	322,7	317,2	98,3
Manufacture of bakery and farinaceous products	616,6	678,9	110,1
Manufacture of other food products	728,3	882,1	121,1
Manufacture of prepared animal feeds	156,3	166,4	106,5
Manufacture of beverages	626,4	729,6	116,5
Manufacturers of food and beverages, total	4 641	5 089	109,7

Source: Prod 3-04, SO SR

<sup>1)</sup> RM (MARD SR) 2-12; since 2018 = Meat (MARD SR) 1-12

<sup>&</sup>lt;sup>2)</sup> refined sugar: confidential data; data "FCMIZ (MPRV SR) 3 - 12" available only to 2013; "FCMIZ (MARD SR) 1 - 12"

<sup>&</sup>lt;sup>5)</sup> ML (MARD SR) 6-12 and SO SR (Sources and use of milk in Slovakia, for organisations registered in the Farm Register) calculations by MARD SR;

<sup>&</sup>lt;sup>3a)</sup> Data on processed cheese in 2017 covers only January to September 2017 because data for the last quarter is not available

<sup>4)</sup> flour, malt: "OB (MARD SR ) 9-12"

<sup>5)</sup> Potrav (MARD SR);

<sup>6)</sup> poultry and eggs: The commodity situation and outlook report "Poultry and Eggs"; it covers gross domestic production of poultry meat

<sup>\*</sup> all natural and processed cheeses, \*\* including other products made of milk fat, \*\*\* preliminary data for 2021

<sup>\*</sup> Sample survey of a weighted set of enterprises with 20 or more employees, or enterprises registered in the Companies Register, contributory organisations that are market producers with 20 and more employees and organisations with 0 to 19 employees with annual turnover for own performance and goods of €5 million and more (not including organisations with 0 to 19 employees with annual sales for own performance and goods of less than €5 million); the survey covers all food production enterprises except companies producing tobacco products;

<sup>\*\*</sup> based on SK NACE classification

### CONSUMPTION OF SELECTED TYPES OF FOODSTUFFS PER CAPITA IN SLOVAKIA (kg per year)

Table 23

Type of food	2000	2005	2010	2015	2020	2022	2023 estimate	Difference SR 2021-20	RFI <sup>5)</sup>	Accept- able range
Meat (carcass weight)	60,9	61,6	55,8	50,6	69,9	71	72,5	1,5	57,3	51,6-63,0
- beef, veal	9,3	6,2	4,3	4,3	5,3	6	5,8	-0,2	17,4	
- pork	33,1	32,9	30,8	30,9	37,5	39	40,6	1,6	22,2	
- poultry	17,1	21,1	19,0	14,1	25,6	24,5	22,2	-2,3	15	
- other <sup>1)</sup>	1,4 (0,3)	1,4 (0,2)	1,7 (0,2)	1,3	1,5	1,5 (0,2)	1,1 (0,2)	-0,4	2,7	
Fish	4,3	4,4	5,1	5,3	5,9	5,7	5,8	0,1	6	
Milk and dairy	160,2	154,6	162,8	169,2	180,1	184,8	191,6	6,8	220	206,0-240,0
- drinking milk	71,5	55,7	54,5	48,1	48,6	43,3	45,7	2,4	91	
- cheese, curds	7,9	9,1	9,9	12,2	14,7	14,4	14,3	-0,1	10,1	
Eggs (pcs.)	210,0	199,0	208,0	203,0	229,0	214	191,5	-22,5	201	
Fats, total	23,9	23,8	23,1	21,1	21,9	22,2	23,9	1,7	22	19,8-23,1
- butter	2,7	2,0	2,6	3,6	4,0	4,3	4,1	-0,2	2,8	
- lard	3,3	3,3	3,0	3,7	3,0	2,6	2,2	-0,4	3	
- EPFO <sup>2)</sup>	17,8	18,4	17,4	13,7	14,7	15,2	16	0,8	16,2	
Sugar	31,5	34,0	34,3	30,5	32,1	31,8	34,2	2,4	30,9	
Cereals (flour)	98,5	91,0	80,3	81,2	77,9	76,1	78,3	2,2	98,5	94,0-103,0
Potatoes	68,1	60,3	47,6	48,9	54,2	54,3	53,5	-0,8	80,6	76,3-84,9
Legumes	1,9	1,6	1,6	1,5	1,5	1,8	2	0,2	2,6	2,1-3,2
Vegetables 3)	94,2	86,7	94,6	100,9	107,0	101,4	97,1	-4,3	127,9	116,9-138,9
Fruit 4)	56,8	52,6	53,6	65,7	69,6	70,5	70,8	0,3	96,7	86,7-106,7

Source: Food consumption, SO SR

 $<sup>^{1)}</sup>$  in brackets - mutton, goat, horse; the remainder is game, rabbit and other small animals

<sup>2)</sup> edible plant fats and oils

vegetables and vegetable products (fresh equivalent)
 fruit and fruit products (fresh equivalent); excluding consumption of nuts
 RFI = recommended food intake; ODP and acceptable range of rational consumption

Prepared by: MARD SR

### TOTAL VOLUME OF FOREIGN TRADE, OF WHICH EU

Commodities HS 01 - 24 (EUR '000)

Table 24

		Ехр	ort			Imp	oort	
Commodities	2022		20231)		20	)22	20231)	
	total	of which EU-27						
01 live animals	181 336	167 746	210 214	192 414	91 825	91 070	107 850	106 602
02 meat and edible meat offal	143 074	140 905	185 289	183 304	744 892	714 088	849 227	801 186
03 fish and shellfish	9 212	9 181	9 646	9 626	81 554	55 691	90 810	61 702
04 milk, eggs, honey and products	420 953	373 024	399 891	323 256	596 528	588 048	586 337	581 944
05 products of animal origin	40 768	36 587	47 088	44 469	29 668	22 253	42 226	23 814
06 live plants and floricultural products	23 432	22 106	25 857	23 748	127 069	123 836	116 515	113 619
07 edible vegetables, roots, and tubers	62 401	59 039	74 951	72 246	349 869	313 044	425 901	381 227
08 edible fruits and nuts	96 443	92 031	116 151	113 230	417 926	225 956	449 802	259 716
09 coffee, tea, and spices	175 246	173 413	147 612	146 857	273 961	247 551	226 598	202 263
10 cereals	791 473	775 472	647 790	633 256	230 031	140 309	192 512	134 539
11 mill products, malt, starches	223 574	219 116	230 370	225 251	81 010	77 784	77 088	74 373
12 oil seeds and fruits, straw, fodder	419 268	417 466	370 407	368 750	164 289	86 896	126 057	96 145
13 shellac, rubber, resin	3 587	2 223	5 238	3 527	22 856	14 317	26 643	14 194
14 vegetable plaiting materials	409	390	293	254	1344	919	871	516
15 animal or vegetable fats and oils	219 881	217 903	166 989	165 428	398 562	365 975	471 817	452 189
16 meat and fish preparations	138 329	136 267	180 218	178 432	309 267	292 451	356 076	338 901
17 sugar and sugar confectionery	306 358	279 790	343 475	315 851	135 396	127 307	178 025	165 853
18 cocoa and cocoa preparations	323 627	284 078	337 831	300 820	369 678	332 525	359 386	323 299
19 cereal or milk preparations	262 823	251 032	380 700	367 762	474 840	461 160	535 504	517 888
20 vegetable, fruit or plant preparations	66 666	64 513	91 459	88 993	238 705	209 188	278 054	253 274
21 various food preparations	447 088	400 407	555 593	494 491	537 909	483 788	664 693	611 184
22 beverages, spirits and vinegar	346 771	328 513	376 793	355 748	512 070	453 277	558 580	498 978
23 residues and waste, feed	179 290	177 006	221 829	219 847	323 422	281 410	382 084	330 392
24 tobacco, substitutes	14 111	13 329	34 671	32 487	300 117	291 609	295 987	279 867
Total	4 896 123	4 641 537	5 160 353	4 860 046	6 812 789	6 000 452	7 398 644	6 623 668

<sup>&</sup>lt;sup>1)</sup> Preliminary data (June 2024) Source: SO SR Prepared by: MARD SR

### FOREIGN TRADE OF SLOVAKIA IN AGRICULTURAL AND FOOD PRODUCT (€)

Table 25

	2022	2023 1)					
AGRICULTURAL PRODUCTS <sup>2)</sup>							
IMPORT Total	1 435 618 458	1 447 792 146					
of which: substitutable	1 068 685 651	1 075 690 353					
non-substitutable	366 932 807	372 101 793					
EXPORT Total	1 655 247 473	1 511 735 185					
of which: substitutable	1 510 998 817	1 344 088 940					
non-substitutable	144 248 656	167 646 245					
BALANCE Total	219 629 015	63 943 039					
of which: substitutable	442 313 166	268 398 587					
non-substitutable	-222 684 151	-204 455 548					
FOOD PRODUCTS							
IMPORT Total	5 377 170 659	5 950 851 573					
of which: substitutable	4 226 799 473	4 643 944 850					
non-substitutable	1 150 371 186	1 306 906 723					
EXPORT Total	3 240 875 113	3 648 617 336					
of which: substitutable	2 780 228 163	3 192 017 379					
non-substitutable	460 646 950	456 599 957					
BALANCE Total	-2 136 295 546	-2 302 234 237					
of which: substitutable	-1 446 571 310	-1 451 927 471					
non-substitutable	-689 724 236	-850 306 766					

<sup>1)</sup> Preliminary data (June 2024)

Prepared by: MARD SR

SHARE OF TRADE BLOCS in Slovakia's total foreign agri-food trade

Table 26

	Country / grouping	lmp	oort	Ехр	ort	Balance
	Country / grouping	EUR million	%	EUR million	%	EUR million
	EU-27	6 000	88,08	4 642	94,8	-1 359
	of which: Czechia	1 276	18,73	1 044	21,33	-232
	Poland	768	11,28	580	11,85	-188
2	Hungary	446	6,54	967	19,75	521
0	Germany	661	9,7	503	10,27	-158
`	Austria	232	3,4	522	10,66	290
2	Third countries	812	11,92	255	5,2	-557,8
2	of which: CIS	209	3,07	79	1,61	-130
	ACP	123	1,81	5,32	0,11	-118
	Mediterranean countries	72	1,06	12	0,25	-60
	Total	6 813	100	4 896	100	-1 917
	EU-27 <sup>1)</sup>	6 624	89,53	4 860	94,18	-1 764
	of which: Czechia	1 433	19,37	1 130	21,9	-303
	Poland	929	12,56	723	14	-206
2	Hungary	454	6,13	912	17,67	458
0	Germany	723	9,77	470	9,11	-253
`	Austria	242	3,27	531	10,28	289
2	Third countries <sup>1)</sup>	775	10,47	300	5,82	-475
3	of which: CIS	141	1,91	79	1,53	-63
	ACP	121	1,64	7,15	0,14	-114
	Mediterranean countries	78	1,05	17	0,32	-61
	Total <sup>1)</sup>	7 399	100	5 160	100	-2 238

<sup>1)</sup> Preliminary data (June 2023); Source: SO SR; Note: EU-27: Belgium, Denmark, France, Greece, Netherlands, Ireland, Luxembourg, Germany, Portugal, Italy, Spain, Austria, Sweden, Finland, Slovakia, Czechia, Poland, Hungary, Slovenia, Latvia, Lithuania, Estonia, Malta, Cyprus, Bulgaria, Romania, Croatia; MEDITERRANEAN COUNTRIES: Algeria, Egypt, Palestine, Israel, Jordan, Lebanon, Morocco, Tunisia, Turkey, Syria; ACP: African, Caribbean and Pacific Group of States; CIS: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan; Prepared by: MARD SR

<sup>&</sup>lt;sup>2)</sup> Agricultural products: HS chapter 0101-0106,0301,0401,0601-0604,0701-0709,0713,0801-0810, 1001-1008.1201-1207, 1209-1214, 1401-1404, 1801, 2401

Source: SO SR, own calculations

COMMODITY STRUCTURE OF AGRI-FOOD IMPORTS TO SLOVAKIA in 2022 and 2023 (ordered by share in 2023)

in 2022	in 2022 and 2023 (ordered by share in 2023)			<b>-</b>	Table 27
٤		2022		2023	
S g	Commodity name <sup>1)</sup>	æ	Share (%)	÷	Share (%)
2106	Food preparations not elsewhere specified or included	359 936 844	5,28	465 215 250	6,29
0203	Meat of swine, fresh, chilled or frozen	376 805 662	5,53	443 536 650	5,99
1905	Bread, pastry, cakes, biscuits and other bakers' wares, whether or not containing cocoa; communion wafers, empty cachets of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products	315 047 279	4,62	361 063 480	4,88
1806	-	315 196 022	4,63	290 159 695	3,92
0406	Cheese and curd	269 034 288	3,95	278 754 094	3,77
2309	Preparations of a kind used in animal feeding	219 579 104	3,22	270 504 565	3,66
020	Meat and edible offal of poultry under code 0105, fresh, chilled or frozen	222 100 438	3,26	258 852 489	3,5
2202	Waters, including mineral waters and aerated waters, containing added sugar or other sweetening matter or flavoured, and other non-alcoholic beverages, not including fruit, nut or vegetable juices of heading 2009	191 588 464	2,81	229 518 200	3,1
0901	Coffee, whether or not roasted or decaffeinated; coffee husks and skins; coffee substitutes containing coffee in any proportion	250 601 840	3,68	205 137 541	2,77
2402	Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes	191 261 109	2,81	172 908 975	2,34
1601	Sausages and similar products, of meat, meat offal, blood or insects; food preparations based on these products	125 424 986	1,84	151 190 952	2,04
1602	Other prepared or preserved meat, meat offal, blood or insects	119 567 074	1,76	139 944 565	1,89
2208	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol; spirits, liqueurs and other spirituous beverages	118 710 697	1,74	129 076 948	1,74
1515	Other fixed vegetable or microbial fats and oils (including jojoba oil) and their fractions, whether or not refined, but not chemically modified	6 043 769	60'0	122 174 852	1,65
1005	Maize /corn/	146 778 306	2,15	121 814 146	1,65
2404	Products containing tobacco, reconstituted tobacco, nicotine, or tobacco or nicotine substitutes, intended for inhalation without combustion; other nicotine containing products intended for the intake of nicotine into the human body	73 804 233	1,08	106 139 999	1,43
0401	Milk and cream, not concentrated nor containing added sugar or other sweetening matter	103 347 543	1,52	89 290 215	1,21
0802	Citrus fruit, fresh or dried	81 138 010	1,19	87 384 529	1,18
020	Other vegetables, fresh or chilled	77 856 659	1,14	87 081 018	1,18
1518	Animal, vegetable or microbial fats and oils and their fractions, boiled, oxidised, dehydrated, sulphurised, blown, polymerised by heat in vacuum or in inert gas or otherwise chemically modified, excluding those of heading 1516; inedible mixtures or preparations of animal, vegetable or microbial fats or oils or of fractions of different fats or oils of this chapter, not elsewhere specified or included	40 860 451	9,0	85 253 104	1,15
1901		75 308 568	1,11	84 253 237	1,14
2204		68 415 120		81 708 903	12.

Table 27 continue

0405	Butter and other fats and oils derived from milk; dairy spreads	87 107 020	1,28	77 067 160	1,04	
0803	Bananas, incl. plantains, fresh or dried	73 127 764	1,07	76 727 854	1,04	
1704	1704 Sugar confectionery (including white chocolate), not containing cocoa	63 036 472	0,93	76 340 234	1,03	
2103	2103 Sauces and preparations therefor, mixed condiments and mixed seasonings; mustard flour and meal and prepared mustard	63 675 836	0,93	75 553 415	1,02	
2008	Fruit, nuts and other edible parts of plants, otherwise prepared or preserved, whether or not containing added sugar or other sweetening matter or spirit, not elsewhere specified or included	66 199 033	0,97	73 747 700	-	
2203	Beer made from malt	68 153 761	-	72 275 167	0,98	
0201	Meat of bowine animals, fresh or chilled	69 524 235	1,02	71 969 808	0,97	
1701	1701 Cane or beet sugar and chemically pure sucrose, in solid form	47 010 145 0,69	69'0	67 144 458 0,91	0,91	
0701	0701 Potatoes, fresh or chilled	39 571 110	0,58	0,58 64 035 871 0,87	0,87	

Source: Statistical Office of the Slovak Republic, preliminary data 2023 valid as of August 2024 Prepared by: Ministry of Agriculture and Rural Development of the Slovak Republic  $^{\rm D}$  The table contains the top 30 commodities by share

COMMODITY STRUCTURE OF AGRI-FOOD EXPORTS FROM SLOVAKIA in 2021 and 2022 (ordered by share in 2022)

in 2021 ar	COMMODILITY INCL. TOKE OF AGRIFTOOD EAFORTS FROM SECVANIA in 2021 and 2022 (ordered by share in 2022)				Table 28
۶		2022		2023	
code	Commodity name <sup>1)</sup>	Ę	Share (%)	Ę	Share (%)
1001	Wheat and meslin	403 144 721	8,23	429 408 549	8,32
2106	Food preparations not elsewhere specified or included	274 087 499	5,6	370 848 261	7,19
1806	Chocolate and other food preparations containing cocoa	298 622 797	6,1	309 004 613	5,99
1905	Bread, pastry, cakes, biscuits and other bakers wares, whether or not containing cocoa; communion wafers, empty cachets of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products	186 523 609	3,81	286 881 334	5,56
0406	Cheese and curd	199 748 706	4,08	195 409 240	3,79
1005	Maize /com/	345 652 229	7,06	171 529 042	3,32
1205	Rape or colza seeds, whether or not broken	201 821 345	4,12	169 421 934	3,28
1107	Malt, whether or not roasted	119 477 809	2,44	153 204 230	2,97
1704	Sugar confectionery (including white chocolate), not containing cocoa	123 327 894	2,52	143 134 313	2,77
1060	Coffee, whether or not roasted or decaffeinated; coffee husks and skins; coffee substitutes containing coffee in any proportion	167 618 566	3,42	138 895 260	2,69
0207	Meat and edible offal of poultry under code 0105, fresh, chilled or frozen	90 642 938	1,85	132 091 653	2,56
1702	Other sugars, incl. chemically pure lactose, maltose, glucose and fructose, in solid form; sugar syrups not containing added flavouring or colouring matter; artificial honey, whether or not mixed with natural honey; caramel	114 384 907	2,34	128 111 516	2,48
2207	Undenatured ethyl alcohol of an alcoholic strength of >= 80%; ethyl alcohol and other spirits, denatured, of any strength	121 176 545	2,47	123 775 632	2,4
2104	Soups and broths and preparations therefor; homogenised composite food preparations	116 844 750	2,39	123 387 928	2,39
2202	Waters, including mineral waters and aerated waters, containing added sugar or other sweetening matter or flavoured, and other non-alcoholic beverages, not including fruit, nut or vegetable juices of heading 2009	119 980 756	2,45	122 650 800	2,38
0401	Milk and cream, not concentrated nor containing added sugar or other sweetening matter	112 081 420	2,29	104 811 049	2,03
1601	Sausages and similar products, of meat, meat offal, blood or insects; food preparations based on these products	84 253 299	1,72	102 789 322	1,99
2309	Preparations of a kind used in animal feeding	41 602 229	0,85	102 197 221	1,98
1206	Sunflower seeds, whether or not broken	124 196 652	2,54	95 518 256	1,85
0102	Live bovine animals	62 674 184	1,28	75 696 921	1,47
0103	Live swine	54 497 877	1,11	68 744 390	1,33
1602	Other prepared or preserved meat, meat offal, blood or insects	46 012 323	0,94	67 187 745	1,3

Table 28 continue

-	1901	Malt extract; food preparations of flour, groats, meal, starch or malt extract, not containing cocoa or containing less than 40 % by weight of cocoa calculated on a totally defatted basis, not elsewhere specified or included; food preparations of goods of headings 0401to 0404, not containing cocoa or containing less than 5 % by weight of cocoa calculated on a totally defatted basis, not elsewhere specified or included	54 702 824	1,12	65 236 639	1,27
	1701		59 703 452	1,22	63 760 283	1,24
	1201	1201 Soya beans, whether or not broken	59 122 599	1,21	58 531 020	1,13
	1507	Soya-bean oil and its fractions, whether or not refined, but not chemically modified	73 278 088	1,5	53 645 383	1,04
	2103	Sauces and preparations therefor, mixed condiments and mixed seasonings, mustard flour and meal and prepared mustard	50 002 905	1,02	52 758 881	1,02
	2303	Residues of starch manufacture and similar residues, beet-pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste, whether or not in the form of pellets	53 389 948	1,09	49 881 835	0,97
	2208	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol; spirits, liqueurs and other spirituous beverages	34 131 814	0,7	49 693 988	96'0
	0105	0105   Live poultry, that is to say, fowls of the species Gallus domesticus, ducks, geese, turkeys and guinea fowls	47 041 127	96'0	47 190 306	0,91

Source: SO SR Prepared by: MARD SR <sup>(1)</sup> The table contains the top 30 commodities by share

### **DEVELOPMENT OF ASSETS in agriculture** (EUR '000)

Table 29

Indicator	2018	2019	20201)	20211)	20221)	2023²)	Index 2023/2022
GFCF	562 057	667 177	573 763	690 427	931 406	1 115 376	119,8
of which – buildings and structures including residential buildings	118 899	146 304	138 652	134 814	122 076	157 148	128,7
of which, residential buildings	1 494	1 616	229	253	-2 711	332	-
- machinery and equipment	198 141	179 099	153 138	186 483	212 466	220 934	104,0
of which other machinery and equipment	196 977	178 120	151 339	183 137	210 654	218 862	103,9
- transport equipment	164 363	220 858	195 598	202 154	251 462	284 310	113,1
- cultivated biological resources	76 655	117 591	80 146	160 466	342 684	448 525	130,9
- intellectual property	3 999	3 325	6 229	6 510	2 718	4 459	164,1

Source: SO SR

### DEVELOPMENT OF ASSETS in production of food, beverages and tobacco products (EUR '000)

Indicator	2018	2019	20201)	20211)	20221)	2023 <sup>2)</sup>	Index 2023/2022
GFCF	308 214	298 339	361 457	326 444	335 835	515 224	153,4
of which – buildings and structures including residential buildings	76 805	32 271	100 638	85 157	104 901	132 757	126,6
of which residential buildings	355	7	139	108	110	95	86,4
- machinery and equipment	188 458	207 051	217 065	177 142	164 250	280 289	170,6
of which other machinery and equipment	185 475	204 842	214 858	173 632	160 038	275 368	172,1
- transport equipment	32 751	33 730	25 121	23 531	33 107	56 292	170,0
- cultivated biological resources	2749	15478	11650	11044	25613	33971	132,6
- intellectual property	7 451	9 809	6 983	29 570	7 964	11 915	149,6

Source: SO SR

<sup>1)</sup> Preliminary data

<sup>&</sup>lt;sup>2)</sup> Data from quarterly statistical reports Prepared by: MARD SR

<sup>1)</sup> Preliminary data

<sup>&</sup>lt;sup>2)</sup> Data from quarterly statistical reports

Table 30

CONSUMPTION OF N-P-K AND ORGANIC FERTILISERS IN SLOVAKIA

Indicator	Unit of measurement	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Area of application on agr. land*	ha agr. land	1 555 043	1 557 192	1 598 377	1 638 091	1 646 765	1 605 767	1 701 743	1694717	1 689 923	1 770 814	1 742 647
NPK use, total (N+P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O)	t	133 469	148 865	153 454	152 538	169 401	163 426	174 299	174 262	174 726	178 339	157 307
of which: N from nitrogen fertilisers	t	101 004	113 581	115 568	114 773	126 236	122 541	128 977	128 533	127 677	127 495	115 347
P from phosphorus fertilisers (in the form P <sub>2</sub> O <sub>5</sub> )	ţ	19 167	20 519	21 830	21 588	24 297	23 2 08	25 672	26 091	27 412	29 857	23 887
K from potassium fertilisers (in the form $K_2O$ )	t	13 297	14 764	16 056	16 177	18 869	17 677	19 650	19 638	19 638	20 987	18 074
NPK consumption, total (N+P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O)	kg/ha ag.l.	82'8	92'6	0'96	93,1	102,9	101,8	102,4	102,8	103,4	100,7	90,3
of which: N from nitrogen fertilisers	kg/ha ag.l.	0.59	72,9	72,3	70,1	6'9/	76,3	75,8	75,8	75,6	72,0	66,2
P from phosphorus fertilisers (in the form $P_2O_5)$	kg/ha ag.l.	12,3	13,2	13,7	13,2	14,8	14,5	15,1	15,4	16,2	16,9	13,7
K from potassium fertilisers (in the form $K_2O$ )	kg/ha ag.l.	8,6	9,5	10,0	10,0	11,2	11,1	11,6	11,6	11,6	11,9	10,4
Organic fertiliser consumption	t/ha ag.l.	3,3	3,4	3,1	3,0	2,5	2,8	2,6	2,7	2,6	2,5	2,6
Area of application on arable land*	ha ara. land	1 134 257	1143 767	1174796	1145 075	1 214 981	1 182 695	1 256 511	1196360	1 256 213	1 243 967	1 245 840
NPK consumption, total (N+P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O)	kg/ha ar.l.	115,3	127,3	127,6	130,2	133,6	135,5	135,2	142,7	136,8	140,9	124,8
of which: N from nitrogen fertilisers	kg/ha ar.l.	87,1	8'96	8'56	2.76	5'66	101,4	2'66	105,0	<i>L</i> '66	100,6	91,5
P from phosphorus fertilisers (in the form $P_2O_5)$	kg/ha ar.l.	16,7	17,8	18,4	18,6	19,5	19,5	20,1	21,5	21,6	23,8	19,0
K from potassium fertilisers (in the form $K_2O$ )	kg/ha ar.l.	11,5	12,7	13,5	13,9	14,8	14,7	15,4	16,2	15,5	16,6	14,2

Source: CCTIA
SO SR ceased monitoring of fertiliser use in 2010. Data is from CCTIA.
\* are for which the collected data is available
Notes: ag.l. - agricultural land, arl. - arable land
Prepared by: MARD SR

14. Additional tables

# N-P-K NUTRIENT BALANCE in selected crops (kg/ha)

Table 31

C										Conve	rsion fro	m oxide	es to elei	ments (k	kg/ha)	
Crop	Nutrient	2016	2017	2018	2019	2020	2021	2022	Nutrient	2016	2017	2018	2019	2020	2021	2022
	N	9,2	59,5	68,4	70,3	61,5	59,3	51	N	9,2	59,5	68,4	70,3	61,5	59,3	51,0
Winter wheat	P <sub>2</sub> O <sub>5</sub>	-25,1	-10,7	-7,1	-5,1	-8,9	-6,5	-7,8	Р	-11,0	-4,7	-3,1	-2,2	-3,9	-2,8	-3,4
	K₂O	-40,5	-22,2	-17,8	-11,7	-15,2	-13,5	2,4	K	-33,6	-18,4	-14,8	-9,7	-12,6	-11,2	2,0
	N	22,4	16,8	38,1	27,1	23,7	29,4	18,6	N	22,4	16,8	38,1	27,1	23,7	29,4	18,6
Spring barley	P <sub>2</sub> O <sub>5</sub>	-11,6	-13,5	-3,5	-6,9	-9,2	-6,9	-15,1	Р	-5,0	-5,9	-1,5	-3,0	-4,0	-3,0	-6,6
	K₂O	-32,4	-31,7	-15,4	-13,4	-16,6	-16,9	3,4	K	-26,9	-26,3	-12,8	-11,1	-13,8	-14,0	2,8
	N	39,5	21,1	-88,6	9,5	52,9	56,4	66,9	N	39,5	21,1	-88,6	9,5	52,9	56,4	66,9
Grain maize	P <sub>2</sub> O <sub>5</sub>	-20,2	-29,5	-80,3	-34,3	-8,9	-6,7	-7,6	P	-8,8	-12,9	-35,0	-15,0	-3,9	-2,9	-3,3
	K₂O	-9,3	-20,2	-117,4	-47,4	-23,2	-22,4	15,5	K	-7,7	-16,8	-97,5	-39,3	-19,3	-18,6	12,8
	N	14,8	24,1	22,5	54,1	50,7	36,6	64,3	N	14,8	24,1	22,5	54,1	50,7	36,6	64,3
Sugar beet	P <sub>2</sub> O <sub>5</sub>	16,9	20	16,2	28,6	30,9	33,1	55,8	P	7,4	8,7	7,1	12,5	13,5	14,5	24,4
	K₂O	-96,8	-75	-115	-50,6	-39,8	-48,6	-20,9	K	-80,4	-62,3	-95,5	-42,0	-33,0	-40,4	-17,4
	N	108,9	51,9	94,8	54	67,2	46,7	24,5	N	108,9	51,9	94,8	54,0	67,2	46,7	24,5
Potatoes	P <sub>2</sub> O <sub>5</sub>	92,2	46,5	57,3	51,6	74,2	49,9	66	P	40,2	20,3	25,0	22,5	32,4	21,8	28,8
	K₂O	45,7	-7,4	46,8	14,1	22,5	13,5	28,8	K	38,0	-6,1	38,8	11,7	18,7	11,2	23,9
	N	29,1	79,6	99,9	98,3	94,3	98,7	82,2	N	29,1	79,6	99,9	98,3	94,3	98,7	82,2
Rapeseed	P <sub>2</sub> O <sub>5</sub>	-36,5	-16,1	-13,3	-5,2	-8,4	-1,2	-8,6	P	-15,9	-7,0	-5,8	-2,2	-3,7	-0,5	-3,8
	K₂O	-49,2	-26,7	-64,8	-16,9	-19,5	-16,6	8,4	K	-40,8	-22,1	-53,8	-14,0	-16,1	-13,8	7,0
	N	32,7	32	38,3	18,3	22,6	19,8	31	N	32,7	32,0	38,3	18,3	22,6	19,8	31,0
Sunflower	P <sub>2</sub> O <sub>5</sub>	-9,9	-9,7	-14,2	-11,6	-8,4	-14,7	-5,6	P	-4,3	-4,2	-6,2	-5,1	-3,7	-6,4	-2,4
	K₂O	-58,2	-52,6	-32,6	-83,8	-81,8	-86,6	-25,9	K	-48,3	-43,7	-27,1	-69,6	-67,9	-71,8	-21,5
	N	7,5	18,4	6,3	13,5	22,7	43,4	27,7	N	7,5	18,4	6,3	13,5	22,7	43,4	27,7
Slovak average	P <sub>2</sub> O <sub>5</sub>	-20,9	-16,7	-39,2	-15,3	-9,7	-2,4	-8,7	P	-9,1	-7,3	-17,1	-6,7	-4,2	-1,0	-3,8
	K₂O	-46,1	-40,5	-95,5	-42,5	-33,8	-16,1	-17,5	K	-38,2	-33,6	-79,2	-35,2	-28,1	-13,4	-14,5

Source: CCTIA Prepared by: MARD SR **GREEN REPORT 2023** 14. Additional tables

# PRODUCTION CAPACITY OF THE FOOD INDUSTRY IN 2023

Table 32

Commodity	Meas. unit	Capacity	Production	% utilisation	YOY change in capacity utilisation (% points)
Alcoholic beer excluding mixed beverages	hl	354 503	229 901	64,9	18,4
Pasta	ton	48 908	17 730	36,3	36,0
Chocolate confectionery	ton	10 091	4 835	47,9	-16,8
Poultry products	ton	40 680	27 280	67,1	18,2
Fresh bread	ton	26 389	7 495	28,4	54,0
Drinking milk	ton	154 929	73 704	47,6	21,6
Acidified milk products incl. yoghurts	ton	48 333	45 798	94,8	10,6
Spirits	la.	90 170	73 382	81,4	-4,1
Butter 1)	ton	69 545	64 333	92,5	3,9
Meat products	ton	494 370	341 386	69,1	22,6
Carbonated sweetened non-alcoholic beverages	hl	82 010	12 769	15,6	-3,5
Fresh bakery products	ton	4 822 386	4 685 416	97,2	26,7
Cattle slaughter	t (live weight)	2 564 521	2 453 633	95,7	-10,1
Poultry slaughter	t (live weight)	492 485	482 649	98,0	-0,5
Pig slaughter	t (live weight)	1 804 131	1 397 368	77,5	-2,7
Malt production	ton	199 800	180 085	90,1	-7,2
Preserved vegetables (excl. pickles)	ton	16 361	10 765	65,8	0,5
Preserved pickles	ton	7 800	4 663	59,8	10,8
Cheese, total, excluding processed cheeses	ton	437 292	233 833	53,5	0,9
Durable pastry	ton	39 217 924	15 787 015	40,3	-0,1
Grape wine production	hl	6 506 667	2 729 709	42,0	-11,8
Wheat milling products	ton	30 544	23 486	76,9	-0,8
Rye milling products	ton	56 810	47 397	83,4	-2,1

Source: Potrav report (MARD SR) and calculations by MARD SR  $^0$  from 80% to 90% fat, max. 16% water Prepared by: MARD SR

# SETTLEMENT OF LAND OWNERSHIP IN 2022

SETTLEMENT OF LAND OWNERSHIP IN 2022													Table 33
	2003	2010	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Difference 2023-22
RENEWAL OF LAND REGISTRATION													
Total number of cadastral areas	3 525	3 537	3 559	3 559	3 559	3 559	3 559	3 559	3 559	3 559	3 559	3 559	0
of which, managed by state authorities for land consolidation	1195	1 214	1214	1214	1214	1214	1 214	1 214	1 214	1 218	1 218	1 218	0
under Act No 330/1991 of the Slovak National Council, as amended	759												
under Act No 180/1995, as amended													
- RRLP (ROEP) in preparation	554												
- incorporation of registers for built-up areas in municipalities, where simplified registers of original state were created for unbuilt-up areas of municipalities in the previous period, pursuant to Act No 330/1991 of the Slovak National Council.	641												
Approved registers, total	1 251												
Total number of registered registers (MA SR, GCCA SR)	1162	2 617	3 409	3 503	3 519	3 522	3 526	3 535	3 536	3 536	3 536	3 537	1
Registered registers for built-up areas	356												
SETTLEMENT OF OWNERSHIP  In rectifution proceedings under Art No 229/1991 as amended													
													T
- number of decisions issued	36 780	42 776	44 176	44 906	45 027	45 195	45 429	45 579	46 886	47 421	48 065	48 627	295
- land ownership recognised (area in ha)	204 121	207 516	209 302	210 558	210 582	210 604	210 624	210 655	210 675	210 860	210 997	211 343	346
- land not returned due to legal impediments, for which eligible persons are entitled to financial compensation or land in state ownership (area in ha)	30 084	31 364	31 652	32 438	32 642	32 935	32 971	33 000	33 053	33 099	33 125	33 145	20
Within landowners' associations number of decisions issued	10 740	11 688	11 990	12 225	12 291	12 365	12 385	12 409	12 461	12 470	12 481	12 488	7
- land ownership recognised (area in ha)	116 370	123 108	123 612	124 275	124 301	124 312	124 318	124 320	124 323	124 327	124 330	124 162	-168
- land not returned due to legal impediments (resolved by compensation) (area in ha)	15 890	17 101	17 172	17 334	17 348	17 355	17 359	17 441	17 599	20 158	20 158	20 164	9
In restitution proceedings under Act No 503/2003, as amended													0
- number of decisions issued	·	24 032	29 867	32 050	33 060	33 724	34 376	34 891	35 613	36 111	36 599	36 937	338
- land ownership recognised (area in ha)	·	11 078	13 419	13 861	14 094	14 209	14 282	14 351	14 353	14 365	14 395	14 466	71
- compensation awarded for land (area in ha)	·	6 007	9 782	10 269	10 455	13 732	13 848	13 937	14 022	14 051	14 441	14 472	31
Within landowners' associations number of decisions issued	·	4 582	6 2 2 9	6 4 91	6989	7 086	7 456	7 683	8 003	8 226	8 4 9 8	8 677	179
- land ownership recognised (area in ha)	·	7.771	9 5 9 8	9 719	9 805	0986	6 8 8 9 5	9 964	10 066	10 150	10 180	10 181	-
- right to compensation awarded for land (area in ha)	·	1 939	2 051	2 058	2 094	2 518	2 809	2 823	2 855	2 856	2 894	2 987	93

Table 33 continue

LAND CONSOLIDATION	2003	2010	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Difference 2023-22
Land consolidation projects funded from the state budget													
of which: due to an ecologically damaged landscape													
in Žiarska kotlina	28	20	41	6	2	3	0	0	0	0	0	0	0
in the High Tatras and Spišská Magura	99	52	36	33	27	20	13	8	7	5	5	4	<b>-</b>
other	10	4	0	0	0	0	0	0	3	3	3	3	0
Tokaj area									8	8	8	8	0
Entered in the Land Register after the completion of land consolidation	12	30	26	64	74	83	93	98	66	100	100	101	-
Land consolidation projects covered by the state budget, total	106	106	106	106	106	106	106	106	117	117	117	117	0
Land consolidation projects funded from EU funds													0
- SAPARD programme	0	0	0	0	0	0	0	0	0	0	0	0	0
- SOP programme	0	0	0	0	0	0	0	0	0	0	0	0	0
- RDP SR 2007-2020		245	80	19	6	4	-	-	0	0	0	0	0
- RDP SR 2014-2020									130	130	130	130	0
Land consolidation projects funded from EU funds, registered in cadastre		29	232	293	303	308	311	311	312	312	312	312	0
Land consolidation projects funded from EU funds, total		312	312	312	312	312	312	312	442	442	442	442	0
Land consolidation projects ongoing, total	94	321	130	19	41	27	14	80	148	147	147	174	27
Land consolidation projects registered in cadastre, total	12	6	288	357	377	391	404	409	411	412	412	417	5
Land consolidation projects, total	106	418	418	418	418	418	418	418	226	526	529	591	32
Agricultural land allocated to owners for use as part of the settlement of user rights to land, using simplified and accelerated procedures for the settlement of ownership and utilisation relationships to land under Sec. 15(1) of Act No. 330/1991 on land consolidation (ha)	283 132	0	0	0	0	0	0	0	0	0	0	0	0
of which: original land	41 864												
for substitute use	241 268					_							

Source: MARD, requested data Prepared by: MARD SR

### DEVELOPMENT OF THE AVERAGE REGISTERED NUMBER OF EMPLOYEES

in agriculture and selected sectors of economic activity (natural persons)

in organisations with 20 or more employees

Table 34

Sector		Average regi	istered number o	f employees (nat	ural persons)		Index
Sector	1989¹	2010	2015	2020	2022	2023	2023/22
Agriculture (plant & animal prod.)	350 956	32 750	28 377	22 355	17 615	17 547	99,6
Production of food and beverages	65 049	30 595	28 398	30 825	31 607	31 266	98,9
of which: food production	:	:	24 571	27 157	28 097	27 818	99
Forestry, logging	40 696	5 020	4 870	4 674	4 285	4 240	98,9
Construction industry	221 798	47 336	34 477	33 544	31 670	31 091	98,2
Industry, total	727 293	365 598	393 685	366 336	402 435	393 848	97,9
Transport and storage	158 047	90 763	101 124	104 004	99 386	97 145	97,7
Financial and insurance activities	9 484	31 553	32 154	31 422	29 732	29 453	99,1
Textile production	47 801	4 022	4 753	4 244	3 738	3 606	96,5
Economic activities, total	2 504 079	1 250 925	1 338 903	1 402 686	1 396 659	1 390 402	99,6

Source: Employees and average monthly wages, SO SR

<sup>&</sup>lt;sup>1)</sup> Selected economic indicators and employees in agriculture, SO SR Prepared by: MARD SR

Table 35

**DEVELOPMENT OF AVERAGE MONTHLY WAGES** 

in agriculture and selected sectors of economic activity (natural persons) in organisations with 20 or more employees

Sector	Average monthly wage (SKK)	Wage parity	Average monthly wage (EUR) 2010	Wage parity	Average monthly wage (EUR) 2015	Wage parity	Average monthly wage (EUR) 2020	Wage parity	Average monthly wage (EUR)	Wage parity	Average monthly wage (EUR) 2023	Wage parity
Agriculture (plant & animal prod.)	3 410	106,8	601	71,5	747	75,2	1 075	80,7	1213	9,67	1 321	78.7
Production of food and beverages	3 024	94,7	732	87,1	841	84,7	1 233	92,5	1366	89,7	1 517	90,4
of which: food production			:		794	80,0	1 110	83,3	1 219	80	1337	79,6
Forestry, logging	3117	97,6	875	104,2	1046	105,3	1 128	84,7	1716	112,7	1897	113
Construction industry	3 408	106,7	839	99,9	1 024	103,1	1 213	91,1	1 372	90,1	1 485	88,4
Industry, total	3 199	100,2	848	101,0	1 042	104,9	1302	97,7	1530	100,5	1679	100
Transport and storage	3 126	97,2	762	7'06	857	86,3	1156	86,8	1353	88,8	1 505	9,68
Financial and insurance activities	3117	9,7,6	1485	176,8	1 723	173,5	2 013	151,1	2 303	151,2	2 463	146,7
Textile production	2 730	85,5	581	69,2	742	74,7	1014	76,1	1202	78,9	1338	79,7
economic activities, total	3 194	100,0	840	100,0	666	100,001	1 332	100,0	1523	100	1 679	100

Source: Employees and average monthly wages, SO SR <sup>9</sup> Selected economic indicators and employees in agriculture, SO SR Prepared by: MARD SR

Table 36

SELECTED AGRICULTURAL INDICATORS OF THE EU-27 IN 2022

		Utilised agricultural land	ultural land	Gross va	Gross value added at producer prices	prices		Labour force in agriculture*	in agricultur	* <sub>d</sub> ,	Agricultural income – indicator A
Country	in 1000 ha	% from EU-27	% of the total area of the country	EUR	GVA in EUR per ha. u.a.l.	% from EU-27	in 1000 AWU	AWU per 100 ha u.a.l.	% from EU-27	% of total employment in the country	2021 index 2015=100
EU-27	156 658,5	100,0	38,0	215 599,1	1376,2	100,0	7 611,00	4,9	100	3,6	143,8
Belgium	1354,3	6'0	44,2	2 873,3	2 121,7	1,3	51,6	3,8	0,7	1	107,3
Bulgaria	4 491,9	2,9	40,5	2 893,7	644,2	1,3	143,2	3,2	2	4,2	225,7
Czechia	3 455,4	2,2	43,8	2 508,8	726,1	1,2	6'26	2,7	1,2	1,7	126,9
Denmark	2 614,6	1,7	6'09	3 504,0	1 340,2	1,6	464	1,9	9'0	1,6	187,2
Germany	16 715,3	10,7	46,7	30 030,2	1 796,6	13,9	463,8	2,8	9	1	178,9
Estonia	995,1	9,0	21,9	465,4	467,6	0,2	16,5	1,7	0,2	2,4	151,7
Ireland	4 883,6	3,1	8'69	4 940,2	1 011,6	2,3	156,9	3,2	7	6,2	170,6
Greece	4 553,8	2,9	34,6	6 497,0	1 426,7	3,0	320,8	7	4,2	2'9	143,7
Spain	23 229,8	14,8	46,6	28 498,4	1226,8	13,2	2'208	3,5	11	3,9	97,8
France	27 814,2	17,8	50,7	40 492,5	1 455,8	18,8	9'002	2,5	6	2,3	133,6
Croatia	1563,0	1,0	27,6	1 637,6	1047,8	8'0	173,1	1,11	2,2	10	175,6
Italy	12 598,2	8,0	41,7	36 693,2	2 912,6	17,0	646,7	7,5	13,1	3,8	122,6
Cyprus	111,9	0,1	12,1	335,2	2 994,6	0,2	1'81	16,2	0,2	3,9	116,1
Latvia	1 930,9	1,2	29,9	730,4	378,3	0,3	58,8	3	0,8	9'9	166
Lithuania	2 924,6	1,9	44,8	1 617,6	553,1	8'0	116,4	4	1,6	8,1	156,6
Luxembourg	130,7	0,1	50,3	175,4	1 342,8	0,1	5,4	2,6	0	1,2	151,1
Hungary	4 670,6	3,0	50,2	3 095,5	662,8	1,4	277,6	5,9	4	5,9	135,2
Malta	11,2	0,0	35,4	51,1	4 568,0	0,0	5,4	47,9	0,1	1,9	63,7
Netherlands	1 796,3	1,1	48,1	12 023,2	6 693,5	2,6	159,8	8,9	2	1,6	88,4
Austria	2 669,8	1,7	31,8	4 479,9	1 678,0	2,1	119,2	4,5	1,6	2,6	144,7
Poland	14 405,7	9,2	46,2	13 578,3	942,6	6,3	1 427,50	6,6	18,4	8,2	195,2
Portugal	3 641,7	2,3	40,9	3 151,6	865,4	1,5	220	9	2,9	4,3	123,2
Romania	12 502,5	8,0	52,4	9 944,8	795,4	4,6	1 047,00	8,4	13,1	12	130,5
Slovenia	488,4	0,3	24,1	524,0	1 072,9	0,2	71,2	14,6	6'0	6,5	97,6
Slovakia	1 889,8	1,2	38,5	870,2	460,5	0,4	39,5	2,1	0,5	1,6	169
Finland	2 194,2	1,4	6,5	1 434,2	653,6	0,7	63,2	2,9	0,8	2,3	146,4
Sweden	3 021,4	1,9	6,8	2 553,5	845,1	1,2	56,7	1,9	0,7	1,1	145,1

Source: Eurostat, on-line data - June 2024; "AWU - Annual work unit (the number of people working full-time during the whole reporting period); u.a.l. - utilised agricultural land; Prepared by: MARD SR

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## AGRICULTURAL PRODUCTION AND SUPPORT IN THE EU-27 IN 2022

Table 37

Complex		Production			Support	
Country	EUR million	% EU - 27	€/ha	EUR million	% EU - 27	€/ha
EU-27	531 874	100,0	3 395,1	53 263	100,0	340,0
Belgium	11 703	2,2	8 641,4	652	1,3	481,6
Bulgaria	6 467	1,2	1 439,7	1 262	2,5	281,0
Czechia	7 712	1,4	2 231,7	1 448	2,9	419,0
Denmark	14 094	2,6	5 390,4	852	1,7	325,9
Germany	76 223	14,3	4 560,1	8 417	16,7	503,5
Estonia	1 607	0,3	1 615,3	251	0,5	252,5
Ireland	12 859	2,4	2 633,0	1 942	3,9	397,6
Greece	13 899	2,6	3 052,2	2 723	5,4	598,0
Spain	62 222	11,7	2 678,5	6 053	12,0	260,6
France	95 911	18,0	3 448,3	8 241	16,3	296,3
Croatia	3 166	0,6	2 025,4	527	1,0	337,0
Italy	71 402	13,4	5 667,7	4 589	9,1	364,3
Cyprus	825	0,2	7 373,6	75	0,1	670,1
Latvia	2 271	0,4	1 176,0	356	0,7	184,1
Lithuania	4 908	0,9	1 678,2	206	0,4	70,3
Luxembourg	597	0,1	4 570,1	78	0,2	594,6
Hungary	10 044	1,9	2 150,5	1 711	3,4	366,4
Malta	136	0,0	12 120,8	24	0,0	2 102,0
Netherlands	35 913	6,8	19 993,4	1 107	2,2	616,5
Austria	10 536	2,0	3 946,6	1 718	3,4	643,6
Poland	38 871	7,3	2 698,3	3 832	7,6	266,0
Portugal	10 423	2,0	2 862,2	1 049	2,1	288,2
Romania	22 219	4,2	1 777,1	2 535	5,0	202,7
Slovenia	1 592	0,3	3 260,6	308	0,6	630,4
Slovakia	2 983	0,6	1 578,2	508	1,0	268,7
Finland	5 257	1,0	2 395,9	1 673	3,3	762,5
Sweden	8 035	1,5	2 659,4	1 127	2,2	373,2

Source: Eurostat, Economic accounts for agriculture - values at current prices [aact\_eaa01] online data 2024

online data 2024 Prepared by: MARD SR

### MAIN CROP AND ANIMAL COMMODITIES PRODUCED IN THE EU-27 IN 2022 ('000 t)

Table 38

Country	cereals incl. rice	wheat	barley	grain maize	potatoes	oil crops	cattle	pigs	poultry
EU-27	270 848	134 306	51 992	52 971	47 465	:	6 640	22 066	:
Belgium	2 780	1 852	373	500	3 578	37	238	1 032	449
Bulgaria	9 791	6 448	625	2 554	172	2 453	7	82	120
Czechia	8 218	5 189	1 877	639	655	1 326	69	209	170
Denmark	9 464	4 165	4 123	61	2 618	889	119	1 609	152
Germany	43 521	22 587	11 207	3 837	10 683	4 600	987	4 486	1 543
Estonia	1 529	854	489	0	73	223	8	43	:
Ireland	2 486	701	1 550	0	368	77	621	333	171
Greece	3 206	1 203	323	1 341	392	1164	36	75	249
Spain	19 296	6 509	7 030	3 590	1 882	1 157	732	5 066	1 639
France	59 928	34 632	11 285	10 877	8 067	6 760	1 361	2 152	1504
Croatia	3 043	971	322	1 642	103	397	41	81	72
Italy	14 338	6 610	1 158	4 697	1 333	1 225	747	1 239	1 213
Cyprus	60	33	27	0	90	0	5	40	27
Latvia	3 244	2 539	282	0	130	360	15	36	37
Lithuania	5 624	4 483	522	100	226	910	42	67	86
Luxembourg	171	86	38	1	15	8	10	13	0
Hungary	9 056	4 355	1 591	2 766	199	1 927	26	428	480
Malta	0	0	0	0	7	0	1	4	4
Netherlands	1 647	1 163	283	177	6 916	:	422	1 684	:
Austria	5 207	1 713	767	2 114	686	421	210	478	144
Poland	34 988	13 195	2 782	8 345	6 031	3 648	541	1 795	2 730
Portugal	1 020	62	28	718	320	12	104	349	371
Romania	18 861	8 684	1 707	8 037	1 346	3 584	36	267	491
Slovenia	576	151	112	278	58	16	36	21	74
Slovakia	3 383	2 048	556	684	131	:	8	52	77
Finland	3 590	844	1 426	0	533	60	84	170	147
Sweden	5 823	3 229	1 510	12	852	436	135	254	176

Source: Eurostat, on-line data - June 2024

Note: : = data unavailable Prepared by: MARD SR

GROSS PRODUCTION, INTERMEDIATE CONSUMPTION AND GROSS VALUE ADDED for the production of food, beverages and tobacco products in the EU-27, € million cutp.

Table 39

						,	-		-	
:		Gross production	duction			Turn	Turnover		Gross value added per employee in 2021, in thousands €	lded per em- in thousands €
Krajina	2020	2021	Index 2022/2021	% EU-27	2020	2021	Index 2022/2021	% EU-27	in food production	in beverage production
EU-27 (since 2020)	1 029 334	1 105 339	107,4	100	1 184 342	1 457 247	123	100	51,8	107,1
Belgium	44 840	42 707	95,2	3,9	46 317	71 487	154,3	4,9	89,7	
Bulgaria	2 909	6 694	113,3	9,0	7 680	10 044	130,8	0,7	15,1	24,8
Czechia	14 470	14 413	966	1,3	16 634	20 546	123,5	1,4	30,7	61,8
Denmark	20 784	21 161	101,8	1,9	28 718	33 253	115,8	2,3	79,5	103
Germany	197 033	201 451	102,2	18,2	232 375	283 021	121,8	19,4	51,5	89
Estonia	1 854	2 004	108,1	0,2	2 315	2 518	108,8	0,2	29,2	54,5
Ireland	25 623	23 986	93'6	2,2	77 677	33602,64	120,1	2,3	154,7	
Greece	16 006	15 894	99,3	1,4	18 244	20 388	111,8	1,4	26,7	63,6
Spain	125 447	137 227	109,4	12,4	142 798	169 957	119	11,7	54,5	92,7
France	164 359	192 748	117,3	17,4	227 987	255 322	112	17,5	61,7	145,7
Croatia	4 759	4 158	87,4	0,4	5198	6 454	124,2	0,4	22,4	43,4
Italy	143 526	156 005	108,7	14,1	158 440	182 642	115,3	12,5	69,2	123,4
Cyprus	1425	1 630	114,3	0,1	1 855	2 102	113,4	0,1	30,9	44,3
Latvia	2156	2 040	94,6	0,2	2177	2 600	119,4	0,2	20,3	25,6
Lithuania	4 790	4 728	7,86	9,0	4 975	6 446	129,6	0,4	24	42,1
Luxembourg		882		0,1	932,86	1028,9	109,9	0,1	50,1	89,9
Hungary	11 810	13 306	112,7	1,2	15 032	19 464	129,5	1,3	25,9	39,4
Malta	486	462	95	0	439,08				29,3	45,5
Netherlands	74 077	72 995	98,5	9,9	82 092	105 307	128,3	7,2	103,5	153,1
Austria	23 513	26 484	112,6	2,4	29153	37 273	127,9	2,6	62,4	278,9
Poland	66 574	74 022	111,2	6,7	77 865	609 96	124,1	9,9	27,7	72,5
Portugal	18 026	16 827	93,3	1,5	18 977	23 219	122,4	1,6	28,7	59,1
Romania	23 103	14 034	2'09	1,3	17 717	19 310	109	1,3	13,2	40,4
Slovenia	2 199	2 319	105,5	0,2	2 640	3 185	120,6	0,2	41,4	70,6
Slovakia	4 433	3 686	83,2	0,3	4 477	6 466	144,4	0,4	27	
Finland	11 295	10 754	95,2	1	11 500	11 487	6666	0,8	67,3	129,4
Sweden	17 081	19 095	111,8	1,7275	22 350	24 140	108	1,6565	74,9	165,9

Source: Eurostat, 2024; : data unavailable; Prepared by: MARD SR

### **EMPLOYMENT AND GROSS FIXED CAPITAL FORMATION**

for the production of food, beverages and to bacco products in the  $\hbox{EU-}27$  Table 40

Krajina	Employme	nt ('000 persons	s) (ESA 2010 me	thodology)	Gross fixed	d capital format million cu.p.	ion in EUR
Majiria	2021	2022	Index 2022/2021	% EU-27 year 2022	2020	2021	Index 2021/2020
EU-27 (since 2020)	4 293,5	4 292,6	100,0	100,0	:	:	:
Belgium	93,7	97,6	104,1	2,3	2 501,0	2 685,4	107,4
Bulgaria	80,0	78,0	97,6	1,8	398,0	297,2	74,7
Czechia	101,9	101,1	99,2	2,4	788,0	628,3	79,7
Denmark	56,3	55,6	98,7	1,3	773,0	651,2	84,2
Germany	900,0	904,7	100,5	21,1	6 746,0	5 582,8	82,8
Estonia	13,2	13,3	101,0	0,3	96,0	118,2	123,1
Ireland	52,6	53,4	101,5	1,2	:	176,5	:
Greece	130,8	132,4	101,2	3,1	473,0	438,2	92,6
Spain	425,9	436,8	102,6	10,2	4 963,0	4 158,2	83,8
France	683,5	676,9	99,0	15,8	8 052,0	8 218,6	102,1
Croatia	53,1	53,4	100,5	1,2	185,0	151,0	81,6
Italy	435,5	438,9	100,8	10,2	4 620,0	4 426,3	95,8
Cyprus	13,5	13,8	102,1	0,3	62,0	47,3	76,3
Latvia	21,3	20,3	95,5	0,5	136,0	79,4	58,4
Lithuania	38,6	38,8	100,5	0,9	169,0	219,5	129,9
Luxembourg	4,6	4,7	101,9	0,1	40,0	38,2	95,5
Hungary	100,7	100,7	100,0	2,3	842,0	990,7	117,7
Malta	3,0	3,0	100,1	0,1	29,0	9,0	30,9
Netherlands	134,9	133,3	98,8	3,1	:	1 824,0	:
Austria	82,2	84,9	103,3	2,0	1 112,0	952,4	85,6
Poland	450,8	439,4	97,5	10,2	3 127,0	2 745,9	87,8
Portugal	94,9	96,5	101,8	2,2	812,0	612,9	75,5
Romania	168,2	167,3	99,4	3,9	1 006,0	929,7	92,4
Slovenia	17,6	18,5	104,7	0,4	116,0	144,6	124,7
Slovakia	38,7	40,4	104,4	0,9	379,0	267,5	70,6
Finland	34,7	35,2	101,5	0,8	432,0	454,2	105,1
Sweden	61,2	53,6	87,6	1,2	608,0	694,8	114,3

Source: Eurostat; June 2023 : data unavailable Prepared by: MARD SR



