



**REPORT ON THE SITUATION
OF AGRICULTURE
IN THE REPUBLIC OF SERBIA
IN 2022**

BOOK I

Horizontal Analysis



Republic of Serbia

Ministry of Agriculture, Forestry
and Water Management



AUTHORS:

SECTOR FOR AGRICULTURAL POLICY

Milica Jevtić, B.Sc. Econ. - editor and coordinator

Book I:

- **Chapter 1:** Milica Jevtić, B.Sc. Econ.
STIPS: Zorica Kukić, B.Sc. Agric. Eng.
- **Chapter 2:** Tamara Đuričanin, B.Sc. Agric. Eng.
- **Chapter 3:** Mirjana Bojčevski, M.Sc.
- **Chapter 4:** Milica Jevtić, B.Sc. Econ.
IPARD: IPARD Program Management Department
Subchapter 4.4: Zorica Kukić, B.Sc. Agric. Eng.
- **Chapter 5:** Dragana Drobnjak, M.Eng.
- **Chapter 6:** Milica Jevtić, B.Sc. Econ.

Book II:

- **Chapter 1.1:** Ljiljana Duduković, B.Sc. Agric. Eng.
- **Chapter 1.2:** Tatjana Miranović Drobnjak, B.Sc. Agric. Eng.
- **Chapter 1.3:** Tatjana Miranović Drobnjak, B.Sc. Agric. Eng.
- **Chapter 1.4:** Milan Ćuprić, B.Sc. Agric. Eng.
- **Chapter 1.5:** Vesna Radojičić, B.Sc. Agric. Eng.
- **Chapter 1.6:** Vesna Radojičić, B.Sc. Agric. Eng.
- **Chapter 1.7:** Vojkan Stojanović, B.Sc. Agric. Eng.
- **Chapter 2.1:** Mirko Novaković, B.Sc. Agric. Eng.
- **Chapter 2.2:** Mirko Novaković, B.Sc. Agric. Eng.
- **Chapter 2.3:** Tomislav Topalović, D. Vet. Med.
- **Chapter 2.4:** Tomislav Topalović, D. Vet. Med.
- **Chapter 2.5:** Tomislav Topalović, D. Vet. Med.
- **Chapter 2.6:** Tomislav Topalović, D. Vet. Med.

June, 2023

INTRODUCTION BY THE MINISTER

Dear readers,

It is our great pleasure and honour to present to the public the tenth "Green Book", or the **Report on the Situation of Agriculture in the Republic of Serbia in 2022**. It started as an idea to present complete annual statistics in one place through an overview of the agricultural sector, and today this report is a serious analytical document, cited in many sector overviews.

Starting in 2013, the Ministry of Agriculture, Forestry and Water Management has been annually publishing on its website a comprehensive report on the situation of the agricultural sector in the previous calendar year, striving each year to introduce novelties in the document, including new areas and raising new questions. In this way, the report includes an overview of the sector through the analysis of FADN indicators and its comparison with the agricultural economy of the European Union, a chapter on climate change, reforms of the Common Agricultural Policy, the European Green Deal, and other relevant topics.

In this sense, in the "Green Book 2022" special attention is paid to the expected trends in the market of agricultural products in the European Union in 2023, bearing in mind significant market disturbances in previous years.

The General Directorate for Agriculture and Rural Development (DG AGRI) regularly publishes similar analytical documents at the level of the European Union, which speaks of the importance of monitoring sectoral trends and regularly informing the public. The European Commission has confirmed that the "Green Book" is a good document when it praised Serbia's initiative and the quality of the document in the first years of its publication.

We are proud that by publishing this report every year we contribute to informing our farmers and the general public about the situation of the agricultural sector in a detailed and comprehensive way, and we will continue to improve the document in the coming years.

With respect,

Minister

Jelena Tanasković

Table of Contents

INTRODUCTION	6
1. SITUATION IN AGRICULTURE	7
1.1. Macroeconomic environment and importance of the agricultural and food sector	7
1.2. Structure of agricultural production.....	14
1.2.1. Utilized agricultural area.....	14
1.2.2. General indicators of agricultural production.....	15
1.2.3. Prices of agricultural products.....	19
2. FOREIGN TRADE OF AGRICULTURAL AND FOOD PRODUCTS.....	23
2.1. Total exchange	23
2.2. Exchange structure.....	24
2.3. Main products in trade	26
2.4. Major trading partners	29
3. THE FARM ACCOUNTANCY DATA NETWORK OF THE REPUBLIC OF SERBIA (FADN) AND ANALYSIS OF FINANCIAL DATA IN SERBIA	32
3.1. FADN sample, data collection and results	33
3.1.1. FADN sample and population.....	33
3.1.2. Data collection within the FADN research.....	34
3.1.3. Standard results – overview and structure of indicators	35
3.2. Analysis of financial data in Serbia.....	36
3.2.1. Farm Net Value Added.....	36
3.2.2. Share of subsidies in the farm NVA.....	38
3.2.3. Net value added per annual work unit	40
3.2.4. Farm Net Income	42
3.2.5. Farm net income per engaged family labour force.....	45
4. AGRICULTURAL POLICY	46
4.1. Framework of the agricultural and the rural development policies	46
4.2. Measures of agricultural and rural development policies in 2022	48
4.3. Budget funds to support agriculture and rural development	50
4.3.1. Budget of the Ministry of Agriculture, Forestry and Water Management	50
4.3.2. Funds allocated for subsidies in agriculture and rural development.....	50
4.3.3. Realized funds for subsidies in agriculture and rural development.....	51
4.4. Support at the provincial and local level.....	56
5. CLIMATE CHANGES IN AGRICULTURE.....	57
6. SITUATION AND EXPECTATIONS IN THE MARKET OF AGRICULTURAL PRODUCTS IN THE EU IN 2023.....	59
6.1. ARABLE CROPS.....	60
6.1.1. Cereals.....	61
6.1.2. Oilseeds.....	62
6.1.3. Sugar	63
6.2. SPECIALIZED CROPS	64
6.2.1. Olive oil.....	65
6.2.2. Wine	66
6.3. MEAT.....	71
6.3.1. Beef and veal.....	71
6.3.2. Pigmeat.....	72
6.3.3. Poultry.....	73
6.4. MILK AND DAIRY PRODUCTS.....	75
6.4.1. Milk.....	75

6.4.2. Dairy products	76
7. ANNEXES	80
1. SITUATION IN AGRICULTURE	80
2. FOREIGN TRADE	90
3. AGRICULTURAL POLICY	92

INTRODUCTION

The monitoring and analysis of individual, particularly sensitive sectors of the economy, became imperative in the previous decade, and it was especially evident in the previous few years, which were marked by extremely significant market disturbances, rooted in a scope of health, economic and social causes.

The publication of the Report on the Situation of Agriculture in the Republic of Serbia ("Green Book"), in addition to being a legal obligation, is primarily the result of the enthusiasm and desire of the Ministry of Agriculture, Forestry and Water Management to offer the expert and the general public a comprehensive analytical document that presents the sectors of Serbian agriculture during the previous year. For ten years in a row, the Ministry has published this document on its website by June 30 for the previous calendar year.

As in the previous years, the "Green Book 2022" has two parts - Book I provides a macroeconomic overview of the sector, while Book II analyses the state of the most important agricultural markets in 2022. Within the framework of the multi-year established structure, the "Green Book" includes new chapters every year, focusing on some new topics, all with the aim of broadening the readers' information from various aspects. In this sense, this year's "Green Book 2022" includes a section on climate change and the expectation in the market for agricultural products in the European Union in 2023.

The presentation of the agriculture sector is based on official statistical data for 2022, shown in relation to the previous year, 2021, as well as in relation to the average of the previous five-year period (2017-2021), to absorb any possible annual deviations of the results, while the attached tables with statistical data, as well as most of the graphs in the text, contain ten-year time series (2013-2022).

The "Green Book 2022" is largely based on statistical data, produced by the Statistical Office of the Republic of Serbia. Other sources of statistics are relevant administrative sources – individual registers of the Ministry and other state bodies, the National Bank of Serbia, Eurostat, DG AGRI, etc.

Bearing in mind that the structure of the Report on the Situation of Agriculture in the Republic of Serbia is adapted to the structure of similar reports published in the European Union, as well as that the agricultural statistics of Serbia are largely harmonized with the Eurostat methodology, the "Green Book" enables comparability with relevant analytical documents and EU-level data.

The Ministry of Agriculture, Forestry and Water Management would like to thank the **Statistical Office of the Republic of Serbia** for its support and assistance in preparing this document.

1. SITUATION IN AGRICULTURE

1.1. Macroeconomic environment and importance of the agricultural and food sector

A major part of the previous five-year period, in terms of macroeconomic trends in the Republic of Serbia, was marked by the pandemic caused by the COVID-19 virus, which significantly affected the disruption of market developments, regular economic activities, foreign trade, and cash flows. Also, the pandemic, as well as the regulatory and market changes that followed it, led to a significant change in consumer habits at the global level, which affected the change in the structure of demand.

Regarding the Republic of Serbia, after slow growth and limited economic activity in the years of the pandemic, a gradual recovery of the economy is noticeable in 2022. However, the Russian-Ukrainian conflict has greatly influenced the rise in prices of energy, raw materials and inputs for production at the world level, which additionally influenced changes in macroeconomic trends, and limited the full recovery of economic activities. In this sense, certain macroeconomic indicators that contain a price component, show a significant increase, which cannot be fully attributed to economic/production activity, but is significantly influenced by the rise in prices at the global level and, consequently, inflationary trends at the national level.

Positive trends were recorded in the national economy in 2022, in terms of GDP growth, reduction of the unemployment rate, increase in average salaries, increase in all components of foreign trade, reduction of the share of the budget deficit and public debt in GDP, as well as the increase of foreign exchange reserves. On the contrary, negative trends were recorded in terms of the increased foreign trade deficit, the increase in the share of the deficit of the current account of the balance of payments in the GDP, as well as the maximum reached inflation in the previous fifteen years.

Table 1: Main macroeconomic indicators; 2018-2022

	2018	2019	2020	2021	2022
GDP (mill. EUR) ¹	42,892	46,005	46,815	53,329	60,371
Real GDP growth (%of change from the previous year) ²	4.5	4.3	-0.9	7.5	2.3
Unemployment rate (%) ³	13.7	11.2	9.7	11.0	9.4
Salaries (annual average, EUR) ⁴	419.8	466.0	510.9	560.2	637.9
Total exports of goods and services (mill. EUR) ⁵	21,166	23,349	22,271	28,818	38,000
Total imports of goods and services (mill. EUR) ⁵	25,257	27,960	26,370	33,439	45,037
Balance of trade (mill. EUR) ⁵	-4,091	-4,612	-4,099	-4,621	-7,037
Foreign trade (mill. EUR) ⁵	46,423	51,309	48,641	62,258	83,037
Current account of the balance of payments (% of GDP)	-4.8	-6.9	-4.1	-4.2	-6.9
Budget surplus/deficit (% of GDP) ⁶	0.6	0.2	-8.3	-4.6	-3.3
Public debt (central government) (% of GDP)	53.6	51.9	57.0	56.5	55.2
Inflation (consumer prices, % of change from the same month of previous year)	2.0	1.9	1.3	7.9	15.1
NBS foreign exchange reserves (mill. EUR)	11,262	13,378	13,492	16,455	19,416
Foreign exchange rate (annual average, RSD/EUR)	118.27	117.85	117.58	117.57	117.46
Foreign exchange rate (annual average, RSD/USD)	100.28	105.28	103.03	99.49	111.86

¹ According to the ESA 2010 methodology. The data for 2022 is estimated by the NBS.

² In constant prices of the previous year. The data for 2022 is calculated by the NBS based on the quarterly data of the SORS.

³ The data was revised according to the new methodology of the Labour Force Survey from 2021.

⁴ Until 2018, salaries were presented according to the old methodology. Since 2018, salaries have been presented according to a new methodology and based on data from the Tax Administration. The average RSD/EUR exchange rate in the observed period was used to convert salaries in RSD into EUR.

⁵ Since 2007, data on the balance of payments (current account, export and import of goods and services) have been harmonized with the guidelines contained in the Manual for the preparation of the balance of payments and international investment position no. 6 of the IMF (BPM6). Since 2007, the export and import of goods are given according to the general system of trade, which is a broader concept and includes all goods that enter or leave the economic territory of a country, with the exception of goods that are in transit.

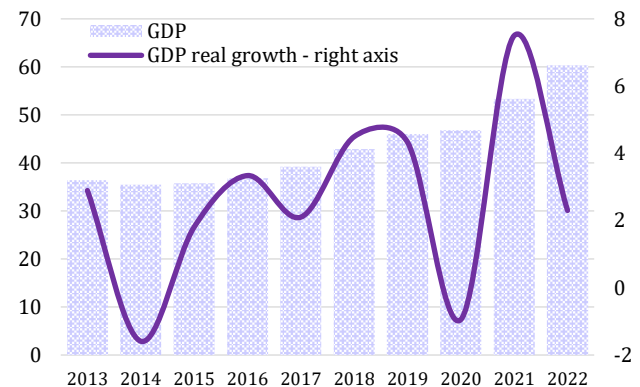
⁶ The consolidated (since 2005) and national (since 2008) deficits include the payment of activated guarantees, bank recapitalisations and debt accession, according to the IMF methodology.

Source: NBS

The first half of the previous decade was marked by a stable level of GDP (around EUR 36 billion), and GDP growth was recorded in the second half of the period, especially in the last two years (which is largely the result of growth in prices).

After the drop in GDP in 2020, the next two years saw a positive growth rate - 7.5% in 2021 (as a result of the low base value) and 2.3%¹ in 2022.

Graph 1: Gross domestic product (bn EUR) and real GDP growth (%) (right axis); 2013-2022

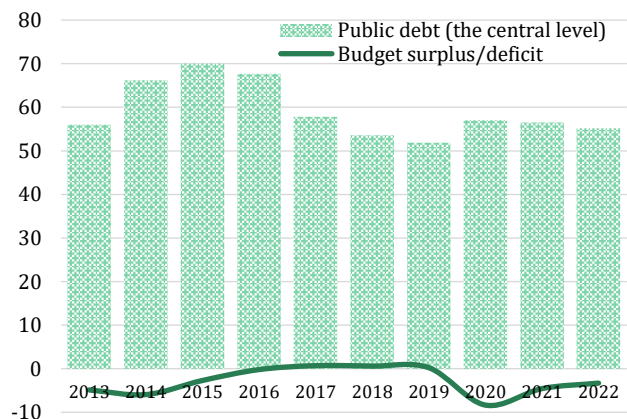


Source: SORS

Observed by economic activities, the real GVA growth was recorded in all sectors, except for construction and agriculture. In the agriculture sector, a real decline in GVA was recorded in all four quarters, with the lowest growth rate in the 2nd and 3rd quarters (-8.6% and -8.5%). If GDP growth in 2022 is viewed from the perspective of GDP use, the most significant contribution to real GDP growth was made by the import and export of goods and services, with a slightly smaller impact on household final consumption expenditure.

After two years of growth in the share of public debt in GDP, caused by extraordinary borrowing due to the pandemic and the need to start economic activity during and after the pandemic, the share of public debt in GDP decreased in 2022 (55.2%), or by 1.3 pp year-over-year. This reduction is largely due to the increase in GDP, given that the absolute value of the public debt has increased, compared to 2021 (EUR 33.3 billion²).

Graph 2: Budget result and public debt of Serbia (% of GDP); 2013-2022



Source: SORS

The structure of public debt at the central level is dominated by direct liabilities based on external debt (61.5%). The total general debt of the state accounts for 55.7% of GDP in 2022.

The recovery of the economy is also indicated by the decrease in the share of the budget deficit in GDP in 2022, by 1.3 pp year-over-year (at 3.3%). As in the case of debt, the increase in GDP in 2022 has a significant impact on this drop.

In 2022, a record-high share of the balance of payments deficit in GDP was recorded at the level of 6.9%, which was the same as in 2019. Such a high share is the result, before all, of the increased value of the deficit in foreign trade of goods and services (52% compared to

¹ The real growth of gross domestic product in 2022 was obtained based on quarterly calculations

² Source: Public Dept Administration

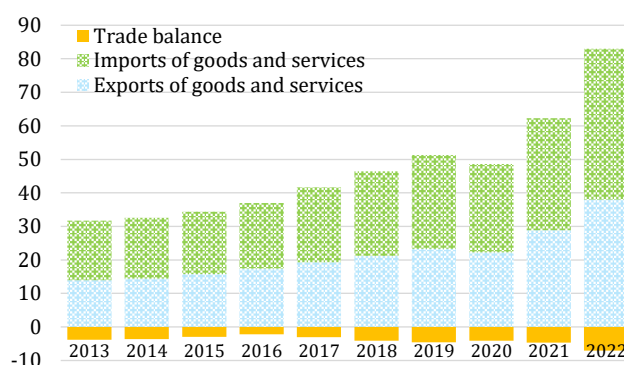
2021) and the increase of the payment deficit, i.e., reduced capital inflow and increased borrowing.

After the record values of foreign trade in goods and services in 2021, the following year, 2022, saw new record values of all foreign trade components. The total value of foreign trade in 2022 reached a value of around EUR 83 billion, which is a third more than the value achieved in the previous year, and even 71% more than the value recorded in 2020. The rise in prices at the global level, caused by the rise in the prices of raw materials and energy, definitely had the most significant impact on the value of trade, but the impact of the increase in production and trade activities in the post-pandemic period is also noticeable.

In 2022, the value of imports recorded a level of around EUR 45 billion (35% more than in the previous year), while the value of exports in 2022 was 32% higher than last year, at the level of EUR 38 billion.

This ratio in trade for the result had a deficit in the value of about EUR 7 billion, or 52% more than in 2021.

Graph 3: Foreign trade of Serbia (bn EUR); 2013-2022



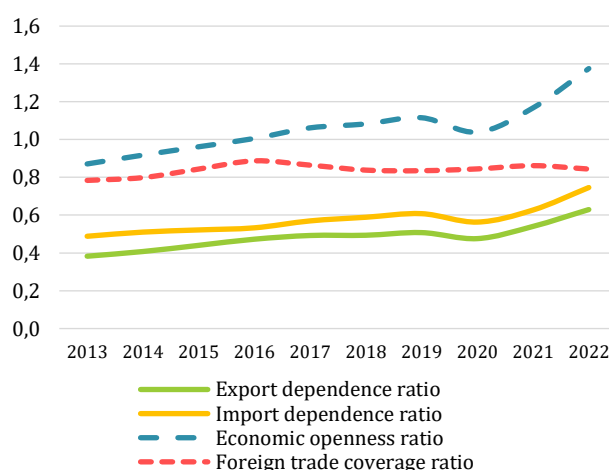
Source: SORS

Observed from the perspective of the commodity deficit, it is estimated that about 70% of the increase in the commodity deficit in 2022 was realized in the energy market, due to the import of larger volumes at higher prices.

The foreign trade coverage ratio in 2022 recorded a stable level, identical to the level from the period 2018-2020, of 84%, which is 2 pp less coverage than in 2021.

All indicators of the openness of the domestic economy in 2022 recorded growth, year-over-year, reaching maximum levels in the previous decade. Given that import dependence recorded a level of 0.75 and bearing in mind that in the Republic of Serbia, with an economy that records a deficit in the trade of goods and services, import dependence is greater than export dependence, lower dependence on exports was recorded in 2022, at the level of 0.63.

Graph 4: Economic openness ratio and foreign trade coverage ratio; 2013-2022



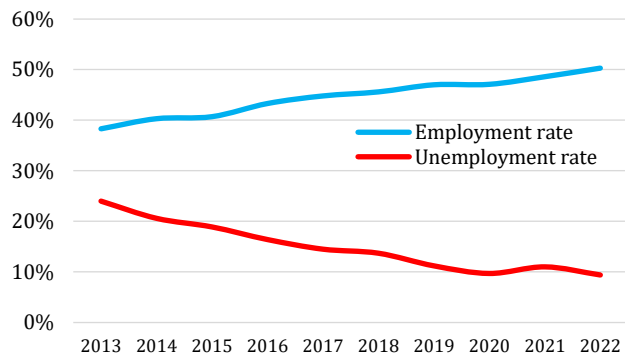
Source: NBS (calculated by the MAFWM)

As the economic openness ratio in 2022 records the maximum level of 1.38 in the previous decade, it indicates that in 2022 the value of foreign trade of goods and services is 38% higher than the realized GDP.

Year-over-year, trends in the labour market in 2022 show positive changes, with employment and unemployment rates reaching record levels in the previous decade.

In 2022, the employment rate increased by 1.7 pp (to 50.3%), while at the same time, the unemployment rate decreased by 1.6 pp, reaching the minimum level in the previous decade, at 9.4%.

Graph 5: Employment and unemployment rate (%); 2013-2022³



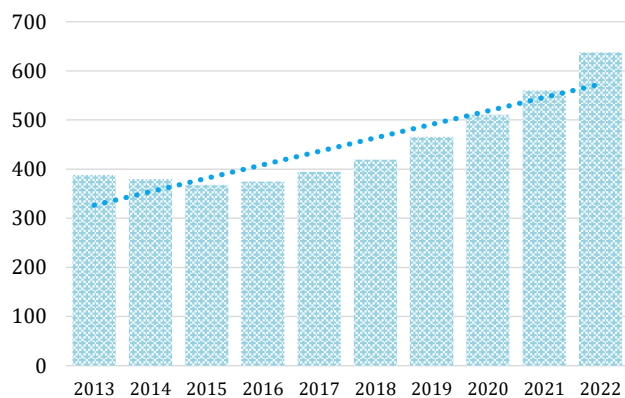
Source: SORS

According to the Labour Force Survey, 2.91 million employed persons⁴ were recorded in 2022 in the Republic of Serbia, or 2.3% more than the previous year. In contrast, the number of unemployed persons in 2022 was at the level of 302.2 thousand, which is a decrease of 14.2% compared to the number of unemployed persons in 2021.

After the stagnation of average salaries at a level slightly below EUR 400, which marked the first half of the previous decade, average salaries recorded an upward trend in the second half of the period.

This trend continued in 2022, given that the average salary level increased by about 14% on an annual basis, reaching a value of EUR 637.9, which is also the maximum level of average salary in the previous ten years.

Graph 6: Average salaries⁵ (EUR) and trend; 2013-2022



Source: NBS

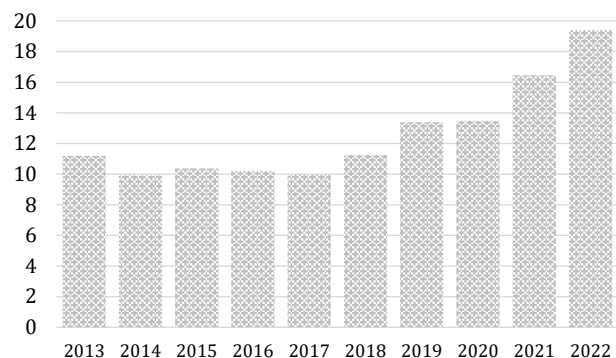
³ The Statistical Office of the Republic of Serbia conducts the Labor Force Survey (LFS) according to the new, redesigned methodology of Eurostat as of 2021. The changes that have been introduced in the LFS since 2021 relate mainly to the definitions and the manner of specifying certain categories of the population in the labour market - employed persons, unemployed persons and persons outside the labour force - as well as the range and extent of variables dedicated to their additional characteristics. The most significant change in the definition of employees refers to the exclusion from the contingent of employed persons who produce agricultural goods and services intended for personal consumption, or without placing the product on the market.

⁴ In the category "population aged 15 and over".

⁵ Average of the period.

After a slightly decreasing trend in the first half of the previous decade and a significant growth trend in the second half of the period, a further increase in foreign exchange reserves is recorded in 2022. Foreign exchange reserves in 2022 reached the level of EUR 19.4 billion, which is the maximum level of foreign exchange reserves of the NBS in the previous ten years and 18% higher than the previous year.

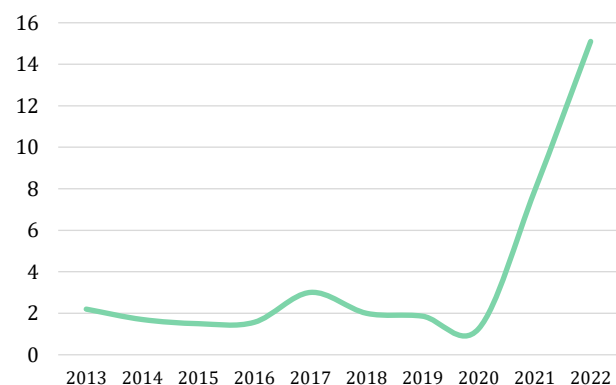
Graph 7: Foreign exchange reserves of the NBS (bn EUR); 2013-2022



Source: NBS

After a long period of stable inflation after 2012 and its trend in the range of 1.3% to 3%, an increase in inflation to the level of 7.9% is recorded in 2021, and in 2022 the level of as much as 15.1% would be reached, as the maximum level of inflation in the previous ten years.

Graph 8: Inflation rate (%); 2013-2022



Source: NBS

In the period up to 2020, the inflation was in the zone of projected inflation, while in 2020, the level of inflation was recorded below the lower limit of the zone of projected inflation. In 2021, inflation exceeded the zone of projected inflation, so this trend would also manifest itself in 2022, with the upper limit of the zone of projected inflation ($3\% \pm 1.5$ pp)⁶ being exceeded by 10.6 pp, or by 12.1 pp in relation to the target inflation.

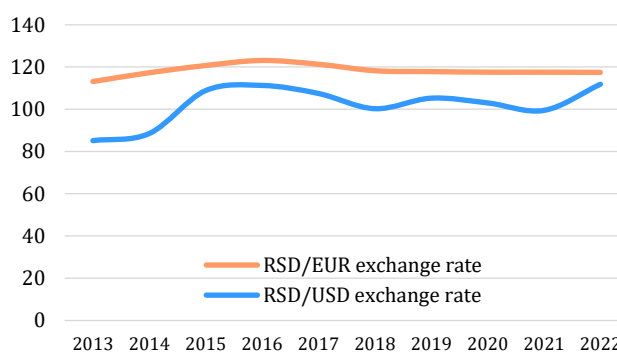
The inflation at such a high annual level is to the greatest extent the result of "imported" inflation, it occurred as a consequence of the rise in the prices of gas and other energy sources in the European Union, disruptions in supply chains and trade restrictions caused by the Russian-Ukrainian conflict, as well as the implementation of China's zero tolerance to the corona virus strategy 2022.

If we look at the growth rates of inflation components, the biggest impact on the overall growth rate of consumer prices in Serbia in 2022 was the rise in food and beverage prices (20%-30%), while the rise in housing prices, electricity, gas and other fuels, then the price of furniture, household equipment and household maintenance, the rise in transport prices and the prices of restaurants and hotels had a lower impact (10%-20%).

⁶ Target inflation for the period January 2021 - December 2023 is projected at the level of $3\% \pm 1.5$ pp, based on the Memorandum of the National Bank of Serbia on the target inflation rates until 2023.

In 2022, the euro maintained a stable value against the dinar at the level of RSD 117.46. On the other hand, the dollar continues to fluctuate, reaching its maximum value (in the previous ten years) against the dinar in 2022, at the level of RSD 111.86, or 12.4% higher than the previous year.

Graph 9: Exchange rate of the dinar (RSD); 2013-2022



Source: NBS

The strengthening of the US dollar in 2022 and its equalization with the euro (for the first time in the last 20 years) is largely due to the increased demand for gas and other energy products, the prices of which are expressed in US dollars, as well as the strong reaction of the Federal Reserve in the USA, which have significantly raised interest rates in 2022, due to record inflation in the US, and this further increased the demand for the US dollar.

Table 2: Participation of the agricultural sector in main macroeconomic indicators (%); 2018-2022

	2018	2019	2020	2021	2022
GVA in current prices (mill. RSD)					
Agriculture, forestry and fishing (A)	321,765	322,840	349,165	394,576	478,758 ⁷
Share in total GVA (%)					
Agriculture, forestry and fishing (A)	7.7	7.2	7.6	7.6	8.2
Number of employees (000 persons)					
Agriculture, forestry and fishing (A)	451.0	452.7	421.4	426.3	430.6
Manufacture of food products (C10)	95.4	88.6	91.4	94.3	101.4
Manufacture of beverages (C 11)	11.9	10.9	11.7	11.9	11.0
Manufacture of tobacco products (C 12)	2.8	2.3	2.6	4.1	4.0
Share in total employment (%)					
Agriculture, forestry and fishing (A)	15.9	15.6	14.6	15.0	14.8
Manufacture of food products (C10)	3.4	3.1	3.2	3.3	3.5
Manufacture of beverages (C 11)	0.4	0.4	0.4	0.4	0.4
Manufacture of tobacco products (C 12)	0.1	0.1	0.1	0.1	0.1
Average net salary in regard to average net salary (%)					
Agriculture, forestry and fishing (A)	86.4	86.3	87.0	84.9	82.3
Manufacture of food products (C10)	80.7	77.5	76.8	76.6	75.9
Manufacture of beverages (C 11)	137.6	126.9	118.8	114.8	109.3
Manufacture of tobacco products (C 12)	202.5	197.7	211.8	181.7	168.4
Share of agricultural and food products in total foreign trade (%)					
in exports	17.5	18.5	21.3	19.3	17.2
in imports	7.8	7.8	8.9	8.5	8.3

Source: SORS

Unlike 2021, when the economic results of the agriculture sector were still significantly affected by the consequences of the COVID-19 pandemic, economic indicators in 2022 show a gradual recovery of the sector, but still not reaching the pre-pandemic levels. In addition, the disruption in the global market of food, raw materials, and energy, caused by the Russian-Ukrainian conflict, and particularly bad production results in 2022, caused by the summer drought, had an additional impact on such trends.

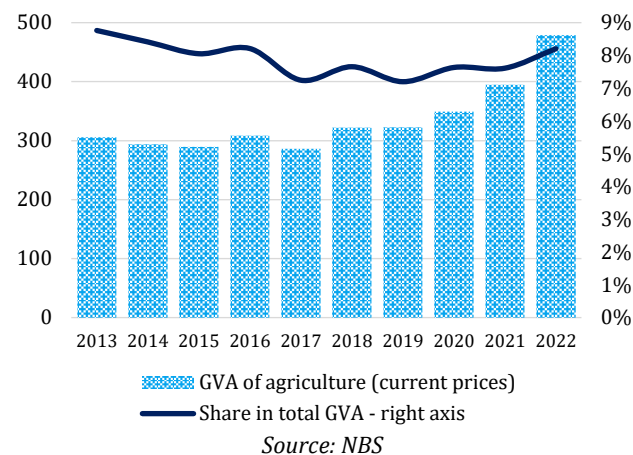
⁷ GVA of agriculture in 2022 presented as a sum of quarters

Although the GVA of agriculture (in current prices) in 2022 indicates an increase in this indicator, year-over-year, the real growth rate is negative, with the highest level of -7.8% achieved in the fourth quarter. The reason for this phenomenon is the significant impact of the rise in price in 2022 on the movement of economic indicators that contain a price component, which can show an unrealistic picture of growth.

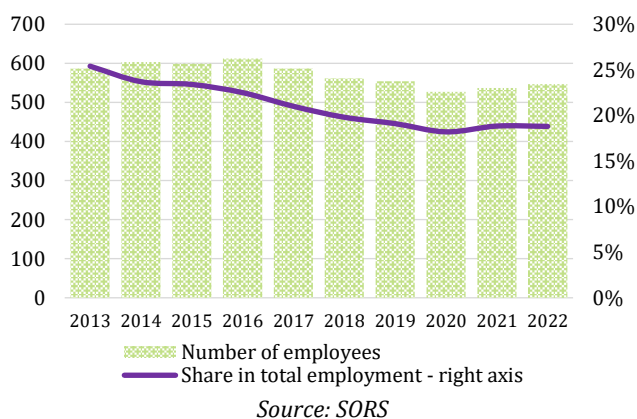
The participation of agricultural GVA in the total GVA in 2022 recorded a level of 8.2%, which is 0.6 pp more than the previous year.

In 2022, 547 thousand employees were registered in the agriculture and food industry sector (+2% at the annual level), of which 78.7% are employed in primary agriculture. This data indicates the maintenance of the stability of the number of employees, with a slight increase in the last three years, after several years of decline in this indicator.

Graph 10: GVA of agriculture (bn RSD) and share in total GVA (%) (right axis); 2013-2022



Graph 11: Number of employees⁸ (000 persons) and share in total employment (%) (right axis); 2013-2022



Employees in agriculture and the food industry in 2022 make up 18.8% of the total number of employees in Serbia, which is at the level of last year's share.

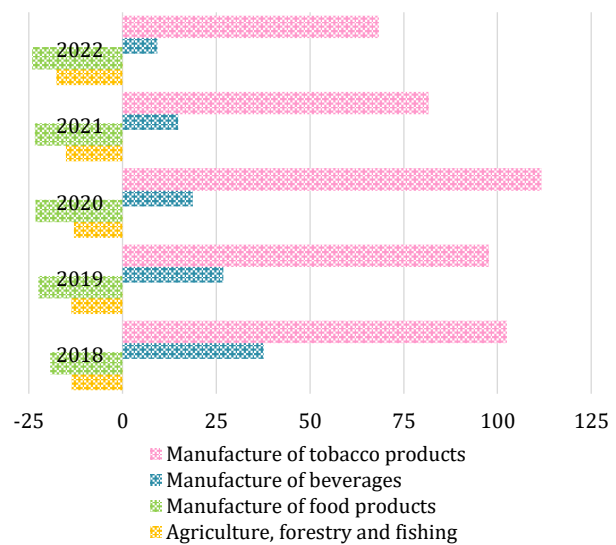
⁸ The number of employees refers to employees in agriculture and the food industry, i.e. to business sectors KD2010: A – Agriculture, forestry and fisheries, C 10 – Manufacture of food products, C 11 – Manufacture of beverages and C 12 – Manufacture of tobacco products.

The salaries in all agriculture and food industry business activities in 2022 increased in the range from 5.5% (manufacture of tobacco products) to 12.8% (manufacture of food products).

Considering that the average net salaries at the level of the economy increased to a greater extent, compared to the agricultural sector (+13.8%), the deviation of net salaries in primary agriculture (-17.7%) and the manufacture of food products (-24.1%) in relation to the average of the economy, while in activities that record a higher level of salaries than the average, this deviation is reduced – manufacture of beverages 9.3% and manufacture of tobacco products 68.4%.

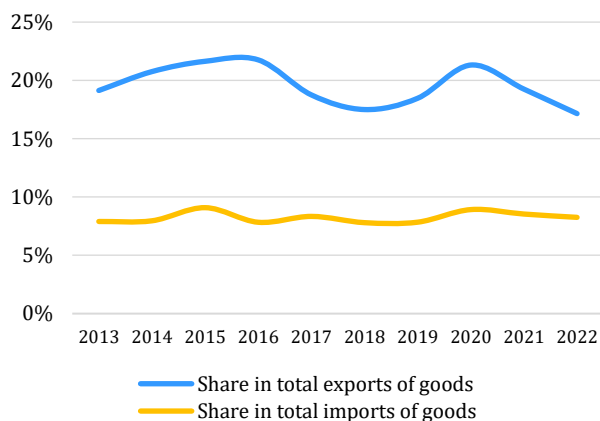
Given that the total value of imports in 2022 increased by 35%, year-over-year, while the value of imports of agricultural and food products increased by 32%, the share of imports of agricultural and food products in total imports decreased slightly, by 0.3 pp compared to 2021 (to the level of 8.3%).

Graph 12: Deviation of average monthly net salary in agriculture from average net salary in Serbia (average = 0) (%); 2018-2022



Source: SORS

Graph 13: Share of import and export of agricultural and food products in total import and export (%); 2013-2022



Source: SORS

Regarding exports, the value of total exports of goods and services increased by 32% in 2022, while the value of exported agricultural and food products increased by 14%. Differences in growth rates led to a reduced share of agricultural and food exports in total exports by 2.1 pp compared to 2021, reaching the minimum level in the previous ten years of 17.2%.

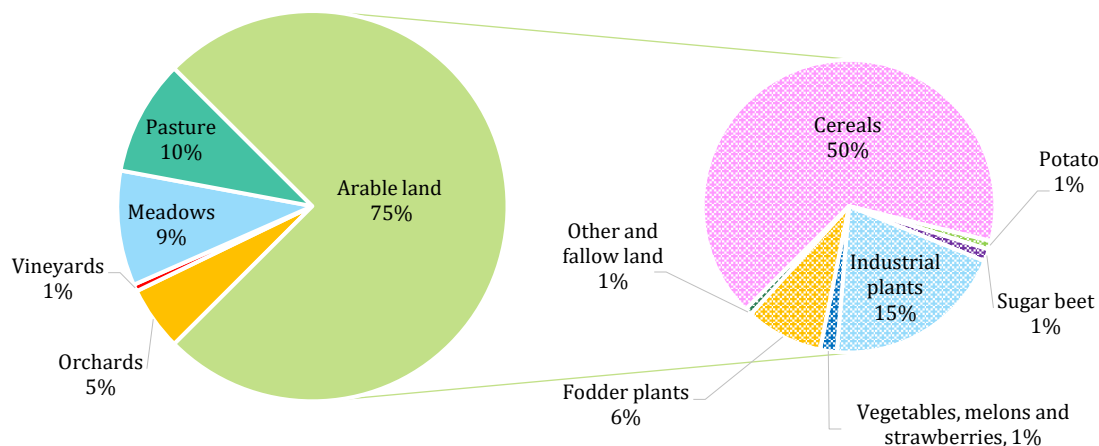
1.2. Structure of agricultural production

1.2.1. Utilized agricultural area

Utilized agricultural area (UAA) is a category with minimum volume and structure fluctuations at an annual level. In this sense, the UAA in the Republic of Serbia in 2022 is 0.5% less year-over-year, recording a level of 3,488,752 ha. Three-quarters of the UAA is arable land and gardens, dominated by grain production (two-thirds of the harvested area).

Maize remains the most represented crop in plant production, as it was grown in 36.6% of the harvested areas in 2022, while wheat was grown in 24.3% of the harvested areas.

Graph 14: Structure of UAA, by utilisation categories (left) and structure of arable land, by crops⁹ (right) (%); 2022



Source: SORS

Although nominally small areas, in 2022 the areas under flowers have recorded the largest increase – by 16.3%, while the areas under industrial plants increased by 8.9% at the annual level. On the other hand, the biggest decrease in the area at the annual level was recorded for sugar beet (-11.9%).

1.2.2. General indicators of agricultural production

Gross agricultural production in 2022 dropped by 8.3% year-over-year, while net agricultural production was 8.1% lower than in 2021. The decrease in the physical volume of agricultural production is to the greatest extent a consequence of the decrease in the volume of plant production (-11.3%), while the decline in the area of livestock production is significantly lower (-1.3%) but it keeps a downward trend.

Compared to 2021, when reduced production was recorded in all segments of plant production (as a result of high baseline values from 2020), in 2022 a decrease in production was recorded only in crop and vegetable production, where the production dropped by 16.7% compared to 2021. In contrast, the production of fruit increased by 9.3%, while the results in viticulture were higher by 4.3% year-over-year. However, these increases only somewhat compensated for the decrease in crop production, which, considering the share of crop production in total agricultural production, largely contributed to the decrease in net agricultural production.

As in the previous year, the maize production results, which were 28.9% less in 2022 than in 2021, had the greatest impact on the reduction of plant production. Unlike the previous year, in 2022, wheat production also recorded a drop of 9.7% compared to 2021, which contributes to the overall drop in grain production of 21.5% year-over-year.

Most other grain crops also recorded a decline in production in 2022, with the largest decrease compared to 2021 recorded in fodder crops (-19%), sugar beet (-18.6%) and potatoes (-14.7%). On the other hand, the production of sunflowers increased by 5.9%,

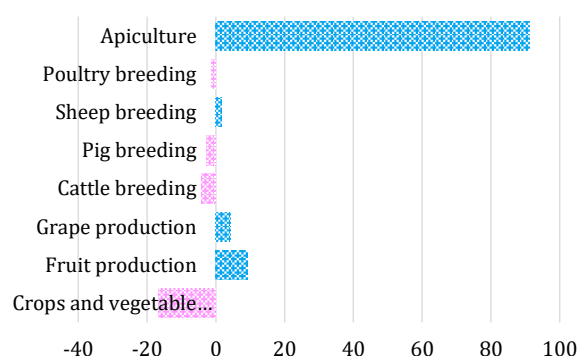
⁹ The data refers to shares in UAA.

while the production of vegetables (without potatoes) increased by slightly less than 2% compared to 2021.

In regard to livestock production, the most significant decline was achieved in cattle breeding (-4.1%), while honey production almost doubled (91.3%) at an annual level.

Pig breeding recorded a decrease in production by 2.8% year-over-year, while production increased by 1.7% in sheep breeding, although the production of sheep's milk was significantly reduced (-15.5%).

Graph 15: Changes in the physical volume of production (%); (0=2021); 2022



Source: SORS

Plant production

The largest production areas in 2022 were used for grain production – 1.72 million ha, which is a slightly smaller area compared to the previous year (-2.6%), but still at the level of the five-year average. In 2022, wheat was sown on 631 thousand ha (+5.3%), while maize production was again reduced to below 1 million ha (952 thousand ha, 7% less than in 2021).

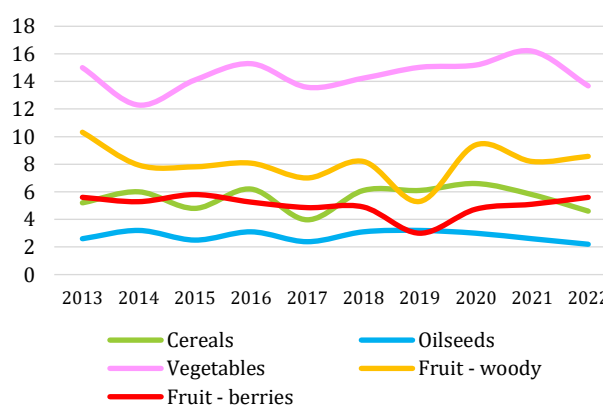
After the increase in the area under sugar beet in 2021, the following year, in 2022, the sown areas were again reduced to the level of 35 thousand ha, which is one-fifth below the last five-year average.

In the oilseeds sector, there was an increase of 8.9% in sowed areas, which was largely contributed by the increased areas under sunflower (+17.8%) and to some extent under rapeseed (+26.1%).

In 2022, there was a decrease in the yield of all field crops, with the total grain yield reduced by 20.7% year-over-year, as a result of the maize yield of 4.5 t/ha (-23.7% inter-annually) and wheat of 5 t/ha (-12.3% inter-annually).

The yield of oilseeds in 2022 recorded a 15.4% lower level than the previous year, primarily due to the reduced yield of soya beans by 26.1% (1.7 t/ha).

Graph 16: Yields in plant production (t/ha); 2013-2022



Source: SORS

In the tobacco production sector, there a significantly was also a lower yield year-over-year - 26.4%, at the level of 1.28 t/ha. A slightly smaller drop in yield was recorded in sugar beet production, at the level of 7.7%.

Conversely, in the woody fruit sector, yield growth of 4.5% was recorded, while yield growth in berries was 9.8%. The largest increase in yields in fruit production in 2022 was

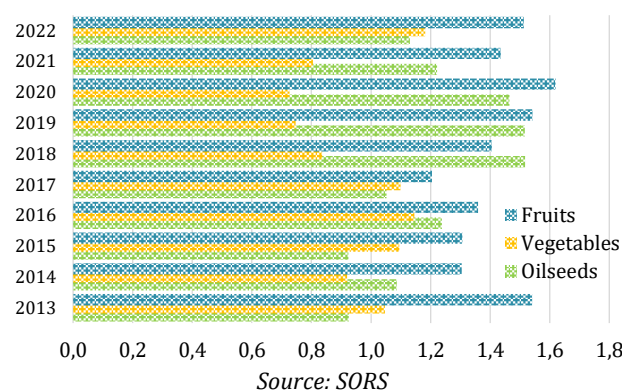
recorded in strawberries (+46.5%), cherries (+41.7%), apricots and walnuts (+40%), while the decline in yields was only recorded in apples (-6.3%) and the “other fruits” category.

The yield in the vegetable production sector decreased by 15.6% compared to 2021, with an increase in the yield of melons and watermelons at the level of 23.3%, while the biggest decrease was recorded for garlic (-10.3%).

In regard to the achieved production, the reduced yields of a significant number of crops affected the reduction of production results in plant production in 2022. The most significant decrease at the level of individual sectors was recorded in the grains sector (-21.7%), given that maize production decreased by 28.9% year-over-year. Also, the production of sugar beet was 18.6% lower year-over-year, which was largely contributed to by the reduction of sown areas. A significant decrease in production, of almost 35%, was recorded for tobacco, while the production of fodder plants in 2022 was 17.5% less than the previous year. Due to the reduced average yield, soya bean production recorded a 26.1% drop in production in 2022, which contributed to a 7.5% decrease in production at the level of the oilseeds sector.

On the other hand, the fruit and vegetable production sectors recorded an increase in production on an annual level in 2022, with fruit production recording a growth of 5.4% (berries 10.4%), while vegetable production increased by as much as 46.8% compared to 2021.

Graph 17: Production of oilseeds, fruits and vegetables (mill. t); 2013-2022



Livestock production

In regard to changes in number of livestock in 2022, a continued trend in a decrease of the number of cattle, pigs and goats is noticeable, while the number of sheep increased slightly.

The number of heads of cattle and pigs decreased by 7% each in 2022 year-over-year, that is, the livestock population in the cattle sector was reduced by 60 thousand heads in one year, while this reduction in the pig sector amounted to 201 thousand heads. The main reason for the decrease in the number of cattle in 2022 is the decrease in the number of dairy cows by 8.3% year-over-year. In the pig production sector, the number of sows decreased by 9% year-over-year, which is the minimum number of sows in the previous decade.

The number of heads in sheep production increased by 1.5% in 2022, while the number of goats decreased by the same percentage.

In 2022, the number of poultry decreased by 3.5% compared to 2021, while the decrease in the laying hen category was at 4.7%.

The number of hives keeps a stable annual growth, with a slight increase of 0.1% in 2022.

In regard to the level of production in certain livestock sectors, the biggest drop in production of 5.3%, was recorded in the cattle sector in 2022, reaching a level of 142 thousand t, which is the minimum production level reached in the previous decade.

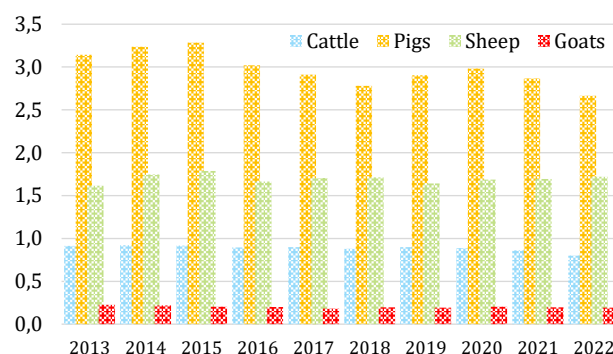
A drop in the level of production in 2022 was also recorded in pig production, where a drop in production of 2.8% was recorded, year-over-year.

Contrary to these negative trends, the increase in production in 2022, year-over-year, was recorded in the poultry (1.8%) and sheep production (1.5%) sectors.

The level of beef production in 2022 was 2.6% higher compared to the production of the previous year, while a decrease in production in the same percentage was recorded in the pork production sector.

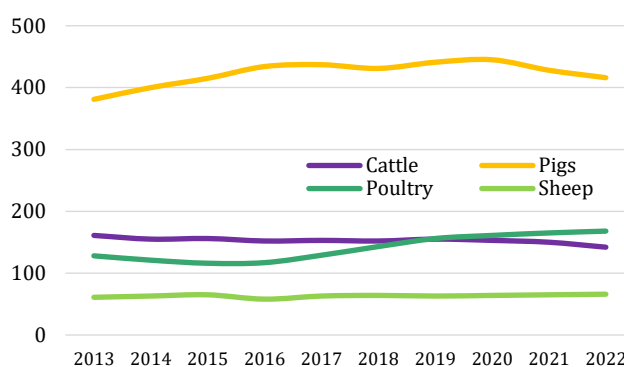
An increase in the level of meat production was also recorded in the poultry production sector (4.5%), while the production of sheep meat remained at a stable level of 31 thousand t.

Graph 18: Number of cattle, pigs, sheep and goats (mill. heads); 2013-2022



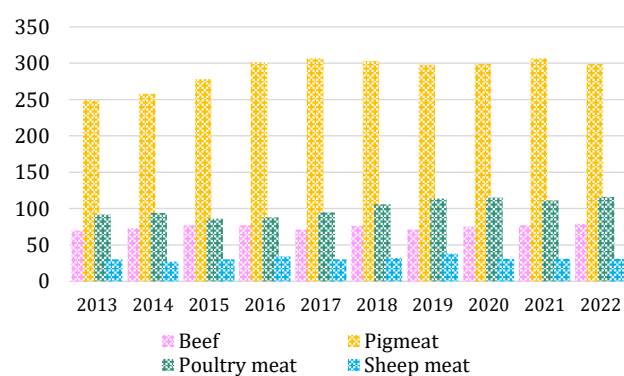
Source: SORS

Graph 19: Production of cattle, pigs, sheep and poultry (weight gain/live weight; 000 t); 2013-2022



Source: SORS

Graph 20: Meat production¹⁰ (carcasses weight; 000 t); 2013-2022



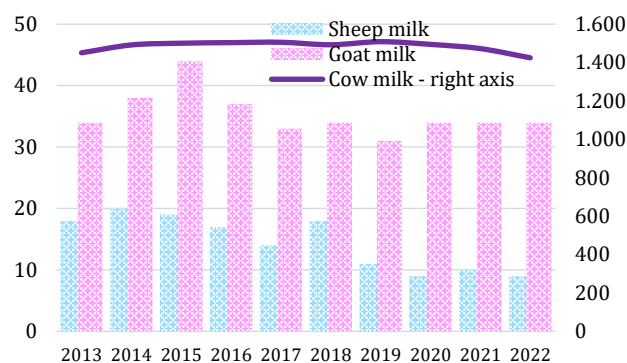
Source: SORS

¹⁰ Gross domestic production (exported live cattle included, imported live cattle excluded), without raw fats.

In regard to milk production, a decrease of 3.3% was recorded in 2022 in the production of cow's milk, while the production of sheep's milk recorded a decrease of 10%, compared to the production in the previous year.

The production of sheep's milk in 2022 remained unchanged compared to 2021.

Graph 21: Milk production (mill. l); 2013-2022

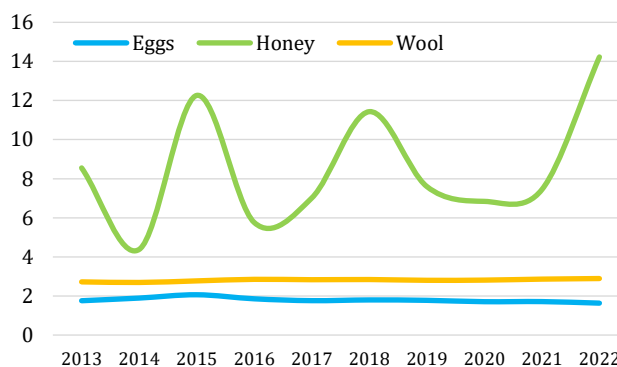


Source: SORS

In regard to other agricultural products of animal origin, the production of eggs in 2022 was reduced by 4.6% year-over-year, reaching the level of 1.63 billion pieces.

At the same time, wool production remained at a stable level (+1%) compared to the production in 2021.

Graph 22: Production of honey, wool (000 t) and eggs (bn pcs.); 2013-2022



Source: SORS

The production of honey in the previous ten years recorded significant variations, which was particularly pronounced in 2022, given that the production of 14.2 thousand t is higher by 91% than in the previous year, reaching a peak level of honey production in the previous decade.

1.2.3. Prices of agricultural products

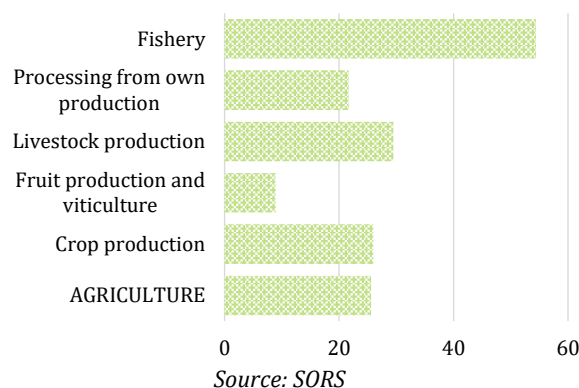
Bearing in mind the increase in the prices of agricultural and food products at the global level, caused by the increase in the prices of production inputs and energy, there was a realistic expectation that the global increase in food prices would also affect the market in Serbia. In this sense, in 2022, a record interannual price growth¹¹ in the last decade was recorded, at a level of as high as 25.6%. Observed by branches within the agricultural sector, 2022 is the only year in the previous ten-year period with a recorded increase in prices (year-over-year) in all branches of production.

¹¹ Weights that represent the structure of the value of products sold by legal entities from their own production and the value of products purchased from family farms are used to calculate the price index of producers of agricultural and fishery products. Product weights are calculated for each month separately, based on monthly data on purchases and sales.

The increase in prices in the sector is most pronounced in fishery, where prices have increased by as much as 54.4%, while prices in livestock production have increased by nearly 30% compared to 2021.

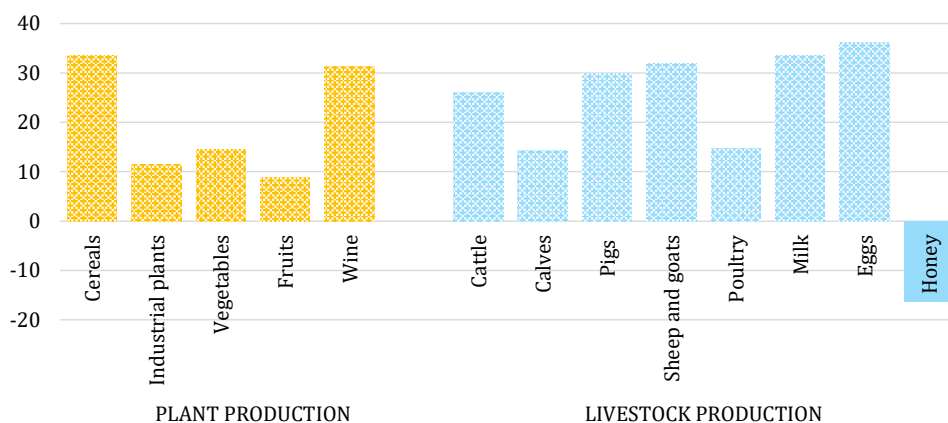
In crop production, prices have increased by 26% in 2022, while the annual price increase in fruit and viticulture production is close to 9%.

Graph 23: Price changes in the agriculture sector (%) (0=2021); 2022



In 2022, an interannual price increase was recorded within all product groups of plant production, and the most pronounced price increase (of 33.5%) was in grain. The increase in the prices of wheat (45.3%) and maize (28.1%) contributed to such a high increase in grain prices, which greatly affected the price of animal feed, and therefore the prices of final products in the livestock sector.

Graph 24: Price changes of certain products (%) (0=2021); 2022



A slightly smaller increase in prices was recorded for wine (31.4%), while the prices of vegetables are 14.5% higher compared to 2021. The lowest growth in 2022 was recorded for fruit, at a level of close to 9%.

In 2022, an increase in prices was recorded in all branches of production in the livestock sector, except for honey production, where a drop in prices was recorded at the level of 16.4%, as a result of increased supply due to a record-breaking production.

In 2022, the price of eggs increased by as much as 36.2% year-over-year, while the price of milk increased by one-third, after five years of relatively stable prices.

A similar trend in the price fluctuation is present in sheep and goats (+32%) and pigs (+30%), while the price of cattle has increased by 26%.

The Market Information System of Serbian Agriculture (STIPS)

The Market Information System of Serbian Agriculture is an *online* database¹², which contains data on prices of agricultural and food products and inputs on a weekly/monthly

¹² STIPS is available at: www.stips.minpoli.gov.rs

basis, as well as trends in retail prices at green markets and wholesale prices at wholesale markets. Based on the price data, reports that show the state of supply and demand, quality and price trends in the previous seven days are prepared, and they are part of the weekly newsletter.

Data and analysis of price trends are most often used when agricultural producers decide where to place their product, but they are also an integral part of the MAFWM's analytics, in order to increase the transparency of agricultural policy implementation. By providing a comprehensive display of market information, this system contributes to the knowledge of demand and a greater level of certainty, and thus the security of market placement of agricultural products.

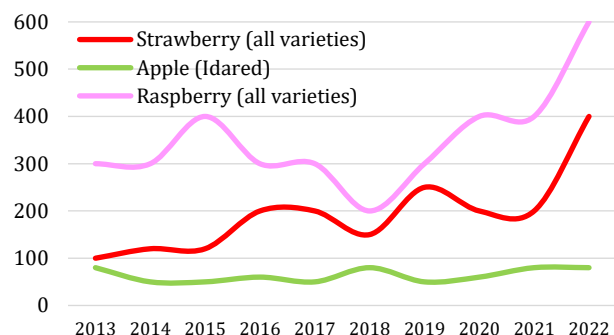
The Marketing Information System is one of the important integral systems of the EU single market, which is based on the national systems of the member states, and which provides information on the prices of certain agricultural and food products on the territory of the EU. Member countries are obliged to submit market information to the Commission within the deadlines and for the products prescribed by the regulation.

Market disturbances and expected market instability, as well as logistical problems, have affected the realization of previously contracted purchases, which led to an increase in prices. Increased input and energy prices have led to an increase in cost prices; therefore, global food prices have been on a steady rise since the start of the COVID-19 pandemic. The pandemic has led to disruptions in transport and distribution, breach of the market chain, accumulation of stocks at the level of countries and individuals, and changes in consumer habits for certain products.

The extended winter and morning frosts have contributed to the reduced yield of early fruit. As a result, the dominant price of raspberries at green markets has increased by 50% year-over-year, and the main reason is the increase in the price of plant protection products, raw materials, fertilizers and labour, whose price has doubled compared to 2021.

The picking of strawberries was delayed due to the cold spring, so the dominant price of strawberries has doubled year-over-year.

Graph 25: Dominant prices of certain fruits on green markets (RSD/kg); 2013-2022



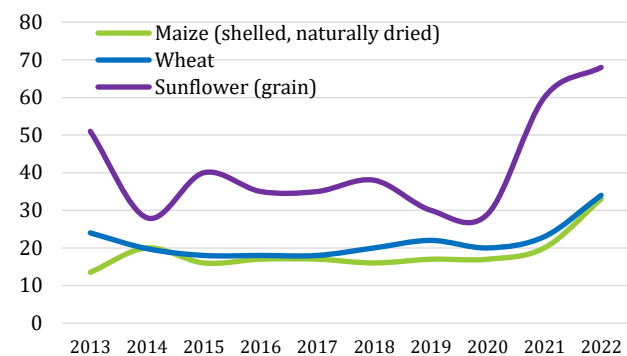
Source: MAFWM, STIPS

Due to war conflicts with Ukraine and difficulties in banking operations in the Russian Federation, apple placement in the Russian market is difficult. In addition, transportation costs have increased, which led to a decrease in exports, and apple exporters were forced to turn to new export markets (UAE, Kuwait, Singapore, India, Scandinavian countries, etc.). The dominant price of Idared in the domestic market remained the same, year-over-year.

Ukraine and the Russian Federation are large producers and exporters of cereals, oilseeds, and mineral fertilizers, which has significantly affected the cereals world prices. An increase in grain prices was recorded in all world stock exchanges in 2022, which was also reflected in the Serbian market.

The dominant price of maize in 2022 is 64% higher than in the previous year.

Graph 26: Dominant prices of certain cereals from silos (RSD/kg); 2013-2022



Source: MAFWM, STIPS

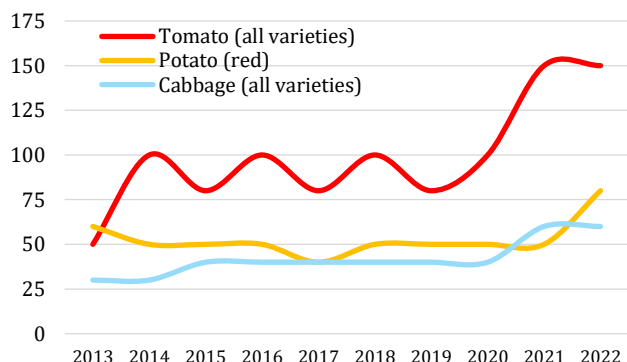
The lack of humidity in the soil has slowed down the growth of wheat, which also affected its yield. The reduced supply, as well as the high price of mineral fertilizers, affected the price of wheat, which is higher by 48% in 2022, year-over-year.

The dominant price of sunflower in 2022 is higher by 13%, year-over-year, which is less price increase compared to other crops, and is the result of the fact that less expensive nitrogen mineral fertilizer is needed to grow this oilseed than maize. The increase in prices in crop production directly affects the increase in prices in livestock production, and therefore the price of the final product.

The summer drought, which occurred during the fruiting phase, affected the reduced potato yield, and therefore the dominant price of potatoes in 2022, which is higher by 50%, year-over-year. Also, the price increase was influenced by the increase in the prices of seeds, fertilizers, labour, packaging and transport.

The dominant prices of cabbage and tomatoes did not change year-over-year.

Graph 27: Dominant prices of certain vegetables on green markets (RSD/kg); 2013-2022



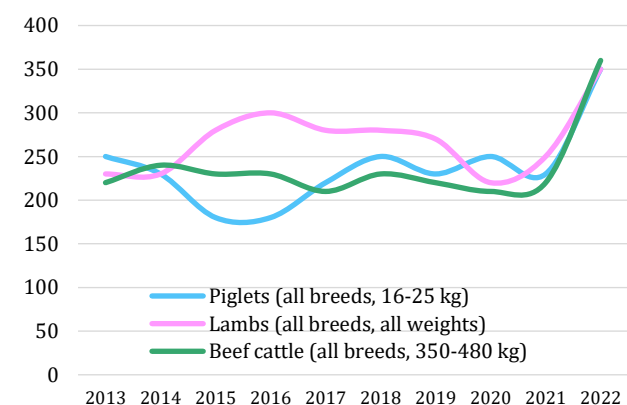
Source: MAFWM, STIPS

High input prices, as well as the uncertainty of production and placement, have affected the livestock sector, which is not directly affected by the crisis in Ukraine, as is the case with grains, but indirectly.

The dominant price of piglets (from 16-25 kg) year-over-year increased by more than 50%, which is partly the result of the high price of the feed's components.

The dominant price of lamb has increased by 40% compared to 2021, while the price

Graph 28: Dominant prices in slaughterhouses (RSD/kg); 2013-2022



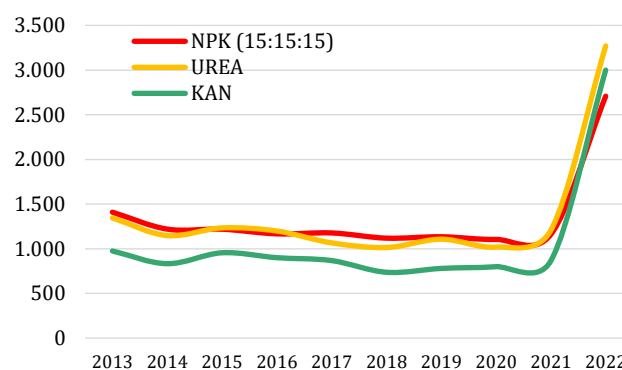
Source: MAFWM, STIPS

of beef cattle has increased by as much as 64%.

The Russian Federation is one of the world's largest exporters of nitrate fertilizers, as well as a producer of phosphorus fertilizers and potassium. A large number of countries are highly dependent on the import of fertilizers from the Russian Federation and Ukraine, which has significantly affected the prices of these fertilizers in Serbia.

The average prices of mineral fertilizers in the domestic market, before the spring sowing (in 25 kg packages), have more than doubled - the price of the NPK fertilizer (15:15:15) is 133% higher compared to 2021, urea by 171%, while the price of KAN fertilizer is even 247% higher year-over-year.

Graph 29: Average prices of fertilizers (RSD/25 kg); 2013-2022



Source: MAFWM, STIPS

Considering the high prices of fertilizers, one of the biggest risks is saving costs in agrotechnical operations, that is, the question of to what extent will the producers adjust their agrotechnical operations to the new price conditions. Such a trend could have a double effect on production - on the reduction of yields and the increase of product prices.

2. FOREIGN TRADE OF AGRICULTURAL AND FOOD PRODUCTS

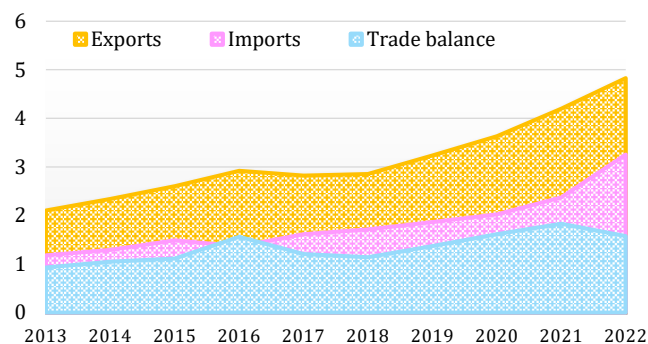
2.1. Total exchange

The agricultural and food sector has a significant place in the foreign trade of the Republic of Serbia, considering that for many years it has been the only sector of the economy that recorded a constant surplus in foreign trade. In 2022, the share of agricultural and food product exports in the total export of goods from the Republic of Serbia was 17.2% (the lowest share recorded so far), while the share of imports was at 8.3%, which is at the level of a multi-year average.

In 2022, the largest volume of trade in agricultural and food products was achieved so far, with a value of EUR 8.1 billion, which is a growth of 23% compared to 2021, or 53% higher than the average of the period 2017-2021. The realized value of exports of agricultural and food products in 2022 was EUR 4.8 billion, 15% higher than the realized export value of the previous year, or 44.1% higher compared to the five-year average. At the same time, the realized value of the import of agricultural and food products amounted to EUR 3.3 billion, which is the highest value of imports recorded so far, which is by 37% higher than the recorded value of imports in 2021, and by 70% higher than the average of the previous five-year period.

The trend of a surplus in the trade of agricultural and food products continued in 2022, with a level of EUR 1.6 billion reached, or 14% less than the surplus achieved in 2021, while compared to the five-year average, it is higher by 10%.

Graph 30: Foreign trade of agriculture of the Republic of Serbia (bn EUR); 2013-2022

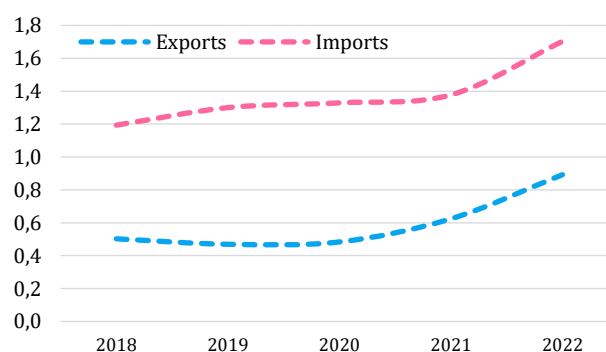


Source: SORS (processed by the MAFWM)

Such high values of exports and imports are the result, before all, of the rise in prices of agricultural and food products in the international market, due to the Ukrainian crisis, but also due to the need to compensate for the business losses caused by the global crisis due to the COVID-19 pandemic.

The analysis of unit values of exports and imports of agricultural and food products indicates their higher level in 2022 compared to the previous years. Namely, in 2022, the unit value of exports was 0.89 EUR/kg, while 5.4 million t of products worth EUR 4.8 billion were exported, while in 2021, 6.7 million t of products worth EUR 4.2 billion were exported (the unit value was at the level of 0.62 EUR/kg).

Graph 31: Unit values of exports and imports of agricultural and food products (EUR/kg); 2018-2022



Source: SORS (processed by the MAFWM)

The situation is similar with imports, given that the unit value of imports in 2022 was 1.70 EUR/kg (1.8 million t of products were imported for EUR 3.1 billion), while in 2021 imports were at a lower level of 1.38 EUR/kg (1.7 million t of products were imported for EUR 2.4 billion).

2.2. Exchange structure

The export of agricultural and food products from the Republic of Serbia is still dominated by primary agricultural products, whose share in the export structure in 2022 was 69%, which is slightly below the last five-year average (73%). Compared to 2021, in 2022 there was a drop in the share of primary agricultural products in exports, which is before all a consequence of the ban, or restrictions on the export of certain agricultural and food products, primarily cereals.

The ban, or the export restriction, was in effect from March 10 to August 11, 2022¹³. The decision originally referred to the complete ban on the export of mercantile wheat, mercantile maize, wheat and corn flour, corn groats, corn semolina, and crude and refined sunflower oil, and it was adopted with the aim of providing food security for the population and ensuring a sufficient amount of raw materials, but also due to fear that the significant increase in the prices of these products on the international market caused by war on the territory of Ukraine would increase the exports of these products from Serbia, which could lead to a shortage. However, this ban was not complete and for certain products such as wheat, maize, and later sunflower oil, permits were granted for the export of certain quantities to the markets of countries that have free trade agreements with Serbia, and above all the markets of neighbouring countries within the “Open Balkans” initiative.

The export ban was in force until April 2022, when a temporary export restriction, with a prescribed export quota, replaced the ban. The Decision on the temporary export restriction was amended several times, with the temporary restriction being successively abolished for particular products¹⁴.

Despite the export ban in 2022, mercantile maize, mercantile wheat and refined sunflower oil were among the leading products exported from the Republic of Serbia, with the export values of wheat and refined sunflower oil being higher than in 2021, while the value of mercantile maize exports is lower than that achieved in 2021, by 26.5%.

The fact that export of mercantile maize in 2022 is 1 million tons less compared to 2021 (in 2022 – 1.22 million tons, and in 2021 – 2.27 million tons). The situation with mercantile wheat is similar – in 2022, 692 thousand t were exported, while the export was at the level of 1 million t in the previous year).

Regardless of the export ban/restriction, due to the increase in prices in the international market, there was an increase in the export of primary agricultural products at the level of 7.6% compared to 2021.

In regard to processed agricultural products, the share of this group of products in the structure of exports was 30.7% in 2022, which is 4 pp higher than the five-year average of the previous period. The export of this group of products has increased by 3.5 times in the last ten years.

In the export of processed agricultural products in 2022, cigarettes dominated, with a 15.7% share of this product group in the exports. In addition to cigarettes, smoking tobacco, mineral and aerated waters containing added sugar, food products not elsewhere specified, protein concentrates, ice cream, etc. had a significant share in the export of this product group.

The share of fish and fishery products in the export structure is small (only 0.4%) in 2022 and is at the same level as the previous year. The value of export of fish and fishery products in 2022 was 20% higher than the realized value of exports in 2021, and 27.6% higher than the average value of exports in the previous five-year period.

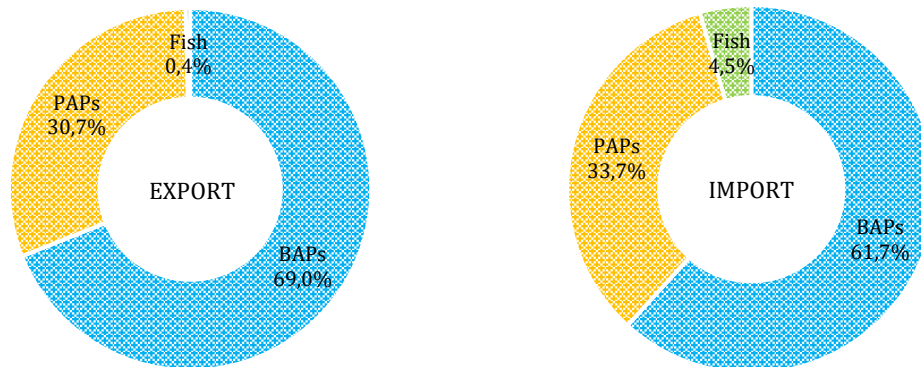
In regard to imports, primary agricultural products dominate, with a participation in imports of 61.7%, which is at the level of the previous year (61.3%), and only 1.2 pp less

¹³ Decision on the temporary ban on the export of basic agricultural food products essential for the population (Official Gazette of RS, nos. 32/22, 35/22 and 48/22); Decision on the temporary restriction of the export of basic agricultural food products essential for the population (Official Gazette of RS nos. 49/22, 52/22, 57/22, 59/22, 61/22, 67/22, 69/22, 74 /22, 76/22 and 81/22).

¹⁴ In May 2022, the export restriction was first abolished for wheat flour, and in July 2022, it was also abolished for mercantile wheat and maize, and in August the restriction was completely abolished.

than the five-year average of the previous period (2017-2021). Primary agricultural products, which dominated imports to the Republic of Serbia in 2022, were: raw coffee, frozen boneless pork, mercantile soya beans, bananas, palm oil, tobacco, seed maize, tomatoes, etc. As a matter of fact, these products have been dominating imports for many years.

Graph 32: Shares of certain product categories in trade (%); 2022



Source: SORS (processed by the MAFWM)

The share of processed agricultural products in the total import of agricultural and food products in 2022 was 33.4% which is a slight decrease in share year-over-year, but it is still 2 pp above the five-year average. As a matter of fact, the value of imports of processed agricultural products in 2022 is 32% higher than the realized value of imports of this group of products in the previous year, and within this group of products the following products were mostly imported: various food products, cigarettes, cigarette substitutes, tobacco extract and essences, mineral and aerated waters containing added sugar, preparations based on coffee extracts, essences and concentrates, filled chocolate, bakery products, etc.

The share of fish and fishery products in the total import of agricultural and food products in 2022 was 4.5% or at the same level as in the last few years. Imports were dominated by fresh or chilled salmon, frozen hake and canned fish.

2.3. Main products in trade

If we look at the basic sectors of agricultural and food products in exports in 2022, as in the previous years, the fruit sector dominates (including nuts, melons and watermelons). Products from this sector accounted for 17.6% of the total export of agricultural and food products, which is 1.9 pp less than in 2021. In second place is the cereal sector, with a share of 14.4%, followed by the tobacco and tobacco substitutes sector (9.5%), beverages, spirits and vinegar (8%), animal fodder (6.9%), miscellaneous edible preparations (6.7%), etc.

The share of the first six leading sectors in exports in relation to the total export of agricultural and food products in 2022 was 63.1%, which is 1.8 pp less than the share of the same groups of products in exports in 2021.

In comparison with the export values of these product groups in 2021, all product groups recorded an increase in export values in 2022, except for cereals, which is directly related to the ban or export restriction.

The highest export growth, year-over-year, was achieved in the following sectors: lac, gums, resins, and other vegetable saps and extracts (75%), cocoa and cocoa preparations

(including chocolates) (55.5%), products of the milling industry (55%), cereal, flour and starch products (40%) and beverages, spirits and vinegar (37.8%). The biggest drop in exports was recorded in the following sectors: plant plaiting materials, other products of plant origin (19.5%), other products of animal origin (9.7%), cereals (9.2%), live animals (5.3 %) and sugar (4.6%).

Table 3: Highest export values (by tariff chapters) (000 EUR; %); 2022/2021

Chapter	Description	2021		2022	
		Value (000 EUR)	Share (%)	Value (000 EUR)	Share (%)
8	Edible fruit and nuts; peel of citrus fruit or melons	825,704	19.5	851,100	17.6
10	Cereals	765,386	18.0	694,600	14.4
24	Tobacco and manufactured tobacco substitutes	386,840	9.1	460,200	9.5
22	Beverages, spirits and vinegar	280,587	6.6	386,500	8.0
23	Residues and waste from the food industries; prepared animal fodder	245,766	5.8	333,800	6.9
21	Miscellaneous edible preparations	262,341	6.2	322,300	6.7
Total top 6 by chapters		2,766,624	65.2	3,048,500	63.1
Total exports		4,240,619	100.0	4,828,600	100.0

Source: SORS (processed by the MAFWM)

On the import side, products from the fruit sector (including nuts, melons and watermelons) dominate in 2022, with a share in imports of 9.1%, followed by the tobacco and tobacco products sector (9%), various food products (8, 2%), cereal products (6.6%), dairy products, eggs and honey (6.2%), the sector of meat and edible meat offal (6.1%), etc.

The share of the six leading sectors in the total value of imports of agricultural and food products in 2022 amounted to 45.4% and is at the same level as the previous year.

As is the case with exports, growth in imports was recorded in all sectors, and the highest growth in imports was recorded in the following sectors: cereals (117%), lac, gums, resins, other plant saps and extracts (99%), vegetable plaiting materials, other products of plant origin (85.8%), dairy products, eggs, natural honey (81.7%), meat and edible meat offal (80.3%), etc.

Table 4: Highest import values (by tariff chapters) (000 EUR; %); 2022/2021

Chapter	Description	2021		2022	
		Value (000 EUR)	Share (%)	Value (000 EUR)	Share (%)
8	Edible fruit and nuts; peel of citrus fruit or melons	286,254	11.6	295,700	9.1
24	Tobacco and manufactured tobacco substitutes	221,898	9.0	292,200	9.0
21	Miscellaneous edible preparations	224,200	9.1	267,200	8.2
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	162,200	6.6	214,900	6.6
4	Dairy produce; birds' eggs; natural honey	116,647	4.7	212,000	6.5
2	Meat and edible meat offal	109,434	4.4	197,300	6.1
Total top 6 by chapters		1,120,633	45.5	1,479,300	45.4
Total imports		2,460,575	100.0	3,255,700	100.0

Source: SORS (processed by the MAFWM)

The largest trade surplus was achieved in the following sectors: cereals – EUR 631 million, fruit – EUR 555 million, animal fodder – EUR 197 million, beverages, spirits and vinegar – EUR 189 million, animal and vegetable fats and oils – EUR 182.3 million, etc., while the largest trade deficit was realized in the following sectors: meat and edible meat offal – EUR 157 million, coffee, tea, maté and spices – EUR 97.9 million, dairy products, eggs and

natural honey – EUR 95.8 million, fish, crustaceans, molluscs and other aquatic invertebrates – EUR 66.6 million, cocoa and cocoa preparations – EUR 63.2 million, etc.

The observed indicators demonstrate that the agricultural export orientation of the Republic of Serbia is focused on certain groups of products, which have recorded success in the international market for many years and can serve as one of the indicators of the competitiveness of these products on the world market.

The decline in the export of milk and dairy products and the increase in the trade deficit is the result, among other things, of the temporary ban on the export of milk and dairy products, which was in force from October 2022 to January 2023¹⁵, but also the increased import of milk and dairy products due to the withdrawal of milk of domestic origin from the shelves in retail stores due to the dissatisfaction of producers caused by the limitation of the price of milk¹⁶.

Looking at individual products, in 2022 the leading export product was frozen raspberries with a realized export value of EUR 353.5 million (2.2% less compared to 2021). In second place is mercantile maize with an export value of EUR 344 million (26.5% less than in 2021), while in third place is mercantile wheat with an export value of EUR 229.4 million (growth of 6.2% year-over-year). In addition to mercantile wheat, an increase in exports was also recorded for tobacco, mineral and aerated waters containing added sugar, dog or cat food, refined sunflower oil and raw soya bean oil, while a slight decrease in exports was recorded for apples, which is the consequence of the Ukrainian crisis and difficult export and transport of apples to the Russian market, considering that, until the beginning of the war in Ukraine, the transport of apples to the Russian market was through the territory of Ukraine.

Table 5: Highest export values (by tariff items in 10 digits) (000 EUR; %); 2022/2021

CN code	Description	2021		2022	
		Value (000 EUR)	Share (%)	Value (000 EUR)	Share (%)
0811 20 31 00	Raspberries, frozen, not containing added sugar	361,459	8.5	353,497	8.3
1005 90 00 00	Maize, other	468,416	11.0	343,983	8.1
1001 99 00 00	Wheat and meslin, other	215,891	5.1	229,420	5.4
2402 20 90 00	Cigarettes containing tobacco	193,566	4.6	228,487	5.4
2403 19 90 00	Smoking tobacco, other	165,509	3.9	193,561	4.6
2202 10 00 00	Waters, including mineral waters and aerated waters, containing added sugar	85,939	2.0	154,769	3.6
2309 10 51 00	Dog or cat food	108,025	2.5	124,182	2.9
0808 10 80 00	Apples, fresh, other	105,679	2.5	101,052	2.4
1512 19 90 00	Sunflower-seed, safflower oil, other	71,899	1.7	97,512	2.3
1507 10 90 00	Soya-bean oil, degummed	60,432	1.4	88,149	2.1
Total top 10 products		1,475,357	34.8	1,914,612	45.1
Total exports		4,240,619	100.0	4,828,600	100.0

Source: SORS (processed by the MAFWM)

In terms of export value, among the top twenty leading products in the total export of the Republic of Serbia, there are five products from the agricultural and food sector, namely: frozen raspberries, ranked 6th (1.3% of export value), mercantile maize (7th place, with the same share of 1.3%), followed by mercantile wheat (in 12th place), cigarettes (13th place) and smoking tobacco (17th place).

¹⁵ Decision on the temporary ban on the export of milk and dairy products (Official Gazette of RS, nos. 121/22, 130/22 and 144/22)

¹⁶ Regulation on price limits for basic foodstuffs (Official Gazette of RS, nos. 133/2022, 136/2022, 10/2023, 15/2023, 25/2023 and 34/2023)

On the import side, the highest import value was realized by the import of raw coffee, whose share in the total import of agricultural and food products amounted to 3.7%, with an increase in the value of imports by 67.9% compared to 2021. Frozen boneless pork is second, with a recorded import value higher by 64.2% than that recorded in 2021, followed by bananas, mercantile soya beans, palm oil, seed maize, filled chocolate, etc. In 2022, various food products not elsewhere specified, weren't among the ten leading products in imports for the first time, while in 2021, they occupied the leading place in imports.

Table 6: Highest import values (by tariff items in 10 digits) (000 EUR; %); 2022/2021

CN code	Description	2021		2022	
		Value (000 EUR)	Share (%)	Value (000 EUR)	Share (%)
0901 11 00 00	Coffee, not roasted, not decaffeinated	53,561	2.2	89,914	3.7
0203 29 55 00	Meat of domestic swine, other, boneless, frozen	51,280	2.1	84,192	3.4
0803 90 10 00	Bananas, fresh, other	57,851	2.4	61,164	2.5
1201 90 00 00	Soya beans, whether or not broken, other	33,140	1.3	63,912	2.6
1511 90 99 00	Palm oil, other, non-solid fractions, for other purposes	32,639	1.3	45,643	1.9
1005 10 15 00	Maize, seed, simple hybrids	14,012	0.6	39,154	1.6
1806 31 00 00	Chocolate (blocks, slabs or bars), containing cocoa powder, filled	24,324	1.0	27,435	1.1
0805 50 10 00	Lemons, fresh	21,974	0.9	24,487	1.0
1601 00 99 90	Sausages and similar products, of meat, meat offal or blood, other	27,758	1.1	24,002	1.0
0901 21 00 00	Coffee, roasted, not decaffeinated	17,150	0.7	23,855	1.0
Total top 10 products		228,847	9.3	309,652	9.5
Total imports		2,460,575	100.0	3,255,700	100.0

Source: SORS (processed by the MAFWM)

Products from the agricultural and food sector are not represented to such an extent in the total imports of the Republic of Serbia, as is the case with exports so among the top twenty products by import value in 2022, not one of these products is found, while raw coffee is only at 39th place.

This exchange ratio indicates the fact that the import of agricultural products is far more diverse than the export since the share of individual products in the total import of the agricultural and food sectors is significantly less than that of exports.

2.4. Major trading partners

Looking at the directions of trade, that is, by relevant markets, the European Union is Serbia's main trade partner in agricultural and food products trade. In 2022, 58.8% of trade in these products was with the European Union, where more than half of the total export of agricultural and food products was placed on the European Union market (51.6%), while as much as 68.5 % of the total value of imports of agricultural and food products to the Republic of Serbia was imported from the European Union.

The Republic of Serbia achieves a constant surplus in trade with the European Union in agricultural and food products trade. In 2022, an exchange surplus in the amount of EUR 238 million was realized, which is a drop of around 61% compared to 2021, and 40% compared to the average of the previous five-year period. The realized value of exports to the European Union market in 2022 was at the level of EUR 2.4 billion which is an increase of 9% compared to 2021, and 48% compared to the average of the previous five-year period. At the same time, the value of imports was recorded at EUR 2.2 billion, which is 35% more year-over-year, and even 76% more compared to the average of the previous

five-year period, where the total trade in agricultural and food products with the European Union was realized in the value of EUR 4.6 billion.

Observed by individual member states of the European Union, the most goods were placed in the Italian market (EUR 369.6 million), followed by German (EUR 354.1 million), Romanian (EUR 274.3 million), Croatian (EUR 250.6 million) and French (EUR 153 million), while the least was exported to the markets of Estonia, Luxembourg and the Republic of Ireland (under EUR 1 million on average).

On the other hand, the highest import values were achieved by imports from Germany (EUR 274.8 million), Italy (EUR 213.9 million), Croatia (EUR 211.4 million), Hungary (EUR 194.1 million), and Poland (EUR 192.3 million), while the least was imported from Finland, Luxembourg and Malta.

In 2022, the Republic of Serbia achieved the largest surplus in the exchange of agricultural and food products with Romania, Italy and Bulgaria, while the largest deficit in the exchange was recorded with Spain, Poland and the Netherlands.

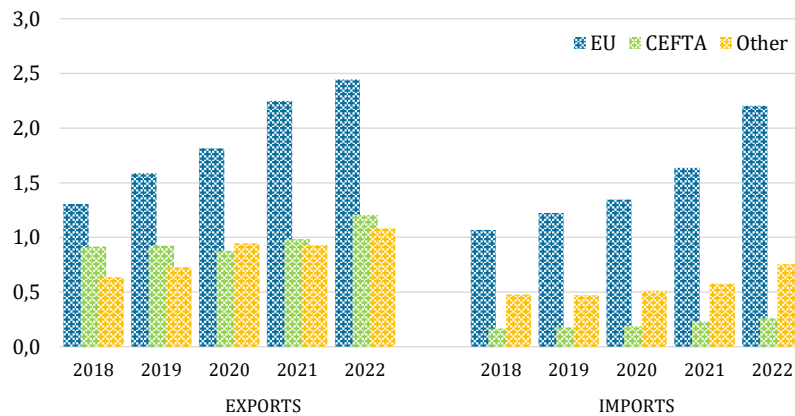
Another equally important trade partner of the Republic of Serbia, in agricultural and food products trade, is CEFTA, with a share in total trade in 2022 of 18.4%, where the share of exports to this market was 25.5%, the share of imports was only 8%.

Observed in absolute figures, the total trade in agricultural and food products with CEFTA partners was close to EUR 1.5 billion which is an increase of 20% compared to 2021, and 32% compared to the average of the previous five-year period. The value of exports to the CEFTA market in 2022 was EUR 1.2 billion, which is a growth of 23% year-over-year, and 31% compared to the average of the previous five-year period. At the same time, the import value of EUR 259 million is an increase of 12% compared to 2021, and 45% compared to the five-year average. In this way, in 2022, a trade surplus of EUR 947 million was realized, which is 26% more compared to 2021, and 28% more compared to the average of the previous five-year period.

Among the CEFTA partners, in 2022, the biggest export was to Bosnia and Herzegovina (EUR 565 million), as in previous years, while the least was exported to Moldova (EUR 3 million). The situation is the same with imports, given that the biggest import was from Bosnia and Herzegovina (EUR 100 million), and the least from Moldova (EUR 15 million).

In 2022, the Republic of Serbia achieved a surplus in the exchange of agricultural and food products with all CEFTA parties, except with Moldova. The largest trade surplus was achieved with Bosnia and Herzegovina - EUR 467 million, while the value of the deficit with Moldova was EUR 11.9 million.

Graph 33: Export and import of agricultural and food products by markets (bn EUR); 2018-2022



Source: SORS

Trade with other countries includes foreign trade with countries the Republic of Serbia has signed bilateral agreements on free trade with and trade with other countries. The share of this trade in the total trade in agricultural and food products in 2022 was 23.1%, where the share of exports was at the level of 22.9%, while imports from other countries participated in total imports at 23.5%.

Observed in absolute terms, the value of trade in agricultural and food products between the Republic of Serbia and other countries in 2022 reached the level of EUR 1.8 billion, which is 22% more than the trade in 2021, and 44% more than the average of the previous five-year period. In trade with these countries, an exchange surplus was in the value of EUR 327 million, which is a drop of 8% compared to 2021, but is 22% higher, compared to the average of the previous five-year period. In 2022, the export value was EUR 1.1 billion, or 16% more than the value of exports achieved in 2021, and 40% more compared to the average of the previous five-year period. At the same time, the value of imports was recorded at the level of EUR 756 million - 31% more compared to 2021, and 50% more compared to the average of the previous five-year period.

Of the total export of agricultural and food products to other markets, 44% was exported to countries Serbia has signed free trade agreements with (EFTA, Eurasian Economic Union, Turkey, and the United Kingdom), while 56% refers to countries the Republic of Serbia has not signed an agreement on free trade with.

Of the countries the Republic of Serbia has signed bilateral agreements on free trade with, the most important trade partner is certainly the Russian Federation. In 2022, the total trade in agricultural and food products with the Russian Federation was in the value of EUR 413.5 million, which is 17% more than in the previous year. The value of exports was EUR 301.5 million (18% more than the value of exports in 2021), while the value of imports was at the level of EUR 111.9 million, which was 14.4% higher than the value recorded in 2021.

As for the other members of the Eurasian Economic Union (Belarus, Kazakhstan, Armenia, and Kyrgyzstan), the value of exports achieved in trade with these states in 2022 was EUR 11.2 million, while the value of imports was close to EUR 24 million. The highest export value was in trade with Belarus - EUR 5.1 million, and at the same time, the highest import value was recorded with Belarus at EUR 13.1 million. Besides Belarus, a lot of agricultural and food products were also imported from Kyrgyzstan – close to EUR 10 million.

In addition to the Russian Federation, important trade partners, among the countries with which Serbia has signed free trade agreements, are certainly the United Kingdom and

Turkey. The Partnership, Trade and Cooperation Agreement¹⁷ allowed for trade with the United Kingdom to continue within the framework that existed when the country was an EU member. Total trade in agricultural and food products between the Republic of Serbia and the United Kingdom amounted to EUR 96.8 million in 2022 and was 17% higher than in 2021. The realized value of exports to the United Kingdom market was EUR 67.2 million in 2022 (at the level of 2021), while imports from Great Britain amounted to EUR 29.6 million and was almost double compared to the value of imports recorded in 2021, while the exchange surplus was in the value of EUR 37.5 million.

As far as trade with Turkey is concerned, it is mostly at the established level, with the value of exchange of EUR 148.3 million in 2022, whereby the export value was EUR 52.1 million (an increase of nearly 30% compared to 2021), while the recorded value of imports was EUR 96.3 million and is 23% higher than the value of imports in 2021. Otherwise, the Republic of Serbia in the foreign trade in agricultural and food products with Turkey has a constant deficit, which amounted to EUR 44 million in 2022.

As far as the EFTA countries are concerned, the total trade in agricultural and food products was approximately EUR 80.7 million in 2022, which is 17.1% more than the trade in 2021. The realized value of exports in 2022 was EUR 47.8 million, while the value of imports was EUR 32.9 million, with an exchange surplus of EUR 14.9. Among the EFTA countries, in 2022, as in previous years, most trade was carried out with Switzerland, where agricultural and food products worth EUR 37.7 million were placed, with an exchange surplus of EUR 29.3 million. The second most important trading partner of the Republic of Serbia in the EFTA market is definitely Norway. However, unlike with Switzerland, the Republic of Serbia has a constant trade deficit with this country, which was EUR 13.9 million in 2022. This situation is a consequence of the import structure, where fish and fishery products dominate.

Of the countries the Republic of Serbia has not signed free trade agreements with, the most significant export partner in 2022 (as in the previous few years) was Algeria, where Serbia placed EUR 165 million worth of agricultural and food products, which ranks this country among the leading foreign trade partners of Serbia, in regard to the export of agricultural and food products, where the scope of exported products increases year by year. In addition to Algeria, important markets for the export of agricultural and food products from Serbia are the United States of America, Japan, Israel, the United Arab Emirates, Egypt, etc.

In regard to imports, from other countries in 2022, the biggest import was from Brazil (EUR 63.8 million), China, but also Ecuador, Malaysia and Vietnam. Raw coffee was mostly imported from Brazil and Vietnam, cocoa mass and cocoa butter and oil from China, and bananas from Ecuador.

3. THE FARM ACCOUNTANCY DATA NETWORK OF THE REPUBLIC OF SERBIA (FADN) AND ANALYSIS OF FINANCIAL DATA IN SERBIA

Conducting annual surveys according to the FADN methodology is an obligation of all member states of the European Union, while the candidate states are expected to establish

¹⁷ The Partnership, Trade and Cooperation Agreement between the Government of the Republic of Serbia and the Government of the United Kingdom of Great Britain and Northern Ireland (Official Gazette of the RS - International Agreements, No. 13/21)

a functional system in compliance with the EU methodology by the time, they join the EU. Within this requirement, the state should establish an appropriate organization, managed by an authorized Liaison Agency.

Given that FADN contains the most complete information on the situation of agriculture, it is the most important source of data when analysing the effects of agricultural policy measures in the EU.

The FADN system is based on the annual collection of production, economic and financial data from a sample of farms, classified according to different criteria: economic size of the farm, type of agricultural production and regional affiliation. In order for the data collected from the sample to be applied to the population level, it is necessary to ensure the representativeness of the sample, that is, the possibility of extrapolating the results to the national level, which requires the selection of a representative sample of the included farms.

Experience and methodology applied in the EU were used in preparing this analysis. Therefore, in addition to the main goal – establishing an analytical and methodological framework for the evaluation of agrarian policy measures, the comparability of the obtained results with the results of agrarian policy in the EU is enabled.

The most important data sources were used in this analysis: the FADN database (MAFWM) and the *Agri-food Data Portal*¹⁸ (European Commission).

3.1. FADN sample, data collection and results

3.1.1. FADN sample and population

The sample of farms, included in the FADN system, is determined by the statistical method of stratification, through which farms are distributed within the FADN research area into strata. For research purposes, it is necessary to ensure that the selected FADN sample of farms reflects the diversity of production in a certain area, which is why the FADN population is defined by three basic criteria: economic size, type of agricultural production and regional affiliation. However, the FADN sample selection does not include all farms in the country, only those that are considered commercial due to their size.

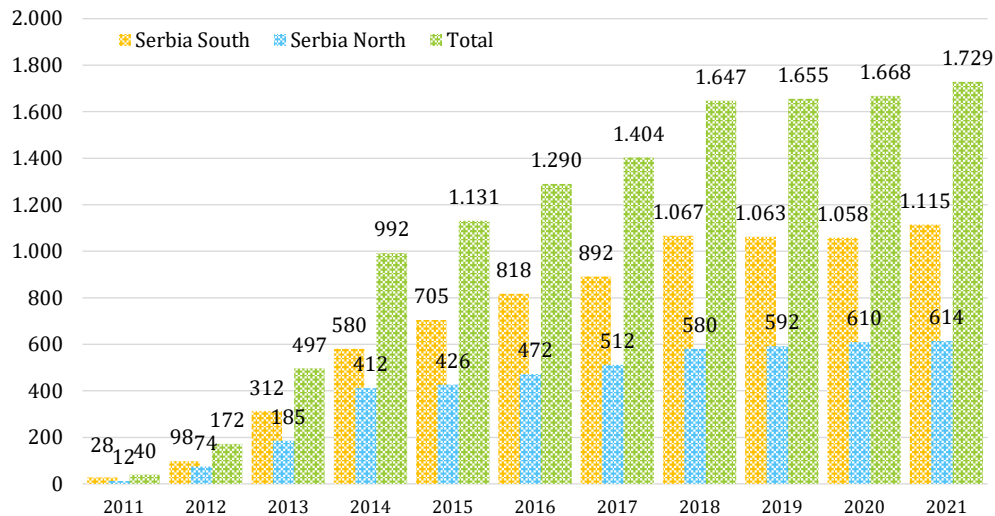
In order for the sample to be considered representative at the national level, and in accordance with the EU methodology, it needs to reflect the research field that covers 90% of the utilized agricultural area, 90% of the total number of livestock units and more than 90% of the value of agricultural production in the member state.

The estimated size of the FADN sample in the Republic of Serbia, required to reach the level of representativeness at the national level, is 2,000 farms, which was determined by statistical methods based on data from the Agriculture Census 2012 and the Farm Structure Survey 2018, conducted by SORS.

In order to reach the required level of representativeness, the FADN sample is increased every year, with the inclusion of new farms, selected in accordance with the Selection Plan, which is prepared at an annual level. In 2021, 1,729 farms were included in the FADN sample, while reaching the level of representativeness of (2,000 farms) is planned in the period until the accession of the Republic of Serbia to the European Union.

¹⁸ <https://agridata.ec.europa.eu/extensions/FarmEconomyFocus/FADNDatabase.html>

Graph 34: FADN sample in the Republic of Serbia; 2012-2022



Source: MAFWM, FADN

3.1.2. Data collection within the FADN research

The tasks of collecting FADN data in the Republic of Serbia are performed by advisory and expert services, which are recognized in the national FADN system as offices for collecting the FADN data. In addition to collecting data in the field for the needs of the FADN survey, these services also perform other tasks, determined by national regulations:

- ⇒ identify farms for inclusion in the FADN system;
- ⇒ inform and train farm representatives on the collection of FADN data;
- ⇒ fill in and submit forms for FADN data collection, and enter data into the FADN database;
- ⇒ prepare reports for the farm and submit them to the farm;
- ⇒ based on the received data and its processing, analysis of the agricultural business.

Pursuant to the EU legislative, the mandatory data contained in the FADN questionnaire and for which the member state is obliged to send to the EC, are:

1. general data on the farm;
2. type of agricultural production;
3. data on the labour force;
4. assets of the farm;
5. quotas and other rights¹⁹;
6. liabilities;
7. data on VAT;
8. expenses;
9. data on plant production;

¹⁹ Relevant for the period when production quotas for milk and sugar and rights to grow vineyards were applied within the framework of the CAP. Production quotas were abolished during the implementation of the 2014-2020 CAP.

10. data on livestock production;
11. data on livestock products and related services;
12. other activities that generate economic benefits;
13. data on subsidies.

In addition to this data, for which there is an obligation to collect in accordance with the regulations of the member states, within the national FADN system, and in accordance with its own needs, the state can include the collection of additional data – e.g., subsidies received by the farm, whether the farm leases state land, detailed data on production lines, data on organic production, data from the field of ecology and environmental protection, etc.

After the completion of the FADN survey and publication of the standard results, the farm receives the Report for Agricultural Producers, that is, feedback in the form of a temporary balance sheet and income statement. This type of feedback provides the agricultural producer with detailed insight into the technical and bookkeeping results of the farm's business in the previous accounting year, with the aim of planning business in the following period. This type of report is another form of an analytical report, which is produced in the FADN system, in addition to the Standard Results Report.

3.1.3. Standard results – overview and structure of indicators

Standard results are a set of statistical indicators, based on results from farms, calculated according to a unique methodology and presented in aggregate form. The standard results are calculated as weighted averages per farm and enable the extrapolation of data from sampled holdings to the total research field (total population). The weighting shows how much a particular farm in the FADN sample represents farms in the population. In this way, the results are extrapolated, that is, the results of not only the farms in the sample but also those farms that belong to the field of research they represent, are presented.

Standard results in Serbia are published at an annual level, in the form of a Report on standard results.

The standard results provide a presentation of indicators according to basic categories: structural indicators, economic indicators and financial indicators, which can be grouped into eight groups:

- 1) sample and population;
- 2) structure and yields;
- 3) production value;
- 4) expenses;
- 5) subsidies;
- 6) farm profit;
- 7) balance sheet;
- 8) financial indicators.

One of the goals of the FADN survey is to examine the structural changes of farms in Serbia and the competitiveness among different types and economic sizes in different regions of the Republic of Serbia and compare them with the countries of the European Union. Business analysis of farms can most often focus on two dimensions of competitiveness: efficiency and profitability of business.

The efficiency of farm business expresses the achieved quantity or value of production per unit of resource used. The measure of efficiency is expressed as technical efficiency

(volume of products produced /cost of used resources) and allocative efficiency (value of volume of products/value of volume of resources). If the efficiency is too low, it is necessary to check three business segments: technical efficiency, sales prices and input prices.

The profitability of the farm is expressed through the analysis of financial indicators that show the newly created value of own equity, unpaid labour and own management, but also the profit/revenue generated in one production year. Profitability depends on the size of the farm, the type of agribusiness and the participation of the engaged labour force, and therefore the net added value is usually expressed per AWU, which can be seen as a measure of partial labour productivity.

The analysis of the financial indicators of the FADN survey, Farm Net Value Added (SE 415), Farm Net Value Added per annual work unit (SE 420), Farm Net Income (SE 425) and Farm Net Income per annual work unit (SE 430), shows the measure of farm profitability. This analysis also shows the share of subsidies in the net income of farms, that is, the impact of subsidies on the farm business in Serbia and the European Union.

For the analysis of the dynamics of the competitiveness of farms, a set of FADN data, observed in the period 2017-2021, was used. The data was compared for the territorial level of NUTS 1 (Serbia North and Serbia South) and NUTS 2 (Belgrade Region, Vojvodina Region, Šumadija and Western Serbia Region and South and Eastern Serbia Region). In addition, data from the FADN Serbia 2021 was analysed, and the data was compared and analysed with the data from the FADN of the European Union members 2020, which are currently approved and publicly available on the FADN database platform.

3.2. Analysis of financial data in Serbia

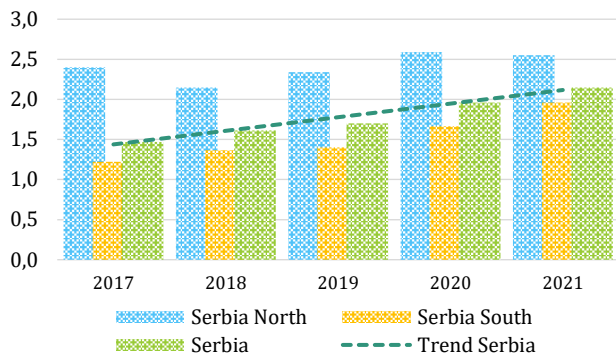
3.2.1. Farm Net Value Added

The Farm Net Value Added (NVA) indicates the newly created value on the farm during the calculation period, which is the result of the production process²⁰. NVA refers to the remuneration of all factors of production (land, equity, and labour), both owned by the farm and those hired externally. The size of the farm, the type of agricultural production and the share of the labour force employed on the farm have the biggest influence on the average NVA per farm.

²⁰ NVA is the gross revenue from business activity, after correction by subsidies and indirect taxes. The calculation of added value includes the value of production and subsidies, which are reduced by the costs of taxes on products and production, and the value of intermediate consumption, which includes the costs of materials, the costs of production and non-production services, and part of other personal expenses.

Observed at the level of Serbia in the last five years, after a stable level in the first two years, this indicator starts to grow from the middle to the end of the period, reaching the maximum level in 2021 of over RSD 2 million. NVA in the North Serbia region is at a higher level than the national level – about RSD 2.6 million, while in the region of Serbia South, it is at the level of around RSD 1.9 million.

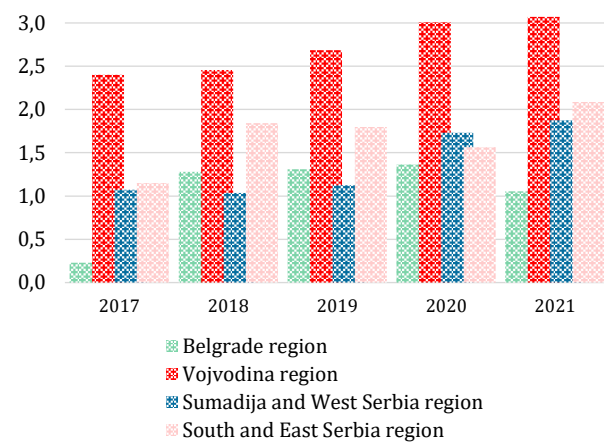
Graph 35: Farm NVA, by regions of NUTS 1 (mill. RSD); 2017-2021



Source: MAFWM, FADN

If NVA is observed by the regions of a lower territorial level, the highest values in 2021 are recorded in the regions of Vojvodina and Southern and Eastern Serbia (RSD 3.1 million and RSD 2 million, respectively).

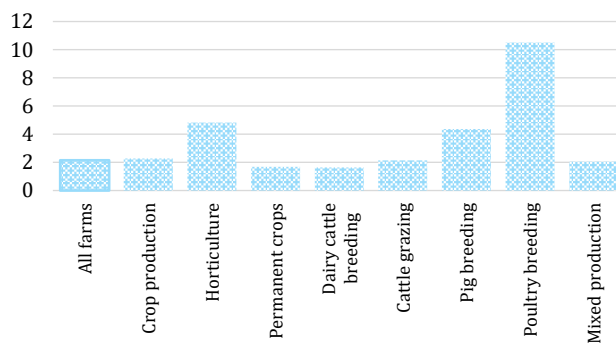
Graph 36: Farm NVA, by regions of NUTS 2 (mill. RSD); 2017-2021



Source: MAFWM, FADN

A comparison of the results by type of production indicates that in 2021, farms with poultry production were the most successful, generating RSD 5.6 million in NVA, while for farms engaged in mixed production, the value of NVA is at the lowest level.

Graph 37: Farm NVA, by type of production (mill. RSD); 2021

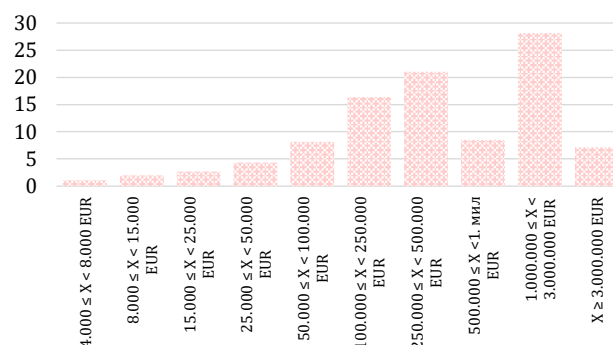


Source: MAFWM, FADN

From the aspect of economic size, the highest level of NVA in 2021 was achieved in the EUR 1-1.5 million category farms, which generated a value of RSD 28 million.

The lowest level of NVA was achieved in the EUR 4-8 thousand category farms, which generated a value of around RSD 1 million and are on the verge of profitability.

Graph 38: Farm NVA, by economic size (mill. RSD); 2021

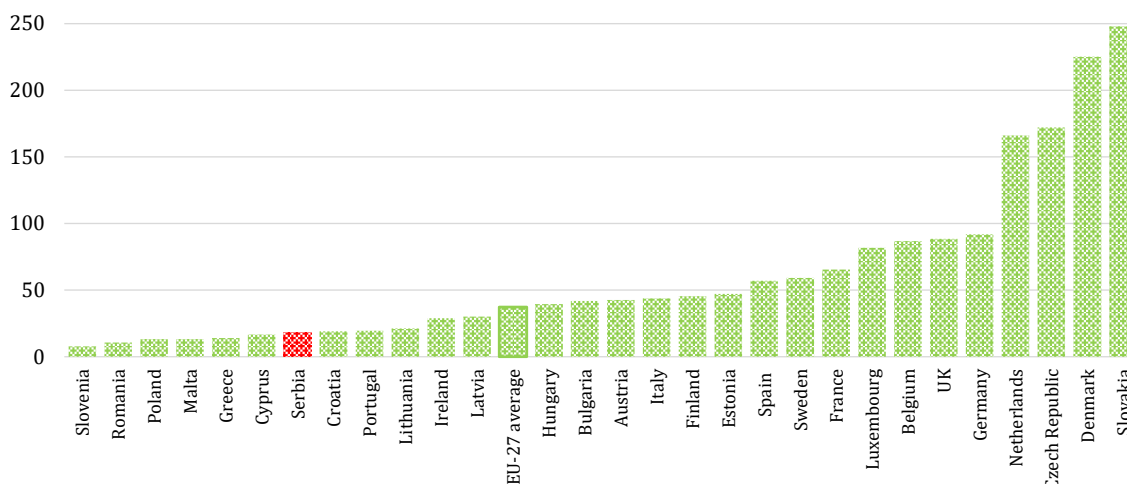


Source: MAFWM, FADN

If the average NVA in Serbia in 2021 is compared with the same indicator in the EU, it can be concluded that the NVA in Serbia is slightly less than half of the EU average (EUR 18 thousand). In relation to individual EU members, Serbia is at the same level as Cyprus, and above Slovenia, Romania, Greece, Malta and Poland, in terms of the generated farm NVA.

The highest level of farm NVA in the EU in 2020 was generated in Slovakia (EUR 248.1 thousand), while Slovenia is at the bottom of the list, with only EUR 7.8 thousand.

Graph 39: Farm NVA in EU members and in Serbia (000 EUR); 2020*



Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

3.2.2. Share of subsidies in the farm NVA

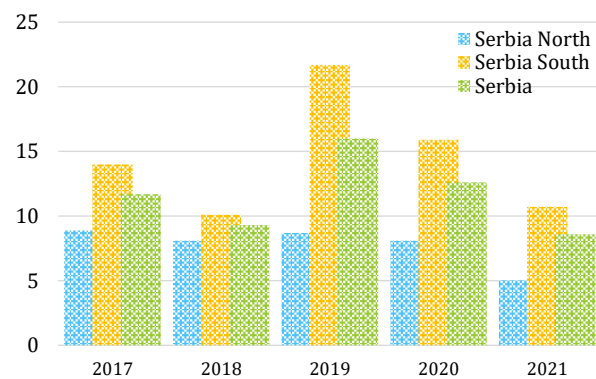
In the agricultural policy of the Republic of Serbia, subsidies are applied pursuant to the Law on Subsidies in Agriculture and Rural Development, at the national, regional and local levels. According to this law, subsidies are classified as direct payments, subsidies for rural development measures, special subsidies and credit support. For the purposes of this analysis, and due to the need for comparability with EU subsidies, as well as due to the application of the FADN methodology, subsidies are grouped as direct payments, payments for rural development, subsidies for investments and other subsidies.

The share of subsidies in the farm NVA shows the extent to which the received subsidies contributed to the newly created value of the farm.

This indicator varies at the level of Serbia during the previous five-year period, with the maximum level reached in 2019 (16%) and the achieved value in 2021 at the level of 8.6%.

In 2021, the share of subsidies in the farm NVA is lower in the region of Serbia North (5%) compared to the region of Serbia South (10.7%), which is a tendency that continues from previous years.

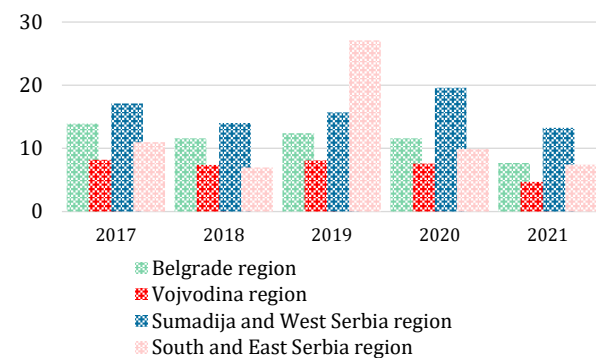
Graph 40: Share of subsidies in the farm NVA, by regions of NUTS 1 (%); 2017-2021



Source: MAFWM, FADN

Observed by the regions of NUTS 2, the largest share of subsidies in farm NVA in 2021 is recorded by the Region of Šumadija and Western Serbia (13.3%), while the share of subsidies is the smallest in NVA in the Region of Vojvodina.

Graph 41: Share of subsidies in the farm NVA, by regions of NUTS 2 (%); 2017-2021

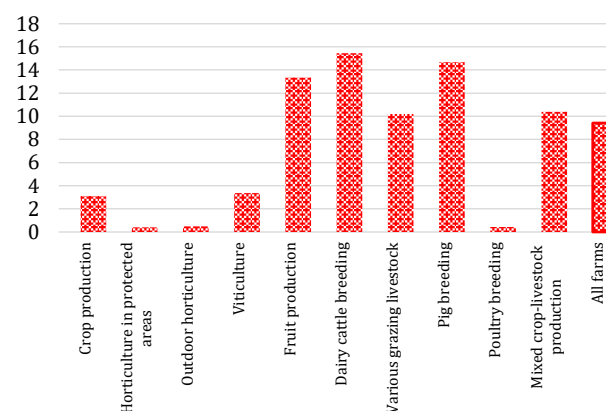


Source: MAFWM, FADN

If this share is viewed from the perspective of the contribution of subsidies to the farm NVA engaged in particular agricultural activities, the highest value of the indicator can be observed in the sectors of dairy cattle breeding and livestock grazing (about 15%).

The lowest share of subsidies in NVA is recorded in the poultry breeding sector, which is a consequence of limited subsidies intended for this type of production.

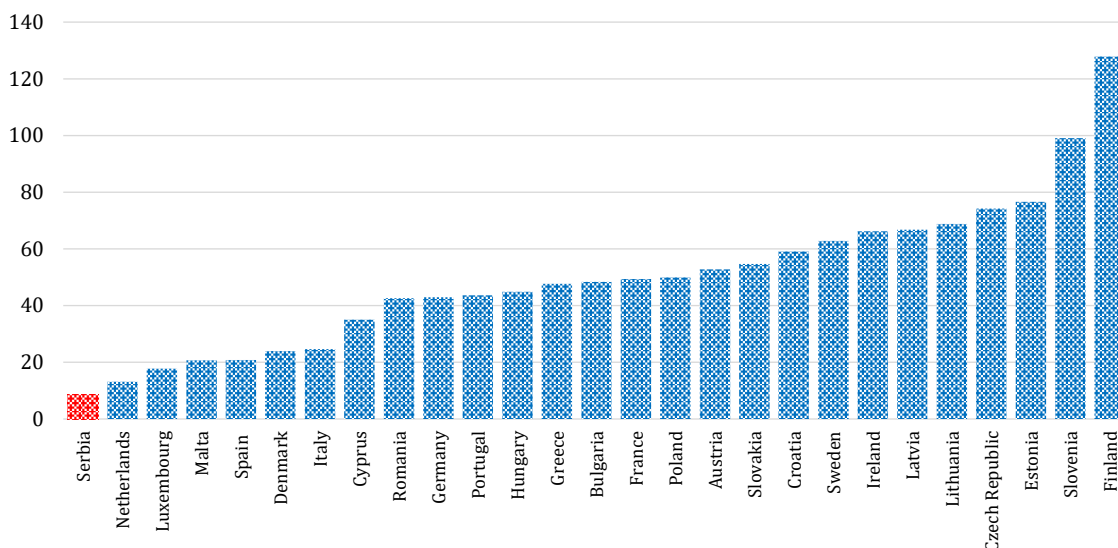
Graph 42: Share of subsidies in the farm NVA, by type of production (%); 2021



Source: MAFWM, FADN

The average share of subsidies in NVA generated by farms in the EU in 2021 was at the level of 37.3%, which is three times higher than in the Republic of Serbia. The highest level of this indicator, observed by member countries, is achieved in Finland (127%), where the result shows that the annual subsidies received by the farm are a quarter higher than the generated NVA. A high level of this share is also recorded in Slovenia (99%), while the lowest share of subsidies in NVA is recorded in the Netherlands (11.6%) and Serbia (8.6%).

Graph 43: Share of subsidies in the farm NVA in EU members and Serbia (%); 2020*



Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

3.2.3. Net value added per annual work unit

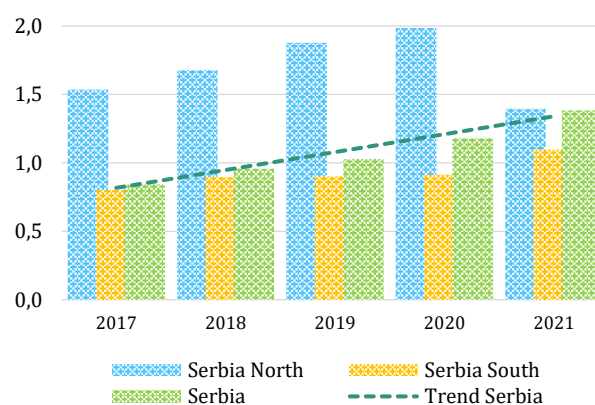
The increased value of the average farm NVA is affected by the farm size, the kind/type of agricultural production or the reduction of the labour force. To overcome this, NVA is usually expressed per annual work unit (AWU), which can be seen as a measure of partial labour productivity.

If NVA is observed by the engaged work invested in production, expressed in the number of AWU, an indicator is obtained for measuring labour productivity, which shows how much-added value is created per unit of engaged work.

This indicator shows constant growth in the period 2017-2021, both at the level of Serbia and at the level of the regions of Serbia North and Serbia South.

The average level of NVA per AWU at the level of Serbia in 2021 was about RSD 1.4 million, while the value of this indicator is slightly higher in the region of Serbia North than in the region of Serbia South.

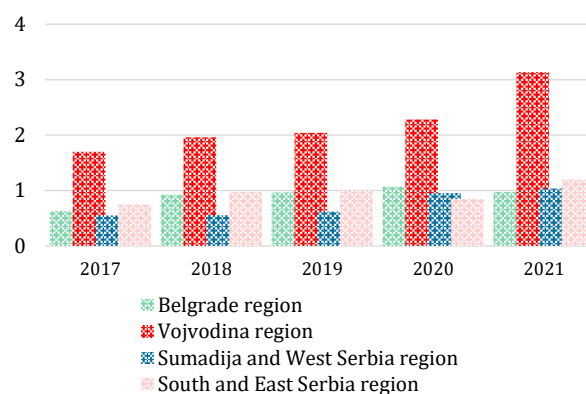
Graph 44: Farm NVA per AWU, by regions of NUTS 1 (mill. RSD/AWU); 2017-2021



Source: MAFWM, FADN

The level of NVA per AWU in 2021 records the highest value in the Region of Vojvodina, (slightly more than RSD 3 million /AWU), while in other regions it is at the level of around RSD 1 million /AWU.

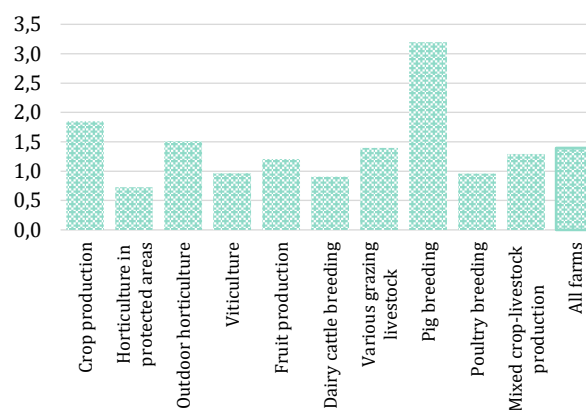
Graph 45: Farm NVA per AWU, by regions of NUTS 2 (mill. RSD/AWU); 2017-2021



Source: MAFWM, FADN

When this indicator is observed in relation to the types of production, the highest value, i.e., the lowest expenditure of labour for generating the newly created value on the farm, is shown by farms engaged in the production of arable crops and pig production.

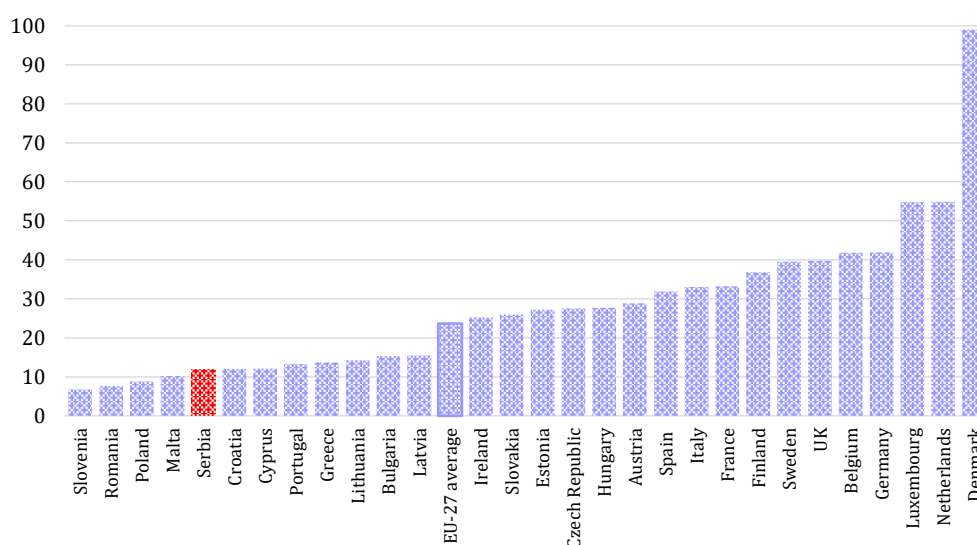
Graph 46: Farm NVA per AWU, by type of production (mill. RSD/AWU); 2017-2021



Source: MAFWM, FADN

NVA per AWU varies significantly in EU member states. The highest value of this indicator in 2020 was achieved in Denmark (about EUR 99 thousand) per farm, while this value in the Netherlands and Luxembourg is at the level of about EUR 50 thousand. On the other hand, a lower value of this indicator indicates lower productivity. Serbia shows extremely low values of this indicator of around EUR 11 thousand, the value of which is significantly below the EU-27 average (about EUR 23 thousand).

Graph 47: Farm NVA per AWU in EU members and Serbia (000 EUR); 2020*



Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

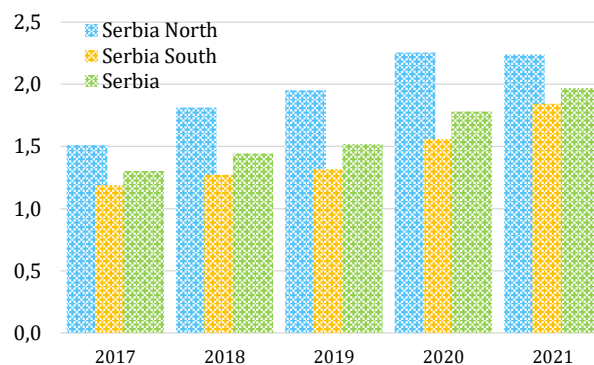
3.2.4. Farm Net Income

The structure of the distribution of the total income shows the farm's profitability. When analyzing the farm business, it is important to determine the value of the farm's net income, or the return on own capital, unpaid labour and own management.

The average net income of all farms in Serbia is RSD 1.8 million (about EUR 15 thousand) p/a, which is below the average in the EU.

The net income in the region Serbia North is significantly higher than in the region Serbia South, which indicates a more favourable volume and value of production (a larger number of hectares, a larger number of cattle, etc.), or more viable use of resources.

Graph 48: Farm net income, by regions of NUTS 1 (mill. RSD); 2017-2021



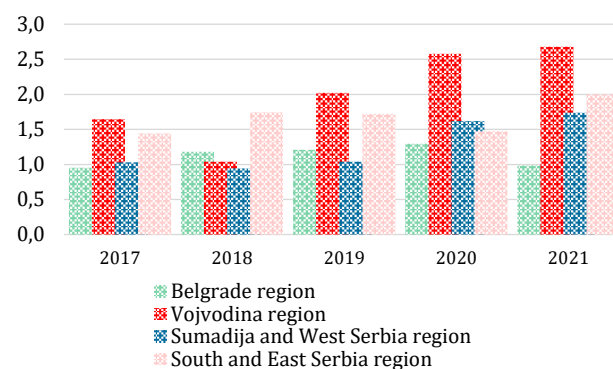
Source: MAFWM, FADN

The movement of net income shows a growing trend at the level of Serbia in the previous five-year period, as well as at the level of the North and South regions. The average farm net income in 2021 reached the national maximum value of RSD 1.8 million, whereby a higher level of net income is achieved in the region of North Serbia (RSD 2.3 million) compared to the region of South Serbia (RSD 1.6 million).

Observed by regions at the level of NUTS 2, all regions recorded growth in the previous five years, except for the regions of South and East Serbia, where a slight decline in this indicator is evident from the middle of the period.

The highest level of farm net income in 2021 was recorded in the Vojvodina Region – RSD 3.3 million, while the other three regions achieved a result of around RSD 1 million.

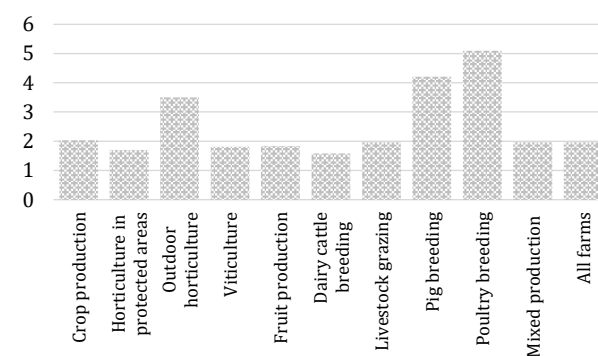
Graph 49: Farm net income, by regions of NUTS 2 (mill. RSD); 2017-2021



Source: MAFWM, FADN

The poultry sector at the level of Serbia also recorded the highest value (RSD 5 million) in 2021, while farms engaged in milk production in 2021, as in the previous period, achieved the lowest net income.

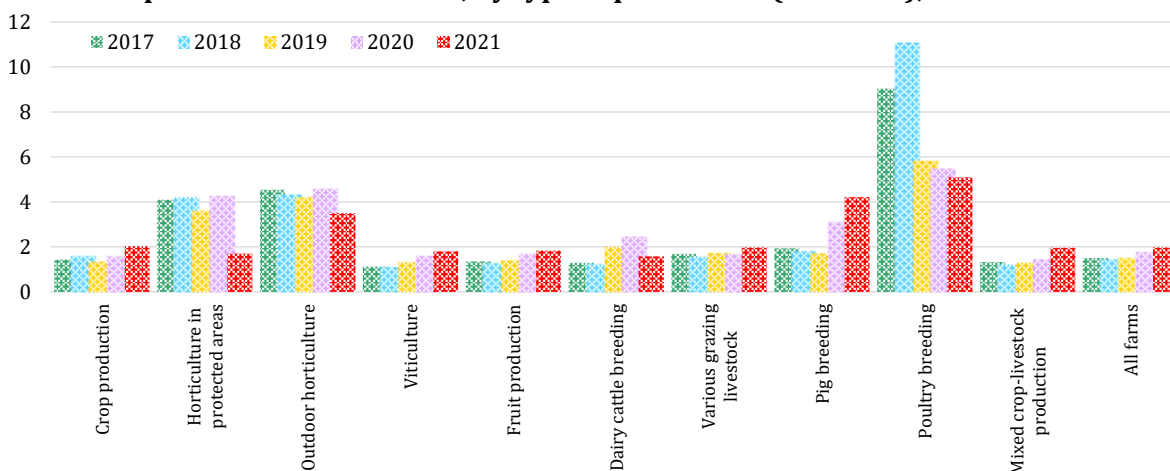
Graph 50: Farm net income, by type of production (mill. RSD); 2021



Source: MAFWM, FADN

If the farm net income is observed from the aspect of the activity in which these farms operate, in the previous five-year period (2017-2021) the dominance of poultry breeding as a sector is visible in the observed period. However, at the end of the period, there is a decrease in the results in this sector and an equalization of the generated income per farm between the sectors. Also, the sector dealing with milk production achieved the lowest values of business profitability in the observed period.

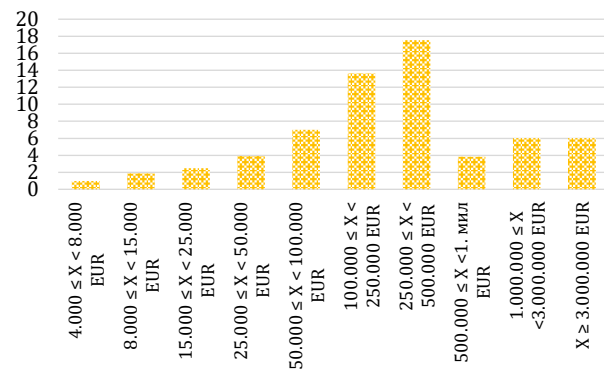
Graph 51: Farm net income, by type of production (mill. RSD); 2017 -2021



Source: MAFWM, FADN

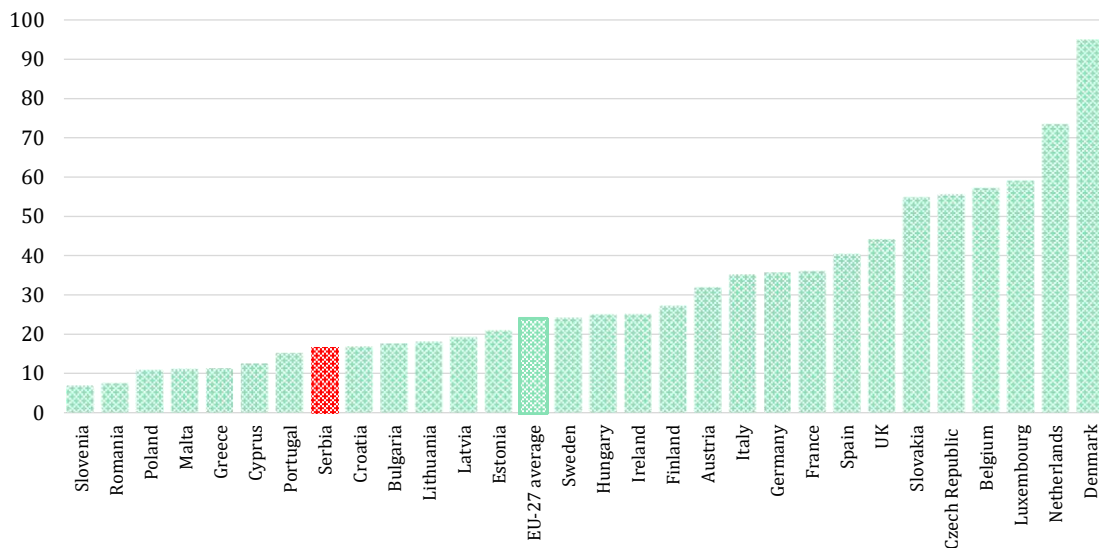
If the generation of farm net income is analysed from the aspect of its economic size, it can be observed that farms of a higher category of economic size achieve the highest net income. Therefore, at the level of Serbia in 2021, the highest result of this indicator was generated by the EUR 250-500 thousand category farms. (RSD 17.5 million).

Graph 52: Farm net income, by economic size (mill. RSD); 2021



Source: MAFWM, FADN

Graph 53: Farm net income in EU members and in Serbia (000 EUR); 2020*

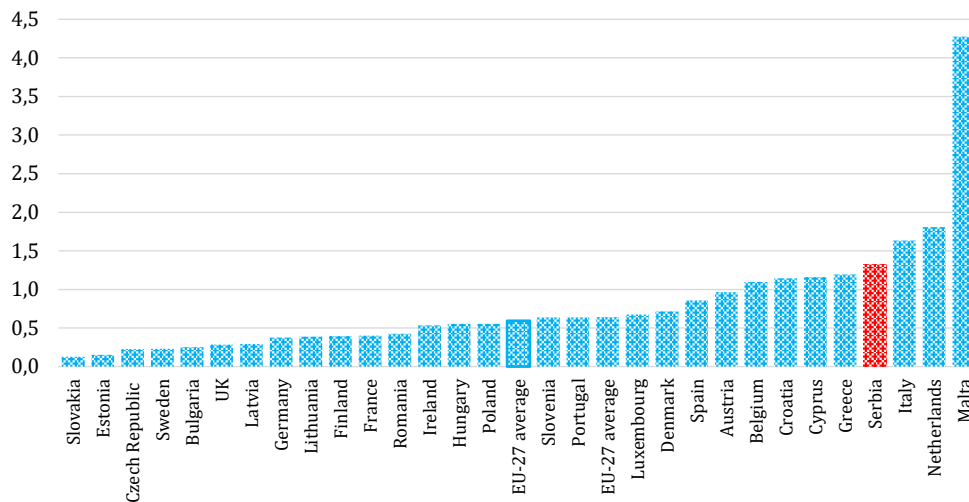


Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

The highest level of net income in the EU in 2020 was generated by Denmark (EUR 94.8 thousand) and the Netherlands (EUR 73.3 thousand), while Slovenia is in last place, with EUR 6.8 thousand generated net income. However, when looking at the net income per UAA, Serbia is near the top, with a net income per hectare of around EUR 1,300.

Graph 54: Farm net income by UAA in EU members and Serbia (000 EUR); 2020*



Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

3.2.5. Farm net income per engaged family labour force

If the farm net income is compared to the engaged labour force of the members of the farm, a more objective indicator of the level of income is obtained by the family (unpaid) labour force, engaged in the production that generated the revenue.

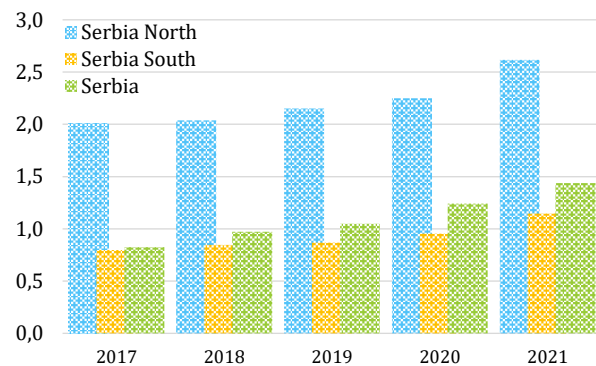
This indicator completely follows the trend, or the increase in the farm net income, which indicates an increase in the farm net income both at the national level and at the level of the North and South regions.

In 2021, at the level of Serbia, the highest value of RSD 1.4 million for the indicator was achieved in the observed period, while in the region of North Serbia, this result was at the level of RSD 2.6 million, and in the region of Serbia South it was half as much (RSD 1.1 million).

This indicator is significantly higher in the North region than in the South region, which indicates a more favourable volume and value of production (a larger number of hectares, a larger number of cattle, etc.), or more profitable use of resources.

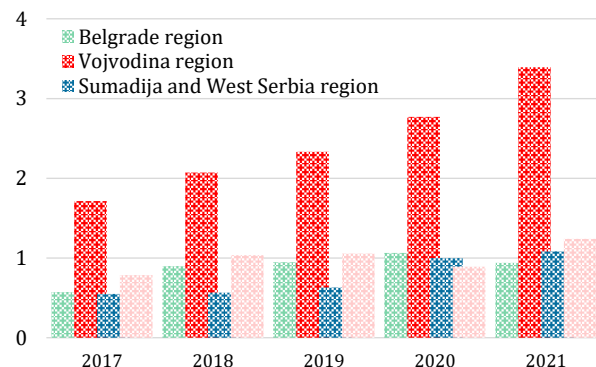
The highest level of this indicator is recorded in the Region of Vojvodina, with a growing trend, while the other three regions deviate significantly, varying around RSD 1 million.

Graph 55: Farm net income/family labour, by regions of NUTS 1 (mill. RSD); 2017-2021



Source: MAFWM, FADN

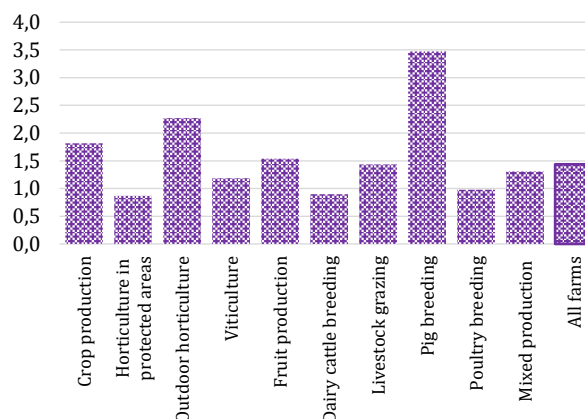
Graph 56: Farm net income/family labour, by regions of NUTS 2 (mill. RSD); 2017-2021



Source: MAFWM, FADN

Observed by the type of production, the highest value in 2021 was achieved by farms engaged in pig breeding, recording a value of RSD 3.5 million (about EUR 30 thousand) p/a.

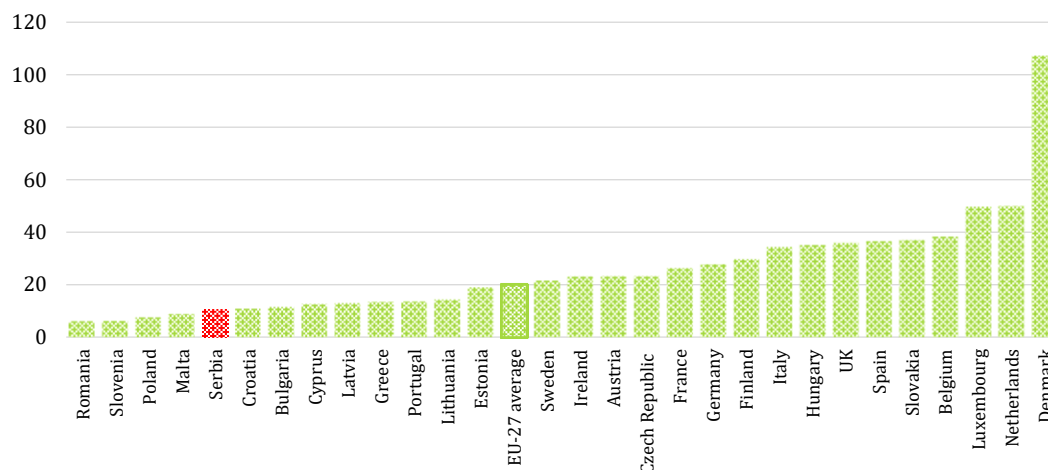
Graph 57: Farm net income/family labour, by type of production (mill. RSD); 2021



Source: MAFWM, FADN

The farm net income expressed by the family labour force in Serbia amounts to RSD 1.2 million (about EUR 11 thousand) p/a, which is below the average of EU member states. The highest level of net income by the family labour force in the EU in 2020 was generated by Denmark (about EUR 106 thousand) and the Netherlands (about EUR 50 thousand), while Slovenia and Romania are in the last place in the EU with about EUR 6 thousand.

Graph 58: Farm net income/family labour in EU members and Serbia (000 EUR); 2020*



Source: MAFWM, FADN and EU, FADN

* Data for Serbia refers to 2021

4. AGRICULTURAL POLICY

4.1. Framework of the agricultural and rural development policies

Strategy and program framework

Agricultural and rural development policies in the Republic of Serbia are implemented in accordance with the strategic directions contained in the Strategy for Agriculture and Rural

Development of the Republic of Serbia for the period 2014-2024²¹. As a document of the highest level of generality, the Strategy defines the vision, strategic goals, priority areas and directions of development of agriculture and rural development of the Republic of Serbia in the period 2014-2024, which is a general direction for defining and implementing specific support measures.

Also, the Strategy is a framework for the adoption of medium-term program documents - the National Program for Agriculture and the National Program for Rural Development. The programs are of a lower level of generality compared to the Strategy, and they contain detailed three-year plans and the dynamics of the implementation of measures, as well as activities aimed at adjusting the national agricultural policy to the Common Agricultural Policy of the EU during the pre-accession period.

Legislative framework

The main laws, on which the implementation of agricultural and rural development policies in the Republic of Serbia are based, are the Law on Agriculture and Rural Development²² and the Law on Subsidies in Agriculture and Rural Development²³.

The Law on Agriculture and Rural Development defines the establishment of certain bodies, instruments and mechanisms for creating and implementing the agricultural and rural development policies. The Law on Subsidies in Agriculture and Rural Development defines types of subsidies, manner of using subsidies, beneficiaries, conditions for exercising the right to subsidies, as well as the minimum amounts of subsidies.

The latest amendments to both laws established the legislative framework for the introduction and functioning of the eAgrar software solution, including electronic submission of requests for subsidies and electronic processing.

Financial basis

Financial resources for subsidies in agriculture and rural development are provided for in the budget of the Republic of Serbia, where the measures are mostly financed from general revenues and budget receipts as sources, while certain support measures are financed from EU funds and international donor funds. Pursuant to the Law on the Budget of the Republic of Serbia for the year 2022,²⁴ the Ministry of Agriculture, Forestry and Water Management, as a budget beneficiary, has allocated funds for subsidies in agriculture and rural development, which were allocated to individual support measures by the Regulation on the Allocation of Subsidies in Agriculture and Rural Development in 2022²⁵. In addition to the amounts at the level of measures and groups of measures, this regulation prescribes the volume of funds, types, and maximum amounts per type of subsidies in agriculture and rural development.

However, in addition to support at the national level, support for agriculture and rural development is also implemented at the local and provincial level pursuant to special programs and it is financed from local/provincial funding sources.

²¹ Official Gazette of RS, no. 85/14

²² Official Gazette of RS, no. 41/09, 10/13 - another law, 101/16, 67/21 - another law and 114/21

²³ Official Gazette of RS, no. 10/13, 142/14, 103/15, 101/16 and 35/23

²⁴ Official Gazette of RS, no. 110/21 and 125/22

²⁵ Official Gazette of RS, no. 125/21, 11/22, 30/22, 52/22, 67/22, 99/22, 126/22, 141/22

4.2. Measures of agricultural and rural development policies in 2022

In 2022, and pursuant to the Regulation on the allocation of subsidies in agriculture and rural development in 2022, the following subsidies were implemented:

- 1) direct payments,
- 2) rural development measures,
- 3) specific subsidies,
- 4) IPARD subsidies,
- 5) credit support in agriculture.

Table 7: Types of subsidies in agriculture and rural development*; 2022

Measure		Support per unit
I	DIRECT PAYMENTS	
1.	Premiums	
1.1	Milk premium ¹	15 RSD/l (Q1-Q2) 10 RSD/l (Q3-Q4)
2.	Subsidies for production	
2.1	Basic subsidies for plant production ²	6,000 RSD/ha
2.2	Subsidies for livestock production	
2.2.1	Subsidies for quality breeding dairy cows ³	25,000 RSD/head
2.2.2	Subsidies for quality breeding fattening cows and bulls	40,000 RSD/head
2.2.3	Subsidies for quality breeding sows and boars	15,000 RSD/head
2.2.4	Subsidies for quality breeding sheep, rams and goats	7,000 RSD/head
2.2.5	Subsidies for quality breeding nuts of fish carp	500 RSD/head
2.2.6	Subsidies for quality breeding nuts of fish trout	300 RSD/head
2.2.7	Subsidies for parental heavy-type hens	60 RSD/head
2.2.8	Subsidies for parental light-type hens	100 RSD/head
2.2.9	Subsidies for parental turkeys	300 RSD/head
2.2.10	Subsidies for suckler cows ⁴	40,000 RSD/head
2.2.11	Subsidies for cattle fattening ⁵	15,000 RSD/head
2.2.12	Subsidies for lambs fattening	2,000 RSD/head
2.2.13	Subsidies for kids fattening	2,000 RSD/head
2.2.14	Subsidies for pig fattening	1,000 RSD/head
2.2.15	Subsidies for beehives ⁶	800 RSD/bee hive
2.2.16	Subsidies for consumable fish production ⁷	10 RSD/kg
2.2.17	Subsidies for cows for breeding calves for fattening ⁸	20,000 RSD/head
3.	Recourses	
3.3	Recourse for storage costs in public warehouses ⁹	40%
3.4	Input subsidies for fuel, fertilizer and seed	3,000 RSD/ha
II	SUPPORT FOR RURAL DEVELOPMENT MEASURES	
1.	Subsidies for competitiveness improvement	
1.1	Investments in physical assets of agricultural holding	
1.1.1	Support for establishment of new permanent crops plantations of fruits, grapevines and hops ¹⁰	
1.1.1.1	Support for establishment of new permanent crops plantations of fruits and hops	50-65%
1.1.1.2	Support for establishment of new permanent crops plantations of grapevines	60%
1.1.2	Support for primary agricultural production improvement	
1.1.2.1	Support for investments in procurement of new machinery and equipment for improvement of primary plant production ¹¹	50-65%
1.1.2.2	Support for investments in procurement of new machinery and equipment for improvement of primary livestock production ¹²	50-65%
1.1.2.3	Support for investments for procurement of new machinery and equipment for improvement of livestock production digitalization ¹³	60%
1.1.2.4	Support for investments in procurement of quality breeding animals for improvement of primary livestock production ¹⁴	50-65%
1.1.2.5	Support for investments in construction and equipping of facilities ¹⁵	50-65%
1.1.2.6	Support for investments in procurement of new tractors ¹⁶	50-65%
1.1.2.7	Support for investments in field electrification ¹⁷	90%
1.2	Investments in processing and marketing of agricultural, food and fishery products	

1.2.1	Support for quality improvement of wine, brandy and agricultural and food products ¹⁸	50-65%
1.2.2	Control stamps for agricultural and food products and wine identification stamps	50-65%
1.2.3	Construction facilities and purchasing of equipment in wine sector	60%
1.2.4	Construction and reconstruction facilities and purchasing of equipment in spirits sector	60% 60% for PGI
1.3	Risk management ¹⁹	40-45% 70% for 5 counties
2.	Subsidies for preservation and improvement of the environment and natural resources	
2.1	Organic production	
2.1.1	Organic plant production ²⁰	250%
2.1.2	Organic livestock production ²¹	40%
2.2	Subsidies for conservation of plant and animal genetic resources	
2.2.1	Subsidies for conservation of plant genetic resources ²²	100%
2.2.2	Subsidies for conservation of animal genetic resources ²³	per head
3.	Subsidies for diversification of income and improving the life quality in rural areas	
3.1	Subsidies for improvement of economic activities in villages through support for non-agricultural activities ²⁴	50-65%
3.2	Subsidies for implementation of activities in order to increase competitiveness in terms of adding value through processing, as well as the introduction and certification of food quality systems, organic products and products with geographical indications on holdings	
3.2.1	Introduction and certification of food quality systems, organic products and products with GI ²⁵	50-65%
3.2.2	Diversification of economic activities through investment support in processing and marketing on holdings ²⁶	50-65%
3.4	Investments in rural infrastructure	100%
4.	Subsidies for preparation and implementation of rural development local strategies	
4.1	Preparation of rural development local strategies	100%
4.2	Implementation of rural development local strategies	100%
5.	Subsidies for improvement of system for creation and transfer of knowledge	
5.1	Development of technical-technological, applied, developmental and innovative projects in agriculture and rural development ²⁷	100%
5.2	Support to providing advice and information to agricultural producers, associations, cooperatives and other legal entities in agriculture ²⁸	100%
III	SPECIFIC SUBSIDIES	
1.	Subsidies for implementation of breeding programs, in order to achieve the objectives in livestock production – selection measures ²⁹³⁰	
2.	Subsidies for promotional activities in the agriculture and rural development (measures and actions in agriculture) ³¹	
3.	Subsidies for production of planting material, certification and clone selection ³²	
IV	IPARD	
	Measure 1: Investments in physical assets of agricultural holdings ³³	
	Measure 3: Investments in physical assets related to processing and marketing of agricultural and fishery products ³⁴	
	Measure 7: Diversification of agricultural holding and business development ³⁵	
	Measure 9: Technical assistance	
V	CREDIT SUPPORT³⁶	

*⁽¹⁻³⁶⁾ Bylaws on subsidies in agriculture and rural development in 2022 is presented in Annex 3.2

Source: *The Regulation on the allocation of subsidies in agriculture and rural development in 2022*

The levels of support for certain direct payments were increased in 2022, with the additional introduction of measures prescribed by the Law on Subsidies in Agriculture and Rural Development. In this sense, the milk premium for the first and second quarters was increased to RSD 15/l, while the level of support in the third and fourth quarters was RSD 10/l. Also, the amount of basic subsidies for plant production was increased from RSD 4,000/ha to RSD 6,000/ha, with the introduction of an input subsidy for fertilizers, fuel and seeds through the payment of RSD 3,000/ha. Support for other direct payment measures remained at the same level as in the previous year.

In terms of measures to support rural development, in 2022, due to the increase of basic subsidies in plant production, the level of support in organic plant production was reduced to 250% compared to conventional production, while the level of support for producers with a registered geographical indication of spirit drinks within the measure Construction and reconstruction of facilities and procurement of equipment in the sector of the production of spirit drinks increased to 70%. The levels of support for other rural development support measures, as well as for other types of subsidies, remained unchanged in 2022 compared to 2021.

4.3. Budget funds to support agriculture and rural development

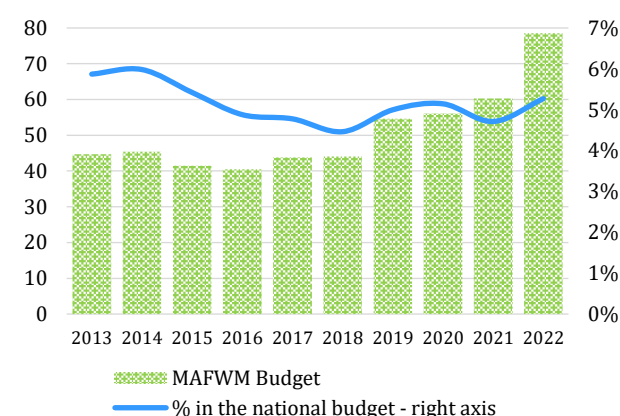
4.3.1. Budget of the Ministry of Agriculture, Forestry and Water Management

In the first half of the previous decade, the budget funds for agriculture, allocated to the MAFWM²⁶ as a budget beneficiary, were at a relatively stable level, between RSD 40 and 45 billion, while the second half of the period was marked by budget growth, reaching the maximum level in 2022 (RSD 78.6 billion).

In the period 2018-2022, the budget of the MAFWM increased by an average of 13% p/a, with the budget for agriculture in 2022 being even 30% higher than the budget in the previous year.

The increase in the absolute amount of the budget for agriculture in 2022 was accompanied by an increase in its share in the total budget of the Republic of Serbia, reaching a share of 5.27%, which is 0.56 pp more than in 2021 and the highest share in the last five years.

Graph 59: Budget of the MAFWM (bn RSD) and share in the total budget of the RS (%) (right axis); 2013-2022



Source: Law on the Budget of the Republic of Serbia for the respective years

4.3.2. Funds allocated for subsidies in agriculture and rural development

About 72% of the budget funds allocated to the MAFWM were earmarked in 2022 for subsidies in agriculture and rural development. The total earmarked amount of RSD 56.7 billion, is an increase of 28% compared to the allocated funds for these purposes in 2021.

As in previous years, subsidies in agriculture and rural development were granted in 2022 through direct payments, rural development measures, specific subsidies, credit support and IPARD subsidies. In addition to these support measures, and due to the need to react to market disturbances, extraordinary support measures were implemented.

²⁶ In the observed ten-year period, the budgets of the ministry responsible for agriculture are shown, while in the period 2014-2017, the competent ministry was the Ministry of Agriculture and Environmental Protection. As a result, the presented budgets also include relevant expenditures regarding environmental protection in the specified period.

Table 8: Funds allocated for subsidies in agriculture and rural development, by type of subsidies (RSD); 2021/2022

Type of subsidies	2021	2022
Direct payments	31,269,521,000	41,256,678,000
Support for rural development measures	7,009,994,000	9,051,459,000
Specific subsidies	250,000,000	226,100,000
IPARD subsidies	5,384,831,000	5,416,650,000
Credit support	470,000,000	722,000,000
Total	44,384,346,000	56,672,887,000
COVID-19 – Intervention purchase of beef cattle		312,700,000
Support for flour producers		353,558,000
Support for sunflower producers		2,600,000,000

Source: Regulations on the allocation of subsidies in agriculture and rural development in 2021 and 2022 and bylaws for the additional measures

The structure of allocated funds for subsidies in agriculture and rural development in 2022 remained largely unchanged compared to previous years, retaining direct payments as the predominant type of subsidies in terms of allocated funds (73% of total subsidies), while 16% of the budget funds were allocated for subsidies in rural development, and slightly less than 10% for IPARD subsidies.

Year-over-year, the allocated funds for direct payments increased by 32%, the funds for rural development measures by 29%, while the funds for credit support in 2022 increased by as much as 54% year-over-year.

4.3.3. Realized funds for subsidies in agriculture and rural development

For subsidies in agriculture and rural development, RSD 53.9 billion was paid out in 2022, which is close to 33% more compared to the value of subsidies realized in 2021.

Table 9: Realized funds for subsidies in agriculture and rural development, by type (RSD); 2021/2022

Type of subsidies	2021	2022
Direct payments	31,171,105,060	41,245,651,001
Support for rural development measures	6,854,917,164	9,001,866,581
Specific subsidies	248,055,621	224,913,111
IPARD subsidies	1,898,969,206	2,688,967,331
Credit support	451,625,799	712,341,220
Total	40,624,672,849	53,873,739,245
COVID-19 – Intervention purchase of beef cattle		312,681,640
Support for flour producers		353,392,237
Support for sunflower producers		2,598,987,729

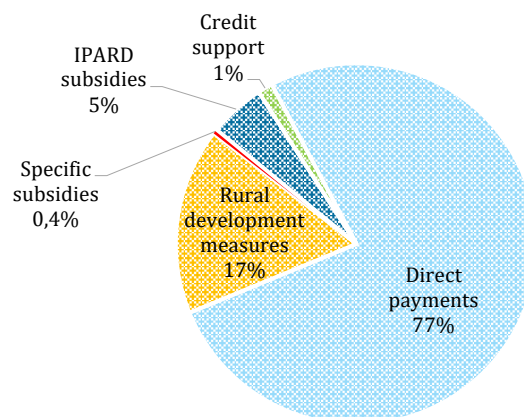
Source: MAFWM, DAP

Bearing in mind the increase in funds within certain types of subsidies, the largest year-over-year increase in disbursed funds was recorded for credit support (+58%) and IPARD subsidies (42%), while the realized funds for direct payments and rural development measures increased by 31-32%.

The structure of realized subsidies by individual types is correlated with the structure of allocated funds for these purposes in 2022, with the expected largest amount paid out for direct payments (77% of the budget for subsidies).

Funds for rural development measures accounted for 17% of the total subsidies, while IPARD subsidies accounted for 5% of the funds realized in 2022.

Graph 60: Structure of funds realized for subsidies in agriculture and rural development, by type; 2022



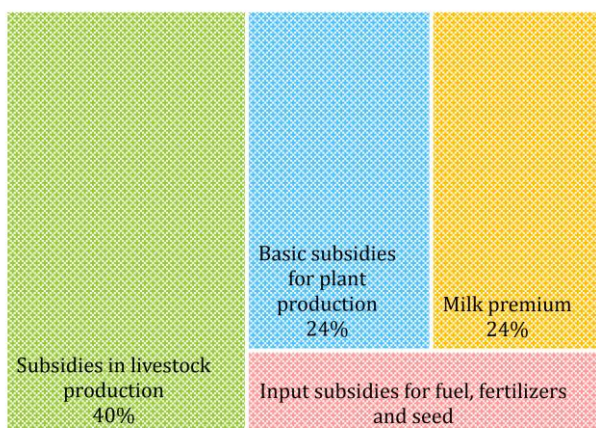
Source: MAFWM, DAP

Direct payments

For the purposes of direct payments in 2022, approximately RSD 41.2 billion was paid, of which the largest part (40%) was related to direct payments in livestock production.

Basic subsidies for plant production and the milk premium account for nearly half of the realization of direct payments, while 12% was used for payments based on the purchase of inputs for production.

Graph 61: Structure of funds realized for direct payments, by measures (%); 2022



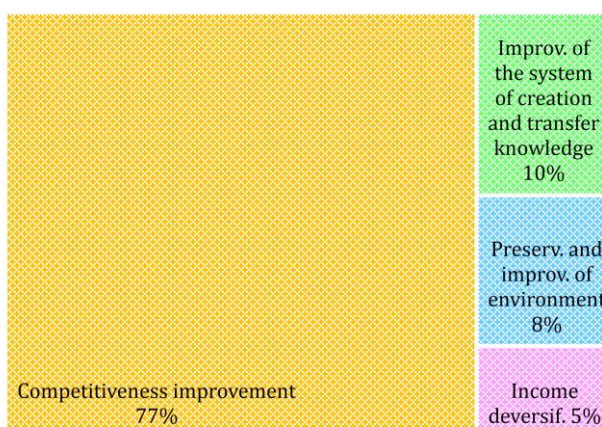
Source: MAFWM, DAP

Subsidies for rural development measures

In regard to rural development measures, about RSD 9 billion was paid for this type of measure in 2022, with over 3/4 of the funds intended for investments for competitiveness improvement.

Within this category of subsidies, almost half of the funds (RSD 3.3 billion) related to investments in physical assets of holdings, while 27% was spent on insurance premium costs and 25% on investments in processing and marketing.

Graph 62: Structure of funds realized for rural development measures, by measures (%); 2022



Source: MAFWM, DAP

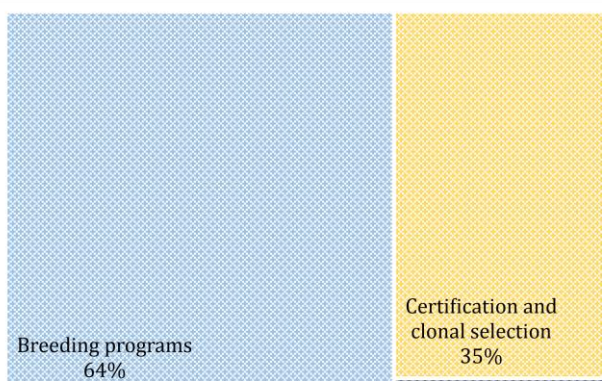
As part of the measures aimed at improving the knowledge creation and transfer system, almost RSD 600 million was implemented for advisory activities, while most of the subsidies for the preservation and improvement of the environment and natural resources related to the financing of support for organic production. In 2022, about RSD 440 million was spent on subsidies for income diversification and improvement of the quality of life in rural areas, mainly for the purpose of improvement and development of rural infrastructure.

Specific subsidies

About RSD 225 million was spent in 2022 on specific subsidies, of which 64% was aimed at support through breeding programs in livestock production (selection measures).

35% was set aside for subsidies for the production of planting material and certification and clonal selection, while less than RSD 3 million was paid for promotional activities in agriculture.

Graph 63: Structure of funds realized for specific subsidies, by measures (%); 2022



Source: MAFWM, DAP

Credit support

Credit support is a type of subsidy that allows holdings easier access to the use of credit by subsidizing part of the interest, for the following credit purposes: 1) purchase of animals (including animal insurance premium); 2) procurement of seeds, planting material and plant protection products; 3) investments in agricultural machinery and equipment; 4) procurement of feed for animals; 5) investments in certain types of

machinery and equipment used in plant production; 6) procurement of quality breeding heifers and quality breeding cows (up to five years of age); 7) procurement of fertilizers. In 2022, based on credit support, RSD 712.3 million was realized.

IPARD subsidies

The main purpose of the IPARD II Program is to support agricultural producers and processors, as well as the population in rural areas in the Republic of Serbia to gradually increase their capacities and potentials in order to timely and properly prepare for reaching European standards in the fields of agriculture, food industry and environmental protection. The IPARD II Program defines measures that provide financial support to the sector of primary agricultural production, the sector of processing and marketing of agricultural and fishery products, as well as support for the farm diversification and business development in rural areas of the Republic of Serbia.

The IPARD II Program contains the following accredited measures:

- Measure 1: Investments in physical assets of agricultural holdings;
- Measure 3: Investments in physical assets concerning processing and marketing of agricultural and fishery products;
- Measure 7: Farm diversification and business development;
- Measure 9: Technical assistance.

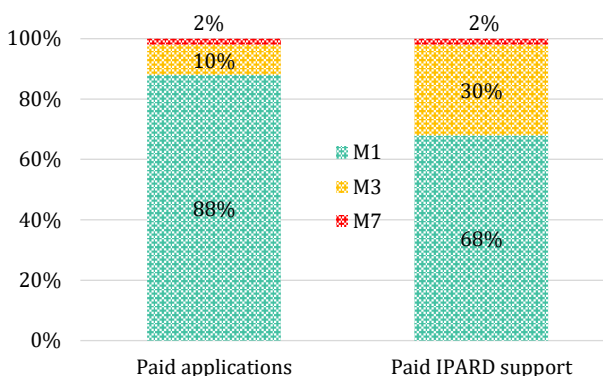
The Republic of Serbia was initially granted EUR 175 million from European funds for the IPARD II program period 2014-2020. Given that the funds from the budget allocation for 2017 in the amount of EUR 3,696,787.3 were not used for the purpose of pre-financing, for interim payments, in accordance with the relevant provisions of the Sectoral Agreement concluded between the Government of the Republic of Serbia and the European Commission, automatic cancellation of the budget obligation in the specified amount was initiated. Accordingly, the determined budget contribution of the EU for the IPARD II Program amounts to EUR 171,303,212.7²⁷.

From the beginning of the implementation of the IPARD II Program until the end of 2022, 14 public calls for project proposals were published (seven for Measure 1, with a total of allocated funds in the amount of EUR 111.2 million, four for Measure 3, with a total of allocated funds in the amount of EUR 81.5 million, two for Measure 7, with total allocated funds in the amount of EUR 26.3 million, and one call for non-investment Measure 9, whose beneficiary is the IPARD Managing Authority, for the purposes of creating the IPARD Managing Authority website in the amount of the required IPARD support of EUR 6,300), of which two calls were announced in 2022 (Seventh call for Measure 1 and First call for Measure 9). By the end of 2022, 3,179 applications were submitted for the exercise of the right to IPARD subsidies, with required public support in the amount of EUR 490.7 million, of which 656 requests were submitted in 2022 within the Seventh Call for Measure 1 for the purchase of tractors (estimated IPARD support: EUR 31.8 million), while one request was submitted for Measure 9, with the requested support amount of 6,300 EUR. Concluding from 31 December 2022, 1,193 IPARD projects were approved (EUR 146.8 million approved IPARD support) and 675 projects were paid (EUR 52 million paid IPARD support).

²⁷ Until 31/12/2022

As part of Measure 1, by the end of 2022, the largest number of requests were paid (594, with the amount of IPARD support paid in the amount of EUR 35.4 million), including the advance payment. A significantly smaller number of requests were paid for projects under Measure 3 (70), with IPARD support paid in the amount of EUR 15.6 million, while within Measure 7, EUR 1.1 million was paid in advance for 11 projects.

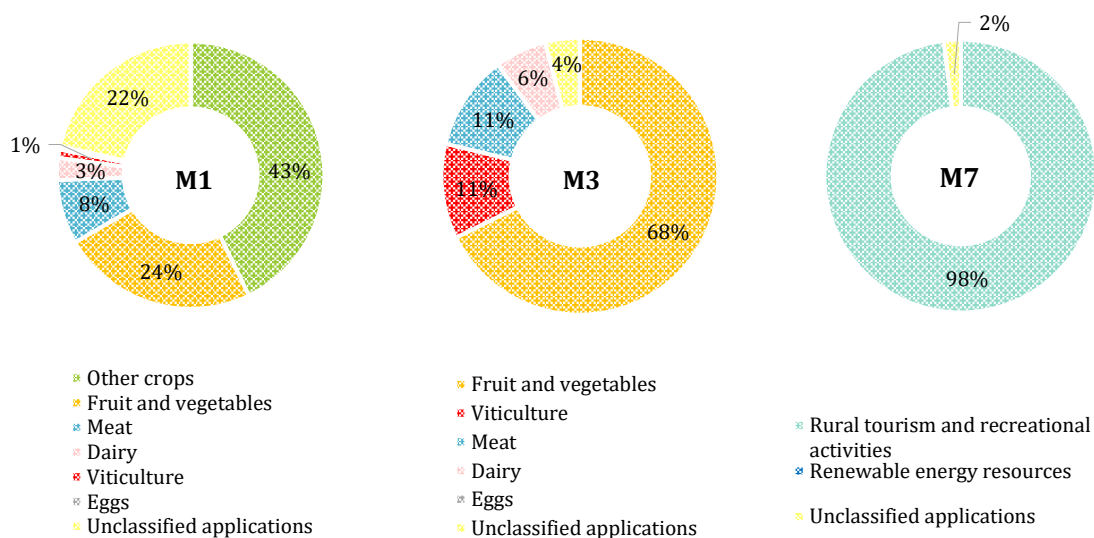
Graph 64: Share of certain measures in the total number of paid applications and paid IPARD support (%); 2014-2020



Source: MAFWM, IPARD Managing Authority

The greatest interest of beneficiaries from the point of view of the number of requests submitted under Measure 1 refers to investments in the sector of other crops (cereals, oilseeds, sugar beets), while at the same time, the largest number of requests received for Measure 3 is intended for investments in the sector of fruit and vegetable processing. Rural tourism and recreational activities are the most attractive sectors within the call for Measure 7.

Graph 65: Structure of submitted applications, by sectors (%); 2014-2020

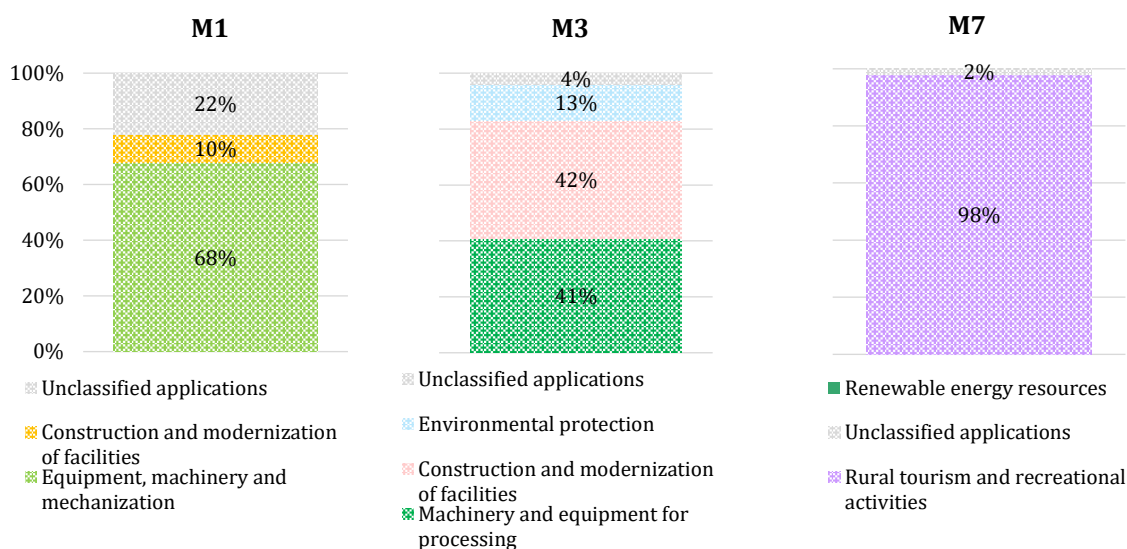


Source: MAFWM, IPARD Managing Authority

In regard to the type of investments according to IPARD measures, the procurement of equipment, machinery and mechanization is the most represented type of investment within Measure 1 in terms of the number of applications submitted, while investments in the construction and modernization of facilities are more significant in terms of the volume of investments, or the required amount of IPARD support, which results in a higher average investment value per submitted application for this type of investment. Within Measure 3, out of the total number of submitted applications classified by sectors, 149 applications were submitted for the purpose of building and equipping facilities and setting up new processing facilities, while 109 applications were submitted for the modernization of processing equipment. The establishment of tourist households and

recreational zones is the predominant type of investment within Measure 7, for which 468 applications have been submitted by the end of 2022.

Graph 66: Structure of submitted applications, by investment (%); 2014-2020



Source: MAFWM, IPARD Managing Authority

The predominant type of investment within Measure 1 refers to the purchase of tractors, with a total of 1,486 submitted applications (66% of the total number of submitted applications) and requested IPARD support in the amount of EUR 58.8 million (27% of the total amount of the requested IPARD support).

The most represented applicants for IPARD funds are natural persons (individual farmers and entrepreneurs), who submitted 79% of the total number of applications, with a share in the requested costs of 57%. In contrast, 21% of applications were submitted by legal entities (companies and agricultural cooperatives), but their share of the requested costs is around 43%. The above structure by the type of beneficiary indicates a significantly higher average investment value per submitted application in the case of companies (EUR 574,448) compared to this indicator for individual farmers (EUR 194,922).

Regarding the regional representation of submitted applications, the largest number of applications for Measure 1 was submitted in the Vojvodina Region (70%), while the largest number of applications for Measure 3 and Measure 7 was submitted by potential beneficiaries from the Region of Šumadija and Western Serbia (48% for Measure 3 and 60% for Measure 7).

4.4. Support at the provincial and local level

The Law on Subsidies in Agriculture and Rural Development prescribes the possibility of implementing a program of support measures for the implementation of agricultural and rural development policies for the territory of an autonomous province or local self-government unit. These programs are adopted by the competent bodies of the provincial and local administrations, with the prior approval of the Ministry of Agriculture, Forestry and Water Management, which evaluates the compliance of the program with legal provisions and national policies.

Within their programs, the authorities of the autonomous province and local self-government units can implement all types of subsidies in their territory, except for direct

payments (with the exception of recourse for the costs of storage in public warehouses and recourse for reproductive material/artificial insemination).

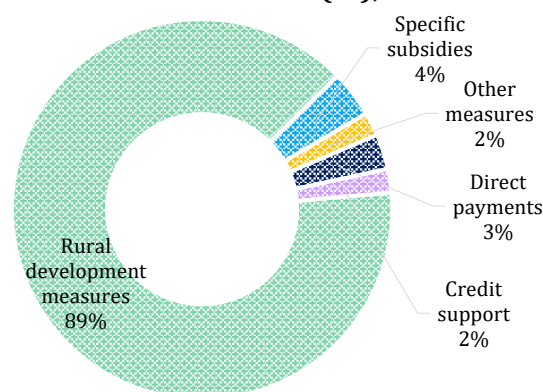
Support programs at the provincial and local level are submitted and approved electronically, through the Platform for Communication with Local Self-Governments. Also, the authorities of the autonomous province and local self-government units submit reports on the implementation of the program in the previous calendar year through the platform, and in accordance with legal provisions.

In 2022, through 119 approved programs, around RSD 3.5 billion were realized for measures to support agriculture and rural development at the provincial and local levels.

Due to legal restrictions regarding the possibility of realizing direct payments, but also due to the potential for adaptation to local characteristics, the most represented type of support is rural development measures, given that almost 90% of funds at the local and provincial level are directed towards supporting rural development.

On the other hand, RSD 386 million was spent on other types of support.

Graph 67: Structure of realized support at the provincial and local level (%); 2022



Source: MAFWM

5. CLIMATE CHANGES IN AGRICULTURE

Climate changes, which are faster than ever today, have increased damages and losses, and threatened people's lives and the functionality of natural systems, both globally and in our country. Estimates show that the Republic of Serbia is warming more and faster than the global average – while an increase in the global average temperature of 1.1 °C has been recorded, Serbia is already at 1.8 °C, and in the summer at even 2.6 °C. At the same time, since 2000, the Republic of Serbia has faced several significant extreme climatic and weather episodes, which have caused significant material and financial losses, as well as losses of human lives.

Climatic hazards that cause the most damage and losses in the Republic of Serbia and whose intensity and frequency are increasing are heat waves, intense precipitation and droughts. Other climatic hazards caused by climate change, which act depending on the characteristics of the region, are floods, landslides, fires, etc. Vulnerability to climate change is exacerbated by air, water and soil pollution. The climate change events in the Republic of Serbia led to the worsening of problems caused by pollution.

The frequency and intensity of climate hazards, caused by climate change, will increase in the future, with a clear trend of change until the middle of the 21st century, after which changes depend on the success of the implementation of mitigation measures and adaptation to climate change. Estimates at the national level show that an increase in the average global temperature will significantly affect the value of GDP in the Republic of Serbia. The decrease in total GDP, depending on the scenario of global temperature

increase, without adjustment and compared to the case of complete absence of global warming, is shown in Table 10.

Table 10: Expected impact of climate change on GDP: Reduction of total GDP compared to GDP in conditions without climate change²⁸ (bn USD; %); 2020-2100

Increase of T for:	2020-2040	2040-2100	2020-2100
1 °C	15,465 (1.20%)	328,899 (4.74%)	344,364 (4.19%)
2 °C	58,124 (4.53%)	708,193 (10.20%)	766,317 (9.32%)
3 °C	59,107 (4.97%)	831,296 (12.88%)	890,403 (11.65%)
4 °C	97,536 (6.87%)	1,904,874 (18.46%)	2,002,410 (17.06%)

Source: UNDP (2019)

In the Republic of Serbia, changes in climate conditions have been monitored for more than ten years, including observed climate changes and future changes until the end of the 21st century under various scenarios of greenhouse gas (GHG) emissions. Reporting according to the United Nations Framework Convention on Climate Change (UNFCCC) of importance in the area of adaptation to changed climate conditions is done in the framework of national reports (so-called National Communications).

The Republic of Serbia has adopted two such reports (First National Communication, MEP, 2010; Second National Communication, MEP, 2017). The Second National Communication is an analysis of the observed climate changes up to 2012, while considering future climate changes according to the IPCC SRES scenarios (Special Report on Emissions Scenarios - SRES) of emissions with the greenhouse effect, in accordance with the IPCC Fourth Assessment Report (Working Group Report I; IPCC, 2007). The selected scenarios for the analysis at that time are SRES A1B and A2, the so-called "medium" and "extreme" scenarios, considering that the assessments of future climate conditions under these two scenarios include the most likely outcomes of climate change for the purposes of adaptation planning.

Within the project financed by the Green Climate Fund "Improvement of medium- and long-term planning of adaptation measures to changed climate conditions in the Republic of Serbia", the necessary support for the improvement of climate analysis, impact analysis and availability of climate data is provided, with the aim of a systematic approach in the process of adaptation to climate change of the Republic of Serbia, as well as providing the opportunity to implement adaptations that are important at the local level. Otherwise, the Green Climate Fund (GCF) is a global fund, created to help the efforts of developing countries under the Convention to respond to the challenges of global climate change. GCF provides support to these countries in limiting or reducing GHG emissions and being affected by changed climate conditions. In other words, the goal of the GCF is to promote the paradigm of transition to low-carbon and development resistant to climate change in a way that respects national priorities and needs, especially taking into account the needs of the most affected countries and peoples.

In 2010, GCF was established by 194 member states of the UN Framework Convention on Climate Change (UNFCCC Convention) as a financial mechanism of this Convention. When the Paris Agreement was adopted in 2015, the GCF gained a significant role in achieving

²⁸ The energy sector is covered together with the three most vulnerable sectors.

the main goal of this Agreement or maintaining the increase in the average global temperature significantly below 2 °C.

In order to cooperate with the GCF pursuant to the Convention, developing countries must establish the so-called NDA (National Designated Authority), or the National Body for Cooperation with the GCF, which serves as a link between the governments of developing countries and the GCF and which primarily approves potential projects for funding from the GCF at the national level²⁹.

Analysis within the above project pointed to the fact that the agricultural sector is the most vulnerable to climate change and has a high exposure because most of the production is in open space. In this regard, it is necessary to provide capacities for adapting agricultural production to climate change.

The negative impact of climate change on fruit production indicates that it is necessary to protect plantations at high risk of frost in the vegetation period and at high risk of extreme temperatures and hail, as well as to plan larger investments to subsidize the protection system in the near future due to the increase in risk. In order to use the potential for growing grape vines, it is necessary to regularly renew the zoning of the Republic of Serbia for the needs of viticulture production, including assessments of the potential risks of climate change, with recommendations for the selection of varieties, locations, methods of cultivation and various agrotechnical measures of, which would ensure quality yield. In high-risk areas, it is necessary to protect the plantations from hail, and high temperatures, but also to plan the introduction of frost protection. Based on previous research, there is a need to apply measures to adapt crop production to climate change through zoning, making recommendations and producing educational materials, and ensuring efficient access to information for the producers. Due to the growing risk of heat stress and other climatic hazards, it is recommended to plan an increase in investment in the provision of suitable facilities for animals, as well as an increase in the capacity to adapt livestock production to climate change and make appropriate recommendations for producers and assess the needs of future investments in order to mitigate the negative impacts.

There is no doubt that climate change will affect the quality and quantity of yields of basic agricultural crops. Recognizing all the negative effects caused by climate change and taking timely short- and long-term activities at all levels can contribute to significantly reducing damage and losses in agriculture. Adaptation to climate change is a long-term process, which needs to be maintained in the future, due to the dynamics of climate change, through renewing and expanding knowledge and information, increasing the effectiveness of their availability to producers and other interested parties, as well as including this information in planning, or strategic and planning documents.

6. SITUATION AND EXPECTATIONS IN THE MARKET OF AGRICULTURAL PRODUCTS IN THE EU IN 2023

The next chapter is an overview of production and market indicators in the markets of basic agricultural products in the European Union in 2022, as well as the expected market

²⁹ The Government of the Republic of Serbia has appointed the Minister of Agriculture, Forestry and Water Management as the new national focal point for the GCF in 2022. This choice is a consequence of the competence of the MAFWM for the three sectors most affected by the changed climate conditions: agriculture, forestry and water management.

trends in 2023. A particular aspect of this review points to market disruptions at the global level, caused by the conflict in Ukraine, as well as significant price fluctuations of production inputs and food in the previous period.

The text is based on the analytical document of the European Commission “*Short-term outlook for EU agricultural markets in 2023*” (issue no. 35, spring 2023)³⁰.

6.1. ARABLE CROPS

- ✓ **265.6 mill. t**
Usable production of EU cereals in 2022/23
- ✓ **+44%**
EU cereals imports in 2022/23
(compared to the five-year average)
- ✓ **31.3 mill. t**
EU oilseed production in 2022/23
- ✓ **+33%**
EU sugar imports in 2022/23
(compared to the five-year average)

The EU usable cereal production is projected at 265.6 million t in 2022/23, a 6.9% decrease compared to the five-year average mostly due to the drought conditions that affected maize in particular (-24.3% below the five-year average). The poor harvest combined with high cereal prices at the beginning of the season and an anticipated decrease in EU meat production is expected to reduce the use of cereals for feed by 2.9% year-on-year, while food use is expected to increase slightly (+0.8% year-on-year).

EU imports of cereals could increase by 44% compared to a five-year average to 35 million t due to an increase in imports from Ukraine. On the other hand, cereal exports are expected to remain strong (+4.7% above the five-year average) thanks to increased soft wheat availability.

The EU oilseed production in 2022/23 is expected at 31.3 million t (+5.2% above the five-year average), helped by an excellent rapeseed harvest (+13.6% above the five-year average) which fully outweighed the decline in the sunflower harvest due to the summer drought.

The forecast of EU sugar production in 2022/23 is at about 15 million t (-8.7% below the five-year average) as both sugar beet area and yields were reduced. Due to lower availability and higher EU prices, EU imports of sugar are expected to increase to 2 million t (+33.1% above the five-year average).

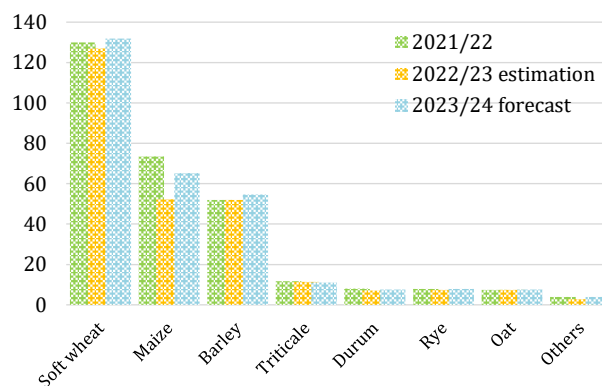
³⁰ *Short-term outlook for EU agricultural markets in 2023 (spring 2023, edition No 35)*
https://agriculture.ec.europa.eu/system/files/2023-03/short-term-outlook-spring-2023_en_1.pdf

6.1.1. Cereals

Lower EU cereal production confirmed

EU cereal production in 2022/23 was impacted negatively by hot and dry weather, resulting in declined production by 9.2% year-on-year, with yields showing a stronger decline (-7.4%) than the area (-2%). However, these results were not proportional to all crops. Yields dropped considerably for maize (-25.7%), more moderately for soft wheat (-2.7%), and remained almost stable for barley (with a yield for spring soft wheat and spring barley significantly better than for the winter ones).

Graph 68: Cereal production in the EU (mill. t); 2021/22-2023/24



Source: DG AGRI (based on Eurostat, MS notifications and JRC MARS data)

EU exports of cereals are likely to be lower than last year (-7.7%, at 44.2 million t), in particular, due to reduced maize exports linked to lower availability. On the other hand, EU wheat exports could grow (+9.4%, to 32 million t), as well as exports of other small cereals. In contrast, EU cereal imports are expected to increase significantly (+57%), driven by increasing imports from Ukraine which created oversupply, downward pressure on prices and saturated logistical chains in some EU regions (Poland, Bulgaria, Romania), while in others it helped compensate production shortages due to draught. Lower EU cereal use for feed is expected compared to the previous marketing year (-2.9%) since the EU livestock production is reduced more than previously forecast. As a result, the cereal ending stocks are expected to increase (+2.4% year-on-year).

Growing EU cereal exports in 2023/24

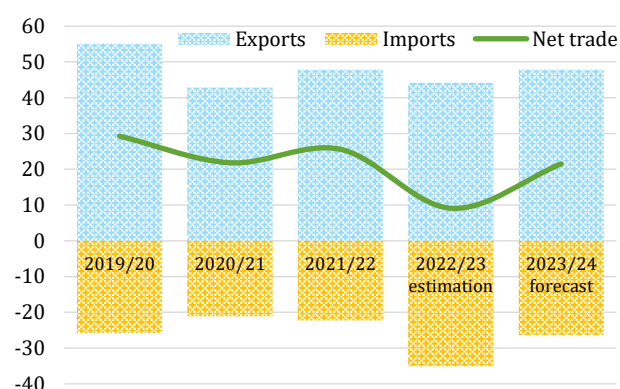
Sowing areas for winter cereals are estimated to be higher in 2023/24 than last year. Areas under winter wheat are expected to remain almost unchanged (20.8 million ha), while winter barley sowing areas should increase to 5 million ha (+1.5%). After a 10% drop last year, an area under rye could increase slightly (+4.6%). Durum wheat and triticale areas, however, are estimated to decrease by more than 2.5% (to 2.1 and 2.5 million ha respectively).

For maize, a prolonged winter drought (and so reduced water availability for summer irrigation) in many EU-producing regions and lower prices could incentivise some farmers to switch maize to sunflower, resulting in a projected reduction of sowing maize area by 4% year-on-year (to 8.5 million ha).

Total EU cereal production in 2023/24, assuming average weather conditions, could reach 287.9 million t (+8.4% year-on-year). Soft wheat production is forecast at 130.9 million t, barley at 54.2 million t and maize at 65 million t.

Lower cereal prices in 2023/24 are due to stabilise animal feed demand at a level of 156.5 million t, while food demand could grow slightly to 59.6 million t, in line with an EU population growth. With higher production, EU cereal exports could increase by 8% (to 48 million t). At the same time, EU imports are forecast to decrease by 25% to 26 million t, also due to the expected recovery in maize production.

Graph 69: Foreign trade in cereals in the EU (mill. t); 2019/20-2023/24



Source: DG AGRI (based on Eurostat and MS notifications)

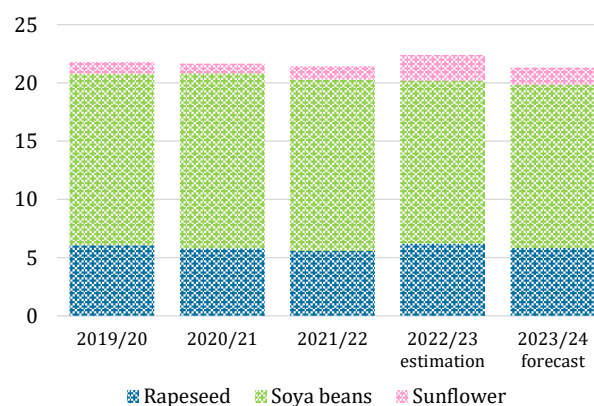
6.1.2. Oilseeds

2022/23 EU oilseeds production rises despite drought

The EU oilseed production in 2022/23 grew by 4% (to 31.4 million t, including linseed), thanks to 19.6 million t of rapeseed harvest (+14.8% year-on-year) and despite reductions due to drought for sunflower (-10.8%) and soya beans (-6.8%).

EU oilseed imports are expected to increase to a record 22.4 million t in 2022/23 (+4.5% year-on-year). Notably, EU imports of sunflower seeds are expected to nearly double to 2.2 million t, as imports from Ukraine have grown due to operations' disruptions of their crushing facilities and logistical constraints. Given these higher imports, EU crushing of oilseeds in 2022/23 is expected to increase by 5%, most notably for the rapeseed (+14%).

Graph 70: Import of oilseed crops to the EU (mill. t); 2019/20-2023/24



Source: DG AGRI (based on Eurostat, MS notifications and JRC MARS data)

EU oilseed meals production is also forecast to reach a record level of 30.5 million t (+4.1% year-on-year), while meals imports should decline to 18.7 million t (-4.6%) due to lower imports of soya bean meals (-4% to 16 million t).

For vegetable oils, EU imports are expected to reach a new low of 6.4 million t (-25.5% year-on-year). The main reason for this is the ongoing phasing-out of palm oil from the feedstock used in biodiesel production, which is expected to reduce EU palm oil imports by 30% in 2022/23 (to 3.8 million t).

Production of oilseeds could reach a new record in 2023/24

The EU winter rapeseed area is estimated at a five-year high (6 million ha) due to attractive prices during the sowing period and favoured by mild conditions during winter. EU rapeseed production is therefore expected to increase to 19.8 million t (+1% year-on-year and +15% above the five-year average). Sowing area for sunflower is due to see a

10% increase above the five-year average and reach 4.8 million ha, on account of the temporary derogation from the obligation to allocate a part of the arable land to non-productive areas and features; and a possible switch from maize in drought-affected regions. The area for soya beans is also expected to increase by 6.4% above the five-year average (to 1 million ha). EU oilseed production in 2023/24 could increase by 7% year-on-year to reach a new record of 33.6 million t. Sunflower production, assuming average yields, and so normal weather conditions in drought-affected regions of last summer, would also reach a new record of 10.9 million t (+18% year-on-year).

EU vegetable oil and oilseed meal production is also expected to hit new highs of 17.2 million t of oils and 30.9 million t of meals. As a result, EU net imports of these products are forecast to be lower than in 2022/23, and so EU self-sufficiency rates could increase.

6.1.3. Sugar

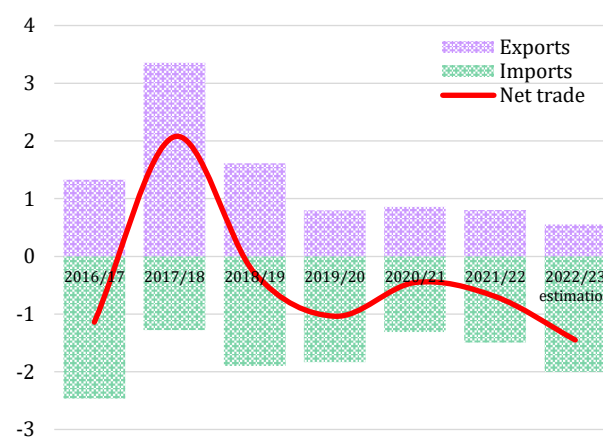
EU sugar price spikes as production falls below average in 2022/23

2022/2023 EU sugar production is estimated at 15 million t, which is below both the previous season (-10%) and the five-year average (-9%). This decrease is due to a combination of lower sugar beet areas (-4.3% year-on-year), mainly in the EU-13 countries, and the decrease in yields due to the summer drought in various parts of the EU. The world sugar production, on the other hand, is expected to increase by 3.2% in 2022/23.

The smaller EU sugar beet harvest and increasing costs for sugar refining due to high natural gas prices have fuelled sugar price growth in the autumn and winter of 2022/23. The average EU price in February 2023 reached EUR 804/t, corresponding to an 83% annual price increase, or 51% growth since September 2022. World sugar prices, on the other side, seem to have peaked in September 2022 and started to decline again based on expectations of a global market surplus.

Due to high internal prices and a decline in local production, EU imports of sugar as such are forecast to reach 2 million t in 2022/23 (+34% year-on-year), while EU exports are also forecast to decline 31% year-on-year, to 0.6 million t.

Graph 71: Foreign trade in sugar in the EU (mill. t); 2016/17-2022/23³¹



Source: DG AGRI (based on Eurostat)

³¹ Data from 2020/21 refer to the EU-27.

EU sugar consumption to decline in 2022/23

EU human consumption of sugar is expected to decline, as increasing prices have to negative effect on consumer demand. Additionally, net exports of sugar in processed products are also expected to decline from a record level of 2021/22.

EU sugar use for bioethanol production in 2022/23 is expected to decrease by 0.1 million t to 0.6 million t, as other feedstock alternatives, like cereals, become more competitive. Similarly, demand for sugar in other industrial applications is expected to decline. Nevertheless, the lower demand for sugar use is expected to be less pronounced than the decline in availability. EU sugar ending stocks are therefore forecast to decrease slightly by 0.1 million to 1.4 million t in 2022/23.

The EU Court of Justice's preliminary ruling in January 2023 on the derogations to the use of neonicotinoid substances is due to impact planting decisions, and the EU sugar beet area in 2023 is forecast to drop 3% below the five-year average to 1.45 million ha. Sugar beet yields are expected to be in line with the long-term average at 77 t/ha, resulting in a sugar beet production of around 111 million t.

6.2. SPECIALIZED CROPS

2022/23 EU olive oil production is expected to be record low (1.4 million t, -39% year-on-year) mainly due to the production drop in Spain as a result of extremely hot and dry weather. Lower availability, combined with high input costs, is leading to higher producer prices, which are passed along the supply chain and lead to higher consumer and export prices. As a result, both EU consumption and exports are expected to drop (after a record level of exports recorded last year).

Contrary to olive oil production, EU wine production is increasing and could reach almost 158 million t in 2022/23, an increase mainly due to a strong recovery in France. Following the strong consumption growth last year, it is likely to go back to a declining trend, slightly above the level during the COVID-19 initial outbreaks. EU wine exports could remain stable, at a level comparable to the one of last year.

The weather impacted negatively also EU orange production, especially in Spain (-16%) and Italy (-20%). A stronger reduction is expected in processed oranges, and the reduced availability could lead to increasing imports of this fruit. High prices are expected to have a negative impact on an apparent per capita fresh consumption (-7%), but less than for other types of fruits.

Above-average apple production is expected in the EU. Due to high storage costs (especially energy), but also transportation, more apples could be directed to processing. Similar to oranges, apparent EU per capita consumption of fresh apples could decline (-6%) while increases for processed products (+4.5%).

- ✓ **Olive oil: -11%**
consumption of olive oil in the EU in 2022/23
- ✓ **Wine: +3%**
wine production in the EU in 2022/23
- ✓ **Apples: above average production**
- ✓ **Oranges: -7%**
consumption of fresh oranges in the EU per capita

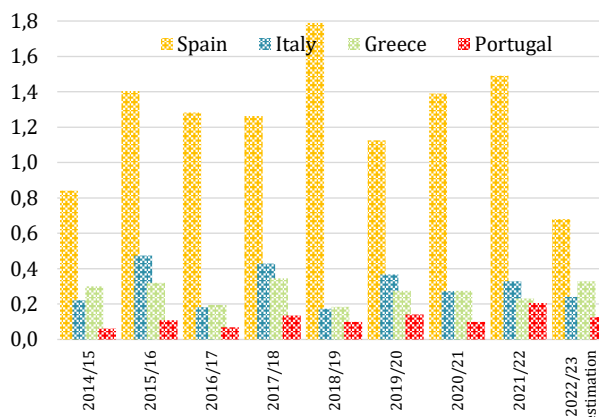
6.2.1. Olive oil

2022/23 EU olive oil production record low

Earlier estimates of a record-low harvest due to hot and dry weather conditions were confirmed, and 2022/23 EU olive oil production could reach only 1.4 million t (-39% year-on-year). This is due to lower yields of olives (2.53 t/ha in 2021 and only 1.67 t/ha in 2022) as the oil yield remained comparable to the previous year.

Among the main EU-producing countries, only Spain showed an increase (+42%), which was far from enough to compensate for losses in other main producing countries.

Graph 72: Olive oil production in the main EU producing countries (mill. t); 2014/15-2022/23



Source: DG AGRI (based on MS notifications)

In Italy and Portugal, some decline is also attributed to a bi-annual alternation, while Spain suffered the most from the lack of rainfall during flowering and the consequential availability of water for irrigation.

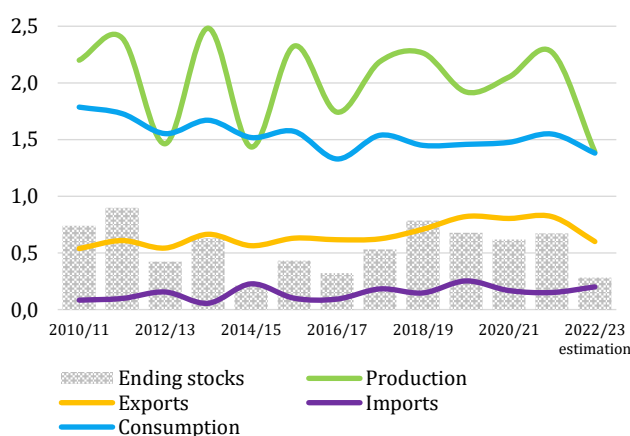
Despite high beginning stocks in 2022/23, the olive oil availability is low, which, combined with high input costs, contributes to historically high producer prices for all categories of olive oil. In Spain, the average price of extra virgin olive oil is 85% above the last five-year average at the end of February (more than EUR 520/100 kg), and 90% in the category of lampante olive oil (EUR 470/100 kg). Along supply chains, these increases lead to an increase in a unit export value as well as in EU consumer prices. In January, the index of consumer prices for olive oil was at 126.3 points (index year 2015) and recorded a further 12 points increase since the beginning of the new campaign in October.

Increasing prices weaken EU and global demand

Increasing EU consumer prices are likely to negatively impact EU consumption in 2022/23. In the main EU-producing countries, usually more sensitive to price moves, the drop could be around 11%.

Besides reduced retail purchases, it is expected that some volumes could also be reduced in food processing, and some substitution with other oils could also take place, even if more limited as their prices remain high (e.g., sunflower oil).

Graph 73: Balance of olive oil in the EU (mill. t); 2010/11-2022/23



Source: DG AGRI (based on Eurostat and MS notifications)

In the rest of the EU, and given a more premium positioning of the product, the consumption could drop by 10% (relative to stable levels observed last year).

EU exports could also be reduced, taking into account increased exports last year, and a weaker purchasing power in some destinations. Therefore, they are likely to reach 600 thousand t (27% below last year which was very close to the record year of 2019/20). Lower EU availability could also lead to increasing imports, mainly sourced from Tunisia, but also Turkey and other origins that showed a production increase. Therefore, they could reach 200 thousand t. Combined with other EU market developments, ending stocks could reach close to 280 thousand t, assumed to be an average level of ending stocks.

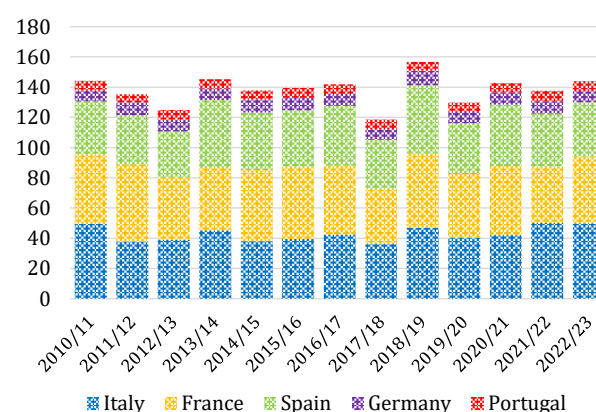
6.2.2. Wine

EU consumption of wine could go back to its long-term declining trend

Based on the latest member states' notifications, 2022/23 EU wine production is likely to be close to original estimates – it could reach almost 158 million hl (+3.3% year-on-year). This is mainly due to a production recovery in France (around +19% year-on-year).

Among the other main producing countries, Spain showed an increase (+1.3%) while the production in Italy declined by almost 1% compared to the last marketing year. At the same time, wine production dropped in Portugal by 8%.

Graph 74: EU wine production of the main producing countries (mill. hl); 2010/11-2022/23



Source: DG AGRI (based on Eurostat and MS notifications)

As a result of the post-COVID recovery of consumption habits, and partially due to changes in EU population numbers in 2021/22, EU consumption of wine increased in 2021/22. There are some market signals that this is likely to be reverted in 2022/23. As a result, it could return to a declining trend and it could reach 22.5 l per capita (above the consumption level during 2020/21, impacted strongly by initial COVID-19 outbreaks, but 1.3% below a five-year average). This is particularly the case for red wines.

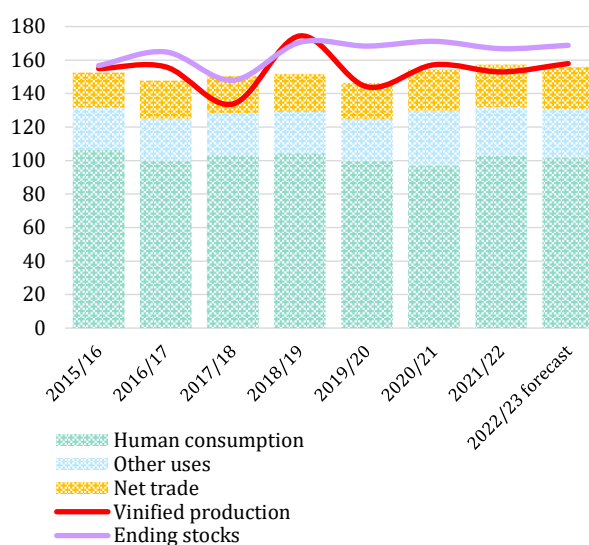
Despite an expected increase in production, vinified production destined for “other uses” (e.g., distillation, vinegar and brandies) is likely to remain at a comparable level to the last campaign (around 29 million hl).

Maintaining the level of wine exports from the EU in 2022/23

While wine exports from the EU in terms of quantities remained stable in 2021/22, the export value increased by more than 12%.

Taking into account different categories of wine, the stability of exported quantities is a consequence of the increase in the export of wines with a protected designation of origin (PDO), other and varietal wines, which compensated for the decreased export of wines with a protected geographical indication (PGI).

Graph 75: Balance of wine production (mill. hl); 2015/16-2022/23



Source: DG AGRI (based on Eurostat and MS notifications)

The United Kingdom and the USA remained the main EU export destinations, with a higher share of value traded taken by the USA while the United Kingdom imported larger volumes. These markets allow EU producers to export their most expensive wines which are benefitting there from a better positioning than they would have got in the EU market.

In 2022/23, EU wine exports, driven by quality wines, could remain at a comparable level as in the last marketing year (around 32 million hl, 3% above the five-year average). This could be supported by a sustained demand in main EU export destinations.

Taking into account an increase in EU vinified production, EU wine imports could drop by around 4% to 6.6 million hl (14% below the five-year average) and continue a long-term declining trend. As an overall result, ending stocks of 2022/23 are expected to continue to be at high levels (around 170 million t); however, they would remain below the record level in 2020/21.

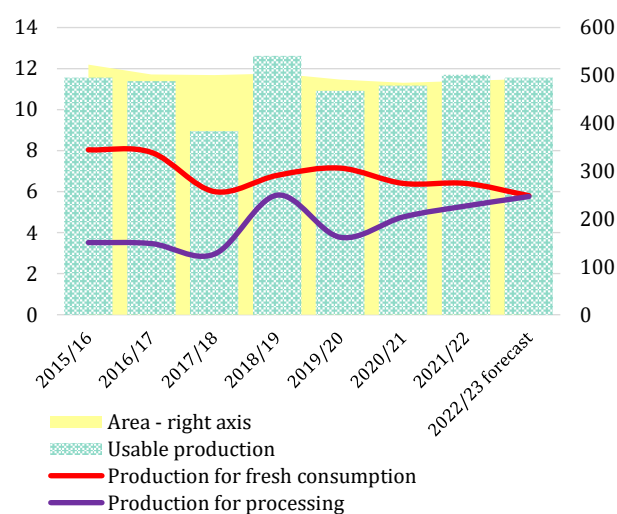
6.2.3. Apples

High storage costs direct more apples into processing

It is expected that the production of apples in the EU in 2022/23 to be at the level of about 12.2 million t (at last year's level, 2.6% above the five-year average).

Record-high results in Poland (4.2 million t, +5% year-on-year) and Italy (+7%) compensated for lower-than-usual production results in France (-10%). A lower level of production was also recorded in other EU countries, mainly in Hungary, Romania, Spain and Portugal.

Graph 76: Area (000 ha; right axis) and EU apple production (mill. t); 2015/16-2022/23



Source: DG AGRI (based on Eurostat)

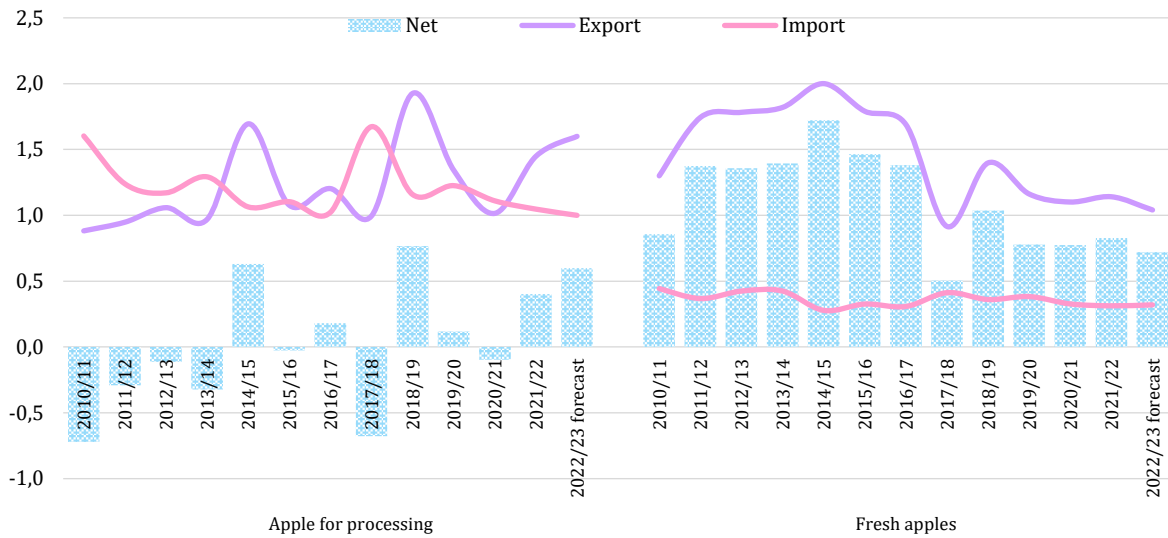
Almost half of the production is expected to be channelled to processing rather than to be stored. This is a result of higher availability of lower-quality apples not suitable for fresh consumption, their low prices, lower export opportunities and high energy (storage) costs. In addition, problems with the availability of seasonal workers in some EU countries delayed harvests, which had an implication on the fruit quality. In total, around 5.8 million t of apples are expected to be sold in the EU for fresh consumption (-9% year-on-year) and 5.7 million t for processing (+8% year-on-year).

EU exports of processed apples increasing

Higher than expected EU availability of apples for processing in 2022/23 (+8% year-on-year) and lower than expected production in China could help to increase EU exports of processed apples (+26% above five-year average) and weigh negatively on imports of those products (-4% year-on-year). EU exports of fresh apples could continue to decline in 2022/23 (-9% year-on-year), driven by lower availability of apples for fresh consumption, especially in the second half of the season due to high storage costs and more apples to be sent for processing. This could also be combined with limited access to markets of third countries. As a result, a slight increase in EU imports of fresh apples is expected in 2022/23 (+2% year-on-year), while ending stocks could drop by 23%.

The apparent EU per capita consumption of fresh apples is expected to go down in 2022/23 (to 11.5 kg, -6% year-on-year). Persistent inflation, implying a purchasing power decrease, outweighs relatively low prices in real terms, which cannot keep up with the increase in production costs.

Graph 77: Foreign trade in apples in the EU (mill. t); 2010/11-2022/23



Source: DG AGRI (based on Eurostat)

However, similar to oranges, this drop is smaller than in other (more tropical) types of fruit. On the other hand, higher availability of apples for processing is expected to lead to a record high EU apparent consumption of processed apples (11.5 kg per capita, +5% year-on-year).

6.2.4. Oranges

Ten-year low EU production of oranges

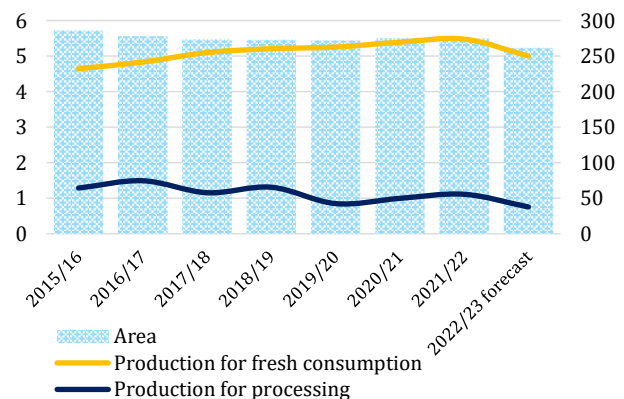
As a result of dry and hot weather conditions in the main EU-producing countries (especially in Spain and Italy), 2022/23 EU orange production is expected to decline by 13% to around 5.7 million t. A comparably low production was last time recorded in 2012/13.

In the case of Spain (more than 50% of EU production), the drop of 16% is attributed to lower yields while the area remained relatively stable. In Italy, the area decline was combined with lower yields, and so the production was 20% below last year. In the EU, the area decline was slightly lower (-5%) than the yield change (-8%).

Besides lower yields of oranges, the quality of the fruit is also reported to be lower. Usually, lower-quality oranges are destined for processing, while, due to the lower supply, some of these are likely to end up in fresh consumption as well.

Overall, it is expected that the drop in production would have a stronger impact on processing than on fresh consumption (-32% and -9% respectively).

Graph 78: Area (000 ha; right axis) and EU orange production (mill. t); 2015/16-2022/23



Source: DG AGRI (based on Eurostat)

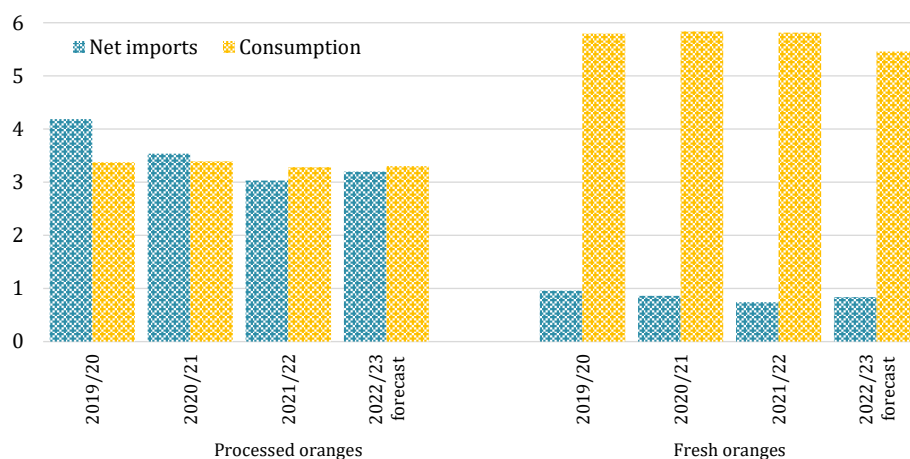
While the supply for processing could be historically low, the production for fresh consumption could remain low, but at comparable levels observed in past years.

As a result of the low production, producer prices increased (except in Portugal), but they might not be high enough to compensate for the rising cost of inputs, mainly energy and fertilisers.

EU fresh oranges per capita consumption down

Because of a lower EU availability, EU imports of fresh oranges are likely to increase (+14%), given good production in Egypt and South Africa. On the contrary, EU exports of fresh oranges could be lower (-6%).

Graph 79: Import and consumption of oranges in the EU (mill. t); 2019/20-2022/23



Source: DG AGRI (based on Eurostat)

As a result, increasing net imports could prevent EU consumption of fresh oranges from a stronger decline, which could have been expected considering the lower production and high prices. Concerning the latter, this could impact negatively per capita consumption (-7%), but less than for other (especially more expensive) types of fruit (berries and cherries).

In the case of processed oranges, EU imports could also increase (+6%) and substitute for lower domestic supply. This growth could be attributed to larger imports of concentrated orange juice from Brazil. At the same time, EU exports could decline by an additional 24% (as already recorded last year) and reach the historically lowest level (650 thousand t), but relative to the historically lowest production of oranges. As a result, an apparent EU per capita consumption of processed oranges could remain stable compared to a declining trend observed in the past. This could also be attributed to a decreasing purchasing power when consumers are choosing less expensive processed products (e.g. packaged juices over freshly squeezed ones).

6.3. MEAT

EU beef production is expected to decrease further in 2023 by 1.6%, mainly due to a structural adjustment in the beef and dairy sector, despite high beef prices. The current price environment could attract more imports from the United Kingdom and South America (+5%), while EU exports are due to remain stable as global supply is also low and demand rather firm.

- ✓ **-11%**
EU beef production in 2023
- ✓ **-3%**
EU pig meat export in 2023
- ✓ **+17%**
Value of EU poultry exports in 2022
- ✓ **+8%**
EU sheep import in 2023

A smaller breeding herd as well as African Swine Fever pushed EU pigmeat production further down in 2023, by 5%, despite lowering feed prices. Further decline in exports to China will contribute to a 3% reduction in EU exports in 2023.

As production costs are coming down from very high levels, EU poultry production could benefit from a modest recovery of 1.1% in 2023, despite the occurrence of Highly Pathogenic Avian Influenza. In addition, high EU poultry prices make EU exports more difficult, while the suspension of duties on products coming from Ukraine favours poultry imports and increases domestic availability.

The historically low EU sheep and goat flock pushed slaughtering down by 1% in 2023, despite high domestic prices. More imports from New Zealand are expected, due to favourable lambing conditions and high EU prices.

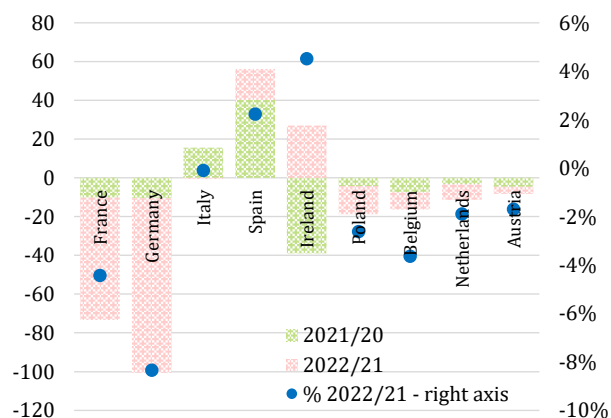
6.3.1. Beef and veal

Continued decline in EU beef production

EU beef production decreased in 2022 by 2.6%, more than previously estimated (-0.6%).

Observed among the largest producing countries, Germany declined the most (-8%), followed by France (-4.4%) and Poland (-2.6%). On the other hand, Spain continued to increase its production (+2%), and an increase was also recorded in Ireland (+4.5%), while in Italy production remained relatively stable.

Graph 80: Changes in beef production in volume (000 t, carcass weight) and % - right axis



Source: DG AGRI (based on Eurostat)

In the December 2022 Livestock Survey, the number of suckler cows in the EU declined for the third year in a row, by an additional 240 thousand heads (-2.3%).

At the same time, the decline of dairy cows was lower than expected (-0.6%) which prevented even further production drop. The number of male bovine cattle for slaughtering between 1 and 2 years also decreased (-2.2%) and this will have implications for beef availability this year. On the other hand, it is expected that the slaughtering of

dairy cows might accelerate this year and be stronger, as some dairy farmers will react to declining raw milk prices while beef prices could stay high.

As a result of this development, EU beef production in 2023 is expected to decrease further by 1.6%. Given some possible price relaxation of feed costs, and assuming improved grass quality compared to last year, average carcass weights might increase, but this would not counterbalance the decreasing numbers of animals.

A slight increase in EU beef exports

As the beef supply in the EU is lower, prices may stay high, and this could potentially have a negative impact on the EU consumption and competitiveness of the EU exports. However, the supply remains lower also globally, while the demand is high, which could help exports from the EU to remain stable in 2023 despite higher prices.

On the other hand, the current price environment could attract more imports into the EU. They could further grow by 5%, and so add to a 25% increase observed last year, in particular from the United Kingdom, but also from South America; such an increase would re-balance the temporary drop due to the impacts of Brexit and COVID-19. This is expected even though Asian markets (especially China) could be a more attractive destination for the Americas while the United Kingdom flows could get to comparable pre-COVID levels. At the same time, EU live animal exports could decline, but at a lower rate than last year's (-2%).

The apparent EU per capita beef consumption is expected to follow a long-term declining trend and could stay slightly below 10 kg in 2023 (-1.7%). Compared to other types of meats, beef is also more expensive, so consumers will likely be looking for cheaper animal proteins in a context of high food inflation.

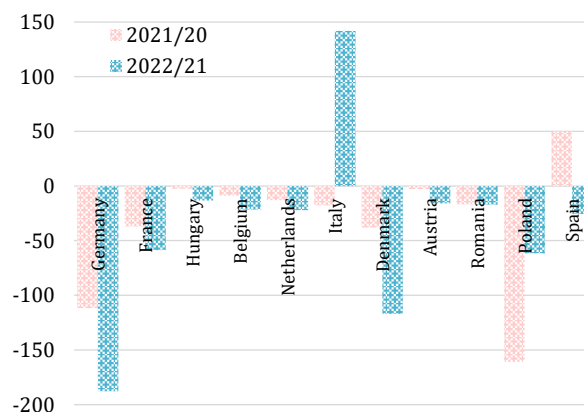
6.3.2. Pigmear

A low number of breeding sows and African Swine Fever are pushing down the production

EU pigmeat production decreased in the majority of member states and on average by 5.6% in 2022. Important producers such as Germany, Poland, Denmark, Spain, Belgium and Italy, recorded a large drop in production.

According to the December 2022 Livestock Survey, the number of breeding sows decreased by half a million heads in 2022 (-4.6%), following a decline of 370 thousand heads in 2021 (-3.6%). The current stock of fattening pigs is also very low in all categories.

Graph 81: Changes in the number of breeding sows in the main producing EU countries (000 heads)



Source: DG AGRI (based on Eurostat)

In 2023, the situation of African Swine Fever is assumed not to change dramatically and this will continue to trigger strong responses in affected countries and among trade partners.

As feed prices are slowly going down, the main pressure on margins is expected to cool down, which might result as well in slightly higher carcass weights. Overall, EU pigmeat production is expected to decrease further by another 5% in 2023.

High prices hamper export potential

Due to tight supply, EU pigmeat prices continue evolving at record levels, which makes EU pigmeat exports relatively less competitive than other exporters in the global market. EU pigmeat exports declined by more than 16% in 2022, mainly coming from a 50% reduction of exports to China, which is not expected to be reverted in 2023. This was compensated partly by diverting exports to other destinations like Japan (+23%), the Philippines (+21%), South Korea (+12%) and Australia (+19%). Overall, EU pigmeat exports may decrease further by 3% in 2023.

EU pigmeat imports from the United Kingdom increased by almost 28% in 2022, representing a bit less than 85% of the total EU imports. As production in the United Kingdom is expected to decline, there is little potential to increase imports from that side. Therefore, EU pigmeat imports are expected to increase by only 2% in 2023.

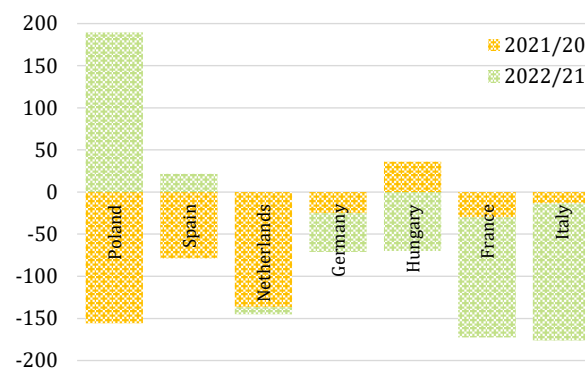
Due to the limited supply, EU domestic use decreased by 2.8% in 2022, averaging at 31.8 kg per capita. This would further go down in 2023 by 5.9% and reach its lowest point (around 30 kg per capita on average).

6.3.3. Poultry

Possible recovery of EU production in 2023

In 2022, EU poultry production decreased again, although less than the year before (-1.7%). In particular, this was driven by declines in major producing countries such as France (-12%), Italy (-9%) and Germany (-3%). On the other hand, in Poland, production increased by 6%.

Graph 82: Changes in poultry production in selected EU countries (000 t, carcass weight)



Source: DG AGRI (based on Eurostat)

Given the circumstances in 2022, the emergence of Highly Pathogenic Avian Influenza is assumed to remain a year-round threat rather than a seasonal phenomenon.

On the other hand, its direct impact on poultry meat production is limited as the production could recover quickly. However, the damage to EU exports caused by the introduction of related import bans by third countries is of a stronger magnitude.

Driven by the tight supply and good demand, EU broiler prices continued increasing and have been reaching exceptionally high levels since April 2022 which partly helped to transfer high feed and energy costs down the chain. Since 2023, producer prices tend to be more stable. As feed and energy costs are coming down from the very high levels observed last year, some production recovery could take place in 2023. Therefore, EU poultry production is likely to grow by around 1.1% in 2023. Demand for poultry benefits

from general inflation as consumers replace more expensive meats (beef, pigmeat) with cheaper poultry meat. This could support EU poultry consumption growth in 2023 by 2.5%.

Lower competitiveness of EU exports continues

In 2022, EU imports grew by around 15% (+105 thousand t), mainly due to an increase in imports from Ukraine, while the remaining increase was attributable to increased imports from Brazil. In general, Brazil is more competitive for feed and energy, and so it continues trading poultry meat at a cheaper price. Overall, EU imports are expected to increase by another 7% in 2023 to meet the additional demand growth in the EU.

Due to the lower EU competitiveness, the Highly Pathogenic Avian Influenza outbreaks which led either to country-wide bans or their regionalisation, and the Russia-Ukraine war, EU exports declined by around 9% in volume in 2022. On the other hand, given globally high prices, exports grew by 17% in value terms.

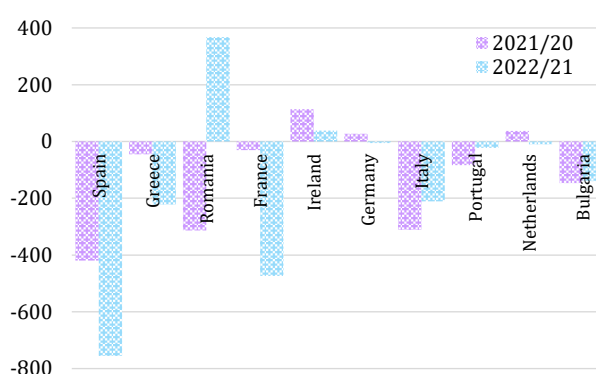
In 2023, despite an observed downward trend in EU prices, it is likely that some other markets (especially Brazil) might remain more competitive, and so EU poultry exports could drop further (-5%).

1.3.4 Sheep and goat meat

Stable EU sheep and goat meat production

The December 2022 Livestock Survey showed a significant decline in the number of sheep and goats in the EU by an estimated 1.5 million heads, especially in Spain and France. This is the third year in a row that the number has declined by more than 1 million heads. On the other hand, Romania showed an increase of more than 360 thousand heads. Moreover, more ewes were put to the ram in Romania and in France compared to last year.

Graph 83: Changes in herd size in the main producing EU countries (000 heads)



Source: DG AGRI (based on Eurostat)

In 2022, the production of sheep and goat meat decreased by only 0.6%. Ireland and Romania increased slaughtering while Greece, Germany, Spain and France reported noteworthy decreases. Despite favourable prices, the substantial reduction in the number of heads is hampering EU production.

Lower feed prices and better grazing conditions might improve slaughter weights year on year. Overall, a decrease in production of 1.2% is still expected in 2023, which could ensure a high level of domestic prices.

High domestic prices attract imports in 2023

EU sheep meat exports decreased by 6% in 2022. A shortage in domestic supply and relatively high prices could push exports further down in 2023 (-1%).

EU exports of live animals increased by 1.2% in 2022, despite a difficult first half of the year and high domestic prices. Most main destinations recorded decreases, except Jordan

and Israel; the increase of exports to these two destinations alone compensated largely the declines in most other destinations. Romania is expected to further redirect a part of its live animals to Greece and Bulgaria due to the very remunerating prices instead of exporting them to non-EU countries. Overall, EU exports of live animals are set to decline by 3.5% in 2023 due to high domestic prices and the continuing difficult transport situation through the Black Sea.

EU imports of sheep meat increased by almost 23% in 2022, coming from New Zealand, the United Kingdom and Australia. More imports from New Zealand are expected also in 2023, mostly thanks to lower Chinese demand and fewer logistic hurdles. Overall, EU imports could reach an additional 8% increase in 2023, boosted also by more competitive United Kingdom and Australian exports. These additional imports are expected to put some pressure on high EU prices. Per capita consumption would stay rather stable in 2023.

6.4. MILK AND DAIRY PRODUCTS

Despite expectations of a lower output, 2022 EU milk production remained rather stable. However, lower fat and protein milk contents reduced availability for processing. EU dairy exports declined in volume (but were record high in value terms), as a result of high EU prices, limited supply and lower export to China. On the other hand, domestic dairy use slightly increased despite increasing food inflation.

In 2023, cow slaughtering is likely to increase, responding to declining raw milk prices, which could also be partly compensated by increasing milk yields (assuming normal weather conditions).

Despite a slight decrease in EU milk deliveries (-0.2%), processing availability might still be kept stable thanks to higher milk fat and protein contents. The cheese and whey processing stream is expected to be favoured by the industry, due to EU export potential and relatively stable domestic cheese consumption. Butter and skimmed milk powder production could decline due to the larger than usual stocks (taken over from 2022), which could partially cover the increase in exports and domestic use.

Overall, EU consumption is expected to face some consumer preferences shift to lower quality products, rather than impacting the value and not the total volume. Recovering import demand in China would be an important factor for EU export growth.

6.4.1. Milk

EU dairy prices passed the peak

Despite initial expectations of declining EU milk deliveries in 2022, they remained relatively stable (following a notable 1.4% growth in Q4). High raw milk prices might have been an incentive for this, offsetting increasing input costs. EU average raw milk prices decreased in January 2023 after 24-months of uninterrupted growth, reaching EUR 55/100 kg in February.

- ✓ **-0,2%**
EU milk deliveries in 2023
- ✓ **stable**
consumption of milk and dairy in 2023
- ✓ **+2%**
EU exports of cheese in 2023
- ✓ **-0,7%**
consumption of fermented dairy products in 2023

Between September and March, EU butter prices dropped the most (-32%), followed closely by milk powder (skimmed milk powder -30%, whole milk powder -29%, whey powder -24%). The decline was less for cheddar (-3%). Compared to the five-year average of the same week in March, only whey prices are higher.

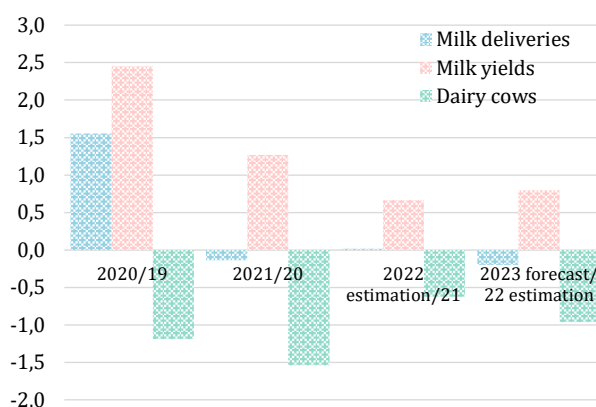
Developments of butter and skimmed milk powder prices allow for a calculation of an “EU milk equivalent price” which, with a time lag of 2-3 months, anticipates trends for raw milk prices. The increasing seasonal availability due to the spring production peak in the EU, and existing stocks carried over from last year, are likely to keep dairy prices in a downward trend. The extent of such decline will, however, depend on the development of demand, with export growth halted by existing stocks in China in 2022 (some postponed orders as buyers were expecting further price drops) and rising food inflation in the EU and worldwide.

2023 EU milk deliveries to be reduced

While EU milk deliveries remained stable in 2022, the milk fat and milk protein contents were lower (-0.4% and -0.3% respectively). As a result, the availability of milk solids for processing was reduced.

It was notably hot and dry weather impacted negatively quality and availability of grass and feed crops. Milk yields grew also less compared to past annual rates (only 0.7% in 2022).

Graph 84: Annual changes in EU milk deliveries, milk yields and dairy cows' herds (%)



Source: DG AGRI (based on Eurostat and MS notifications)

Positive returns due to high raw milk prices have likely prevented farmers from reducing their herds, and so the EU dairy herd dropped by 0.6%, less than expected.

In 2023, a declining EU raw milk price is likely to lead to increasing slaughtering as feed and other input costs could remain high (despite costs being expected to be over the peak reached last year). Overall, the EU dairy herd could shrink by 1%, which could also be incentivised by higher beef prices to some extent. The decline in the dairy herd could be compensated by increasing yields (0.8%), assuming normal weather conditions, and so removing the negative impact of hot and dry weather. This assumption could also impact milk fat and protein content positively which could be 0.2% above the levels of last year. In light of all these factors, overall EU milk production could decline (-0.2%), in particular in the second half of the year but increasing milk fat and protein could keep the availability of milk for processing stable.

6.4.2. Dairy products

Asia is driving global demand for dairy products

Globally, the dairy demand remained strong in 2022 (except for China) despite initial fears of drops linked to increasing global inflation and import prices, which were (beyond input costs) also impacted by still high freight costs and strength of the US dollar. However,

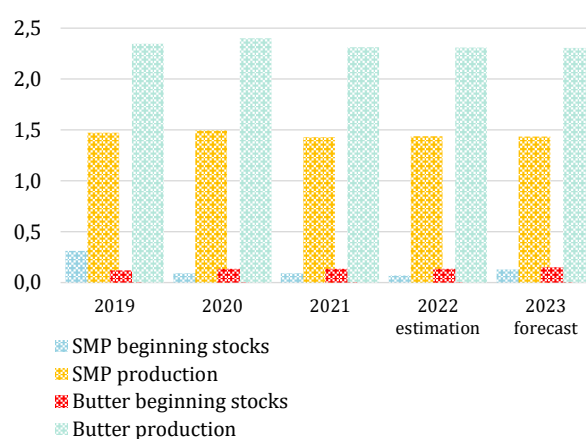
some regional differentiation was observed, with South-East Asia and Middle East and North African countries (especially Algeria) showing growth while some other developing countries (especially in Africa) were struggling. In particular, the strong US dollar made imports of African countries more expensive, which could make them vulnerable also in 2023. On the other side, other demand could remain positive, especially in Asian markets with lower inflation. Concerning China, it is assumed that stocks piled up in the last years are at normal levels now. Combined with the removal of the Zero-COVID policy, and assuming a return of consumers' confidence and a certain strength of their purchasing power, China could restart its import activity in 2023.

Consumer prices for dairy products continue increasing in the EU and only butter price has reached its peak so far. Consumers are reportedly looking for cheaper options rather than reducing consumption due to which premium and branded products are suffering the most. The pressure from retailers (especially discounters) for lower prices is likely to add to price pressure along the whole chain.

Expected recovery of EU skimmed milk powder exports in 2023

The stable 2022 EU milk collection, and especially its increase in Q4, resulted in a higher butter and skimmed milk powder production than anticipated. These additional volumes could not be fully absorbed by demand. Although demand increased by a smaller drop in skimmed milk powder exports, and by a larger increase in domestic butter use, both butter and skimmed milk powder stocks grew in 2022.

Graph 85: EU SMP and butter production and beginning stocks (mill. t)



Source: DG AGRI (based on Eurostat and MS notifications)

In 2023, despite stable milk fat and protein availability, butter and skimmed milk powder production streams are not expected to increase. A decrease of -0.2% in supply is expected for both products, and it is assumed that growing demand will partly be covered by stocks. In the case of skimmed milk powder, EU exports are likely to recover (+8%), especially to destinations in South-East Asia where EU market shares had previously been taken over by other competitors due to their competitive prices and geographical proximity (e.g. New Zealand, which increased skimmed milk powder availability as its milk was re-channelled from whole milk powder to skimmed milk powder and butter).

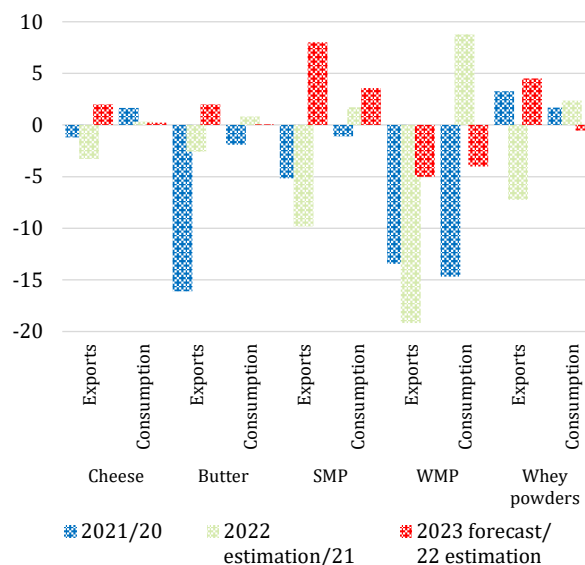
EU domestic skimmed milk powder use could also grow, likely to be pushed by demand for fat-filled powders as well, especially in more price-sensitive markets. Concerning butter, demand recovery in China, and stable United Kingdom and USA demand could support EU export growth (2%). Domestic use could remain overall stable (0.1%), especially if prices continue their downward trend.

More milk channelled into cheese and whey production

In 2022, EU cheese production dropped (-0.5%). Globally, the demand for cheese remained stable, even increasing in the United Kingdom (the global largest importer, +2% until November), Saudi Arabia (+10%) and the USA (+1%). On the other hand, there was a lower demand from China (top 6 world importers, -17%).

These developments underpinned the declining trend observed in EU exports (-3%). In the domestic market, some downgrading of consumer choices for cheaper types of cheese took place, which supported the relative stability of the EU use, partially covered by existing stocks.

Graph 86: Annual changes in EU exports and consumption of certain dairy products (%)



Source: DG AGRI (based on Eurostat)

In 2023, more milk could be channelled to cheese and whey production, which is likely to offer a better valorisation than other streams. It could grow by 0.7%, contributing to EU exports recovery (+2%), assuming some stability of shipments to the USA and United Kingdom, while demand from China could increase.

EU consumption could change comparably to the previous year (+0.2%). EU whey production will also benefit. While in 2022 EU exports dropped (-7.3%), mainly due to weaker Chinese demand, they could recover in 2023, supporting growth of EU shipments (5%).

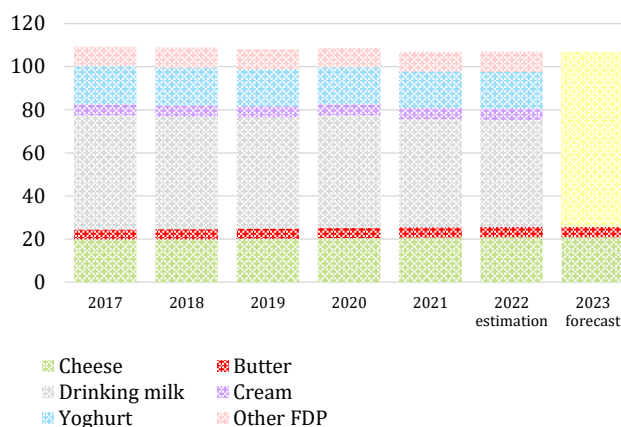
Contrary to EU exports, domestic use grew in 2022 (+2.4%), of which a great share is directed to feed. Given the drop in dairy herds in 2023, and assuming that individual purchases could turn towards more basic products and so less to be spent on specialized nutrition, EU whey use could be reduced (-0,5%).

The consumption of fermented dairy products (FDP) back to the downward trend

In 2022, EU production of FDP continued its declining trend, in particular, driven by drinking milk and yoghurts, while production of cream increased.

At the same time, EU exports dropped by 14% compared to a record level of last year, in particular due to a drop in yoghurt exports (-32%) and drinking milk (-13%). The EU consumption of FDP remained overall stable, partly explained by a positive EU population change recorded last year and the slowdown of exports.

Graph 87: EU per capita consumption of certain dairy products (kg); 2017-2023



* Yellow bar in 2023 corresponds to total consumption of FDP

Source: DG AGRI (based on Eurostat)

In 2023, around one-third of EU milk is still expected to be channelled to FDPs. However, their overall production could maintain its downward trajectory (-0.5%), despite an expected recovery in EU shipments (+10%) due to an increase in foodservice demand for drinking milk and cream in China. The EU consumption is likely to be lower (-0.7%), and so back to its declining trend.

Among other dairy products, EU whole milk powder production remains on a declining trend (-4.5%), with exports contracting less than in the previous year (-5% compared to -19% in 2022). Domestic use will remain the main outlet for EU whole milk powder (64%). As it is mainly directed to confectionery and given its positioning as a more premium product, some reduction of domestic use is expected (-4%), following the recovery of last year (+9%).

7. ANNEXES

1. SITUATION IN AGRICULTURE

Annex 1.1: Holdings according to the size of UAA in Serbia; 2018

Total (all holdings)				
	Area (ha)	Structure (%)	Number of holdings	Structure (%)
No land	0	0.00	5,290	0.94
> 0-≤ 1 ha	58,683	1.69	106,587	18.88
> 1-≤ 2 ha	159,904	4.60	110,893	19.64
>2-≤5 ha	589,218	16.95	182,253	32.28
>5-≤10 ha	665,233	19.14	96,262	17.05
>10-≤20 ha	556,201	16.00	40,876	7.24
>20-≤30 ha	261,305	7.52	11,072	1.96
>30-≤50 ha	228,204	6.57	6,062	1.07
>50-≤100 ha	256,164	7.37	3,825	0.68
>100 ha	700,982	20.17	1,422	0.25
Total	3,475,894	100.00	564,542	100.00

Source: SORS, Farm Structure Survey of 2018

Annex 1.2: Gross agricultural production indexes in Serbia, 2013-2022 (previous year=100)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AGRICULTURAL PRODUCTION - TOTAL – gross ¹⁾	124.4	104.6	92.8	111.6	84.5	116.1	101.5	102.9	92.5	91.7
AGRICULTURAL PRODUCTION - TOTAL – net ¹⁾	122.5	102.9	92.0	109.0	88.1	114.3	98.8	102.0	94.4	91.9
Plant production (1+2+3) ¹⁾	139.5	106.3	87.3	119.5	76.5	125.5	101.9	104.6	89.9	88.7
1. Crop and vegetable production (a+b+c+d)	137.7	111.8	83.4	124.7	71.9	130.8	101.5	104.4	89.8	83.3
a) Cereals	144.8	119.9	77.3	129.1	61.6	156.7	99.1	109.5	89.8	78.5
Wheat	112.1	88.7	101.7	118.8	78.9	129.3	86.2	113.4	119.8	90.3
Maize	166.0	135.6	68.6	135.2	54.5	173.3	105.5	107.2	76.6	71.1
b) Industrial plants	134.7	117.8	79.6	129.0	86.6	132.4	100.2	96.3	85.8	89.2
Sugar beet	128.1	110.3	62.2	122.9	93.7	92.5	99.1	87.5	101.5	81.4
Sunflower	140.1	99.3	85.8	142.1	87.0	135.7	99.4	87.3	95.4	105.9
c) Vegetables	121.5	83.0	113.2	109.5	90.9	77.6	106.1	95.8	107.8	95.9
Vegetables without potatoes	114.4	87.1	116.4	108.4	95.1	75.2	87	96.6	118.3	101.9
Potatoes	132.7	77.2	108.0	111.7	82.5	82.8	143.9	94.7	92.2	85.3
d) Fodder plants	120.8	104.6	85.0	124.2	73.2	126.8	117.4	107.2	67.5	81
2. Fruit production ¹⁾	149.9	84.1	105.0	102.2	94.7	109.3	102.9	106.0	89.6	109.3

3. Viticulture	134.0	61.3	139.3	85.5	113.5	90.4	109.3	98.0	97.1	104.3
Livestock production (1+2+3+4+5)	102.1	101.4	103.5	98.3	101.5	101.3	100.9	99.7	98.6	98.7
1. Beef cattle breeding	99.4	99.9	100.5	99.3	100.3	99.4	101.2	98.9	98.7	95.9
Weight gain	99.8	96.0	99.9	98.5	100.6	99.5	102	98.4	98.4	94.5
Cow's milk	99.1	102.9	100.9	99.8	100.0	99.3	100.7	99.3	98.9	96.8
2. Pig breeding	103.7	104.8	103.8	104.5	100.7	98.6	102.5	100.8	96.2	97.2
3. Sheep breeding	114.3	104.2	102.8	89.1	107.4	103.3	95.2	100.3	101.3	101.7
Weight gain	112.1	104.0	103.1	88.9	109.7	101.7	98.2	101.3	101	102.6
Sheep's milk	158.6	107.3	99.7	87.6	82.2	127.3	62.2	84.3	107.6	84.5
4. Poultry breeding	99.9	100.5	102.6	95.1	102.1	106.5	103.8	99.9	101.3	98.8
Weight gain	101.9	94.1	96.1	101.4	110.2	110.9	108.7	103.4	102.2	101.9
Eggs	97.8	107.8	108.9	89.9	94.9	102.1	98.8	96.1	100.3	95.4
5. Beekeeping - honey	122.5	51.2	279.8	47.0	121.7	162.9	66.5	90.0	108.8	191.3

¹⁾ Due to the revision of data on fruit production, the value of indexes for the series for 2013-2016 changed on the following positions: fruit production, plant production, agricultural production - total net and agricultural production - total gross.

Source: SORS

Annex 1.3: Agricultural land in Serbia, by categories of utilisation (000 ha); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Utilised agricultural area, total ¹⁾	3,495	3,518	3,480	3,456	3,438	3,487	3,482	3,504	3,506	3,488	99.49	100.13
Arable land	2,590	2,606	2,591	2,597	2,595	2,583	2,579	2,604	2,615	2,600	99.43	100.19
of which fallow land and uncultivated land	19	20	18	17	15	9	9	9	8	7	87.50	70.45
Area under permanent crops ¹⁾	192	199	200	204	208	204	206	207	204	206	100.98	100.14
of which orchards ¹⁾	168	175	176	180	184	183	184	185	182	184	101.10	100.26
Vineyards	22	22	22	22	22	20	21	20	20	20	100.00	96.95
Permanent grassland	694	693	670	634	616	676	675	671	666	662	99.40	100.17
of which meadows	382	382	369	343	322	351	346	340	333	330	99.10	97.53
pastures	332	332	321	311	295	325	329	331	333	331	99.40	102.63

¹⁾ Due to revision of data on fruit production, the areas for the series for 2013-2016 changed on the following positions: orchards, permanent crops and utilised agricultural area.

Source: SORS

Annex 1.4: Utilised agricultural area by categories (ha); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
UAA, total ¹⁾	3,495,190	3,518,249	3,480,374	3,455,998	3,438,130	3,486,908	3,481,567	3,504,290	3,506,075	3,488,752	99.51	100.15
Arable land	2,589,715	2,606,073	2,590,985	2,597,808	2,594,980	2,582,909	2,578,898	2,604,295	2,615,194	2,600,681	99.45	100.21
Cereals	1,766,447	1,819,188	1,782,010	1,763,575	1,718,034	1,712,988	1,698,993	1,740,456	1,770,188	1,724,728	97.43	99.80
Legumes	5,277	7,830	9,362	9,788	10,582	7,827	7,733	7,235	6,731	7,035	104.52	87.70
Potatoes, early and late	50,740	51,819	421,004	40,388	38,183	28,232	34,110	29,676	26,388	24,870	94.25	79.41
Sugar beet	66,712	64,112	42,683	50,071	54,183	48,125	42,539	37,418	39,411	34,728	88.12	78.33
Industrial plants	368,671	346,524	376,812	408,867	449,147	490,126	489,369	491,776	482,616	525,443	108.87	109.33
Vegetables, melons and strawberries	52,898	52,680	66,935	68,183	66,488	50,294	47,832	48,097	47,746	47,986	100.50	92.12
Flowers	412	343	445	472	1,057	440	469	508	662	770	116.31	122.77
Fodder plants	257,652	242,041	250,359	236,684	240,088	230,484	243,480	234,842	228,495	222,650	97.44	94.55
Other crops on arable lands	1,633	1,713	2,252	2,831	2,249	4,732	5,407	5,746	5,029	5,203	103.46	112.31
Fallow land	19,273	19,655	17,969	16,624	14,680	9,143	8,966	8,541	7,929	7,267	91.65	73.76
Permanent grassland	693,694	693,074	669,707	633,925	616,434	676,363	675,314	671,774	665,984	661,578	99.34	100.06
Meadows	381,654	381,654	368,738	342,926	321,812	351,653	346,196	340,417	332,856	330,095	99.17	97.49
Pastures	331,588	331,588	320,837	311,211	294,622	324,710	329,118	331,357	333,128	331,483	99.51	102.76
Permanent crops ¹⁾	192,233	198,934	199,814	204,053	207,592	203,849	206,228	207,503	204,470	206,611	101.05	100.33
Orchards ¹⁾	167,868	174,729	175,917	180,173	183,609	183,460	183,611	185,418	182,084	184,265	101.20	100.34
Vineyards	22,150	22,150	22,150	22,150	22,150	20,333	20,501	19,840	20,113	19,973	99.30	97.02
Nurseries	1,598	1,531	1,182	1,112	1,246	1,336	1,363	1,532	1,578	1,642	104.06	116.37
Other permanent crops	617	524	565	618	587	719	753	713	695	731	105.18	105.42

¹⁾ Due to revision of data on fruit production, the areas for the series for 2013-2016 changed on the following positions: orchards, permanent crops and utilised agricultural area.

Source: SORS

Annex 1.5: Structure of harvested areas in Serbia (%); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Harvested area	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cereals	67.7	70.2	69.3	68.5	66.5	66.6	65.9	66.8	67.7	66.3
Maize	24.3	23.4	39.8	39.4	39.0	35.1	37.3	38.2	39.0	36.6
Wheat	37.7	40.9	23.3	23.2	21.6	25.0	22.4	22.3	22.9	24.3
Other cereals	5.7	6.0	6.3	6.0	5.9	6.5	6.2	6.3	5.8	5.4
Sugar beet	2.6	2.5	1.7	1.9	2.1	1.9	1.6	1.4	1.5	1.3
Oilseeds	13.7	13.2	14.3	15.5	17.1	18.8	18.6	18.6	18.1	19.5
Sunflower	7.2	6.8	6.5	7.8	8.5	9.3	8.5	8.5	8.1	9.7

Soya beans	6.1	6.0	7.3	7.1	7.8	7.6	8.9	9.1	9.1	9.0
Potatoes	2.0	2.0	1.7	1.6	1.5	1.1	1.3	1.1	1.0	1.0
Fresh vegetables and beans	3.1	3.1	3.0	2.9	3.1	2.3	2.1	2.3	2.3	3.1
Fodder plants	9.9	8.8	9.9	9.2	9.3	9.0	9.4	9.0	8.7	8.6
Other	1.0	0.5	0.1	0.4	0.4	0.4	1.1	0.8	0.7	0.2

Source: SORS

Annex 1.6: Areas under the main crops in Serbia (000 ha); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Cereals	1,759	1,817	1,759	1,759	1,710	1,713	1,699	1,740	1,770	1,724	97.40	99.86
Wheat	632	605	590	595	556	643	577	581	599	631	105.34	106.73
Maize	980	1,058	1,010	1,010	1,002	902	962	996	1,020	952	93.33	97.49
Other cereals	147	154	159	154	152	168	160	163	151	141	93.38	88.79
Sugar beet	67	64	42	49	54	48	43	37	39	35	89.74	79.24
Oilseeds	358	339	364	396	441	482	480	484	474	516	108.86	109.28
Sunflower	188	175	166	200	219	239	219	221	213	251	117.84	112.93
Soya beans	160	154	185	182	202	196	229	237	237	235	99.16	106.75
Rapeseed	10	10	12	13	19	46	31	25	23	29	126.09	100.43
Other crops for oil production	„	0	1	1	1	1	1	1	1	1	100.00	100.00
Tobacco - dry leaves	5	5	5	5	5	6	7	7	6	5	83.33	80.65
Potatoes	51	52	42	41	39	28	34	30	26	25	96.15	79.62
Fresh vegetables and beans	71	70	81	82	86	65	62	61	61	62	100.98	91.94
Fruit	166	172	174	179	183	183	188	185	182	184	101.10	99.89
of which berries	20	25	27	32	36	38	38	39	36	36	100.00	96.26
Grapes	21	21	21	21	21	21	21	20	20	20	100.00	97.09
Fodder plants	258	242	250	237	240	230	243	235	228	223	97.81	94.81

Source: SORS

Annex 1.7: Yields of main crops in Serbia (t/ha); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Cereals (t/ha)												
Wheat	4.3	4.0	4.1	4.9	4.1	4.6	4.4	4.9	5.7	5.0	87.72	105.52
Maize	6.0	7.5	5.4	7.3	4.0	7.7	7.6	7.9	5.9	4.5	76.27	67.96
Sugar beet	47.8	54.7	51.8	54.5	46.7	48.3	54.2	53.9	52.0	48.0	92.31	94.09
Oilseeds												
Sunflower	2.7	2.9	2.6	3.1	2.5	3.1	3.3	2.9	2.9	2.6	89.66	88.65
Soya beans	2.4	3.6	2.5	3.2	2.3	3.3	3.1	3.2	2.3	1.7	73.91	59.91
Rapeseed	2.8	3.2	2.7	2.9	2.5	2.9	2.7	3.0	3.2	3.0	93.75	104.78
Tobacco – dry leaves	1.6	1.9	1.8	1.5	1.4	1.2	1.1	1.3	1.7	1.3	76.47	96.80
Potatoes	15.1	11.4	15.4	17.8	15.3	17.3	20.6	22.4	23.3	21.1	90.56	106.66
Fresh vegetables and beans												
Tomatoes	20.0	13.9	16.6	15.9	15.6	15.3	14.2	14.1	17.8	19.0	106.74	123.31
Peppers (fresh)	8.6	9.7	11.1	13.4	11.4	11.2	11.7	10.7	14.4	14.1	97.92	118.64
Beans ¹⁾	1.1	1.4	1.0	1.1	1.0	1.2	1.0	1.1	1.1	1.0	90.91	92.78
Fruit – woody (t/ha)												
Apples ²⁾	21.5	16.5	17.5	16.1	15.1	17.8	19.1	18.6	19.0	17.8	93.68	99.37
Sour cherries ²⁾	10.1	6.7	6.6	5.8	5.2	6.8	5.1	8.5	7.9	8.2	103.80	122.32
Plums ²⁾	7.9	5.6	4.8	6.4	4.6	6.0	7.7	8.0	5.7	6.8	119.30	106.28
Berries (t/ha)												
Raspberries ²⁾	5.7	5.6	6.0	5.6	5.0	5.6	5.2	4.9	5.3	5.9	111.32	113.37
Strawberries	5.9	4.7	5.1	4.0	4.3	3.2	3.0	4.5	3.3	4.7	142.42	128.42
Grapes-total (t/ha)	7.7	5.8	8.1	6.9	7.8	7.0	8.0	8.0	7.4	8.1	109.46	106.02
Fodder (t/ha)												
Clover	3.8	3.3	2.9	4.0	3.0	4.0	5.0	5.0	3.9	3.1	79.49	74.16
Alfalfa	5.0	5.2	4.4	5.7	4.0	5.0	6.0	6.0	5.1	4.1	80.39	78.54
Fodder maize	20.7	19.2	17.3	21.3	16.0	20.0	20.0	21.0	15.8	15.0	94.94	80.82

Crop yield is expressed as barn yield with regular humidity, after deduction of all losses during harvesting (picking), transport, threshing.

Yield per area unit (per ha) is calculated on harvested area.

¹⁾ Bean yields per ha is expressed for pure crops.

²⁾ Due to revision of data on fruit production, the data on fruit yield or the series for 2013-2016 changed on the following positions: apples, sour cherries, plums, raspberries.

Source: SORS

Annex 1.8: Production of the main crops in Serbia (000 t); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Cereals	9,090	10,849	8,437	10,869	6,793	10,527	10,437	11,446	10,236	8,012	78.27	81.03
Wheat	2,690	2,387	2,428	2,885	2,276	2,941	2,535	2,873	3,442	3,109	90.33	110.51
Maize	5,864	7,952	5,455	7,377	4,018	6,964	7,345	7,872	6,027	4,283	71.06	66.45
Other cereals	536	510	554	607	499	622	557	701	767	620	80.83	98.54
Sugar beet	3,180	3,507	2,183	2,684	2513	2325	2305	2018	2048	1667	81.40	74.36
Oilseeds	925	1,087	924	1,238	1,052	1,517	1,516	1,465	1,222	1,131	92.55	83.51
Sunflower	513	509	437	621	541	734	729	637	608	644	105.92	99.12
Soya beans	385	546	454	576	461	646	701	752	540	399	73.89	64.35
Rapeseed	27	31	33	39	49	135	84	74	73	87	119.18	104.88
Other crops for oil production	„	0	1	2	1	2	2	2	1	1	100.00	60.73
Tobacco – dry leaves	8	9	9	8	7	7	8	9	10	6	60.00	72.86
Potatoes	767	592	639	714	589	488	702	665	614	523	85.18	85.51
Fresh vegetables and beans ¹⁾	1,047	920	1,095	1,146	1,100	836	747	726	805	1,182	146.83	140.26
Fruit ²⁾	1,541	1,304	1,307	1,359	1,205	1,406	1,542	1,619	1,436	1,513	105.36	104.96
of which berries ²⁾	114	132	157	169	174	189	177	185	183	202	110.38	111.23
Grapes (total)	164	122	171	146	166	150	164	160	156	162	103.85	101.76
Fodder plants	1,598	1,506	1,402	1,679	1,224	1,498	1,824	1,882	1,425	1,175	82.46	74.81

¹⁾ Beans growing is presented jointly for pure crops and cover crops. Cabbage and kale growing is presented jointly for the main and double crops.

²⁾ Due to revision of data on fruit growing, the data on production of the series for 2013-2016 changed on the following positions: fruit, of which berries.

... – no data available

Source: SORS

Annex 1.9: Head of cattle¹⁾ in Serbia (000); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Beef cattle (total)	913	920	916	893	899	878	898	886	860	800	93.02	90.48
of which cows	451	460	455	438	436	434	434	429	419	384	91.65	89.22
of which dairy cows	429	437	430	426	429	423	423	417	408	374	91.67	89.05
Pigs (total)	3,144	3,236	3,284	3,021	2,911	2,782	2,903	2,983	2,868	2,667	92.99	92.30
of which sows	355	346	354	356	350	343	350	346	331	301	90.94	87.50
Sheep	1,616	1,748	1,789	1,665	1,704	1,712	1,642	1,685	1,695	1,721	101.53	101.98
of which breeding ewes	1,237	1,266	1,287	1,231	1,287	1,264	1,197	1,178	1,186	1,211	102.11	99.07
Goats	225	219	203	200	183	196	191	202	195	192	98.46	99.28
Poultry (total)	17,860	17,167	17,450	16,242	16,338	16,232	15,780	15,249	15,348	14,817	96.54	93.84
of which laying hens	9,230	10,650	11,538	9,138	8,973	8,988	8,525	8,207	8,292	7,902	95.30	91.92

Beehives	653	677	792	792	849	914	977	980	976	977	100.10	104.02
----------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	--------	--------

¹⁾ Situation as at 1st December.

Source: SORS

Annex 1.10: Livestock production in Serbia; 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Total production (weight gain/live weight) (000 t)												
Beef cattle	161	155	156	152	153	152	155	153	150	142	94.67	93.05
Pigs	381	400	415	434	437	431	441	445	428	416	97.20	95.33
Poultry	128	121	116	117	129	143	156	161	165	168	101.82	111.41
Sheep	61	63	65	58	63	64	63	64	65	66	101.54	103.45
Gross meat production (carcass side weight) (000 t) ¹⁾												
Beef	70	73	77	77	71	76	71	75	77	79	102.60	106.76
Pork	249	258	278	301	307	303	298	299	307	299	97.39	98.75
Poultry	92	94	86	88	95	106	114	115	111	116	104.50	107.21
Lamb	30	27	30	34	30	32	38	31	31	31	100.00	95.68
Milk (mill. l) ²⁾												
Cow's milk	1,451	1,492	1,501	1,504	1,506	1,493	1,509	1,495	1,473	1,425	96.74	95.30
Ewes' milk	18	20	19	17	14	18	11	9	10	9	90.00	72.58
Goat milk	34	38	44	37	33	34	31	34	34	34	100.00	102.41
Eggs (mill.)	1,755	1,892	2,061	1,853	1,759	1,796	1,775	1,706	1,711	1,632	95.38	93.29
Honey (000 t)	9	4.38	12.26	5.76	7.01	11.43	7.60	6.84	7.44	14.23	191.24	176.44
Wool (000 t)	3	2.69	2.77	2.85	2.83	2.84	2.80	2.81	2.86	2.89	101.05	102.19

¹⁾ Gross domestic production (included exported, excluded imported live animals), without raw fats.

²⁾ Freshly milked milk, total

Source: SORS

Annex 1.11: Price indexes for agricultural products in Serbia (previous year=100); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture and fisheries	98.70	97.30	99.19	99.10	105.00	95.85	102.70	104.70	120.84	125.70
Agriculture	98.70	97.30	99.25	99.00	104.90	95.90	102.70	104.80	121.03	125.60
Crop production	94.30	95.20	103.07	101.60	107.00	95.22	103.00	104.80	132.58	126.00
Fruit production and viticulture	93.80	88.90	120.80	106.60	81.30	81.56	122.80	130.10	150.31	108.90
Livestock production	104.60	100.40	93.80	95.70	105.60	99.34	99.30	100.40	101.24	129.50
Processing from own production	106.30	103.40	102.90	101.30	102.40	104.99	104.20	99.80	105.82	121.70
Fisheries	105.80	95.30	93.50	103.10	126.30	89.91	98.00	95.50	98.24	154.40
Cereals	97.60	96.80	102.04	100.10	106.00	97.78	102.60	102.70	126.80	133.50
Wheat	90.30	101.60	100.10	87.00	111.00	98.59	112.50	100.10	119.23	145.30
Maize	94.10	91.80	105.60	102.70	104.90	96.89	100.40	109.60	139.28	128.10
Industrial plants	83.90	91.70	105.90	103.90	109.80	88.04	101.90	110.20	146.08	111.40
Sunflower	50.00	109.30	133.90	84.80	109.30	82.03	104.50	115.50	155.24	111.10
Soya beans	79.20	91.90	100.90	98.70	118.80	85.07	99.60	114.20	165.46	109.60
Sugar beet	100.80	79.00	92.80	122.90	104.20	87.05	107.60	103.60	114.17	98.60
Tobacco (dry leaves)	110.00	97.20	92.40	114.70	85.50	114.63	100.80	99.80	93.64	142.00
Vegetables ¹⁾	111.20	109.30	114.10	103.40	98.20	125.40	128.00	94.20	120.45	114.50
Potatoes	149.20	91.20	100.60	100.80	100.00	131.41	121.50	81.70	100.93	167.50
Fodder plants	118.20	113.20	108.60	99.80	118.20	107.87	89.10	99.50	126.92	129.10
Fruit	93.80	88.90	120.80	106.60	81.30	81.56	122.80	130.10	150.31	108.90
Wine grapes	75.20	75.90	123.30	98.30	100.40	99.44	96.30	106.00	110.87	98.80
Wine	100.20	146.90	138.00	116.90	105.20	110.30	111.80	94.20	111.16	131.40
Beef cattle	98.80	103.10	99.60	98.50	100.70	105.33	95.70	93.60	107.59	126.10
Calves	100.90	104.30	103.30	96.80	102.20	102.05	104.10	99.50	102.07	114.20
Pigs	101.20	99.20	84.10	92.70	115.80	89.84	100.50	104.00	94.52	129.90
Sheep and goats	97.30	112.80	102.60	101.60	98.20	102.88	97.60	98.10	104.17	132.00
Cattle and poultry	100.70	99.80	89.70	94.30	109.30	95.73	98.00	99.90	100.35	126.90
Livestock products	108.20	100.90	97.50	96.90	102.00	102.93	100.50	100.90	102.06	132.50
Poultry	102.00	95.60	97.00	93.70	101.00	99.00	92.20	96.60	109.47	114.70
Milk	108.60	100.40	97.30	97.00	100.50	104.39	100.10	101.00	100.70	133.50
Eggs	95.20	103.60	97.60	98.20	115.90	91.79	105.10	100.20	104.85	136.20
Honey	106.20	129.90	118.70	85.30	97.40	102.56	100.60	110.20	129.72	83.60

Ponders which represent the structure of the value of products sold by legal entities from their own production and the value of products bought from family holdings are used for calculation of price indexes of agriculture and fisheries product producers. Product ponders are calculated for each month separately based on monthly data on buying-in and sale.

¹⁾ Potatoes and beans are not included.

Source: SORS

Annex 1.12: Average producer prices of agricultural products in Serbia (RSD/kg); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Plant products												
Wheat	17.55	20.48	17.57	15.06	16.77	16.31	17.83	17.97	21.90	33.18	151.51	182.75
Maize	16.03	13.34	15.18	15.14	16.19	14.57	14.39	16.31	23.44	31.07	132.55	182.98
Rye	18.23	17.34	21.63	18.41	17.41	18.20	20.16	19.62	23.05	33.48	145.25	170.05
Barley	17.82	17.32	15.93	15.72	14.31	15.80	15.49	14.74	19.51	32.04	164.22	200.63
Brewing barley	20.18	15.97	16.95	16.35	16.06	16.12	17.34	16.39	19.38	35.08	181.01	205.65
Oats	23.00	22.45	21.48	18.61	17.87	19.06	15.09	16.04	22.15	35.86	161.90	198.76
Rapeseed	42.04	35.90	38.95	38.91	38.08	34.82	37.73	38.84	55.52	74.19	133.63	180.96
Sunflower	24.75	28.19	36.67	30.68	33.22	26.95	28.18	32.24	51.79	57.86	111.72	167.83
Soya beans	43.65	37.40	38.31	37.64	45.02	35.39	34.67	40.24	67.28	74.89	111.31	168.22
Sugar beet	4.56	3.49	3.24	4.07	4.24	3.56	3.80	4.00	4.37	4.77	109.15	119.43
Tobacco (dry leaves, non-fermented)	244.24	233.04	221.71	246.42	205.15	214.69	214.98	256.43	249.73	330.95	132.52	145.03
Beans	218.79	248.28	208.99	145.47	173.45	203.12	210.62	195.20	161.71	205.37	127.00	108.76
Potatoes (pure crops)	28.17	21.11	23.95	20.24	22.78	32.02	30.59	22.85	25.96	55.91	215.37	208.31
Peppers	39.89	69.90	52.61	49.22	54.34	62.19	76.03	75.46	55.20	68.49	124.08	105.95
Cabbage	14.76	18.89	22.12	17.12	21.07	21.92	23.84	18.65	33.26	30.56	91.88	128.68
Tomatoes	35.94	73.62	40.22	50.99	47.75	48.93	62.65	58.58	71.51	77.41	108.25	133.73
Cucumbers	28.29	39.17	27.55	36.60	27.71	37.34	46.07	43.91	42.31	57.71	136.40	146.22
Carrot	29.27	29.22	37.02	26.27	31.08	36.53	30.61	25.16	36.01	39.15	108.72	122.81
Onion/garlic	23.94	17.99	22.04	24.61	19.31	31.84	41.77	28.74	26.68	31.80	119.19	107.19
Apples	37.28	45.15	42.93	46.09	54.96	44.58	41.23	49.66	50.94	45.39	89.10	94.03
Pears (dessert)	48.70	53.18	69.39	75.92	75.48	69.72	69.66	78.27	45.16	88.23	195.37	130.41
Peaches and nectarines	65.74	60.75	61.60	74.99	68.42	67.95	57.67	67.56	88.35	80.48	91.09	114.99
Apricots	81.43	57.84	93.74	89.68	67.29	89.35	63.00	114.40	123.56	95.44	77.24	104.28
Sour cherries	58.34	50.80	142.39	108.56	96.22	127.04	114.51	78.14	118.75	84.13	70.85	78.68
Plums	30.63	57.04	55.50	46.51	60.97	57.54	40.43	53.54	59.77	58.16	97.31	106.81
Walnuts (whole)	228.65	271.53	230.48	216.06	266.40	234.14	180.31	159.04	191.49	217.90	113.79	105.64
Raspberries	184.23	151.37	192.89	194.23	131.72	96.26	143.64	196.29	377.37	488.13	129.35	258.19
Table grapes	51.12	73.12	70.57	63.06	75.18	53.66	70.67	82.63	96.07	90.94	94.66	120.22
Wine grapes	27.27	24.01	39.15	31.34	37.50	36.96	47.34	45.08	44.98	47.51	105.62	112.13
Livestock products												
Calves	293.47	322.36	328.33	316.91	322.82	333.16	351.15	338.95	354.89	419.43	118.19	123.29
Bullock and heifers	219.05	223.32	220.48	219.30	217.18	236.56	220.75	201.53	226.07	297.80	131.73	135.11
Pigs (≤ 110 kg)	176.89	158.88	148.64	140.65	165.47	144.48	150.98	152.69	150.38	206.93	137.60	135.43
Pigs (≥ 110 kg)	169.70	155.02	135.20	126.03	151.89	139.66	141.07	146.96	143.86	197.14	137.04	136.25
Lambs	224.13	261.04	260.41	259.10	250.54	249.13	241.14	217.16	237.93	319.34	134.22	133.51

Chickens	133.13	103.73	112.91	111.98	111.76	104.71	95.57	96.53	112.88	141.74	125.57	135.91
Eggs	7.95	10.34	7.79	7.69	8.55	7.70	8.04	7.99	8.22	11.80	143.55	145.68
Cow's milk	32.84	33.47	31.64	30.44	30.45	31.73	31.69	32.00	32.48	47.70	146.86	150.62
Honey	284.19	348.74	381.59	325.92	301.39	323.93	318.41	407.12	514.86	407.31	79.11	109.16

Source: SORS

Annex 1.13: Average producer prices of agricultural products in Serbia (EUR/t); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Plant products												
Wheat	155.12	174.59	145.55	122.32	138.21	137.90	151.29	152.83	186.27	282.48	151.65	184.27
Maize	141.69	113.72	125.76	122.97	133.43	123.19	122.10	138.72	199.37	264.52	132.68	184.51
Rye	161.13	147.82	179.15	149.53	143.48	153.88	171.06	166.87	196.05	285.04	145.39	171.43
Barley	157.51	147.65	131.97	127.68	117.94	133.59	131.44	125.36	165.94	272.78	164.38	202.28
Brewing barley	178.37	136.14	140.39	132.80	132.36	136.30	147.13	139.40	164.83	298.66	181.19	207.40
Oats	203.29	191.38	177.95	151.16	147.28	161.15	128.04	136.42	188.39	305.30	162.05	200.51
Rapeseed	371.58	306.04	322.59	316.04	313.84	294.41	320.15	330.33	472.22	631.62	133.76	182.45
Sunflower	218.76	240.31	303.75	249.19	273.78	227.86	239.11	274.20	440.49	492.60	111.83	169.22
Soya beans	385.82	318.82	317.29	305.72	371.03	299.23	294.18	342.24	572.24	637.58	111.42	169.67
Sugar beet	40.31	29.75	26.87	33.06	34.94	30.10	32.24	34.02	37.17	40.61	109.26	120.52
Tobacco (dry leaves, non-fermented)	2,158.80	1,986.60	1,836.36	2,001.49	1,690.75	1,815.22	1,824.15	2,180.94	2,124.04	2,817.58	132.65	146.21
Beans	1,933.85	2,116.52	1,730.99	1,181.55	1,429.49	1,717.40	1,787.16	1,660.17	1,375.40	1,748.44	127.12	109.69
Potatoes (pure crops)	248.99	179.96	198.37	164.40	187.74	270.73	259.56	194.34	220.80	476.00	215.58	210.03
Peppers	352.58	595.88	435.77	399.78	447.84	525.82	645.13	641.79	469.50	583.10	124.20	106.79
Cabbage	130.46	161.03	183.23	139.05	173.65	185.34	202.29	158.62	282.89	260.18	91.97	129.73
Tomatoes	317.67	627.59	333.16	414.16	393.53	413.71	531.60	498.22	608.22	659.04	108.36	134.76
Cucumbers	250.05	333.91	228.21	297.28	228.37	315.71	390.91	373.45	359.86	491.32	136.53	147.25
Carrot	258.71	249.09	306.63	213.37	256.15	308.86	259.73	213.99	306.28	333.31	108.83	123.91
Onion/garlic	211.60	153.36	182.54	199.89	159.14	269.21	354.43	244.43	226.92	270.73	119.31	107.94
Apples	329.51	384.89	355.62	374.36	452.95	376.93	349.85	422.36	433.26	386.43	89.19	94.93
Pears (dessert)	430.45	453.34	574.77	616.64	622.07	589.49	591.08	665.69	384.10	751.16	195.56	131.67
Peaches and nectarines	581.07	517.88	510.21	609.09	563.88	574.52	489.34	574.60	751.45	685.18	91.18	115.98
Apricots	719.75	493.07	776.45	728.41	554.57	755.46	534.57	972.97	1,050.92	812.54	77.32	105.02
Sour cherries	515.66	433.06	1,179.39	881.76	793.00	1,074.13	971.64	664.58	1,010.01	716.25	70.92	79.35
Plums	270.73	486.25	459.73	377.77	502.48	486.51	343.06	455.36	508.37	495.15	97.40	107.84
Walnuts (whole)	2,021.00	2,314.72	1,908.99	1,754.90	2,195.54	1,979.67	1,529.97	1,352.63	1,628.69	1,855.12	113.90	106.78
Raspberries	1,628.38	1,290.39	1,597.62	1,577.59	1,085.57	813.89	1,218.82	1,669.44	3,209.67	4,155.75	129.48	259.82
Table grapes	451.84	623.33	584.50	512.19	619.60	453.70	599.65	702.77	817.11	774.23	94.75	121.24
Wine grapes	241.04	204.68	324.29	254.55	309.06	312.50	401.69	383.41	382.57	404.48	105.73	113.03

Livestock products												
Calves	2,593.93	2,748.03	2,719.48	2,574.03	2,660.52	2,816.90	2,979.58	2,882.77	3,018.47	3,570.86	118.30	124.35
Bullock and heifers	1,936.15	1,903.74	1,826.16	1,781.22	1,789.89	2,000.14	1,873.11	1,714.01	1,922.81	2,535.35	131.86	136.31
Pigs (≤ 110 kg)	1,563.50	1,354.41	1,231.16	1,142.40	1,363.72	1,221.59	1,281.10	1,298.63	1,279.04	1,761.72	137.74	136.69
Pigs (≥ 110 kg)	1,499.95	1,321.50	1,119.86	1,023.65	1,251.80	1,180.84	1,197.01	1,249.89	1,223.58	1,678.37	137.17	137.50
Lambs	1,981.05	2,225.29	2,156.93	2,104.49	2,064.83	2,106.42	2,046.13	1,846.94	2,023.68	2,718.74	134.35	134.75
Chickens	1,176.71	884.27	935.22	909.53	921.07	885.33	810.93	820.99	960.08	1,206.72	125.69	137.18
Eggs (000)	70.27	88.15	64.49	62.46	70.46	65.10	68.22	67.95	69.91	100.46	143.69	147.02
Cow's milk (000 l)	290.27	285.32	262.10	247.24	250.95	268.28	268.90	272.16	276.25	406.10	147.00	151.92
Honey	2,511.91	2,972.91	3,160.65	2,647.22	2,483.91	2,738.86	2,701.78	3,462.55	4,379.07	3,467.68	79.19	109.97

Source: SORS

2. FOREIGN TRADE

Annex 2.1: Foreign trade by tariff chapters (EUR bn); 2022/21

		EXPORT					IMPORT				
		EUR mill.		Index	%	EUR mill.		Index	%		
		2021	2022	2022/21		2021	2022	2022/21			
1	Live animals	54.2	51.3	94.65	1.3	1.1	16.1	22.5	139.65	0.7	0.7
2	Meat and edible meat offal	31.7	40.4	127.44	0.7	0.8	109.4	197.3	180.29	4.4	6.1
3	Fish and crustaceans, molluscs and other aquatic invertebrates	15.6	17.9	114.74	0.4	0.4	58.0	84.5	145.59	2.4	2.6
4	Dairy products, eggs, natural honey	101.5	116.2	114.48	2.4	2.4	116.6	212.0	181.74	4.7	6.5
5	Other products of animal origin	5.7	5.1	90.25	0.1	0.1	7.8	10.8	139.12	0.3	0.3
6	Live plants and flowers	29.8	36.6	122.90	0.7	0.8	28.9	31.4	108.69	1.2	1.0
7	Vegetables, plants, roots, rot crops	114.0	133.2	116.88	2.7	2.8	120.2	155.1	128.98	4.9	4.8
8	Fruit and nuts, citrus plants, melons and watermelons	825.7	851.1	103.08	19.5	17.6	286.3	295.7	103.30	11.6	9.1
9	Coffee, tea, mate, spices	23.5	25.7	109.54	0.6	0.5	79.9	123.6	154.75	3.2	3.8
10	Cereals	765.4	694.6	90.75	18.0	14.4	29.1	63.4	217.85	1.2	1.9
11	Milling industry products, malt, starch	77.2	119.7	155.02	1.8	2.5	17.6	28.1	159.52	0.7	0.9
12	Oil seed and oleaginous fruit	164.0	172.5	105.18	3.9	3.6	97.8	136.4	139.48	4.0	4.2
13	Flax, rubber, rosin, other plant juices and extracts	3.7	6.5	174.97	0.1	0.1	6.2	12.3	199.77	0.3	0.4
14	Vegetable plaiting materials, other products of plant origin	0.7	0.6	80.54	0.0	0.0	2.1	3.9	185.80	0.1	0.1
15	Animal and plant fats and oils	268.2	312.8	116.61	6.3	6.5	100.3	130.5	130.11	4.1	4.0
16	Meat products	62.8	70.9	112.90	1.5	1.5	105.4	126.8	120.35	4.3	3.9
17	Sugar and sugar products	101.8	97.1	95.43	2.4	2.0	57.0	71.8	125.96	2.3	2.2

18	Cocoa and cocoa products	72.5	112.7	155.51	1.7	2.3	140.3	175.9	125.37	5.7	5.4
19	Cereals, flour and starch products	175.4	246.3	140.43	4.1	5.1	162.2	214.9	132.49	6.6	6.6
20	Vegetable, fruit and nut products	141.6	177.0	124.99	3.3	3.7	122.9	152.5	124.11	5.0	4.7
21	Miscellaneous food products	262.3	322.3	122.86	6.2	6.7	224.2	267.2	119.18	9.1	8.2
22	Beverages, spirits and vinegar	280.6	386.5	137.75	6.6	8.0	141.7	196.9	138.96	5.8	6.0
23	Food industry waste and offal (fodder)	245.8	333.8	135.82	5.8	6.9	125.7	136.2	108.36	5.1	4.2
24	Tobacco and manufactured tobacco substitutes	386.8	460.2	118.96	9.1	9.5	221.9	292.2	131.68	9.0	9.0
	Total agricultural products (1-24)	4,210.4	4,791.0	113.79	99.3	99.2	2,374.6	3,141.9	132.31	96.5	96.5
	Other agricultural products (tariff chapters 29-53)	30.2	37.6	124.50	0.7	0.8	88.0	113.8	129.32	3.6	3.5
	Total	4,240.6	4,828.6	113.87	100.0	100.0	2,460.6	3,255.7	132.31	100.0	100.0

Source: SORS

Annex 2.2: Regional export structure of agricultural and food products (EUR bn); 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
EXPORTS	2,104	2,338	2,605	2,922	2,823	2,854	3,238	3,635	4,163	4,735	113.74	141.66
EY	1,104	1,155	1,248	1,411	1,284	1,305	1,585	1,814	2,249	2,443	108.63	148.29
CEFTA	723	775	833	865	918	915	924	877	983	1,206	122.69	130.60
Other	277	407	524	647	621	634	729	944	931	1,083	116.33	140.33
IMPORTS	1,177	1,292	1,489	1,362	1,617	1,714	1,872	2,048	2,442	3,220	131.86	166.10
EY	704	821	970	869	978	1,069	1,223	1,346	1,635	2,205	134.86	176.37
CEFTA	151	153	162	156	162	167	178	189	230	259	112.61	139.85
Other	322	317	358	338	477	478	471	513	577	756	131.02	150.24
BALANCE	927	1,047	1,117	1,560	1,207	1,140	1,366	1,587	1,721	1,515		
EY	400	334	278	542	306	236	362	468	614	238		
CEFTA	572	622	672	709	756	748	746	688	753	947		
Other	-45	90	167	309	145	156	258	431	354	327		

Source: SORS

Annex 2.3: Main indicators of foreign trade of agricultural and food products; 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Index 2022/21	Index 2022/ Ø17-21
Exports (EUR mill.)	2,104	2,338	2,605	2,922	2,823	2,854	3,238	3,635	4,163	4,735	113.74	141.66
Imports (EUR mill.)	1,117	1,292	1,489	1,362	1,617	1,714	1,872	2,048	2,442	3,220	131.86	166.10
Balance (EUR mill.)	987	1,047	1,117	1,560	1,206	1,140	1,366	1,587	1,721	1,515	88.03	107.91
Volume of trade (EUR mill.)	3,221	3,630	4,094	4,284	4,440	4,568	5,110	5,683	6,605	7,995	121.04	151.39
Export-to-import ratio (%)	188.4	181.0	175.0	214.5	174.6	166.5	173.0	177.5	170.5	147.0	86.22	85.26
Share of total trade of Serbia (%)	12	13.6	14.4	13.9	12.9	12.0	12.3	14.2	9.9	11.9	120.20	97.14
Share of exports in total exports (%)	19	20.8	21.6	21.8	18.8	17.5	18.5	21.3	15.1	17.2	113.91	94.34
Share of imports in total imports (%)	8	8.0	9.1	7.8	8.3	7.8	7.8	8.9	6.3	8.3	131.75	106.06

Source: SORS

3. AGRICULTURAL POLICY

Annex 3.1: Paid funds for subsidies in agriculture and rural development (RSD); 2022

TYPE OF SUBSIDIES		PAID FUNDS
I	Direct payments	41,245,651,001
1	Premiums	9,743,152,461
1.1	Milk premium	9,743,152,461
2	Production subsidies	26,470,223,281
2.1	Basic subsidies for plant production	10,002,273,021
2.2	Subsidies in livestock production	16,467,950,260
3	Input subsidies	5,032,275,259
3.1	Input subsidies fuel, fertilizers and seed	5,032,275,259
II	Subsidies for rural development measures	9,001,866,581
1	Subsidies for improvement of competitiveness	6,944,579,864
1.1	Investment in physical assets of holdings	3,335,443,008
1.2	Subsidies in processing and marketing of agricultural, food and fisheries products	1,746,912,018
1.3	Risk management	1,862,224,837
2	Subsidies for preservation and improvement of the environment and natural resources	729,688,001
2.1	Organic production	576,127,504
2.2	Preservation of plant and animal genetic resources	153,560,497
3	Subsidies for income diversification and improvement of the quality of life in rural areas	440,218,798
3.1	Improvement of rural economic activities through support to non-agricultural activities	59,197,569

3.2	Implementation of activities with the aim of improving competitiveness in terms of adding value through processing, as well as for introduction and certification of the quality system for food, organic products and products with GI at holdings	73,020,173
3.3	Improvement and development of rural infrastructure	308,001,056
4	Subsidies for preparation and implementation of local rural development strategies	932,975
4.1	Preparation of local rural development strategies	932,975
4.2	Implementation of local rural development strategies	0
5	Subsidies for improvement of system of creation and transfer of knowledge	886,446,943
5.1	Development of technical and technological, applied, development-related and innovative projects in agriculture and rural development	288,979,574
5.2	Support to provision of advice and information to farmers, associations, cooperatives and other legal entities in agriculture	597,467,369
III	Specific subsidies	224,913,111
1	Subsidies for implementation of breeding programmes, for the purpose of achieving breeding objectives in livestock breeding - selection measures	143,807,826
2	Subsidies for promotional activities in agriculture and rural development (measures and actions in agriculture)	2,768,795
3	Subsidies for production of propagation material and certification and clone selection	78,336,490
IV	IPARD subsidies	2,688,967,331
V	Credit support	712,341,220
	TOTAL	53,873,739,245

Source: MAFWM, Directorate for Agrarian Payments

Annex 3.2: Bylaws (implemented in 2022)

-
- ¹ Rulebook on the conditions, manner and application form for exercise the right on milk premium (Official Gazette of the RS, No 28/13, 36/14, 44/18 – other law, 56/20, 159/20 and 93/21)
- ² Rulebook on the manner for exercise the right on basic subsidies for plant production and application form for exercise the right on those subsidies (Official Gazette of the RS, No 29/13, 9/16, 38/20, 16/21, 18/22 and 141/22)
- ³ Rulebook on the manner for exercise the right on subsidies in livestock production for quality breeding animals (Official Gazette of the RS, No 26/17, 20/18, 34/18, 44/18 – other law, 104/18, 24/21, 139/22 and 144/22)
- ⁴ Rulebook on the manner for exercise the right on subsidies in livestock production for suckler cows (Official Gazette of the RS, No 46/15, 26/18, 44/18 – other law and 139/22)
- ⁵ Rulebook on the conditions and manner for exercise the right on subsidies in livestock production for cattle fattening, pigs fattening, lambs fattening and kids fattening (Official Gazette of the RS, No 104/18, 3/19 and 139/22)
- ⁶ Rulebook on the conditions and manner for exercise the right on subsidies in livestock production per beehive (Official Gazette of the RS, No 33/15, 14/16, 20/18, 44/18 – other law, 27/19, 76/20 and 139/22)
- ⁷ Rulebook on the manner for exercise the right on subsidies in livestock production for consumable fish production (Official Gazette of the RS, No 61/13, 44/14, 44/18 – other law and 139/22)
- ⁸ Rulebook on the conditions and manner for exercise the right on subsidies in livestock production for cows for breeding calves for fattening (Official Gazette of the RS, No 25/18, 44/18 – other law and 139/22)
- ⁹ Rulebook on the conditions, manner and application form for exercise the right to recourse for the costs of storing agricultural products in public warehouses (Official Gazette of the RS, No 61/13 and 141/22)
- ¹⁰ Rulebook on subsidies for programs for improvement of competitiveness for investments in physical assets of agricultural holdings through support for establishment of new permanent crops plantations of fruits and hops (Official Gazette of the RS, No 41/21)
- ¹¹ Rulebook on subsidies for investments in physical assets of agricultural holdings for the purchase of new machinery and equipment for the improvement of the primary plant production (Official Gazette of the RS, No 48/18, 29/19, 78/20 and 119/21)
- ¹² Rulebook on subsidies for investments in physical assets of agricultural holdings for the purchase of new machinery and equipment for the improvement of the primary livestock production (Official Gazette of the RS, No 48/18, 23/19, 78/20 and 119/21)
- ¹³ Rulebook on subsidies for investments in physical assets of agricultural holdings for the purchase of new machinery and equipment for the improvement of digitalization in livestock production (Official Gazette of the RS, No 46/19, 87/20 and 9/22)
- ¹⁴ Rulebook on subsidies for investments in physical assets of agricultural holdings for the procurement of quality breeding animals for the improvement of primary livestock production (Official Gazette of the RS, No 48/18, 29/19, 48/19 and 25/20)
- ¹⁵ Rulebook on subsidies for investments in physical assets of agricultural holdings for construction and equipping facilities for the improvement of primary agricultural production (Official Gazette of the RS, No 29/18, 30/18, 27/19, 40/19, 81/20, 120/20 and 66/22)
- ¹⁶ Rulebook on subsidies for investments in physical assets of agricultural holdings for the purchase of new tractor (Official Gazette of the RS, No 96/19 and 13/20)
- ¹⁷ Rulebook on subsidies for investments in physical assets of agricultural holdings for field electrification (Official Gazette of the RS, No 25/20)
- ¹⁸ Rulebook on subsidies for programs for investments in agriculture for competitiveness improvement and achieving quality standards by supporting the improvement of wine and brandy quality (Official Gazette of the RS, No 48/13, 33/16, 18/18 and 44/18 – other law)
- ¹⁹ Rulebook on the conditions, manner and application form for exercise the right to subsidies for insurance premiums for crops, permanent crops, nurseries and animals (Official Gazette of the RS, No 61/17 and 44/18 – other law)
- ²⁰ Rulebook on the use of subsidies for organic plant production (Official Gazette of the RS, No 31/18, 23/19, 20/20, 44/21, 50/22 and 139/22)
- ²¹ Rulebook on the use of subsidies for organic livestock production (Official Gazette of the RS, No 25/20 and 144/22)
- ²² Rulebook on subsidies for conservation of plant genetic resources (Official Gazette of the RS, No 85/13 and 44/18 – other law)
- ²³ Rulebook on subsidies for conservation of animal genetic resources (Official Gazette of the RS, No /13, 35/15, 28/16, 44/18 – other law, 104/18, 16/21 and 30/22)
- ²⁴ Rulebook on subsidies for improvement of economic activities in villages through support for non-agricultural activities (Official Gazette of the RS, No 93/21)
- ²⁵ Rulebook on subsidies for implementation of activities in order to increase competitiveness through certification of food quality systems, organic products and products with geographical indications (Official Gazette of the RS, No 39/18, 17/21, 132/21 and 27/22)
- ²⁶ Rulebook on subsidies for implementation of activities in order to increase competitiveness through diversification of economic activities through investment support in processing and marketing on agricultural holdings (Official Gazette of the RS, No 88/17, 44/18 – other law and 141/22)
- ²⁷ Rulebook on subsidies for improvement of system for creation and transfer of knowledge through development of technical-technological, applied, developmental and innovative projects in agriculture and rural development (Official Gazette of the RS, No 76/20, 18/22, 77/22 and 144/22)
- ²⁸ Regulation on establishing the Annual Program for the development of advisory services in agriculture for 2022 (Official Gazette of the RS, No 18/22)

-
- ²⁹ Regulation on establishing the Multiannual Program of measures for the implementation of breeding programs in the Republic of Serbia for the period 2020-2024 (Official Gazette of the RS, No 38/20)
- ³⁰ Regulation on establishing the Annual Program of measures for the implementation of breeding programs for 2022 (Official Gazette of the RS, No 30/22)
- ³¹ Rulebook on the use of subsidies for promotional activities in agriculture and rural development (Official Gazette of the RS, No 72/17 и 139/22)
- ³² Rulebook on subsidies for production of planting material and certification and clone selection of fruits, vine and hops (Official Gazette of the RS, No 58/17 and 25/18)
- ³³ Rulebook on IPARD subsidies for investments in physical assets of agricultural holdings (Official Gazette of the RS, No 84/17, 112/17, 78/18, 67/19, 53/21, 10/22 and 18/22)
- ³⁴ Rulebook on IPARD subsidies for investments in physical assets of agricultural holdings related to processing and marketing of agricultural and fishery products (Official Gazette of the RS, No 84/17, 23/18, 98/18, 82/19, 74/21 and 10/22)
- ³⁵ Rulebook on IPARD subsidies for diversification of agricultural holdings and business development (Official Gazette of the RS, No 76/20, 87/21 and 10/22)
- ³⁶ Rulebook on the conditions and manner for exercise the right to credit support (Official Gazette of the RS, No 48/17, 88/17, 84/18, 23/19 ,27/20, 36/21, 102/21, 130/21, 127/22 and 144/22)