Country Report Organic

2022

SERBIA



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This report has been prepared to the best of our knowledge and belief. We cannot however accept any guarantee for the accuracy, correctness or completeness of the information and data provided.

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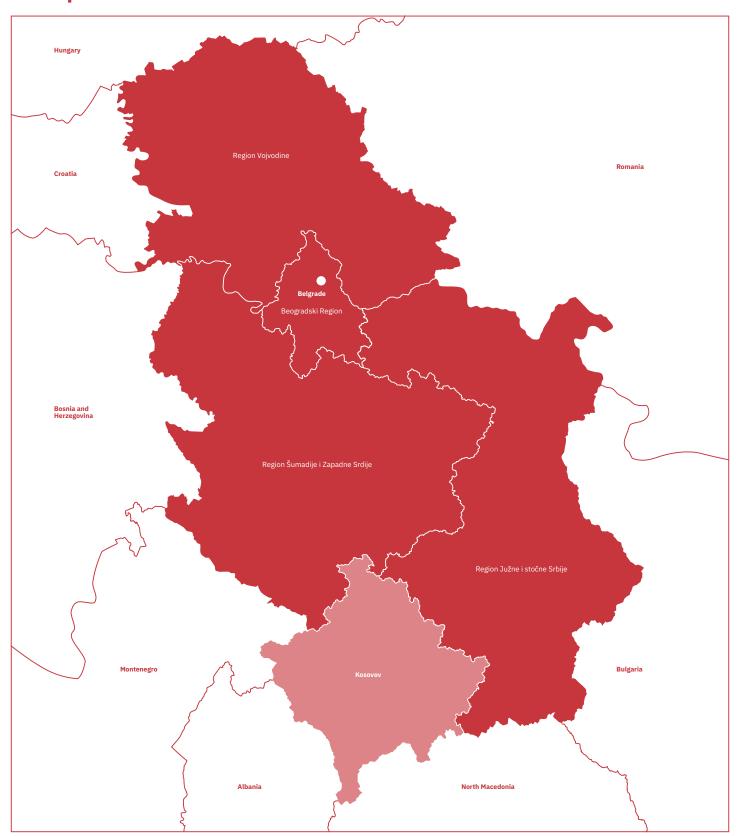


Figure 1: Map of Serbia in 2021 with 145 municipalities

Country Statistics

88 499 km²

Area (2020)

3,504,290 ha

Utilized agricultural area (2020)

Serbian dinar (RSD)

Currency

564,541

Number of agricultural holdings (2021)

14.6 %

Share of the population employed in agriculture, forestry and fishery (2020)

6783 Euro

GDP per capita at current prices (2020)

6.8 %

GDP share from agriculture, forestry, fishery (2021)

6 834 326 Million

Population (estimates for 2021)

-9.4 ‰

Population growth rate 2020 / 2021

11.0 %

Unemployment rate (2021)

6.15 ha

Average area of agricultural land on the farm (2021)

7.5%

Real GDP growth rate (2021)

65.5 %

Household consumption expenditure (2021)

13 %

GDP share from manufacturing (2021)

^{*} Since 1999, the Statistical Office of the Republic of Serbia does not dispose of certain data for AP Kosovo and Metohia, therefore they are not contained in this report.

State and Development of Agricultural Production

In 2021 Serbia had 3,504,290 ha of utilized agricultural area, which is a similar value for over a decade, while the number of farms decreased by 28 % in the past twenty years. The average utilized agricultural land per holding in Serbia is 6.15 ha, but it is noticeable process of farm land consolidation, even more in Vojvodina than in the rest of the country.

Climate and Natural Condition in Serbia

Serbia is a landlocked country situated in the Southeast Europe with one part located on the Balkan Peninsula (around 75 % of the territory) and the other in the Central Europe in Pannonia Plain (around 25 % of the territory). It borders with eight neighbouring countries: Hungary, Romania, Albania, Croatia, North Macedonia, Montenegro and Bosnia and Herzegovina. Overall territory covers 88,499 km² and encompasses various types of terrain ranging from the vast plains in the north and the hilly terrain in the south, to the mountainous regions in western, southern and eastern parts of Serbia.

The climate in the most of the country is moderate continental, and has usually two precipitation peaks – in June and in November, while winters are rather dry. The southwestern part of Serbia borders with the Mediterranean subtropic and continental climate. Both were influenced by the river valleys scattered among mountainous region. Moderate climate is present in Vojvodina, in the north part of the country. This climate is dominated by plains with river courses, as well as two mountain elevations, Fruška gora and Vršac mountains.

The main characteristics of this climate bring hot summers and cold winters, with annual average temperature variations from January to July over 22 °C, while autumn is warmer than spring. Similar climate is present in the lowland parts of Serbia. Hilly regions where altitude varies from 500 to 1,000 meters occupy the area south of the Sava and Danube rivers. This relief covers about two

thirds of the territory of Serbia, and about a tenth of the territory of Serbia consists of areas with altitudes of over 1,000 meters, the massifs located south of the Zapadna Morava and Nišava rivers. Average annual temperature for areas with an altitude of up to 300 m is 10.9 °C.

Areas with an altitude of 300 to 500 m above sea level have an average annual temperature of around 10.0 °C, and over 1000 m above sea level around 6.0 °C.

The largest and navigable rivers in Serbia are international rivers such as Danube (588 km), Sava (206 km), Tisza (168 km). In Serbia, there are a relatively small number of natural lakes – e.g. Đerdap lake, Vlasina lake, Perućac, Palić and Belo lake. Reservoirs have greater importance for water management. There are also various types of aquifers which are mostly used for the water supply system, while the thermal-mineral water has a recreational-therapeutic purpose.

Serbia has five National Parks. These are Đerdap National Park, Kopaonik National Park, Tara National Park, Šar Mountain National Park and Fruška Gora National Park. The Deliblat sandstone represents a geomorphological and ecological-biogeographical phenomenon not only of the Pannonian plain, but also of the whole of Europe.

The annual amount of precipitation on average increases with altitude. In the lower regions, the annual rainfall ranges from 540 to 820 mm. Areas with an altitude of over 1000 m have an average of 700 to 1000 mm of precipitation, and some mountain peaks in the southwest of Serbia have more abundant precipitation of up to 1500 mm. Most of Serbia has a continental precipitation regime, with higher amounts in the warmer half of the year, except for the southwestern regions, where the most precipitation is measured in autumn. The rainiest month is June, when on average 12 to 13 % of the total annual precipitation happens. February and October have the least amount of precipitation. The occurrence of snow cover is characteristic for the colder part of the year from November to March, and the largest number of days with snow cover is in January.

Due to various types of terrain and its exposition, different soil types can be found. Soil characteristics in Serbia are caused by the increasing number of natural factors such as physical-chemical properties, geologic substrate, hydrological and hydrographic conditions, orography, climate, vegetation, presence of macro and micro-organisms.

Socio-economic Factors

The natural resources of Serbia show that this is a country with significant capacity for the growth of productivity and competitiveness of the agricultural and food sector. The contribution of agriculture to the Serbian economy is considerable.

Gross domestic product (GDP) is the best indicator of the level of economic activity and economic trends in the last decade. According to the Statistical Yearbook of the Republic of Serbia 2021 in the structure of the GDP in 2020, agriculture, fishery and forestry accounted for 6.3 %, it decreased from 10 % in the last decade.

The estimated number of inhabitants in the Republic of Serbia in 2021 is 6,834,326 (estimates are based on the results of the statistics of natural movement and internal migration of the population). Observed by gender, 51.3 % are women (3,507,325), and 48.7 % are men (3,327,001). (Statistical yearbook of Serbia 2021)

The trend of depopulation continued, which means that the population growth rate, compared to the previous year, is negative and amounts to -9.4 ‰. At the same time, the process of demographic aging of the population is manifested by the low participation of young people and the high and continuously growing share of the elderly in the total population. According to data for the Republic of Serbia, in 2021, the share of persons aged 65 and over is 21.3 %, and those under the age of 15 are 14.3 %.

In the Republic of Serbia the share of unemployed persons in total economically active population in 2021 was 11.0 %. The unemployment rate in women (12.1 %) is somewhat higher than in men (10.2 %). The lowest unemployment rate has been recorded in Belgrade (8.8 %), and the highest in Southern and Eastern Serbia (13.6 %).

Agricultural Holdings and Production

In 2018 Serbia had 564,541 agricultural holdings cultivating 3,475,894 ha.

According to the Statistical Yearbook of Serbia in 2018 the predominant type of agricultural holding were the small scale holdings with up to 2 ha of land, amounting to 38.9 %, followed by 32 % of holdings cultivating on 2.01 to 5 ha (Fig. 2). Those two farm categories make two-thirds of the overall farms in Serbia according to the size of land (4).

The average area of agricultural land on the farm was 6.15 ha. In regard to the gender of farm owners, 17.3 % of holdings were female owned.

Structure of agricultural holdings according to utilized area (2018 | % | ha)

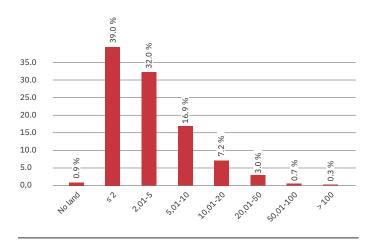


Figure 2: Size of agricultural holdings

Plant Production

In 2020 total utilized area in agriculture amounted to 3,504,290 ha. The share of crop production in the total value of agricultural production equalled 67.5 %, and the livestock production equalled 32.5 %. When compared to 2019, the net index of physical volume of agricultural production increased by 2.0 % (\$\delta\$).

In comparison to 2019, crop production increased by 4.6 %. Within crop production, the value of field crop production increased by 4.4 %, and fruit production increased by 6.0 %, while the share of viticulture decreased by 2.0 %.

Out of total utilized agricultural area in 2020, arable land occupied 2,604,295 ha which is 74.3 % in the utilized agricultural area, permanent plantations with 207,503 ha occupied 5.9 %, permanent grassland with 19.2 % took 671,774 ha, kitchen garden amounted only 0.6 % or 20,718 ha (Fig. 3).

In the structure of sown arable land areas, cereals participated with 66.8%, industrial crops with 18.9%, vegetables with 1.8%, and fodder crops with 9.0% (Fig. 4).

Serbia is among the largest producers of plums and raspberries in the world. With the production of 582,547 tonnes of plums in 2020, Serbia is world's third largest producer of plums, and with the production of 118,871 tonnes is also the third largest producer of raspberries (\$\(\beta\)\) (FAOSTAT).

Utilized agricultural area by type of production (2020 | %)

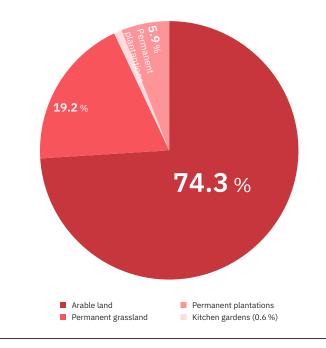


Figure 3: Structure of utilized agricultural area

Crop structure in total arable area (2020 | %)

Cereals	66.83
Industrial crops	18.88
Fodder Crops	9.02
Vegetables, melons and strawberries	1.85
Sugar beet	1.44
Potatoes, early and late	1.14
Fallow land	0.33
Pulses	0.28
Other crops on arable land	0.22
Flowers	0.02

Figure 4: Type of crop production in total arable land

Livestock Production

In 2020 Serbia had 15,249 thousand of heads of poultry, 2,983 thousands heads of pigs, 1,685 thousand heads of sheep, 980 thousands of beehives. Number of heads of cattle is decreasing continuously and in 2020 accounted 886 thousand of heads (Fig. 5). In regard to milk production, in 2020 Serbia produced 1,495 mil of liters of cow's milk and 9 mil of liters of ewe's milk.

The value of livestock production in relation to the previous year decreased by 0.3 %. In the structure of livestock production, pig breeding increased by 0.8 %, while decreased values were noted for sheep breeding by 5.9 %, cattle breeding by 1.1 % and poultry production by 0.1 %.

Livestock production (2019 & 2020 | mill.)

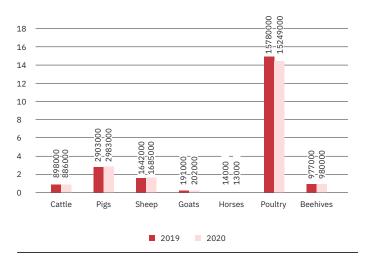


Figure 5: Number of animals

Import and Export of Agricultural Products

The European Union has traditionally been a Serbian key trading partner, accounting for more than 60 percent of the total trade in goods in 2020, with similar percentages continuing for years. The value of Serbian exports to the

EU increased from almost 3.2 billion EUR in 2009 to almost 14 billion EUR in 2021. Over 55 % of Serbia's agricultural exports were shipped to the EU. The export value of agricultural products has increased from 640 million in 2009 to EUR 2.3 billion in 2021. At the same time, Serbian imports of agricultural products from the EU have been constantly rising, reaching 1.6 billion EUR in 2021, while in 2009 export value was 440 million EUR.

During 2021 Serbia mostly exported vegetables and fruits, as well as cereals, wheat and corn. Value of exported corn amounted to 468.4 million EUR, followed by raspberries with 361.5 million EUR export value, wheat with 215.9 million EUR of export value, and cigarettes and tobacco with exported value of 359.1 million EUR (4).

Observed by regions of Serbia, the biggest share in export of agricultural products in 2021 (January–November) had the region of Vojvodina (44%), followed by the region of Belgrade (32%), then the region of Šumadija and Western Serbia (21%), and finally the region of Southern and Eastern Serbia (3%).

The largest share in Serbia's imports had the Belgrade region (43 %), followed by the region of Vojvodina (42 %), the region of Šumadija and Western Serbia (9 %), and the region of Southern and Eastern Serbia (6 %).

History of Organic Farming in Serbia

Natural preconditions in Serbia show great potential for development of organic agriculture and value added products. Organic production took off with the development of the awareness of producers and processors, who, in response to the current trend of using chemical agents in production technology, started responsible production as an alternative to conventional production.

Organic agriculture in Serbia started in 1990s, when the first crops were certified as organic, and when Terra's association in Subotica was established. This was the first association in Serbia that had in focus organic production and that launched and initiated many activities in the field of promotion and development of organic farming. In 2005 Terra's organized the first festival of organic products Biofest which is now a traditional international event taking place in Autumn. This first festival gathered over 80 exhibitors from more than 20 cities from Serbia and from abroad (Croatia, Hungary, Bosnia and Herzegovina, Germany, Italy), and about 500 participants in various accompanying programs have taken part in this event (Simic, 2020, pg. 17). This festival is a place where scientific and practical sides of organic sector meet. Attendees can learn and get an insight into the novelties of the organic world, important topics, to share and express their opinions and meet domestic producers.

After the first Biofest, **Center for organic production in Selenča**, organized **Forum on organic production**. The concept of the event was similar – forums and discussions on important topics in organic production, presentation of local organic products (ibid.).

Then in 2009 was founded **Serbia Organica**, a national association for organic production with the aim to

unite organic stakeholders and support organic development. Since 2011, in cooperation with the Ministry of Agriculture, Forestry and Water Management, association organizes the "Exhibition of organic products" within the International Agricultural fair in Novi Sad. Moreover, Serbia Organica was organizer of the national booth for Serbian companies in the world's most important fair for organic products in Germany – Biofach for ten years, until 2019, when Serbian Chamber of Commerce and Industry took it over.

In 2010 was formed a **Group for organic production** within the **Serbian Chamber of Commerce and Industry** whose members are relevant stakeholders in the sector. In the following period Chamber formed an Organic Production Center. This Center now organizes joint participation of Serbian companies at **Biofach**. They also support companies in export and business matchmaking.

Another milestone for organic sector happened in 2011 when the Expert Council for organic production within the Ministry of Agriculture, Forestry and Water Management was formed with the goal to provide an expert opinion on relevant issues for organic production, to discuss important topics and activities in sector.

Since 2012 in Belgrade was organized "Organic Live Fest", a festival that promotes sustainable production and environmental protection. Organic producers present their products at the festival with a appropriate cultural and educational program.

Nineties were also important for Serbia as the first export of organic products started. In that time Serbia lacked regulation and legislative framework to monitor organic operators in the country, and data about organic production in that time is limited. Control and certification was done by the European certification bodies. Back then, only crop production was certified and mostly fruit production.

Official data on areas are from 2007, when Serbia had 829.7 ha under organic crops. Nowadays, official data for 2021 show that organic production has reached over 23,527 ha, counting organic status and conversion status together.



Figure 6: Serbian exhibitors at Biofach, 2022

Area under Organic Production

Ministry of Agriculture, Forestry and Water Management (MAFWM) and the Group for organic production manages data on organic production, both on areas in organic production and number of organic producers, based on the annual reports of the authorized control organizations. Here it should be noted that there is no official methodology to record the data on the total area used for wild collection (forest fruits, mushrooms) and wild plant species from their natural habitats, therefore they are not counted in the organic area.

Based on the data of the MAFWM (\$\(\beta\)) in 2021 Serbia had 616 individually certified organic producers cultivating 23,527.03 ha of land. From 2020 number of farmers increased by 3.4% while areas under organic production increased by 12.2%. According to the data published by the MAFWM the area under organic production has almost constant upward trend from 2012 to 2021 (Fig. 7).

Area under organic farming, in conversion and organic certified (2013-2021)

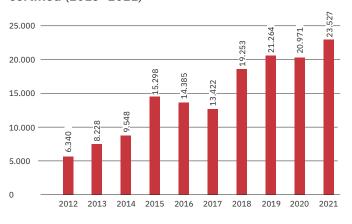


Figure 7: Area in organic status and in conversion

The share of organic production in overall arable land in Serbia is 0.67 %. This area does not include land used for harvesting wild collection (forest fruits, mushrooms and herbs).

Organic Operators

Based on the certification process, Serbia has two types of organic producers. In the first type are individually certified producers who are the owners of the certificate, and in the second type are members of the group production who do not have physical certificate, but are part

of the company that is controlling farmers and is a holder of the certificate. They are mentioned as producers in the Annex of the certificate. This group production was specific for fruit producers in Central, Western and Southern parts of Serbia, where are the largest groups of producers. In this type of production farmers were gathered usually by the processing / exporting company that organized internal system of control and is contractually bound with farmers. Company organizer is an exclusive buyer of farmer's products, and farmers in this cooperation get company's support through inputs like products for plant protection and fertilizers. In the same time there is one smaller group of vegetable producers in Vojvodina, and in eastern Serbia a smaller group of honey producers. But in 2017 a first group of livestock producers started their production in Sumadija district, soon after in 2020 another two companies formed a livestock producers group in the same district. Farmers in group certification make 90 % of the organic producers.

According to the data from 2020 Serbia had 5315 cooperants involved in the system of group production, and 42 companies / organizers of the group production. In 2021 group production included 5805 cooperants which is an increase in the number of cooperants by 9.2 %.

In regard to farms, Serbia has three basic types:

- small eco farms where field crop production and animal husbandry are connected,
- farms dealing with only one type of production (organic field crop production, organic fruit growing...),
- big eco-farms where the crop production and livestock production are combined (Lazić, 2010, pg.8).

In the past years, the number of organic farms has increased, as well as their on-farm diversification.

Nowadays farms are involved in the on-farm processing or tourism.

Geographically looking at the location and type of activity and according to their registered locations, organic operators in 2021 are almost equally distributed in all four districts in Serbia.

Looking at the number of organic operators throughout the years, the number of organic operators (producers, manufacturers, traders) have increased. In the last decade the number of certified producers increased for 91 %, while the number of cooperants have experienced a sevenfold increase (Fig. 8).

Geographical distribution of organic operators (2021)

	Region	со	Legal entities – mpanies / cooperatives / o				
No.		trade, processing, exporting	importing, processing, trade	Plant and livestock production, processing, trade	Farms	Area (ha)	Share in total organic, %
1.	Belgrade	28	48	22	67	47.58	0.2
2.	Šumadija and Western Serbia	28	1	46	105	7024.64	29.8
3.	South and Eastern Serbia	6	18	33	80	7430.67	31.6
4.	Vojvodina	17	3	29	85	9024.14	38.4
Total		79	337	70	130	23527.03	100

Figure 8: Distribution of organic operators according to legal status and scope of activities

History of Organic Farming in Serbia

Number of organic producers (2012 - 2021)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Certified producers	237	258	291	334	390	434	500	513	596	616
Coope- rants	836	970	1575	1955	2404	5719	6206	5727	5315	5805
Total	1073	1228	1866	2289	2794	6153	6706	6240	5911	6421

Figure 9: Number of organic producers per category (individually certified and in group certification)

Number of livestock (2012 - 2021)

Year / Type of animal	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sheep	2837	4031	3153	4848	4378	4665	5138	6099	5711	11152
Pigs	206	175	76	232	283	87	284	315	326	280
Cattle	1428	2176	2726	2746	2895	2987	3594	3556	4627	6708
Goats	211	946	1154	1686	1406	2048	1486	536	286	349
Poultry	2034	1390	1140	1380	3158	4415	6735	17880	14936	33226
Donkeys	7	21	17	20	2	47	_	_	_	_
Horses	66	210	173	218	165	177	114	88	16	45
Beehives	961	1940	894	2504	2878	2307	3061	9969	12618	11964

Figure 10: Number of animals in conversion and organic status

Breakdown of areas under organic production (2021)

Plant production (ha)	In conversi- on (ha)	Organic certified area (ha)	Total Per category (ha)	Share in total area, %
Cereals	1672.10	2786.59	4458.69	19.0
Industrial crops	33.48	2088.13	2121.61	9.0
Vegetables	56.68	113.11	169.79	0.7
Fodder	2221.63	832.47	3054.11	12.9
Fruit	1662.86	3952.07	5614.93	23.9
Medicinal and aromatic plants	32.89	334.4	367.29	1.6
Other	790.94	425.78	1216.72	5.2
Meadows / Pastures	3831.82	2692.08	6523.89	27.7
Total	10302.40	13224.64	23527.03	100.0
Share in total area under organic farming (%)	43.8	56.2	100	_

Figure 11: Areas in organic status and in conversion according to the type of production

Organic Livestock Production

Organic livestock production in Serbia has changed in time by categories of animals and their number. Through the years only number of pigs did not fluctuate a lot as in 2021 Serbia still has just few producers of organic pigs. On the other hand the number of heads of sheep had increased by 95 % in comparison to 2020. Poultry production has also significant increase, between 2020 and 2021 its production grew for 123 %. Number of beehives have continuous rise, and in the period of 10 years achieved tenfold increase. However, after 2017 donkeys did not get certified as organic anymore. Number of cattle increased six times over the last decade (Fig. 10). Organic animal husbandry in the beginning was less attractive for producers as it was perceived as more demanding in regard to regulation and market opportunities. While dairy production was easier to start on small and large scale farms, meat producers had several hurdles on their way. They struggled to find an adequate slaughterhouse to certify meat production. Still, domestic market was not ready and prepared for organic meat. Lower level of awareness of consumers and lack of promotion on domestic market slowed down meat production. Today, situation has ameliorated, and organic certified meat can be found on the market – beef, pork and chicken.

Crop Structure

The total area in organic production in 2021 amounted to 23,527.03 ha, out of that 43.8 % in conversion, and 56.2 % in organic status (Fig. 11). Information on wild



Figure 12: Organic raspberry field in Zlatibor region

collected plants, fruits and mushrooms do not exist as there is no official methodology to record area. However, the volumes of these products are part of the reports on export.

In the crop structure in 2021 grassland participated with 27.7 %, fruits with 23.9 % and cereals with 19 % making almost two-thirds of the total utilized organic area (certified organic area and area in conversion). The production of cereals and fruits are the most important crop production in Serbia and are grown on 43 % of the total arable area. Fruits are produced on 5,614.93 ha, wile cereals are produced on 4,458.69 ha.

With 367.29 ha in organic production, medicinal and aromatic plants had the smallest share in organic production, only 2 %, while the area under vegetables stood at 169.79 ha, with only 1 % in total area (Fig. 13).

Share of production type in total organic area (2021 | %)

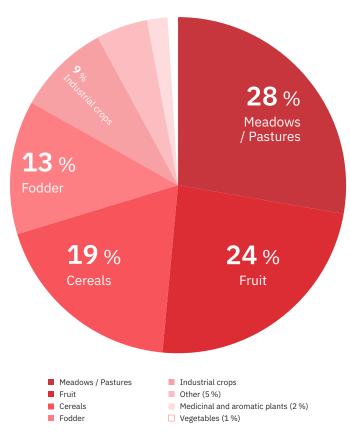


Figure 13: Type of production in organic and in conversion areas

In regard to regional distribution, Vojvodina leads as the region with 9,024.14 ha which makes 38.4 % of the area under organic production, and is followed by Southern and Eastern Serbia with 7,430.64 ha (31.6 %), Šumadija and Western Serbia with 7,024.64 ha (29.8 %) and by Belgrade region with 48.58 ha (0.2 %) (Fig. 14).

Geographical distribution of area under organic production (2021 | %)

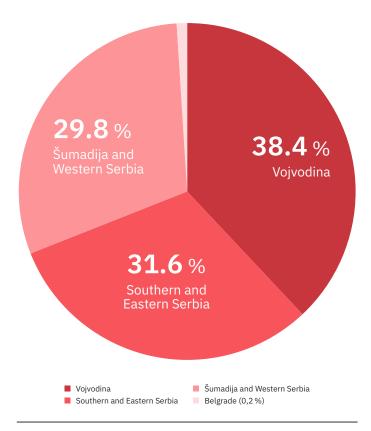


Figure 14: Share of organic and in conversion areas in regions

In Belgrade region dominated fruit production, still this is the region with the smallest share in organic production. In Šumadija and Central Serbia prevailed fruit production equalling 58 % of the total organic fruit production in Serbia, followed by grassland (pastures and meadows) equalling 43 % of the overall organic grassland.

In Southern and Eastern Serbia dominant crops were fruits with 36 % of the overall organic fruit production while meadows and pastures had a share of 49 % of the total organic grassland in Serbia.

In Vojvodina due to the soil type and the relief, predominant was cereal production equalling 79 % of the overall organic cereal production. Second place were fodder crops equalling 86 % of the total area under fodder in Serbia. Industrial crops are on the third place with the share of 63 % of the total area under industrial crops in Serbia (Fig. 15).

In the last five years there was a significant increase of surface under organic production, and crop production as well. According to the percentual increase between 2017 and 2021 certain decline had vegetable production (26.2 %) and industrial crops (7.4 %) (Fig. 16). Areas under vegetable production already make only 1 %

of the total organic area and any decline in production would impact on supply in domestic markets.

In the period from 2017 to 2021 the share of the area under cultivation of cereals increased, while the share of the area under fodder crops, as well as meadowes and pastures decreased (Fig. 16).

According to the MAFWM data, cereals, fruits and industrial crops are the most important organic crops in regard to the surface they are cultivated on. Wheat and rye take the biggest share out of cereals, and raspberry and plums among fruits. In the table is given an overview of the ten most important crops according to the production area, which is 40.2 % out of total utilized organic farming area (Fig. 17).

Organizational Framework, Legislation and Control System

Within the Ministry of Agriculture, Forestry and Water Management, the Group for Organic Production is the authority in charge of:

- preparation of national regulations and participation in the development of strategic documents,
- establishment and management of the control system in the field of organic production,
- control and supervision of the work of the certification bodies,
- monitoring the import and export of organic products,
- approving deviations from the methods of organic plant and livestock production and the processing rules,
- collecting the annual reports of the certification bodies,
- maintaining the records on organic production,
- shortening or extending of the period of conversion,
- approving of the use of reproduction material from conventional production after the period of conversion.

Ministry of Agriculture with Serbia Organica and other relevant stakeholders drafted the first Plan for Organic Production Development in Serbia which was adopted as the integral part of the National Rural Development Program of the Republic of Serbia for 2018–2020 (Official Gazette of the RS, No. 60 / 18).

The goal of the Plan for development of organic production RS is to identify challenges impacting limited development of organic production and to define aims and measures for further progress. This plan should

Breakdown of organic production by surface in regions (2021 | ha)

	Belgrade	Šumadija and Central Serbia	South and Eastern Serbia	Vojvodina	Total
Cereals	6.14	324.82	614.5	3513.24	4458.7
Industrial crops	0	4.03	778.36	1339.22	2121.61
Vegetables	7.12	51.96	19.37	91.34	169.79
Fodder	3.79	291.86	126.71	2631.73	3054.09
Fruit	20.45	3274.9	2026.11	293.47	5614.93
Medicinal and aromatic plants	0.01	72.56	224.32	70.4	367.29
Other	4.96	181.34	439.42	591.01	1216.73
Meadows / Pastures	5.11	2823.17	3201.88	493.73	6523.89
Total area under organic production (ha)	47.58	7024.64	7430.67	9024.14	23527.03
Share in total area under organic farming (%)	0.2	29.8	31.6	38.4	_

Figure 15: Type of organic production per region (organic status and in conversion)

Areas in organic production (2017-2021 | ha)

	2017	2018	2019	2020	2021	Change (%) 2017-2021
Cereals	3661.73	3613.61	4788.81	3623.15	4458.69	21.8
Industrial crops	2290.46	1961.81	2229.57	1294.23	2121.61	-7.4
Vegetables	230.00	199.53	184.16	121.56	169.79	-26.2
Fodder	1210.95	1336.51	1797.92	3872.67	3054.11	152.2
Fruit	4055.96	5883.37	5324.36	5294.84	5614.93	38.4
Medicinal and aromatic plants	114.59	193.36	258.54	390.97	367.29	220.5
Other	311.16	535.63	1332.09	2855.89	1216.72	291.0
Meadows / Pastures	1548.28	5530.76	5349.99	3517.44	6523.89	321.4
Total	13423.13	19254.58	21265.44	20970.75	23527.03	75.3

Figure 16: Total organic land (organic and in conversion) according to type of production

Top ten commodities according to size of area of cultivation (2021 | ha)

No	Crop	Area	Share in total organic production (%)
1.	Raspberry	2019.46	8.6
2.	Wheat	1581.18	6.7
3.	Sunflower	1165.08	5.0
4.	Rye	879.08	3.7
5.	Plums	843.78	3.6
6.	Apple	796.26	3.4
7.	Sour cherry	681.95	2.9
8.	Blackberry	521.58	2.2
9.	Spelt	491.79	2.1
10.	Soybeans	481.07	2.0
		40.2	

Figure 17: Top ten products according to the area of production

foster development of organic agriculture, development of domestic market as well as the export market. Also, the action plan determines requirements to ensure stable and long term growth of organic production sector. It stipulates numerous measures that participants would use to increase organic development. With the support of the GIZ – German organization for international cooperation, the plan was revised in 2021 encompassing period from 2021 to 2026 (4).

In Serbia following legislation regulates organic farming:

- Law on Organic Production (Official Gazette of the RS No. 30 / 10 and 17 / 19 other law), regulates the production of agricultural and other products in organic production, methods and principles of organic production, control and certification process, processing, labeling, storage, transport, trade, import and export of organic products, as well as other issues important for organic production.
- Regulation on Inspection and Certification in Organic Production and Organic Production Methods (Official Gazette of the RS No. 95 / 20 and 24 / 21), describes methods of organic plant and livestock production, processing, record keeping, storing, transporting, labeling, control and certification, use of national logo.
- Regulation on documentation submitted to an authorized control body for the purpose of issuing a confirmation, as well as the conditions and methods of sale of organic products (Official Gazette of the RS No. 88 / 16).

Serbia has a system of private control bodies, which are authorised by the Ministry of Agriculture, Forestry and Water Management, accredited by the **Accreditation Body of Serbia** in accordance with the requirements set out in the latest versions SRPS ISO / IEC 17065.

In 2022 there are seven (5 Serbian, and 2 foreign) authorised control bodies for certification of products in organic production in Serbia (Fig. 19). Five are founded in Serbia, while two are foreign. Out of five Serbian control bodies, two (Organic control System and Ecovivendi) are recognized for the control and certification in accordance to the EU regulation. Control organizations in Serbia offer certification according to the EU, NOP, JAS, Bio Suisse, and other national standards, but every operator must first comply with the Serbian national standard, no matter to trade preferences nor certification demand of the

operator. For all certification bodies accreditation by the Accreditation Body of Serbia and authorisation by the MAFWM is mandatory.

Organic Products' Labeling

Certified organic products that were produced, processed, handled and marketed in accordance with the national legislations and certified as organic by the certification body can be labeled with the national logo (Fig. 18) and the code of the authorised certification body. The same rules apply to imported products.

Only products containing at least 95 % of ingredients of agricultural origin deriving from organic production can be labeled this way. Products from the conversion period have label "Product from conversion period" (Fig. 18), one year after the contract with the authorized control body is signed.



ПРОИЗВОД ИЗ ПЕРИОДА КОНВЕРЗИЈЕ

Figure 18: National logo for organic products (left); National logo for products in conversion (right)

Info

German Organization for international cooperation (GIZ)

www.giz.de

Ministry of Agriculture, Forestry and Water Management

www.minpolj.gov.rs

List of control bodies and the scope of their authorisation (2022)

	Scope / Certification body	Organic plant production, Wild collection	Organic livestock production, Organic animal husbandry products	Processing, organic products: food, feed, seeds, imported products	Organic group production	Serbian national regulation	EU regulation
1	Center for food analysis, doo RS-ORG-008 ¹	×	×	×	×	×	
2	Ecocert Balkan, doo RS-ORG-006/ RS-BIO-154	×	×	×	×	×	×
3	Organic Control System, doo RS-ORG-001/ RS-BIO-162	×	×	×	×	×	×
4	Ecovivendi, doo RS-ORG-009/ RS-BIO-183	×	×	×	×	×	×
5	TMS CEE doo RS-ORG-002	×	×	×	×	×	
6	SGS Belgrade, doo RS-ORG-003	X Just plant production		×		×	
7	Jugoinspekt Novi Sad, doo RS-ORG-004	Just plant production		×		×	

Figure 19: List of authorised control bodies

Stakeholder

www.tms.rs

Center for food analysis	Ecovivendi
www.cin.co.rs	www.ecovivendi.rs
Ecocert, doo	Jugoinspekt
www.ecocert.com	www.jugoinspekt.rs
Organic Control System	SGS Belgrade
www.mail.organica.rs	www.sgs.rs
TMS CEE	

¹ RS-ORG are codes given to authorised certification bodies in Serbia for control and certification against national regulation, RS-BIO are codes given to certification bodies certifying against EU regulation.

Support Measures

According to the Law on Incentives in Agriculture and Rural Development (Official Gazette of the RS, No. 10/ 2013, 142 / 14, 103 / 15 and 101 / 16), the Regulations on the Use of Incentives for Organic Production were published in the Official Gazette of RS, No. 52 / 14 dated May 15, 2014. This Law provides the complete classification and definition of types of incentives for agriculture and rural development on the territory of the Republic of Serbia, their use and scope, technical and administrative limits and obligations, registration and data collection requirements, the conditions for exercising the right to obtain incentives in the agriculture and rural development sector, as well as the maximum amount per user and per type of individual measures. Later this Regulation has been changed as the Regulation on use of incentives for organic livestock production and the Regulation on use of incentives for organic plant production have been adopted.

Budget for agriculture is allocated annually, and the one amount encompasses both types of agriculture – conventional and organic production. Still, there is a difference in the amount producers from conventional and from organic farming will receive. Figure 20 shows how the budget for organic farming has increased 313 % in the last six years. This proofs the potential organic production has and is a result of the efforts of the National Association Serbia Organica.

Budget for organic production (2016-2022 | RSD)

2016	92,000,000
2017	90,000,000
2018	1 10,000,000
2019	117,320,000
2020	350,000,000
2021	235,100,000
2022	380,000,000

Figure 20: Allocated budget for organic production

Any legal entity, a sole proprietor and a natural person – commercial agricultural holding's owner are entitled to different types of incentives for organic production.

However they must meet the following requirements:

- that a contract has been concluded with a certification body, regarding control and certification in organic production, which is valid for the year in which the application is submitted for the use of incentives;
- that in the case of a lease of agricultural land on which the organic production is performed a contract has been concluded at least three years from the date of filing the requests for eligibility for incentives for organic crop production;
- that in the next three years from the year in which applicant got incentives, he will apply methods for organic production in accordance with the regulation in force.

Subsidies are given for:

- conversion period,
- period when conversion period is completed, and the certificate is awaited for,
- certified organic plant/livestock production,
- group organic production in accordance to the organic farming regulations.

Producers included in the organic plant production in 2022 got 250 % more funds than producers in the conventional production, even 28,000 RSD per hectare. Maximum amount per beneficiary is 560,000 RSD. Application is submitted once per year, in two copies to the Ministry of finance – Treasury Administration from May 3 to June 30.

Premium price for milk and subsidies in livestock production are 40 % higher in comparison to conventional farming. Producers included into the organic livestock production in 2022 can get subsidies for: fattening beef cattle, pigs and lambs and quality breeding animals (dairy cows, sheep and goats, sows, parent chickens - heavy and light breed, parent turkeys, carp breeding parent fish and trout breeding parent fish).

Premium price for milk and subsidies in livestock production are increased 40 % in comparison to conventional farming.

Organic producers can get reimbursement of the costs of control and certification as stipulated in the Regulation on incentives to improve the rural economy through the introduction and certification of food safety and quality, organic products and products with geographical indications (Official Gazette of the RS No. 39 / 18 dated May 25 2018, No. 17 / 21 dated February

26 2021, No. 132 dated December 30 2021, No. 27 dated February 25 2022).

Producers included in the organic production can be reimbursed 50 % of the total costs for control and certification (VAT exempted), or 65 % in the areas with difficult work conditions in agriculture. Another financial support organic producers can benefit from are IPARD funds. IPARD support is intended directly for agricultural producers – legal and natural persons. Currently, the IPARD program is implemented through four measures (Fig. 21).

IPARD measures (2022)

Measure	Goal	Deadline to	Total budget (EUR)
Measure 1	Investments in the physical assets of agricultural holdings	26.4.2022	101,386,667
Measure 3	Investments in physical assets for the processing and marketing of agricultural products	To be announced beginning of 2023	87,346,667
Measure 7	Diversification of agricultural holdings and Expected in the business development beginning of 2023		20,000,000
Measure 9 – technical support	Technical assistance: the measure supports technical assistance and costs related to the implementation of the IPARD program	Expected in the beginning of 2023	

Figure 21: Measures available through IPARD funds

Organic Market

Serbia has so far been a supplier of the organic raw material. The biggest exporting companies are cold stores. In 2021 Serbia exported organic products in the value of 57.4 million EUR. The frozen fruits made 68.5 % of the total exported goods, and among them raspberries equalled 56.1 %. Ready to eat products have less than 1 % in the total export of organic products.

Organic Export Market

Since 2012, export data are part of the information system of the Customs Administration. Customs Administration monitors types of commodities, volumes and values of the exported organic products.

Serbia in 2021 exported organic goods in the value of 57.4 million EUR to 34 countries around the world. In regard to the volume, 17,621 tonnes of organic products were exported from Serbia (Fig. 22).

According to the value, export to the international markets increased 53 %, from 37.5 million EUR to 57.4 million EUR. And from the aspect of volumes, for the same period the exported value increased by 23 % (Fig. 23).

Serbia exports to all the countries in the world, but the most of trade is related to the EU Member States. Data of the Customs Administration showed that the export to the EU equalled 76.8 % of the total value of export of organic products, followed by the USA with 13.5 %, and Canada with 6.1 % of share in total value of organic export. The same applies when taking into consideration volumes of the exported products. To the EU went 13986.03 tonnes of the overall exported volume, accounted to 79.1 % (Fig. 23).

The EU market remained the top export market of organic products from Serbia. With a little bit over 44 million EUR, the European Union accounted to 76.8 % of

the overall export value. Within the EU, five countries Serbia has traded with the most are Germany (31.8%), making almost one-third of the overall export, followed by the Netherlands (12.2%), France (7.4%), Poland (6.1%), and Austria (5.9%) (Fig. 24).

According to data from Traces, Serbia equalled to 7.9 % in the share of organic import volumes of fruit, excluding citrus and tropical fruit in 2020 which put her on sixth place of importers to the EU (4).

Frozen fruits in 2021 stood at 68.5 % of the total exported volume, among which frozen raspberries counted 56.1 % (Fig. 26).

Export volumes (2018-2021 | tonnes)

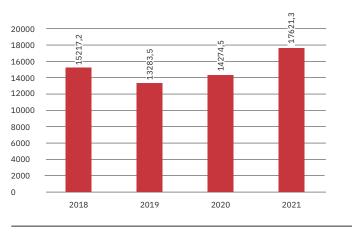


Figure 22: Export of organic products in volumes

Share of export value by region/countries (2021)

Country / region	Value (mio. UR)	Share, (%)	Country/ region	Volume (tonnes)	Share, (%)
EU	44.0	76.8	EU	13926	79.1
USA	7.8	13.5	Switzerland	1344	7.6
Canada	3.5	6.1	USA	1121	6.3
Switzer- land	1.2	2.0	Canada	985	5.6
Australia	0.3	0.5	Turkey	60	0.3
Turkey	0.3	0.4	Great Britain	59	0.3
Great Bri- tain	0.2	0.3	Australia	56	0.3
Bosnia and Herze-go- vina	0.1	0.1	Bosnia and Herze- govina	40	0.2
Israel	0.1	0.1	Israel	15	0.1
Other ²	0.1	0.1	Other	14	0.1
Total	57.4	100.0		17621	100.0

Figure 23: Share of export in 2021

Export to the EU countries (2021)

Country	Value (mio. EUR)	Share, (%)
Germany	18.3	31.8
The Netherlands	6.9	12.2
France	4.2	7.4
Poland	3.5	6.1
Austria	3.4	5.9
Italy	2.8	4.8
Belgium	1.3	2.3
Bulgaria	0.8	1.4
Slovenia	0.7	1.2
Other ³	2.1	3.7
Total Export to the EU	44.0	76.8

Figure 24: Share of export to the EU countries

Share of export per product category per volume (2020-2021)

Product	Export volumes per category, 2020, (tonnes)	Share in total export volume, (%)	Export volumes per category, 2021, (tonnes)	Share in total export volume, (%)	Change in Volume, (%) 2020-2021
Frozen fruits	12682	88.8	12067	68.5	-4.8
Cereals and mill products	0	0.0	1586	9.0	100.0
Fruit concentrates	351	2.5	1129	6.4	221.7
Industrial crops	181	1.3	1039	5.9	474.0
Fruit purees	644	4.5	791	4.5	22.8
Dried fruits	0.379	2.7	622	3.5	64.1
Other	38	0.3	387	2.2	918.4
Total	14275	100	17621	100.00	23.5

Figure 25: Value of exported products

² Russia, North Macedonia, Ukraine, Kosovo, Montenegro

³ Hungary, Sweden, Croatia, Czech Republic, Slovakia, Greece, Romania, Portugal, Latvia, Estonia

Breakdown of frozen fruits (2021)

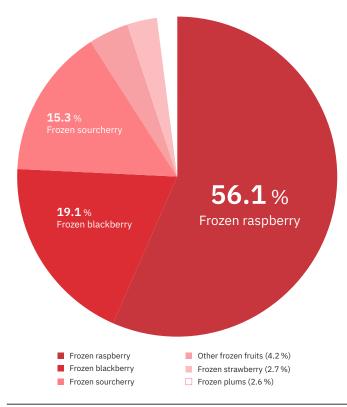


Figure 26: Share of exported frozen products per crop

Import of Organic Products

The supply of organic products from imports has been increasing, especially when it comes to processed products Serbia is lacking.

According to the price of imported organic products and provided data, the value of imports for 2019 was 8,913,370 EUR (Kovacevic, 2020). Other data are not available for further comparison.

Domestic Market

The low purchase power of consumers and the high retail prices represent the main limiting factors in regards to demand and consumption. On the market are predominant the plant-based organic products. However, noticeable is the growth of domestic market and of the product assortment. The first meat (beef) appeared on the market only in mid-2015, while dairy products appeared in 2013. The main concern in the domestic market is the organic vegetable production, which is practiced on just 170 ha and has even decreased from 2017 for 26 %. Organic vegetables make the most of seasonal offer on farmers' markets and are in high demand

by consumers, especially of families with small children. Estimation is that 16.5 million EUR of organic products are placed on the domestic market. Consumption per capita in 2014 was 4.4 EUR (Willer, Lernoud, 2014, 2016). As the main reasons of the lower rate of consumption in Serbia are noted the lower awareness about organic production, lack of knowledge on organic food, and higher prices of organic food (Simin Tomaš / Glavaš Tribić / Petrović /Komaraomi, 2019).

With the growth of surface in organic production, demand and offer have diversified, as well as the channels of sale. Currently organic products can be found at farmer's markets in Belgrade, Novi Sad as the most important farmer's market venues.

Organic food market channels:

- 1. Farmers' market,
- 2. Retail outlets.
- 3. Specialized stores,
- 4. On-line sale,
- 5. Sales through direct marketing.

Farmer's market is the main market for most of the small scale farmers as this market channel gives them an opportunity to sell directly to consumers and to be paid immediately. They do not need to comply with retailers' requirements of sale. Still, sale on farmer's market is organized over weekends, therefore some additional channel of sale would guarantee to farmer that the produce with short shelf life will reach consumers in time.

In Serbia there are two organic farmers markets with a significant offer and turnover of sale. The first one, opened since 2011, is the organic market at the **Block 44 in Belgrade**, with around 25 stalls for organic products. The second market is the **Fish Market – Novi Sad** with about 15 stalls for organic products.

Serbia has one specialized **retail outlet Idea Organic**, specialized for organic products, however, organic food can be found in hypermarkets chain like **Mercator**, **Maxi**, **Univerexport**, **Idea**, **Lidl** as well. Another retail outlet specialized for cosmetic that offers a variety of products from Serbian production as well from import is **DM retail chain**.

Currently there are **eight organic Idea Organic** retail shops in Belgrade. They offer a home delivery as well.

Specialized shops are small shops that sell healthy food among which is organic. Their offer varies due to season and is limited. There are some specialized shops selling solely organic products, and for majority, organic products are just a part of the store assortment.

Organico is a small chain of specialized shops in Belgrade.



Figure 27: Idea Organic retail outlet shop



Figure 28: DM retail outlet shop



Figure 29: Organico - first specialized retail chain of shops in Belgrade

Online sale is usually organized by the farmers' association or the owners of the specialized shops. This channel is developing and represents an advantage for farmers to combine production and offer possibility of purchasing "organic basket" – a mix of products one household might need. For a small producer online sale might be a financial burden and therefore is less practiced by them. Still, many farmers use social networks like facebook to address consumers and present farm's offer as well as prices and delivery conditions. Online sale had its peak in Covid 19 pandemic, and was now identified as the important sale channel for individual producers as well as for shops.

Direct marketing represents the sale on the farm which is the oldest way of marketing and communication with consumers. Consumers are in direct contact with farmers no matter if they come to the farm of producer or they are co-workers, etc. Farmers promote products in direct communication. Consumers can see at farm how food is produced and get more information about production itself. This proved to be a long-term relationship as consumers can gain trust in farmers once they meet each other.

Food Processing Industry

Food processing industry in Serbia is following the growth of areas in organic farming and in number of producers. Number of processors increased in the last five years. Still, the majority of processors are oriented to primary processing – freezing, drying, milling, grinding.

Serbia has certified processors who purchase or import organic raw material and process it and on the other side are certified processors with own plant and / or livestock production. Both types are usually

dealing with organic and conventional products. Frozen fruit processors dominate in the sector, the majority of them are exporters, and exporting mainly bulk products. Mill products are present on the domestic market in small packs, but for the foreign markets they are exported in bulk.

According to the data of the MAFWM around 150 processors are dealing with processing with own or purchased raw material and are distributors and exporters.

Drying of fruits is very important category of products and farmers who are producers of larger volumes of plums especially, are investing into drying facilities. In the last decade in Serbia are present final products like confectionary, pasta, infant food.

Processing into jams, juices, spreads is present as an on-farm activity. However, due to constraints in the regulation, plant-based final products made on farm cannot be certified as organic, although all the principles and regulation are implemented during manufacturing.

For long time only plant based products were being processed. With the establishment of the first big cow farm in Vojvodina, first dairy products like (milk, yogurt, sour cream, cheese) appeared on the market in 2013. For the organic meat Serbia awaited for two more years. On small scale farms livestock can be processed and certified as organic unlike to plant-based food processing.

Today, there is a low interest in other types of food processing apart of freezing, drying and processing into concentrates and purees, and milling into flour. The main



Figure 30: Pasta, jams, juices as final products of the ES Komerc company offered on domestic

reason lies in the comfort companies already positioned at the international market have. They are satisfied with their achievements and are not so prone to change the initial mission of the company. They are ready to invest into technology lines, then into expanding of capacities, in implementation of the food and the social standards

Retail outlets

Idea Organic

www.idea.rs/Organic

Delhaize Serbia (Maxi, Tempo)

www.maxi.rs

Univerexport

www.univerexport.rs

Organico

www.organico.rs

Mercator

www.mercator.rs

Lidl

www.lidl.rs

DM

www.dm.rs

within the scope of their business. However, developing any new product is considered as the big investment for the company and might not necessarily mean it would be successful. New products imply costs in market research, investments in marketing, in promotion and exploration of the new markets. Of course there are few companies who are investing into the final products and

need to export as Serbian market is still not sufficiently developed to rely solely on domestic consumption.

Thus, with the increase of awareness of consumers and health concerns importers have restricted criteria for export, therefore companies had to invest in human and infrastructure capacities in order to differentiate among competition.⁴

Processors

Bio Panon

- Novi Sad
- Dairy and meat products
- +38 1214 80 43 00
- info@biopanon.rs

www.biopanon.rs

Drenovac

- Arilje
- Dry-freezed fruits, fruit freezing
- +38 1313 89 92 33
- office@drenovac.co.rs

www.drenovac.co.rs

ES Komerc

- Prijepolje
- Juices, jams, pasta
- +38 133 77 13 42
- office@eskomerc.rs

www.eskomerc.com

Frikos

- Belgrade
- Fruit freezing
- +38 111 10 23 29
- frikos@sezampro.rs

www.frikos.rs

Cmana

- Krnjevo
- Honey production
- +38 126 82 10 80
- office@cmana.rs

www.cmana.rs

Ecoagri

- Bela Crkva
- Cereals, industrial crops, flour
- +38 113 85 12 11
- office@ecoagri.rs

www.ecoagri.rs

Frigonais

- Niš
- Fruit freezing, purees, concentrates
- +38 118 25 90 44
- frigonais@gmail.com

www.frigonais.rs

Fortis

- Belgrade
- Fruit freezing
- +38 116 82 18 21
- factory@fortis.rs

www.fortis.rs

⁴ Based on the personal research in Summer 2022

Imlek

- Belgrade
- Dairy products
- +38 1113 05 25 05
- info@imlek.rs

www.imlek.rs

Login Eko

- Belgrade
- Cereal production
- +38 1628 80 33 81
- info@logineko.com

www.logineko.com

Mondi Lamex

- Kraljevo
- Fruit freezing
- +38 136 82 30 20
- office@mondiserbia.rs

www.mondiserbia.rs

Samo organsko

- Negotin
- Eggs production
- +38 1114 04 54 91

www.samoorgansko.rs

Timomed

- Knjaževac
- Honey production
- +38 119 73 23 30

www.timomed.co.rs

Winery Kovačević

- Irig
- +38 1628 80 56 99
- vinskakucakovacevic@gmail.com

www.vinarijakovacevic.com

Agro domestica doo

- Ušće, Kraljevo
- Livestock and meat production
- +38 16 4895 34 22

Menex

- Kruševac
- Fruit freezing, purees
- +38 137 44 11 77
- info@menex.rs

www.menex.rs

Nectar

- Bačka Palanka
- Juices, freezing, purees, concentrates
- +38 1216 30 24 70
- office.nectar@nectar.rs

www.nectar.rs

Strela funghi

- Kljajić
- Fruit freezing, wild collection freezing and drying
- +38 116 24 40 11
- info@strelagroup.com

www.strelafunghi.com

Zadrugar

- Drinska
- Frozen fruits
- +38115561803
- office@fruit.rs

https://www.drenovac.co.rs

Education and Advisory

Elementary agricultural education is offered in 33 statefunded secondary agricultural schools. The school curriculum for organic agricultural production is introduced into agricultural secondary schools starting from 2012/ 2013 as an optional subject (organic vegetable and crop production, organic fruit production and organic livestock production) as part of school curriculum: agricultural technician. The first bachelor program in organic agriculture was launched at the University of Novi Sad, Faculty of Agriculture in October 2010. Also higher education with compulsory and optional subjects on organic production, is provided by accredited higher education institutions - Faculty of Agriculture in Belgrade, Agronomy faculty in Čačak, and some private institutions such as Faculty for Biofarming in Bačka Topola and Faculty of Ecological Agriculture in Sremska Kamenica. Masters degree in Organic agriculture is offered at Faculty of Agriculture in Belgrade, Faculty of Agriculture in Novi Sad, Faculty for Biofarming in Bačka Topola and Faculty of Ecological Agriculture in Sremska Kamenica.

Agricultural extension service is available free of charge to all registered producers dealing with organic and conventional agriculture. Serbia has currently 34 extension services distributed across the territory and around 250 employed advisors. Still, none is specialized for organic farming, as organic farming makes only a part of the services they provide on the field.

Private companies are also present as the consultant providers in the organic sector and provide services according to the contractual base.

Institutional and civil organizations

Ministry of Agriculture, Forestry and Water Management

www.minpolj.gov.rs

Accreditation Body of Serbia

www.ats.rs

Serbian Chamber of Commerce and Industry

www.pks.rs

National association Serbia Organica

www.serbiaorganica.org

Terra's association

- Car Jovan Nenad Square 15, Subotica

Vojvodina Organic Cluster

www.vok.org.rs

Center for organic production Selenča

www.organiccentar.rs

Regional Development Agency of Serbia

www.ras.gov.rs

Institute for applied science in agriculture

www.ipn.bg.ac.rs

Agricultural extension services of Serbia

www.psss.rs

Outlook

Similar to developing countries, in Serbia, interest in organic production is primarily driven by the economic characteristics. And in the last five years organic production in Serbia has an upward trend and represents an opportunity for small scale family holdings to provide economic sustainability through value added production. With regulation in place, support measure program and raising demand on the domestic market, future organic producers would have a certain advantage in transiting to organic agriculture.

However, as the support measures are not part of the long-term strategy, organic producers cannot plan investments in capacities and infrastructure. This can in the beginning avert producers as they cannot sell produce as organic until the conversion process is over, and costs of production are high. Also, there is a lack of advisory system, which becomes more evident in the south parts of the country. Extension services are free of charge and usually understaffed and not apt to provide suitable assistance to farmers who are then experimenting with treatments in pest or disease control in order to find adequate measures of control. Unfortunately this could impact production process as farmers tend to misinterpret organic principles.

Additionally, farmers are lacking managerial skills and marketing knowledge. While producing organic food, an added value is already achieved, but by finalisation of the products, with attractive presentation and offer to consumers, producer promote region and would attract tourist and gourmet to the region. Building networks and partnerships with local and national stakeholders in Ser-

bia would lead to better planning and organization of production in more efficient way. Cooperating on local level with other farmers has proved to be a successful model of production as the costs of the control and certification are leveraged, product assortment and volumes are increased, and the work flow evenly distributed. Processors, traders and exporter are also challenged by the food safety, environmental protection and social responsibility requirements coming from the importers and foreign markets. It is obvious that any kind of food production, but organic especially, needs constant investment in the human and social capital equally as into the physical assets.

In 2020 Serbia participated with the share of 7.9 % of the total imported volumes of fruits (excluding citrus and tropical fruit) into the EU market. With the import of 10,500 tonnes Serbia took sixth place as fruit supplier right after Turkey, Argentina, Ukraine, Chile and New Zealand, positioning the country as a reliable and significant supplier.

In order to continue development of organic production, better cooperation of private and public sector is required. Investments in companies and farm activities will depend on the market and consumer demand. Still, support measures should have long-term goals planned according to the needs of the market and producers. Also, evident is lack of knowledge on the field, strong and knowledgeable extension service is missing.

Still, with the availability of unpolluted land, current trend of migration of young families to rural areas, as well as with the rising health concerns, it is expected that organic farming will continue to grow and improve along the value chain.

References

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