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ENABLING ENVIRONMENT AND SOME INDICATORS TO ORGANIC FARMING IN SERBIA

Sredojević J. Zorica, PhD., Full Professor
University of Belgrade-Faculty of Agriculture
Kljajić Ž. Nataša, PhD, researcher
Arsić V. Slavica, MSc., researcher
Institute of Agricultural Economics, Belgrade
Republic of Serbia

The Republic of Serbia is one of the medium populated European countries. According to the last census, the total population in Serbia is 7,186,862 (excluding Kosovo), i.e. there are 92 inhabitants per km² (SORS, 2014). Based on the same data, the population in Serbia has been reduced by 311,139 (or 4%) since 2002. The following has occurred during the last decade in Serbia: population regression, i.e. a reduction in the total population, a decline in the birth rate, an increase in the mortality rate, the concentration of population in urban areas and emptying of rural areas, as well as specific demographic aging of the population.

Serbia's natural resources make it a country with respectable capacity for a growth of its agri-food sector's productivity and competitiveness. The contribution of agriculture to the Serbian economy is considerable. Agriculture contributes significantly to the country's trade balance. The agricultural and food export share in total export is about 20%.

Materials and Methods

The data sources included statistical and other publications, both from domestic and foreign literature internal databases, web sites, via e-mail from farms /entities, etc. Research methodology includes the use of different statistical method. The results are shown in tables and graphs along with the appropriate interpretation.

Results and Discussion

Gross domestic product and other economic indicators - Gross domestic product (GDP) is the best indicator of business and economic trends in Serbia in the past. During the five-year period, from 2010 to 2014, the value of the most important indicator of the national economy and the indicator of productivity and efficiency in the production of goods and provision of services required for different types of consumption in Serbia. In the structure of the gross domestic product of Serbia in 2014, business services had the largest share, which accounted for 61%, industry accounted for 24%, agriculture, hunting, fishing, and forestry accounted for 10%, and construction accounted for 5%. The constant decline in the share of agriculture in gross national income (GNI) structure was not caused by the reduction in the value of agricultural production, but instead by the development of other sectors. In 2001, the total value of agricultural production amounted to RSD 135.08 billion (at constant 2002 prices), which accounted for 15.7% of GDP, while in 2006 the realized value of agricultural production amounted to RSD 200 billion which accounted for 9% of GDP, up until 2011, in which RSD 248 billion accounted for 8,5% of GDP.

The resources of arable land and the structure of agricultural holdings – Serbia has favorable natural conditions for agricultural production. According to the census of 2012 in Serbia has 3,861 million hectares of agricultural land, out of which 3,437 million hectares (89%) is utilized agricultural area (UAA). UAA is accounting for 44% of the Serbian total area and about 2% of the EU-27 UAA (SORS, 2014 and Eurostat, 2013). In the structure of agricultural land in Sebia as in EU-27 the largest share occupies arable land. By data of Statistical Office of Republic of Serbia, the average farm size is 5.4 ha UAA, which is 2.7 times under the EU-27 average 14.4 ha (Eurostat, 2013). In the northern parts of Serbia, in Vojvodina Province, the farm structure is more favorable with the average size of farm being 10.9 ha.

Table 1 - Farm structure by agricultural size of holdings (UAA) in Serbia

Area	Agricultural holdings		UAA	
	Number	Structure (%)	(ha)	Structure (%)
> 0 ha	10,107	1.60	0	0
0 <2 ha	298,286	47.23	273,622	7.96
2 <5 ha	182,489	28.90	596,052	17.34
5- <10 ha	89,083	14.10	617,281	17.96
10- <20 ha	32,313	5.12	435,499	12.67
20- <30 ha	7,677	1.22	185,846	5.41
30- <50 ha	5,352	0.84	203,666	5.92
50- <100 ha	4,394	0.70	314,096	9.14
100 ha and more	1,851	0.29	811,362	23.60
Total	631,552	100.00	3,437,423	100.00

Source: Statistical Office of Republic of Serbia (SORS), 2014 and Eurostat, 2013

The highest proportion of agricultural holdings (47.23%) has up to 2 ha and uses about 8% of the UAA. Farms with over 50 ha take only 1% of the total number of farms, but occupy around one third of the total UAA. According to the Census data in Serbia there are 1,443 million persons working on agricultural holdings. The number of AWU per farm in Serbia is 1.02 which is by 25% above the EU-27 average (0.81). In Serbia, about two-thirds of the gross agricultural output (GAO) coming from crop production, while one-third of livestock production. The dominant position in the structure of the GAO has cereals, especially maize and wheat, about 31% (Figure 1). The productions of fruits and vegetables accounted for 20%, and industrial crops with 9% of the GAO. From the livestock products, pig meat participates about 12%, and cow milk with 8% of the GAO.

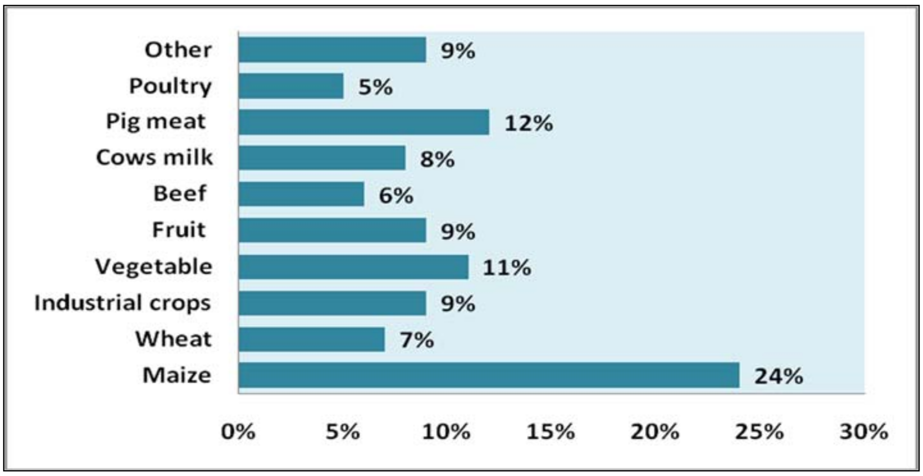

Figure 1 - Share of certain agricultural products in Gross Agricultural Output of Serbia, 2010 – 2014

Source: Statistical Office of Republic of Serbia (SORS), 2014

According to the data of Statistical Office of Serbia, 50% of the total agri-food export goes to the EU market, around 41% to CEFTA countries and 9% to other. Russian Federation has become an increasingly important market for Serbian agricultural products, and also with the newly established Customs Union of Russian Federation, Belarus and Kazakhstan. The imported food commodities came mostly from the EU, about 48%, from counties of CEFTA about 22% and all the other countries account for less than a third of total imports (31%).

Organic production in Serbian agriculture. - In 2014 under organic production was 6,335 ha, respectively 0.11% of agricultural land. Of this, 5,360 hectares are arable land, and 975 occupy meadows and pastures. Number of producers that engage in organic production in 2013 increased to 1,061. According to the same source data, organic vegetable production is most represented in Vojvodina (72%), followed by the Southern and Eastern Serbia (16%), and region Sumadija and Western Serbia (11%). In crop production, dominantly place has the wheat, and in fruits that are grown using methods of organic production. Also, a large amount of certified wild plant species (raspberries, strawberries, blackberries, apples, blueberries, mushrooms, etc.). Number of fruit plantations and vineyards dedicated to organic production is small, and the areas they occupy. In organic livestock production in 2012 was mostly is grown sheep, poultry and cattle. Classification of the product is done every other farmer, mainly by size, rarely towards quality. Aggravating circumstance when it comes to transport goods is the fact that 40% of packaged goods in packages with a mass less than 100 kg, while only 36% is in packages weighing more than 100 kg. In the sector of organic production in Serbia are significant companies operating in terms of processing products from conventional fruit and vegetables. The export of frozen fruit is the most common and most are exported to Austria (35, 85%) and Germany (27.96%), followed by the Netherlands and Italy. Producers of organic products are also eligible for financial support and incentives. Different types of incentives for organic production are handled by separate regulations governing the rights of the premium for the milk, the main incentives in crop production, the subsidy for fuel, fertilizer and incentives in livestock 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).

Conclusion

The field of organic production in Serbia needs a lot of improvement. Although the potential shifts can be identified at all stages of production to sales, the greatest effort should be in the horizontal and vertical integration of the connection of all participants in the value chain of organic products. Although successfully operate individual farms and businesses, the lack of a shared vision leads to loss of economies of scale to huge differences in quality, lack of market information, as well as insufficient market position. Actors sector should start to develop relations on existing good practice. This includes gathering around associations and cooperatives, as well as companies with strong brand to establish contractual arrangements and quality criteria to support its marketing strategy. The competent authorities sometimes play a key supporting role in the case of initiatives and promotional events. For successful production and secure-certain placement of organic products in Serbia, it is necessary to develop a long-term strategy of organic farming providing guidelines for avoiding or mitigating the potential risks when investing, as well as in the implementation of agricultural-technical and management practices.

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