

## CONTRIBUTION OF AGRICULTURE TO THE ECONOMIC DEVELOPMENT OF SERBIA

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**Abstract:** The overall economic development of a national economy depends on the development of individual economic and non-economic activities. Agriculture as an economic activity occupies a significant place in the overall development process of a country. The dependence of agriculture on natural conditions such as climate, geographical location, quality and other characteristics of the land, has the consequence that the contribution of agriculture to the overall economic development will not be the same depending on the above factors. The place and importance of agriculture in the overall economic development varies depending on the observation period because there are differences related to key development factors, as well as the place and importance of agriculture in the overall economic development. The participation of agriculture in the overall economic structure is especially important, although this certainly does not mean that countries with a higher share of agriculture in the economic structure reach higher levels of development. Countries with a large share of agriculture in the economic structure are usually underdeveloped or less developed, while in developed countries the share of agriculture in the economic structure is at a very low level. In a large number of countries, agriculture is still the main economic activity with which the largest number of inhabitants is engaged in proportion. The subject of this paper refers to the contribution to the development of agriculture from the aspect of its role and importance in the overall economic development.

**Keywords:** agriculture, economic activity, economic development, national economy, economic structure.

## **1. Introduction**

Economic development is a complex and multidimensional process that, in addition to economic growth, includes changes in the structure of the economy. In order to achieve sustainable economic growth and development, it is necessary to implement effective changes in the economic structure that will affect the creation of propulsive activities. In today's globalized world, activities that are more intensive in knowledge and technology are increasingly replacing activities that are intensive in work and resources. This is certainly an expected activity, given that the contribution to the creation of gross domestic product and total employment of the sectors based on knowledge and technology is much higher than the sectors based on labor and resources. However, reaching highly developed countries where the economic structure is dominated by highly developed technology sectors is a major problem for most developing countries, and therefore for Serbia. Until that happens, Serbia, like other developing countries, and especially those with significant available human potential, vast natural resources (large areas of agricultural land) and developed agricultural production and processing, must work to further improve agricultural development. Agriculture, food produc-

tion, food security of the country, production of raw materials for other industries, foreign trade, social, demographic and other aspects determine the multiple importance and role of agriculture in the socio-economic development of the Republic of Serbia. [Madžar, 2014, 127] Agriculture in Serbia occupies a significant place in the country's economy, because it creates added value by engaging natural and human resources. Considering the resources at its disposal and the fact that agriculture is the dominant activity of the population in rural areas, it can be said that it is one of the key economic activities of the Republic of Serbia. Thus, one of the basic ways to reduce poverty in these countries must be to increase the rate of economic growth and development, which will lead to increased employment and living standards of the population. [Veselinović, 2020, 39] 2. Resource potential of Serbian agriculture

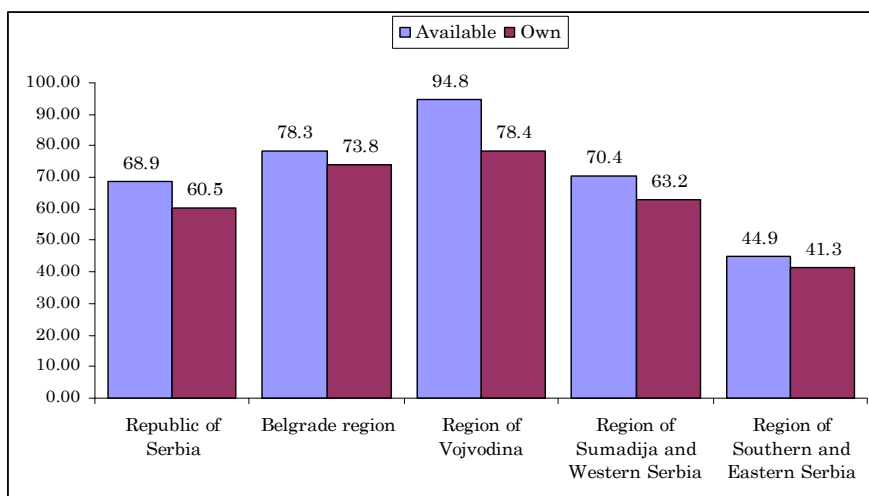
Considering that the regular census of agriculture in Serbia is expected only in the next 2021, in the continuation of the work, we will present statistical data on agriculture from the census conducted in 2012. Agriculture is a significant branch of the economy, given the resources at its disposal. This primarily refers to the available agricultural land, which is the

starting statistical category in the analysis of land resources and it, according to the 2012 Census of Agriculture, covers 5,346,597 ha or 68.9% of the territory of the Republic of Serbia (7,759 km<sup>2</sup>).

Region	Available land (ha)	
	Total	Own
<b>Republic of Serbia</b>	<b>5.346,597</b>	<b>4,691,899</b>
<i>Central of Serbia</i>	<i>3.297,356</i>	<i>2,997,489</i>
<i>Serbia - North</i>	<i>2.302,548</i>	<i>1,932,927</i>
Belgrade region	253,307	238,517
Region of Vojvodina	2.049,241	1,694,410
<i>Serbia - South</i>	<i>3.044,049</i>	<i>2,758,973</i>
Region of Sumadija and Western Serbia	1.865,958	1,675,561
Region of Southern and Eastern Serbia	1.178,091	1,083,412

Source: [Ševarlić, 2015, 37]

Graph 1: Share of available and own land in the total territory of Serbia and the region, 2012



Source: [Ševarlić, 2015, 37]

From the presented Table 1 and Graph 1, it can be noticed that the share of available land of all agricultural farms in the total territory

by regions is between 44,9% in the demographically devastated Region of Southern and Eastern Serbia, and 94,8% in the Vojvodina Region

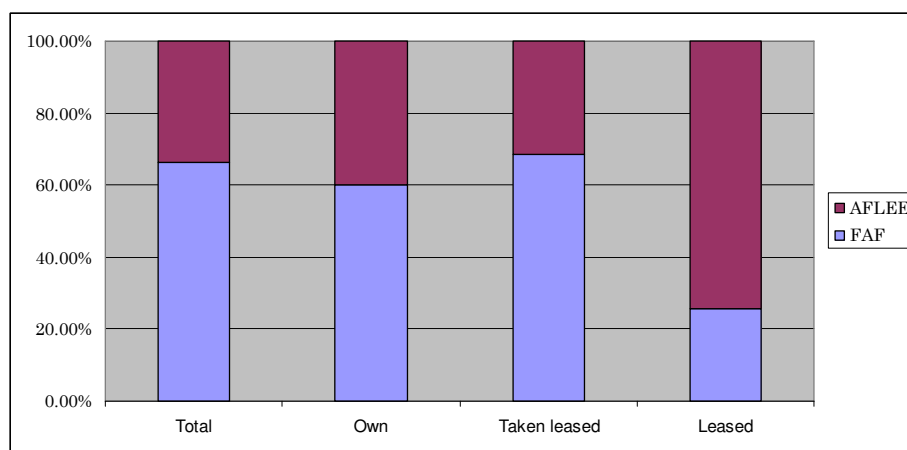
- which from the aspect of available land and its suitability for agricultural production is the richest region in Serbia. As for the participation of own land of all agricultural farms in the total territory, it is relatively smaller, both in the Republic of Serbia (60,5%) and in all regions. The rank of the region has not changed according to this indicator: at least 41,3% of the territory of the Region of Southern and Eastern Serbia is at most 78,4% of the territory of the Region of Vojvodina. The difference to the total area of available land is "net" leased land (654.697 ha).

Table 2: Available land (own and leased) in Serbia, total and by groups of agricultural holdings, 2012

Indicators	Avivable land			
	Total	Own	Taken leased	Leased
<b>All agricultural holdings (AH)</b>				
Area ha	5.346.597	4.691.899	1.264.833	610.136
%	100,0	87,8	23,7	11,4
Farms No.	630.742	622.502	153.140	50.562
%	100,0	98,7	24,3	8,0
ha/AH	8,48	7,54	8,26	12,07
<b>Familly agricultural farms (FAF)</b>				
Area ha	3.538.376	2.825.752	868.551	155.927
%	100,0	79,9	24,6	4,4
Farms No.	627.789	620.055	151.982	50.201
%	100,0	98,9	24,2	8,0
ha/FAF	5,64	4,56	5,71	3,11
<b>Agricultural farms of legal entities and entrepreneurs (AFLEE)</b>				
Area ha	1.808.221	1.866.147	396.283	454.210
%	100,0	103,2	21,9	25,1
Farms No.	2.953	2.447	1.158	361
%	100,0	82,9	39,2	12,2
ha/AFLEE	612,33	762,63	342,21	1.258,20

Source: [Ševarlić, 2015, 39]

Graph 2: Share of FAF and AFLEE in the total area of available and own land and land leased and leased in Serbia, 2012



Source: [Ševarlić, 2015, 40]

Table 2 and Graph 2 show that the dominant representation of family farms in the total available, own area and land area leased in Serbia, while agricultural holdings of legal entities and entrepreneurs are extremely dominant only in the area of land given to other farms in lease (74,4%).

According to the 2012 Census of Agriculture, out of a total of 631.552 agricultural holdings, only 810 farms (763 FAF and 47 AFLEE) or 0,13% do not have their own and/or leased available land - but are listed on the basis of some other conditions they met to obtain the census. categories of agricultural holdings (minimum number of livestock, poultry, bees, etc.).

Of the total number of family farms, 7.734 farms or 1,2% do not own land, but are the subject of analysis only on the basis of leased land. This number of agricultural holdings of legal entities and entrepreneurs is 506 or even 17,1% of their total number. From the above data, it can be concluded that the resource potential of family farms is not to be neglected.

Family farms traditionally dominate more in the total number of farms (99,4%) than in the total used land area (82,2%), but with a very small average area of holdings (4,55ha). Farms of legal entities and entrepreneurs are significant in terms of number of minor (0,5%), and in terms of used agricultural

land (17,8%) and especially in terms of average area of holdings (204,12 ha) in Serbia's agricultural and economic entities. [Ševarlić, 2015, 117-118]

There are still debates as to whether it is better to have a larger number of smaller family farms or farms of legal entities and entrepreneurs. Of course, for underdeveloped countries with a large working age population in rural areas, "preserving small-scale agricultural production could help fight poverty". [Piras, 2020, 460]

Of the total used agricultural land, arable land dominates on all agricultural holdings (73.8% of the used agricultural land - UAL) and in both basic types of agricultural holdings - where they are above average on family farms (76,7% of the UAL) and below average on farms of legal entities and entrepreneurs (60,4% of UAL). As far as meadows and pastures are concerned, they are second in terms of representation on all agricultural holdings (20,7% of UAL), but with lower representation on family farms (17,1% of UAL) and significantly higher representation on farms of legal entities and entrepreneurs (37,7% of UAL). Permanent plantations are the least represented on all agricultural holdings (5,5% of UAL), but with an above-average share on farms of

legal entities and entrepreneurs (1,9% of UAL). [Ševarlić, 2015, 196-197]

The state is responsible for defining the framework of political and institutional changes that contribute to more efficient development of the agricultural sector and the well-being of the inhabitants of rural areas. What worries about the further development of agriculture in Serbia is:

- reduction of agricultural land that is his constant commitment to non-agricultural uses (residential, industrial and other infrastructure facilities, as well as a smaller number of people are engaged in agriculture as a primary activity;
- and translation into the forest land in the hilly-mountainous demographically significant desolate area;
- significantly greater reduction of quality and production-significant arable land and their more extensive return to meadows and pastures as a more natural but also less production-intensive way of land use and/or complete abandonment of arable land cultivation.

Serbia must continue the reform processes in the agrarian and rural economy, which are taking place with a lot of difficulties and contradictions. It can be expected that, in

this domain, it will adjust to European standards and the World Trade Organization (WTO) to be one of the most difficult and complex challenges of our country. [Vasiljević, 2007, 203]

### **3. The share of agriculture in the growth of Serbia's GDP**

The contribution of agriculture to the overall development of a country is based on careful observation of various aspects of the contribution of modern agriculture to the creation of national macroeconomic aggregates (national product, employment, foreign trade balance,

etc.) Given the topic of this paper, we will look at the contribution of agriculture of Serbia. The agrarian potential of rural areas in the Republic of Serbia occupies an important place in terms of the contribution to the management of rural areas in the GDP of the Republic of Serbia. [Dašić & Labović, 2020, 130]

GDP in 2019 amounted to 1.469.839,5 million RSD. Of that, RSD 1.222.521,9 million refers to gross value added and RSD 247.317,7 million to net taxes (Table 3).

Table 3: Gross value added gross domestic product, current prices, millions of RSD

		Gross Value Added	Net taxes	<b>Gross domestic product</b>	Of which: Agriculture, forestry and fishing
2019	I	1.010.141,8	195.810,1	<b>1.205.951,8</b>	64.860,6
	II	1.094.442,4	239.687,9	<b>1.334.130,3</b>	74.638,2
	III	1.164.635,0	236.237,6	<b>1.400.872,6</b>	102.934,6
	IV	1.222.521,9	247.317,7	<b>1.469.839,5</b>	90.820,9
2020	I	1.086.627,3	209.484,3	<b>1.296.111,5</b>	68.614,4
	II	1.036.913,5	227.104,9	<b>1.264.018,4</b>	78.100,7

Source: [STAT RS, 2020, 2]

If we look at the activities, the association in the quarter of 2020. compared to the same period last year, a significant real decline in gross value added was recorded in the wholesale and retail trade and repairs of motor vehicles, transport and storage and accommodation and food services (16,7%), the sec-

tor of industry and water supply and wastewater management (7,7%) and the sector of professional, scientific, innovative and technical activities and administrative and auxiliary service activities (20,6%). values were recorded in the information and communication sector, 5,4% and in the sector

of state administration and compulsory social insurance, education and health and social protection, 7,1%.

The real growth rates of agriculture in the GDP of Serbia are shown in the following table.

It can be observed that in 2020 we have positive growth rates of

agriculture, unlike 2019 when we had negative growth rates in the second and third quarters.

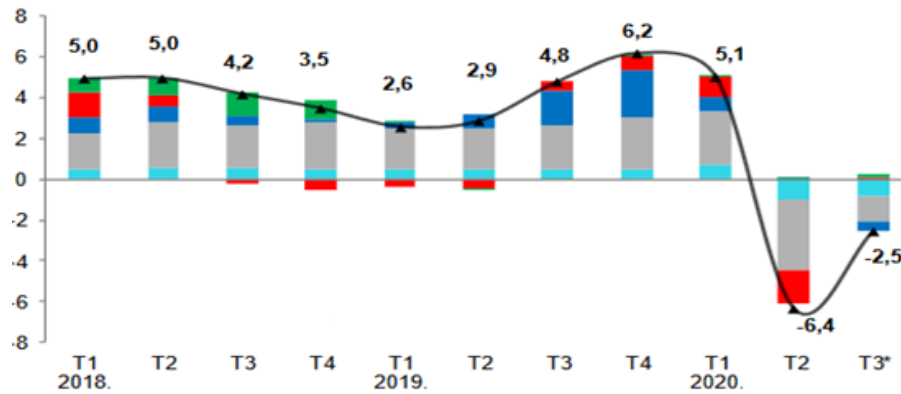
According to the projections of the National Bank of Serbia, GDP growth in 2021 is expected to be +6,0% with sustainable growth of +4% in the medium term. [NBS, 2020, 2]

Table 4: Real growth rates of agriculture, forestry and water management in the GDP of Serbia,%

	2019.				2020.	
	I	II	III	IV	I	II
Agriculture, forestry and fishing	0,2	-0,4	-0,1	0,4	1,7	2,2

Source: [STAT RS, 2020, 3]

Graph 3: GDP growth on the production side



- Agriculture
- Construction
- Net taxes
- Industry
- Services
- GDP

Source: [NBS, 2020, 5]

Table 4: Growth of gross value added of activities 2018-2021, in%

	2018.	2019.	2020.	2021.
Agriculture	15,2	-6,6	1,0	1,0
Industry	2,7	4,7	4,9	5,0
Construction	13,4	8,8	7,5	7,0
Service	3,3	3,7	3,7	3,9

Source: [GOV RS, 2019, 80]

Table 5: Contribution to GDP growth 2018-2021, in %

	2018.	2019.	2020.	2021.
Agriculture	0,9	-0,4	0,1	0,1
Industry	0,6	1,0	1,1	1,1
Construction	0,6	0,4	0,3	0,3
Service	1,7	1,9	1,9	2,0
Net taxes	0,5	0,5	0,6	0,6

Source: [GOV RS, 2019, 80]

The main source of growth on the production side will be the service sector, with a significant contribution from construction and agriculture. [GOV RS, 2019, 11] Therefore, in addition to the high share of the Manufacturing and Agriculture, Forestry and Fisheries sectors in GDP creation, the economic structure of Serbia is changing in favor of the service sector, which has the largest sector share. [Mičić, 2017, 36]

#### **4. Growth of the share of agriculture in GDP through the finalization of agricultural products**

By considering the possibilities for stimulating the agricultural production of final products, and not

semi-finished products, or raw materials, each individual farm, cooperative, region or national economy, uses the development opportunity. In many underdeveloped and developing countries, the sale of agricultural raw materials and insufficiently processed semi-finished products is predominant. The importance of the production of final agricultural products of the highest or higher degree of processing in relation to semi-finished products or raw materials is reflected in the higher added value that such production achieves.

Stimulation of agricultural production of final products, which is achieved by increasing the degree of processing, is of key importance to increase their value, which can significantly contribute to improv-

ing the economic performance of the Serbian economy. It is normal that the production of final products will achieve greater added value than in the case of the sale of semi-finished products or raw materials, ie unprocessed products. Significant funds realized in this way, enable an individual farm, cooperative, region or national economy, to achieve their own development goals and many benefits. It is a mistake to "invest significant amounts of financial resources in increasing the volume of production, and not in innovative development", [Balian et al, 2019, 63], ie not to invest funds in creating final products with higher added value. Innovation and intensification are enduring needs of agriculture, although they must adapt to different contexts. [Taveira et al, 2019, 1]

A large part of agricultural production comes from small farms which, in addition to satisfying their own needs, also have market surpluses, which they mostly sell independently at markets or buyers, since there is usually no form of interest organization (eg cooperatives, etc.). Agriculture has the largest share in the total income of the rural population. The sale of raw materials or semi-finished products is more represented than the processing and production of final products or products of larger stages of processing.

In the domain of agricultural production, the advantages of the final one in relation to the basic product should be especially emphasized due to the far more pronounced profitability and added value. The promotion of agri-food products with added value is a chance to increase the income of family farms. [Regional Development Agency, 2019, 3]

Most agricultural products (farming, vegetables, fruit growing, viticulture, livestock) go through certain stages of processing before entering the market. Strengthening processing capacities in the agricultural sector significantly leads to increased productivity and economy. In that way, the finalization of agricultural products enables their competitive advantage, not only on the local but also on the international market.

The development of agricultural farms must be focused on the modernization and change of the production structure in the direction of higher stages of product processing and quality improvement. The main determinant of competitive advantage is the quality of finished products. In order to increase the competitiveness of agricultural farms, he proposes a six-share participation in the production of final agricultural products, with a reduction in sales of agricultural raw

materials or semi-finished products to a minimum until technological production standards are introduced and the production process is finalized. It is necessary to work on improving the quality of the obtained products and increasing the degree of their processing where possible. [Marković et al., 2019, 941]

The sales channels of the processing industry in the form of wholesale and retail facilities and chains play a crucial role in connecting production and the market. To this should be added the fact that in the global market of individual primary agricultural products, it is possible to finalize several hundred different products, with an increasingly pronounced trend of diversification of product ranges. Of course, this requires technological modernization of capacities, reorientation to the introduction and marketing of new and high quality food products, their permanent innovation in the function of market positioning with a predisposition to create continuous added value.

#### **4. Conclusion**

Agriculture as a branch of the economy is of great importance for the overall development of each country. Serbia is a country rich in agricultural resources. The importance of agricultural land for the

Serbian economy is enormous, because it is a non-renewable natural resource and a necessary condition for organizing agricultural production, food security and a sustainable future for people.

The contribution of agriculture to the overall development of Serbia is indisputable, thanks to the high reference base of agriculture. The most significant participation in the formation of GDP and the creation of GVA are in the sectors of Manufacturing, Wholesale and retail trade and repair of motor vehicles and motorcycles, Real estate and agriculture, forestry and fishing. "The decline in the share of Manufacturing and Agriculture, Forestry and Fisheries in GDP and employment is a consequence of the inefficient transition process, structural features and tertiarization of the economy." [Mičić, 2017, 40]

Improving competitiveness and quality based on the finalization of agricultural products is a fundamental factor in the development of agricultural farms, cooperatives, the entire agricultural sector and a prerequisite for the country's export orientation in the global market. Its competitiveness, in addition to continuous investment in the final innovation of agricultural products and efficient marketing, requires an effective supply

chain of quality raw materials and primary products.

In order to adequately fulfill this role, the obligation of the state is to respond to current challenges with a stable, long-term and efficient policy, such as: 1) the need to reduce the lag in technological development behind competing countries; 2) the need to increase the efficiency of the food chain and the competitiveness of the agri-food

sector; 3) providing a stable income and business environment for farmers; 4) achieving the goals of sustainable development, in which multifunctional agriculture and rural development have a special place; 5) readiness to respond to the requirements arising from the process of accession to the World Trade Organization and the European Union.

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## DOPRINOS POLJOPRIVREDE PRIVREDNOM RAZVOJU SRBIJE

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**Rezime:** Ukupan privredni razvoj jedne nacionalne ekonomije zavisi od razvoja pojedinačnih privrednih i neprivrednih delatnosti. Poljoprivreda kao privredna delatnost zauzima značajno mesto u celokupnom razvojnom procesu jedne zemlje. Zavisnost poljoprivrede od prirodnih uslova kao što su klima, geografski položaj, kvalitet i druge osobine zemljišta, ima za posledicu da doprinos poljoprivrede ukupnom privrednom razvoju neće biti isti u zavisnosti od napred navedenih faktora. Mesto i značaj poljoprivrede u ukupnom privrednom razvoju varira u zavisnosti od perioda posmatranja jer postoje razlike koje se odnose na ključne faktore razvoja, kao i mesto i značaj poljoprivrede u ukupnom privrednom razvoju. Posebno je važno učešće poljoprivrede u ukupnoj privrednoj strukturi, mada to svakako ne znači da zemlje sa većim učešćem poljoprivrede u privrednoj strukturi dostižu i više razvojne nivoe. Zemlje sa velikim učešćem poljoprivrede u privrednoj strukturi su najčešće nerazvijene ili manje razvijene, dok je kod razvijenih zemalja učešće poljoprivrede u privrednoj strukturi na veoma niskom nivou. U velikom broju zemalja, poljoprivreda i dan danas predstavlja osnovnu privrednu delatnost sa kojom se posmatrano srazmerno bavi najveći broj stanovnika. Predmet ovog rada odnosi se na doprinos razvoja poljoprivrede sa aspekta njene uloge i značaja u ukupnom privrednom razvoju.

**Ključne reči:** poljoprivreda, privredna delatnost, privredni razvoj, nacionalna ekonomija, privredna struktura.