TRENDS AND PERSPECTIVES OF AGRICULTURAL DEVELOPMENT IN SERBIA

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ABSTRACT

In the modern global environment, there is a trend of increasing and changing the structure of demand for agricultural sector products. This situation requires a market-oriented approach from agricultural producers, ranging from economic entities to individual farms. Serbia's agricultural policy is characterized by short-term, ad hoc measures, which prevent predictions and timely adjustments by producers, leaving participants in the market chain uncertain about their long-term orientation. In the total value of agricultural production in 2023, crop production accounted for 69.8%, while livestock production accounted for 30.2%, whereas in developed EU countries, the ratio of crop to livestock production is reversed. This indicates a significant share of low-value-added production, or production with a low level of processing. This paper analyzes the state of Serbia's agricultural sector, which is under pressure from poor agricultural policies, numerous internal weaknesses, and insufficient financial resources in an unstable geopolitical environment.

Introduction

Agricultural producers in Serbia today face competition in the domestic market, but also have opportunities to enter international markets such as the EU, Russia, and others. This means that products should not only be low-cost but also of higher quality

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compared to the competition, which requires the practical application of modern knowledge and innovations. When examining the structure of agricultural production value in 2023, a high share of crop production (69.8%) can be observed compared to livestock production (30.2%), which is entirely opposite to agricultural production in EU countries. It is indisputable that the results of the agricultural sector are weak, considering that Serbia is a country with comparative advantages in agricultural production and a traditional food exporter.

The aim of this paper is to highlight the necessity and possibilities for increasing the competitiveness of the agricultural sector. In practical terms, this means focusing on the preservation of natural resources and the environment, the revival of agricultural cooperatives, and incentive measures for small farms.

The Role of Agriculture in the Modern Global Environment

The global market is dominated by large multinational companies that determine global production, trade, and investment flows, thereby managing the world economy. Modern trends of mergers, acquisitions of smaller companies, and consolidation have become an unavoidable trend, even in transition countries. These countries must adapt to the emerging situation and create the conditions for the sustainable development of their economy and the enhancement of its competitiveness on the international level.

The most significant changes in the international business environment include reduced market barriers, rapid market shifts, constant competitive pressures, large-scale separations or mergers, and global approaches to capital markets (Danielle, et al., 2006). New trends in the globalized market require management to ensure the successful positioning of a company in the global market while also adapting to the challenges of local markets.

The process of economic reforms in transition countries followed the recommendations of the Washington Consensus, strongly supported by the IMF and the World Bank as the main proponents of the neoliberal economic concept. Between 1990 and 2000, most transition countries had a negative growth rate (EBRD, 2010). In addition to the recession, there was a noticeable rise in unemployment and an increase in social stratification among the population. After 2000, until the outbreak of the global economic crisis, transition countries experienced high rates of economic growth (an average of 5.7%) and optimistic forecasts for further growth (Lissowska, 2014).

The global order is deliberately disorganized to ensure that large capital becomes the only significant player on the world stage: in such a system, the winners are few, while the majority of the world's population falls into despair and poverty (Samardžić, 2018).

Frequent crises weaken economic activity, reduce consumption and investment, leading to a slowdown in economic growth, loss of jobs, and wage reductions. Most countries face the issue of budget deficits and how to finance them. Due to macroeconomic instability, countries enter into appropriate agreements with the IMF, thus increasing

their external debt. According to Stiglitz (2004), global financial institutions have not provided answers to the development problems of developing countries, so new solutions need to be offered that ensure economic development through the cooperation of the state and the market.

As a consequence of the pandemic and the energy crisis in 2022, inflation affected the most developed Western countries, and its negative impact has been felt across all sectors of the economy and on the standard of living of the population. Agriculture was hit hard by inflationary trends and, alongside energy, became the sector with the highest inflation, particularly in terms of food prices. Inflation, as an indicator of economic conditions, shows a time lag of at least 18 months. This also represents the biggest challenge in conducting monetary policy, given the contemporary economic conditions that are becoming more complex every day and increasingly unpredictable, subject to a growing number of diverse economic factors (Andrić, 2021).

The immediate determinants of economic growth are the investment rate, employment, and technical progress, while additional factors include the economic environment, which encompasses macroeconomic stability (exchange rate stability, inflation, tax policy, interest rates, and infrastructure). Fundamental growth factors include geographical factors, historical heritage, culture, and institutions (Arsić, Gligorić, 2024). The most successful episodes of economic growth have generally been based on several common characteristics, such as an ambitious reform package, productivity growth, an increasing share of investment in GDP, and financial system development (Šoškić, 2024).

In recent years, environmental issues and the economic adjustment to the "green agenda" have become more prominent, with investments being directed into energy sectors that produce green energy, under the dominance of the strongest global players. Thanks to cheap money, 2021 saw historic records in mergers, acquisitions, and consolidations of companies, making global companies and monopolies increasingly powerful, while wealth centralization continues to grow (Katić, 2022).

Due to all of the above, the IMF and World Bank revised their forecasts for global economic growth in 2023, reducing them (Kovačević, Stančić, 2022).

In the global market related to agriculture, globalization has resulted in reduced incomes for farmers, increased dependence on subsidies, and huge profits for intermediaries who control the market, thus preventing any form of competition that would benefit producers (Sol, Ralston, 2011).

Such trends threaten the country's concept of sustainable development, which is based on three main aspects: balanced economic growth (economic aspect), environmental protection and preservation (ecological aspect), and the respect and advancement of social and human rights (social aspect). The sustainable development strategy also represents a process of seeking vision and solutions for sustainability in society (Milosavljević, 2009).

The preservation of nature and its resources emerges as a primary goal of all developmental efforts, ahead of production, economic, regional, and other goals (Pokrajac, 2009).

Although Serbian agriculture has a low level of productivity, it benefits from high-quality arable land, a favorable continental climate, and an abundant workforce. To increase productivity in this sector, greater investment is needed in new technologies, modernization of existing equipment, and the development of agricultural sectors that contribute to higher added value.Therefore, further agricultural development and productivity improvement require investments, adequate financing, and investment across the entire agribusiness value chain (Atanasijević & Danon, 2014).

Financial support from the state should manifest in greater budget allocation for the agricultural budget, as well as in directing the use of other financial instruments, such as EU pre-accession funds (IPARD), securities, financial derivatives, etc. (Radović, 2015).

There are numerous factors that have negatively affected the financing of the agricultural sector.These limitations can be broadly summarized as follows: inconsistent agricultural policy; inefficient subsidy programs; regulatory disincentives or lack of regulation; few alternative financing sources; lenders' knowledge and risk perception in agribusiness; knowledge and access to information; failure to utilize the advantages offered by the value chain concept; high sector risk, etc. (Dimitrijević, 2023).

The level of competitiveness of the national economy reflects a country's ability to produce goods and services under competitive conditions, ensuring long-term sustainable growth and development. Despite the growing impact of globalization processes, national competitiveness is determined by a range of factors that depend on specific, local conditions (Porter, 2008).

The development of modern agriculture requires knowledge and innovations in various fields (Asenso-Okyere, Davis, 2009), ranging from technology, development of modern institutions, timely and adequate agricultural policies, to organization (both public and private groups and companies that need to innovate to become more efficient and effective in the services they provide). Improving the current state of agricultural production requires knowledge and innovation, including new technologies, modern institutions, and agricultural policies aimed at enhancing the competitiveness of agricultural producers. Knowledge as a source of innovation and successful adaptation to the changes in consumer demand is a key determinant for successfully facing competition, preserving existing markets, and gaining new ones (Vasiljević, Savić, 2014).

According to Arsenijević and colleagues (2016), agriculture will struggle to achieve higher levels of productivity and market success if the entire rural activity does not overcome certain depressive factors. One of the main reasons is the low profitability, which results in a lack of financial opportunities for investment and development, further leading to the migration of young people from rural areas.

According to Stefanović and Broćić (2012), global trends encourage more balanced

development and increased food production, along with rapid, rational, and organized distribution of agricultural and food products to all parts of the world. In economic theory, it can be observed that when agricultural and food products dominate the export structure of a national economy, it suggests a lower level of economic development in that country.

However, in some developed countries, agricultural product exports are a significant item in the foreign trade balance (Netherlands, Denmark, France, etc.). Byerlee and colleagues (2009) emphasize that every country should recognize the multiple functions of agriculture and its impact on overall economic development.

The importance of agriculture in the EU can be understood through several data points that illustrate the sector's role in the economy of this community. In the agricultural production sector in EU countries, only 8.3% of the total working-age population is employed. This percentage varies significantly between different countries: in the "old" EU member states (15 industrially developed Western European countries), the average value is 4%, while in the "new" EU member states (Romania, Bulgaria, Slovakia, Hungary), more than 12% of the total workforce is employed in agriculture and the food industry (Vapa-Tankosić, Stojsavljević, 2014).

Gulan (2016) expects agriculture to drive economic development, increase gross domestic product, and serve as the backbone of overall economic stability. The share of agriculture in the gross domestic product ranges from 15% to 40%, which implies that this sector can significantly contribute to future economic development.

For this reason, agriculture should be supported to fully utilize natural, human, and processing capacities, which are currently only being used to a third of their potential. Effective use of agricultural potential is possible if small agricultural producers are connected to markets in a way that allows them to achieve higher profits and other benefits (Zakić et al., 2014).

The achieved level of agricultural development is the result of the absence of a fundamental concept for the development of agricultural production and the active involvement of the private sector in this activity. Despite this situation, the importance of agriculture in Serbia's foreign trade balance and overall employment should be particularly emphasized, considering the country's debt problems and high unemployment rate (Aničić et al., 2016).

Despite the significant importance of the agricultural sector, a sufficiently stimulating socio-economic environment for the development of rural areas and agriculture has not yet been created, particularly in certain regions and areas of the Republic of Serbia (Ristić, 2013).

Byerlee and colleagues (2009) emphasize that the new paradigm should recognize the multiple functions of agriculture and its impact on overall development. The functions of agriculture will have serious repercussions on the overall economic development of the country, both in terms of economic parameters and those related to the natural environment.

The contribution of agriculture should be considered through: 1) the share of agriculture in the total population and the share of active agricultural population in the total workforce, 2) agriculture's share in gross domestic product (GDP), and 3) the contribution of agriculture and agro-industry in foreign trade exchanges. Analysis of these indicators suggests that our development strategy must be based on increasing the export of agricultural and food products (intensive production) and altering the production structure to align with purchasing demand (especially the demand for ecologically healthy food), with a higher degree of finalization, to increase competitiveness and create new value (Mitrović et al., 2017).

If we consider the added value per worker in agriculture as a measure of labor productivity, there is a constant and significant lag behind the EU, which highlights the importance of an adequate policy of financing and investing in agriculture, all aimed at technical-technological progress, innovation, acquiring new knowledge, and increasing productivity in Serbian agriculture (Dimitrijević et al., 2023).

It can be observed that allocations for the implementation of agricultural policy in 2023 have significantly increased, which acts as a positive motivating factor for all agricultural producers. Agricultural incentives aim to ensure the stability of domestic food supply, increase sales and exports, and create new jobs (Kuzman et al., 2017).

The Future of Agriculture in Serbia: Challenges and Development Opportunities

The agricultural sector can significantly contribute to the country's economic growth and seriously improve certain economic parameters in a positive sense if a clear strategic development concept for this sector is defined.

Natural resources and a favorable continental climate can be considered favorable conditions that impact agricultural production in Serbia.On the other hand, one of the significant problems is the fragmentation of land parcels, with the majority of farms being smaller than 5 hectares (Stojanović, 2022).

In the structure of Serbia's economy, traditional sectors dominate (construction, food industry, tire and metal production, agriculture, mining), with low productivity and small added value. As a result, Serbia has not managed to reduce the developmental gap with Central and Eastern European countries over the last 20 years, remaining at only 60% of the average development level of those countries (Petrović et al., 2024). By comparison, Croatia, Romania, and Bulgaria are already at 90% of that average.

The most significant reasons for the slower growth of agriculture compared to other sectors include (Devetaković et al., 2009):

- Unfavorable conditions for doing business over a long period of time.
- Inconsistency in formulating and implementing the development concept of this sector,

- Long-standing restrictions, particularly regarding private landownership,
- Insufficient involvement of the private sector in agriculture.
- Insufficient implementation of irrigation and land reclamation measures.

Data from Table 1 show an upward trend in Serbia's economy in all years, except for 2020 when, as a consequence of the COVID-19 crisis, negative growth rates were recorded in most indicators. During the observed period, there was significant growth in GDP, as well as other economic parameters that show growth.This environment certainly has a positive impact on the trends within the agricultural sector.

Table 1. Macroeconomic Indicators

	2017	2018	2019	2020	2021	2022	2023
GDP growth rates (%)	2,1	4,5	4,3	-0,9	7,5	2,6	3,8
Export of goods and services (billion E)	19,3	21,2	23,3	22,3	28,6	38,0	41,0
Import of goods and services (billion E)	22,3	25,3	28,0	26,4	33,1	45,0	44,5
Foreign market. deficit (billion E)	-3,0	-4,1	-4,6	-4,1	-4,5	-7,0	-3,5
Public debt (% GDP)	58,7	54,4	52,8	57,8	57,1	52,4	48,0
Fiscal deficit/surplus (% GDP)	1,1	0,6	-0,2	-8,0	-4,1	-3,3	-2,2
Unemployment rate (15 +)	14,5	13,7	11,2	9,7	11,0	9,5	9,4
Ref. NBS rate (end of term)	3,5	3,0	2,3	1,0	1,0	6,5	5,75
Foreign exchange reserves of the NBS (in millions of E	9.962	11.262	13.378	13.492	16.455	19.416	24.909
Gross domestic product (GDP)	40.828	44.711	48.105	49.024	55.931	63.501	75.204

Source: National Bank of Serbia, 2024: Key Macroeconomic Indicators

According to the data in Table 2, we can see that total agricultural production grew year by year, except for 2023, when a decline occurred.

Table 2. The price of goods and services in agriculture**.**for the Current Year, 2017-2023(in million RSD)

	2017	2018	2019	2020	2021	2022	2023
I Production of goods and services	543.746,5	589.704,3	605.291,2	667.854,8	724.332,4	841.685,3	773.010,6
1. Production of agricultural goods	529.890,4	574.703,9	589.978,3	651.631,7	707.213,2	821.507,6	752.671,7
1.1.Plant production	357.056,3	398.513,5	414.528,6	473.693,3	544.202,2	590.920,8	521.272,1
1.2.Livestock production	172.834,0	176.190,4	175.449,7	177.938,3	163.011,0	230.586,8	231.399,6
II Agricultural services	13.856,1	15.000,5	15.313,0	16.223,2	17.119,2	20.177,7	20.338,9

Source: Republic Statistical Office, Statistical Yearbook of the Republic of Serbia, 2024

The data from Table 2 show a significant increase in goods and services in the agricultural sector, which will have positive implications for the overall development of the country.

In 2017, the ratio was 67.38% for crop production and 32.62% for livestock, indicating a decrease in the share of livestock in total agricultural production. Primary livestock production is predominantly found in small-scale agricultural households. Today, livestock farming is at an exceptionally low level of development. Primary agricultural production and the food industry are fundamental to economic growth and development and are an important component of the overall national economy due to their contribution to GDP and overall employment.

From the data in Table 3, we can observe the trends in the export and import of agricultural products, as well as that Serbia consistently achieves a trade surplus in the observed period. However, the potential for growth is much higher than the actual results. When examining the export structure, a higher share of processed products can be observed, which creates added value compared to primary products. As for imports, it is characteristic that products of questionable quality and lower prices are often imported, even though there are surpluses in domestic production (meat, milk, corn, certain vegetables, etc.).

Table 3. Foreign Trade of Agricultural and Food Products for the Period 2017-2023
(in millions of euros)

DESCRIPTION	2017	2018	2019	2020	2021	2022
Export of agriculture	888	886	1.070	1.284	1.331	1.273
Import of agriculture	647	571	617	632	724	924
Surplus/deficit	241	315	453	652	607	349
Coverage of imports by exports (in %)	137,25	155,17	173,42	203,16	183,84	137,77

Source: Republic Statistical Office, 2024

Desirable activities to improve the status of small family farms include vertical integration (connecting producers with the market) as well as horizontal integration (connecting producers with each other). In addition, organic production represents a great opportunity for small family farms, given the growing awareness of the importance of healthy food and the global increase in demand for food products.

The share of the agricultural budget in the total budget in 2023 was 5%, with the highest share of the agricultural budget reached in 2013, at 5.79% of the total budget. The main goals of the agricultural budget are to increase production, productivity, exports, monitor technological innovations, improve product quality, develop rural areas, and halt depopulation.

Conclusion

In Serbia, agriculture represents a significant potential for the economic and industrial development of the country, although an environment conducive to the development of rural areas and agriculture, which would yield maximum effects, has not yet been fully established. Agricultural policy should define potential agricultural sectors that could be competitive in the domestic market and gradually improve through new technologies and the application of new knowledge. This would also create opportunities for entering international markets.

It is very important to emphasize that this competitiveness should not be based on low input costs, but on the application of sophisticated solutions in agriculture. Additionally, access to financing must be made easier and simplified. Through such measures, it is possible to change the agricultural structure towards high value-added sectors and halt negative trends such as depopulation of rural areas and underdeveloped regions.

Conflict of interests

The authors declare no conflict of interest.

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