



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# AGRICULTURE OF THE COUNTRIES OF THE WESTERN BALKANS AND EUROPEAN INTEGRATIONS

**Danilo Tomić<sup>1</sup>, Miladin M. Ševarlić<sup>2</sup> & Nataša Tandir<sup>3</sup>**

<sup>1</sup>*Danilo Tomić, PhD, Higher School of Professional Business Studies, Vladimira Perića Valtera 4, 21000 Novi Sad, Serbia, E-mail: dtomic45@gmail.com*

<sup>2</sup>*Miladin M. Ševarlić, PhD, Faculty of Agriculture, Nemanjina 6, 11080 Belgrade – Zemun, Serbia, E-mail: milsevar@eunet.rs*

<sup>3</sup>*Nataša Tandir, MSc, International Burch University, Faculty of Economy, Francuske revolucije bb. 71000 Sarajevo, Bosnia and Herzegovina, E-mail: natkicans@hotmail.com*

**Abstract:** The paper presents the results of research of agriculture of the countries of the Western Balkans in the period of 2002–2009. Specifically, general economic (GDP per capita, share of agriculture in GDP, inflation rate, and unemployment rate), resource (share of arable land in the total utilized agricultural land, of employees in agriculture in the total number of employees, and of rural population in the total population), and value indicators (value added of agriculture in % of GDP, value added of agriculture per employee in agriculture, producers' prices of wheat, corn, and bovine milk, share of agriculture in the values of export and import) were compared.

**Key words:** agriculture, general, resource, and value indicators, the Western Balkans

## 1. Introduction

The Balkan countries have acceded to the European Union at different paces. Greece became an EC/EU member way back in 1981. Compared to Bulgaria and Romania, Slovenia had much more efficiently and faster overcome all the obstacles and became a full member of the European Union in 2004, while the other two countries achieved that in 2007.

Where have the other Balkan countries been in this process in the meantime? In April 1997, the Council of the European Union adopted the so-called Policy of Regional Accession for the countries of the „Western Balkans“. The “Western Balkans” is the term that denotes the territory of the former Yugoslavia, excluding Slovenia, but including Albania.

The Policy of Regional Accession set political and economic requirements for commencement of bilateral cooperation with the above states. The established approach was supplemented by the initiative that came about three years later (in May 1999) when the European Commission came out with the project, which was called the Process of Stabilization and Accession.

Unification of Europe will not be completed until the countries of the Western Balkans are included as well. At the Summit in Thessaloniki, in June 2003, member states of the Council of Europe solemnly stated that the future of the Balkan countries is in the European Union. Thereby they

gave a strong endorsement to the integration of the countries of the Western Balkans in the EU.

However, the requirements for accession are numerous and demanding and long-lasting for the majority of the counties of this region. Delay in the process of joining the EU has additionally deepened the gap in the development level and economic potentials of the countries from the territory of the former Yugoslavia, on the one hand, and of the European Union, on the other. In addition to the problems of legal-political/institutional nature, there are also economic obstacles for the Western Balkans. Trade incentives provided by this process (first of all, opening of the market of the Union by abolishing the duties) have not been used in the best way in view of the fact that the counties in the region, due to poorly developed economic systems, insufficient competitiveness, and non-harmonization with the standards and qualities of their respective goods and services with those in the EU, have not increased their respective export capacities in the EU market. The reasons for that should be looked for in the modest national production, poor competitiveness, and pronouncedly unstable market and business environments, which turn foreign investors off. All of the above limitations are also related to agriculture as the economic activity of outstanding importance in this region.

The subject matter of the research in this paper includes the state and problems of agriculture in the countries of the

Western Balkans. The aim of the paper is to compare the levels of development and preparedness of agricultures of these countries for the European integrations. For the purpose of detailed analysis of the subject matter and the aim of the research, the paper analyzes the indicators of economic development, resource potentials, and values of agriculture development indicators. Comparison between the countries of the Western Balkans is applied in order to point to the differences between the countries of the region, in the context of their future integration with the EU. The time period of research is 2004–2009 because of comparability of the available statistical data. Sources of data are Eurostat, FAO, CIA, the World Bank, as well as the so far research works on this topic.

## 2. Results of research and discussion

### 2.1. General economic indicators

According to the economic theory, there is a tight correlation between the level of agricultural and economic development. The higher the level of economic development, the higher is level of agricultural development, and vice versa. For that reason, in this chapter, the authors are investigating the main indicators of economic development, based on which the levels of economic development of the countries of the Western Balkans are analyzed. They are: GDP per capita, inflation rate, unemployment rate, and the share of agriculture in GDP.

**Table 1:** GDP per capita u zemljama Zapadnog Balkana u eurima

Countries	2004	2005	2006	2007	2008	2009
Albania	1,881	2,088	2,175	2,476	2,785(p)	2,661
Bosnia and Herzegovina	2,103	2,279	2,561	2,896	3,287	3,192
Croatia	7,380	8,043	8,807	9,656	10,683	10,246
Montenegro	2,684	2,912	3,443	4,280	4,908	4,720
Serbia	2,549	2,729	3,144	3,899	4,546	n/a
Macedonia	2,130	2,298	2,564	2,919	3,283	n/a
UNMNIK Kosovo	1,473(p)	1,482(p)	1,520(p)	1,612(p)	1,784(p)	1,790(p)

p = provisional value

Source: Analysis by the authors on the basic of the data of Eurostat

According to the available statistical data in Table 1, it follows that Croatia has the highest level of economic development, measured by the level of GDP per capita, while UNMNIK Kosovo has the lowest one. In the observed period, the growth of GDP/pc has been noticed in all the countries up to 2009, in which the fall in the region as a whole was recorded, due to the well known reasons (the world economic crisis).

The inflation rate varies from country to country and it is the highest in Serbia, which cannot be appraised positively.

The reasons for such a high inflation should be looked for in excessive public spending. The lowest inflation rate, observed in the entire period was recorded in Croatia (Table 2).

**Table 2:** Inflation rate in the countries of the Western Balkans in %

Countries	2004	2005	2006	2007	2008	2009
Albania	2.2	2.0	2.5	3.1	2.2	3.5
Bosnia and Herzegovina	0.4	3.8	6.1	1.5	7.4	−0.4
Croatia	2.1	3.3	3.2	2.9	6.1	2.4
Montenegro	n/a	n/a	n/a	n/a	7.4	3.4
Serbia	11.4	16.2	11.7	7.0	13.5	8.6
Macedonia	−0.4	0.5	3.2	2.3	8.3	−0.8
UNMNIK Kosovo	−0.8	−2.1	−1.5	2.8	12.4	9.7

\* Annual average inflation rate in Harmonized Indices of Consumer Prices (HICPs)

Source: Analysis by the authors on the basic of the data of Eurostat

Although declining, the highest unemployment rate in the observed countries is recorded in UNMNIK Kosovo and FYROM (over 40% and 30% respectively). From the data in Table 3, it can be stated that the lowest unemployment rate is in Croatia, which, in recent years, approached the average unemployment rate in the EU-27.

**Table 3:** Average annual unemployment rate in %

Countries	2004	2005	2006	2007	2008	2009
Albania	14.4	14.1	13.8	13.5	13.0	13.8
Bosnia and Herzegovina	41.8	43.9	31.1	29.0	23.4	24.1
Croatia	13.6	12.6	11.1	9.6	8.4	9.1
Montenegro	27.7	30.3	29.6	19.3	16.8	19.1
Serbia	18.7	21.1	21	18.3	13.6	16.1
Macedonia	37.2	37.3	36.0	35.0	33.8	32.2
UNMNIK Kosovo	39.7	41.4	44.9	43.6	47.5	45.4

Source: Analysis by the authors on the basic of the data of Eurostat

In addition to the above stated, an important indicator of economic development is also the share of agriculture in generation of GDP. Today, majority of economists value branches of economy according to their share in the gross domestic product and thus agriculture is at the bottom of the priority list. As opposed to that, a high share of agriculture in BDP indicates that other economic sectors are insufficiently developed. It is the developed countries that have a low share of agriculture in generation of BDP, because the main agents of economy in those countries are other sectors. That share amounts to up to 3% with the dominant service sector (Beg et al., 2010).

**Table 4:** Share of agriculture in GDP

Countries	1994–1996	1999–2001	2005	2006	2007
Albania	32.0	25.7	21.6	n/a	n/a
Bosnia and Herzegovina	26.3	10.2	8.7	8.4	8.3
Croatia	7.7	7.0	6.1	5.9	5.7
Montenegro	n/a	11.3	11.3	11.3	11.3
Serbia	n/a	17.7	n/a	n/a	n/a
Macedonia	10.7	10.0	9.1	9.2	8.5

Source: Analysis by the authors on the basis of the data of FAO Statistical Yearbook 2009

From the data in Table 4, it is noticeable that the situation in the region of the Western Balkans is different, even when compared with the world average of the share of agriculture in forming BDP. The highest value of this indicator is recorded in Albania (as the least developed country in the region) and the lowest one in Croatia.

## 2.2. Resource indicators

The region of the Western Balkans has production and manpower potentials, first of all, arable land, forests, waters, favorable climatic factors, developed science and technologies, skilled manpower, diligent farmers, etc. Continental, moderate continental, and Mediterranean climates collide in this territory. Moreover, the region has low-land, rolling country, hilly, mountainous, and littoral regions, in which versatile agricultural production can be organized (*crop, vegetable, fruit, grape, animal production*). Major capacities of foodstuff industry are located there (Tomi, 2008). For the purpose of understanding the state and problems of agriculture of the Western Balkans, it is necessary to analyze the available resources in this region.

If the share of arable in the total used land is observed, it is noticed that certain countries (Croatia and Serbia) have a relatively high share in the observed period. However, that share is close to average values for the EU-12 (Csaki, Jambor, 2010).

In addition to the physical resources, which include arable and agricultural land, a very important factor of development is also the human capital, or human resources. In knowledge-based economy, human resources, or intellectual capital as a factor of new economy plays the key role in the 21<sup>st</sup> century, first of all in raising the productivity and competitiveness (price and non-price competitiveness). Intellectual capital creates added value. In addition to the increase of total revenues and profit, permanent increase of added value

**Table 5:** Share of arable land in the total utilized agricultural land (000 ha)

Countries	2004	2005	2006	2007	2008	2009
Albania	51.51	49.95	52.14	52.09	50.17	48.71
Bosnia and Herzegovina	32.40	32.30	32.35	33.29	33.17	31.70
Croatia	71.51	71.43	70.97	70.46	66.38	66.38
Montenegro	36.44 (p)	36.57 (p)	36.58	36.78	36.67	36.61
Serbia	65.89	65.61	65.49	65.29	65.32	64.76
Macedonia	36.44	36.45	35.84	40.01	39.85	41.42
UNMNIK Kosovo	n/a	n/a	n/a	n/a	n/a	n/a

Source: Analysis by the authors on the basis of the data of Eurostat

**Table 6:** Employment in agriculture (share in the total employment in %)

Countries	2004	2005	2006	2007	2008	2009
Albania	58.54	58.48	57.97	47.91	44.61	44.05
Bosnia and Herzegovina	n/a	19.59	20.59	19.76	20.56	21.19
Croatia	16.96	17.29	14.23	12.99	13.55	14.05
Montenegro	10.92	8.63	6.79	8.09	7.57	6.46
Serbia	24.02	23.32	20.54	20.81	25.12	23.89
Macedonia	16.96	19.53	20.11	18.25	19.66	18.52
UNMNIK Kosovo	n/a	n/a	n/a	n/a	n/a	n/a

Source: Analysis by the authors on the basis of the data of Eurostat

must be the motive for business operation of economic operators. That is actually the indicator of success in business operation in a longer time period.

Table 6 shows the share of employees in agriculture in the total number of employees, which quite differs and varies from country to country, being the highest in Albania, somewhat lower in Serbia, Bosnia and Herzegovina, and in Macedonia, and significantly lower in Croatia and particularly in Montenegro.

**Table 7:** Share of the rural population in the total population

Countries	Rural population (000)				Share in total (%)			
	1999–2001	2005	2006	2007	1999–2001	2005	2006	2007
Albania	1,788	1,717	1,703	1,689	58	55	55	54
Bosnia and Herzegovina	2,089	2,051	2,031	2,008	57	54	54	53
Croatia	2,002	1,934	1,921	1,907	44	44	43	43
Macedonia	746	703	694	685	37	35	34	34
Montenegro	n/a	n/a	244	246	n/a	n/a	39	40
Serbia	n/a	n/a	4,758	4,741	n/a	n/a	48	48

Source: Analysis by the authors on the basis of the data of FAO Statistical Yearbook, 2009

It can be noticed from the data in Table 7 that the share of rural population in the total one in the region of the Western Balkans was insignificantly reduced in the period of 1999–2007. That share is still high if we compare it with the data from former research works (Csaki, Jambor, 2010), according to which 34% of the population of the new EU member counties live in rural regions.

### 2.3. Value indicators

Value added of agriculture in the percentage amount of GDP for the observed period is shown in Table 8. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3.

**Table 8:** Agriculture, value added (% of GDP)

Countries	2004	2005	2006	2007	2008	2009
Albania	23	23	22	21	20	21
Bosnia and Herzegovina	11	11	10	10	9	8
Croatia	7	7	6	6	6	7
Montenegro	11	10	10	9	9	10
Serbia	15	17	15	13	13	13
Macedonia	13	13	13	11	11	11
UMNIK Kosovo	n/a	n/a	12	12	12	12

Source: Analysis by the authors on the basic of the data of World Bank

Agriculture value added per worker is a measure of agricultural productivity, which measures the output of the agricultural sector (ISIC divisions 1–5) less the value of intermediate inputs.

The data in Table 9 indicate that the highest productivity in agriculture is achieved in Croatia, then in Bosnia and Herzegovina. However, these statements of the authors must be taken with a pinch of salt due to limitations with respect to the available data. Productivity in agriculture in less developed countries represents a small share of the total productivity. Raising of agricultural productivity is the key for income growth of employees in this sector.

If we analyze the available data on the producers' prices of the main agricultural products, we can notice that they are the highest in Albania, and the lowest in Serbia, with the emphasis that there are no available data for Montenegro and UMNİK Kosovo for the period of 2005–2007 (Table 10). This indicates that the price competitiveness of the analyzed agricultural products is the highest in Serbia.

The CEFTA Agreement, which was signed by the countries of the Western Balkans plus Moldavia, enabled consolidation into one agreement of the existing level of

**Table 9:** Agriculture value added per worker (constant 2000 US\$)

Countries	2005	2006	2007	2008
Albania	1,663	n/a	n/a	n/a
Bosnia and Herzegovina	9,151	10,258	11,647	13,301
Croatia	13,523	14,767	16,123	17,836
Montenegro	n/a	2,104	2,196	2,563
Serbia	n/a	n/a	n/a	n/a
Macedonia	4,135	4,431	4,644	5,165
UMNIK Kosovo	n/a	n/a	n/a	n/a

Source: Analysis by the authors on the basic of the data of World Bank national accounts files and FAO, Production Yearbook and data files

**Table 10:** Producers' prices, average for 2005–2007 (US\$/ton)

Countries	Wheat	Corn	Cow's milk
Albania	264	283	412
Bosnia and Herzegovina	177	206	326
Croatia	167	171	360
Macedonia	190	193	357
Montenegro	n/a	n/a	n/a
Serbia	163	160	271
UMNIK Kosovo	n/a	n/a	n/a

Source: Analysis by the authors on the basic of the data of FAO Statistical Yearbook 2009

trade liberalization achieved through a network of bilateral agreements on free trade that had been previously concluded between the members. In addition to the above stated, conditions for further stimulation of investments, expansion of trade in goods and services have been improved through equitable, clear, stable, and predictable rules. Circulation of goods and services in this region has been facilitated and fair conditions for competition as well as protection of intellectual property rights have been provided. Based on the former research works by authors from the region (Vuković & Vizjak, 2001, Krizmanić, 2007; Tomić et al., 2008; Čejvanović et al., 2009), it can be stressed that the CEFTA Agreement has a positive impact on the structure and volume of foreign trade between the member countries. Additionally, it indirectly contributes to the harmonic development and expansion of trade at the international level.

Based on the data presented in Table 11, it can be concluded that Albania, B&H, and Macedonia have significantly higher shares of agriculture in the total import than Croatia and Serbia. At the same time, in the structure of the total exports of Macedonia and particularly Serbia, agriculture still has a high share – which is the consequence of deindustrialization of economy in those countries in the course of the past decades.

Table 11: Share of agriculture in the total import and export (%)

Countries	Import				Export			
	1999–2001	2005	2006	2007	1999–2001	2005	2006	2007
Zemlje								
Albania	22.6	17.0	17.2	15.6	6.7	6.1	5.8	5.7
Bosnia and Herzegovina	17.9	18.3	17.2	16.0	6.1	7.6	6.0	6.3
Croatia	8.5	7.5	8.2	7.9	8.8	9.6	10.2	9.6
Macedonia	12.9	12.8	11.7	17.3	17.2	16.6	16.3	12.9
Montenegro	n/a	n/a	n/a	6.6	n/a	n/a	n/a	2.2
Serbia	n/a	n/a	6.5	5.5	n/a	n/a	19.7	19.1

Source: Analysis by the authors on the basis of the data of FAO Statistical Yearbook 2009

## Conclusion

Based on the conducted research, the following conclusions can be drawn:

The countries of the Western Balkans have a rather low level of economic development measured by the main economic indicators (GDP per capita, inflation rate, unemployment rate, and share of agriculture in generation of GDP).

Physical and intellectual capital in this region is significant, but insufficiently exploited. The number of employees in agriculture and the number of rural population are rather high. That means that other sectors of economy are insufficiently developed.

The level of productivity of manpower and land in agriculture of these countries is also rather low. That is also reflected on the level of competitiveness of agriculture, which is also very low.

If they wish to speed up the processes of integration in the EU, the countries of the Western Balkans must improve the indicators of the level of economic development, faster implement the international norms and standards, develop market economy, ensure legal security, and reduce administrative limitations. These are the preconditions for a more efficient doing business, raising of the level of economic development of the region, improvement of the

quality of life, faster rural and regional development – without which there shall be no successful integration in the European Union.

## References

- Beg, D., Fišer, S., Dornbuš, R.** (2010): *Ekonomija (Economy)*, DATA STATUS, Belgrade
- Čejvanović, F., Hodžić, K., Terzić, L.** (2009): Utjecaj CEFTA sporazuma na vanjskotrgovinsku razmjenu poljoprivrednih proizvoda u Bosni i Hercegovini (Impact of the CEFTA Agreement on Foreign Trade Exchange of Agricultural Product in Bosnia and Herzegovina), *Tranzicija (Transition)*, Vol. 11, Nos. 23-24, Institute of Economy Tuzla, JCEA Zagreb, DAEB, IEP of Belgrade, FEAM, Bucharest, pp. 10-19.
- Csaki, C., Jambor, A.** (2010) After the First Five Years: The Diversity of Effects of EU Membership on Agriculture in New Member States, chapter in monograph: *Agriculture in Late Transition: Experience of Serbia*, DAES, Belgrade, pp. 7-53.
- Tomi D.** (2008): *Poljoprivreda i selo - Ideje i inicijative (Agriculture and Village – Ideas and Initiatives)*, DAES, IEP, Belgrade.
- Krizmani Marta** (2007): *The New CEFTA with Special Reference to its Influence on Accession to the European Union and on the Republic of Croatia*, *Croatian Yearbook of European Law and Policy*, Vol.3. No.3, pp. 559-579.
- Vuković I., Vizjak Ana** (2001): *Europska unija, CEFTA i hrvatsko gospodarstvo (The European Union, CEFTA, and Croatian Economy)*, *Politi ka misao (Political Thought)*, Vol. XXXVIII, (2001.), No. 1, pp. 112–124.
- Volk Tinca, Ševarlić M.** (2003): *Poljoprivreda u tranziciji – iskustvo Slovenije i Srbije. Tematski zbornik Poljoprivreda i ruralni razvoj u evropskim integracijama (Agriculture in Transition – Experiences of Slovenia and Serbia. Thematic Proceedings: Agriculture and Rural Development in European Integrations)*, Institut za agroekonomiju (Institute of Agroecconomy), Poljo-privredni fakultet (Faculty of Agriculture), Belgrade, pp. 264-274.
- Tomić D., Ševarlić M., Lukać D.** (2008): *Agroprivreda Srbije, zemalja CEFTA i Evropske unije – komparacije i problemi integracije naše agroprivrede (Agribusiness of Serbia, CEFTA Countries and European Union – Comparison and Problems of Integration of Domestic Agribusiness)*, in *Thematic Proceedings “European Union and Western Balkan - Challenges for Agrarian Economy of Serbia: What are going to do?”*, DAES, Belgrade, pp. 21-34.

