**Review paper** UDK: 338.43:338.48(497.11) doi:10.5937/ekonhor1901057R

## SUSTAINABLE INTEGRAL DEVELOPMENT OF AGRICULTURE AND TOURISM IN THE REPUBLIC OF SERBIA

## Lela Ristic\*, Nikola Boskovic and Danijela Despotovic

#### Faculty of Economics, University of Kragujevac, Kragujevac, The Republic of Serbia

Sustainable development is one of global imperatives and it involves the harmonization of economic, environmental, and social development goals, with an appropriate institutional support. There are plenty of resources pertaining to the sustainable development of agriculture and tourism, as numerous studies and practical examples worldwide confirm. The paper highlights the example of the Republic of Serbia and can be of use for other countries with similar resource potentials and developmental constraints. Namely, agriculture and tourism in the Republic of Serbia are distinguished by abundant natural and cultural-historical resources, but what mostly lacks are funds for serious investment, as well as a modern and holistic approach to development, so the available resources are insufficiently used. Accordingly, the research aims to point to the necessity of a more creative use of agro-tourism resources, i.e. to the more promising directions of the integral development of agriculture and tourism on sustainable grounds. The paper results highlight the extreme importance of institutional support to agriculture and tourism networking within the concept of sustainable development.

Keywords: sustainable development, integral development, agriculture, tourism, the Republic of Serbia

JEL Classification: Q01, Q19, Z32

## INTRODUCTION

There is no generally accepted definition of sustainable development, but studies usually cite the Brundtland Commission definition (WCED, 1987), which defines sustainable development as a development that allows satisfying the needs of the present generations without compromising the needs of future generations. Given the fact that this study focuses on the Republic of Serbia (RS), it is important to note that the National Sustainable Development Strategy of RS sees sustainable development as a goal-oriented, long-term, continuous, comprehensive and synergetic process that affects all aspects of life (Vlada Republike Srbije, 2008).

Sustainable development is one of the most popular contemporary phenomena, especially within the United Nations (UN) activities, or the Sustainable Development Agenda until 2030. It aims to balance numerous economic, environmental, and social development goals, and highlights the importance

<sup>\*</sup> Correspondence to: L. Ristic, Faculty of Economics, University of Kragujevac, Liceja Knezevine Srbije 3, 34000 Kragujevac, The Republic of Serbia; e-mail: lristic@kg.ac.rs

of the institutional component. In this regard, the sustainable development of agriculture is considered necessary. The European Union (EU) is a good example of a pronounced tendency towards sustainable agricultural development both in the past decades and today through the implementation of the Common Agricultural Policy 2014-2020, as well as the new concept planned for the period after 2020. Except in Europe, other areas around the world also seek to ensure sustainable agricultural development. This approach to agriculture is of great importance to RS, especially in terms of the integral development of agriculture and tourism.

The UN General Assembly marked 2017 as the year of sustainable tourism development in order to support changes in the tourism development policy and thus contribute to the realization of SDGs (Sustainable Development Goals). The World Tourism Organization (UNWTO), a specialized UN agency for tourism, is tasked with the organization and implementation of such plans in the best possible way (UN, 2016). Since tourism development has global significance, the sustainable use of tourism resources is very important. This is of particular importance for the individual countries and regions, such as Europe, most visited by tourists, only to be followed by Asia and the Pacific, then America, while Africa and the Middle East record a significantly smaller number of tourists. Sustainable tourism development is considered particularly important for world leaders in tourism, such as France, the United States, Spain, China, Italy, the United Kingdom, Germany, Mexico, Thailand, etc. (UNWTO, 2017). This paper analyzes RS and its unfavorable position on the world tourism market as a result of a series of national and international constraints. Considering the natural resources and the cultural and historical heritage Serbia has, the paper tests the possibility of overcoming certain constraints, through a greater integration of tourism and agriculture.

The benefits of the integral development of agriculture and tourism or their interconnectedness are observed all over the world, especially when tourism includes specific agro-food products in its offer. In this regard, the issue of organic products is of particular relevance. Some studies and reports by renowned international organizations responsible for global development issues propose the concept of the integral development of organic agriculture and tourism in the fight against poverty.

Agricultural and food products are an irreplaceable and complementary part of the tourist offer even in the world's most famous tourist destinations, where food and drinks are not the main motives for tourist arrivals.

A rise in the number of tourists in a certain area or a rise in tourist spending stimulates the production of food and drinks for tourists' needs, contributing to the development of the agro-food sector.

In the cause-and-effect chain of agro-tourism development, development initiatives can come from both sectors simultaneously or individually.

Based on the above, the research subject in this paper are the key aspects of the sustainable integral development of agriculture and tourism in RS, or insufficient commitment to this issue, followed by an unfavorable situation in practice, as well as the importance of taking a more modern approach, adapted to the specifics of and needs for the integral development of domestic agriculture and tourism.

The research objective is to point to the necessity of a more creative use of agro-tourism resources in RS, i.e. the more promising directions of the integral development of agriculture and tourism on sustainable grounds. The positive effects that can be expected from such an approach are as follows: a rise in the volume of agricultural production, tourist arrivals and overnight stays; a higher quality and attractiveness of agro-food and tourism products; growth in revenue from agriculture and tourism, as well as the accompanying activities, directly or indirectly related to agriculture and tourism; employment growth in the agro-food sector, tourism and the rural economy, with their growing share in the GDP and exports; the diversification of agricultural production, the non-agricultural rural economy, and the tourist offer; a reduction in poverty and the social exclusion of the population, while improving the

demographic picture of the areas in which agriculture and tourism develop in the long term and integrally.

In accordance with the research subject and objective, the paper tests the following starting hypotheses:

H: If the Republic of Serbia institutionally supports the more intensive networking of agriculture and tourism within the implementation of the sustainable development concept, one can expect more favorable economic effects of the development of the agro-food sector, tourism, and rural economy in general.

The qualitative and quantitative research methods relevant to social sciences, i.e. studies in the field of economics are used in the paper, namely: the historical method, the methods of induction and deduction, analysis and synthesis, comparison, description, the statistical method and the generalization method, as well as SWOT analysis.

The paper consists of five parts. After the introduction, the second part gives an overview of the literature relevant for the research problem in question, whereas the third part points to the research methods used. The fourth part presents the research results, i.e. the general features of Serbian agriculture relevant in tourism terms, as well as the key indicators of tourism development, important for the agricultural activity, emphasizing the possible directions of the future integral development of agriculture and tourism in RS. The conclusion gives the standpoint regarding the hypothesis set, indicates the most important results, the research contribution and the limitations.

#### LITERATURE OVERVIEW

Given the great importance of tourism and agriculture in contemporary conditions, both globally and at the level of national economies, there are numerous studies dealing with this issue. In doing so, increasing attention is given to the integral development of agriculture and tourism on sustainable grounds (Turkalj, Ham & Fosič, 2013), as well as innovative models in this area (Budiasa & Ambarawati, 2014). R. Paci & E. Marrocu (2014) focus on the connectedness of tourism and regional development in Europe. E. V. Yudina, T. V. Uhina, I. V. Bushueva & N. T. Pirozhenko (2016) emphasize the key links and roles of tourism in conditions of globalization, as well as its spatial and socio-cultural dimension, of importance for sustainable agricultural development. J. Von Braun & R. Birner (2017) emphasize the importance of establishing an adequate conceptual framework for analyzing the management of the agricultural sector and the food production system at the global level, the application of an adequate conceptual framework in the analysis of the contemporary problems of the agro-food production system, the identification of possibilities for reforms in this area, etc. Their research is based on theory and practice in this field, which is directly relevant to the global agro-food sector, and indirectly to tourism and other related activities.

Some countries show greater commitment to the realization of the sustainable agricultural and tourism development concept through their interconnectedness, with great allocations for this purpose and a concern for environmental, economic, and other benefits. Due to the strategic importance of the long-term integral development of agriculture and tourism, a large number of authors, national organizations and institutions around the world study this issue from the point of view of sustainable rural development. S. Sandilyan, K. Thiyagesan & R. Nagarajan (2008) note that ecotourism, although essentially aimed at preserving natural resources, can nevertheless cause a loss of biodiversity, which is an important signal for directing this type of tourism and rural economy towards different destinations. M. Pillay & C. M. Rogerson (2013) stress the importance of networking agriculture and tourism in less developed areas. M. Cărătuş Stanciu (2015) suggests that farmers' market and farm visits are the important aspects of sustainable tourism development in rural areas. Some authors explore very specific issues, so S. Z. Mirani & M. B. Farahani (2015) point out the second home tourism (a holiday in cottages) for sustainable rural development.

Research in the integral development of agriculture

and tourism is also present in RS. S. Đekić (2000) analyzes the agricultural and non-agricultural aspects of rural development and emphasizes the importance of rural household networking with the tourism industry, given the fact that, beside food production, rural areas also have a significant role in terms of holiday and recreation, as well as the preservation and improvement of the ecological stability of an area. M. Vujičić and I. Rosić (2000) argue that, as the backbone of rural development, agriculture should give place to integral rural development, where there is a lot of room for tourism development. S. Milenković, L. Ristić and N. Bošković (2013) stress the importance of the integral resource use in the rural-tourist areas of RS, while S. Cvetanović, D. Despotović, Lj. Živković and V. Nedić (2014), explore the ecological dimension of sustainable development, emphasizing ecological sustainability indicators significant for all economic sectors, including agriculture and tourism. In addition to these, many other papers confirm the importance and necessity of further research into the identified research area, with the aim of finding more practical solutions to the integration of agriculture and tourism on sustainable grounds.

A large number of the international organizations specialized in agriculture and tourism, such as the United Nations Food and Agriculture Organization and the UNWTO, are also intensively engaged in finding the best solutions to the contemporary problems of the integral development of agriculture and tourism.

#### RESEARCH METHODOLOGY

The study of the key factors of the sustainable integral development of agriculture and tourism is based on several scientific methods applicable in the field of social-human sciences, i.e. in economic research. In accordance with the defined research area, qualitative and quantitative research methods are used in order to test the initial hypothesis. The purpose of applying the historical method is to determine the factors that influenced agriculture and tourism development in earlier development phases since this is important for determining their future development directions. Agricultural and tourism development are analyzed both individually and in synergy, so the paper relies on the methods of induction and deduction, as well as analysis and synthesis. The nature of the investigated problem requires the use of the descriptive, comparative, and statistical methods for presenting the key indicators of agricultural and tourism development. SWOT analysis and the generalization method are applied in order to draw a general conclusion.

## RESEARCH RESULTS

## The General Features of Serbian Agriculture Relevant in terms of Tourism Development

The sector of agriculture, forestry, and fishery had a 6.0% share in the Serbian GDP in 2017 (RZS, 2018, 134), whereby, based on the Labor Force Survey, the share of this sector in the total employment was 17.2% (RZS, 2018, 78), and 5.9% in exports (RZS, 2018, 309). It should be noted that Serbian agriculture is distinguished by rich natural resources and a long tradition. However, agriculture has been facing a number of problems for a long time, such as: land fragmentation - 47.2% of family households have up to 2 hectares of the used agricultural area (RZS, 2018, 221), obsolete machinery - 95% of tractors are older than 10 years (RZS data, 2013, 179), the migration of the population from rural areas, the underdeveloped infrastructure, insufficient investment, insufficient links with industry, tourism, etc. Numerous SWOT analyses, strategic documents on this subject and studies by a great number of authors confirm this.

Agricultural land in RS covers about 5.3 million hectares. The utilized agricultural area (UAA) is about 3.4 million hectares, with the dominance of arable land and gardens accounting for 76% (Table 1), permanent grassland accounting for 18%, and permanent crops accounting for 6% of the UAA (MPŠV, 2018, 12). The structure of the UAA is also important in terms of a tourist offer, first of all in order to determine whether

	2008.	2010.	2012.	2013.	2014.	2015.	2016.	2017.
Arable land and gardens	2,660,545	2,653,602	2,561,674	2,589,714	2,606,073	2,590,984	2,597,808	2,594,980
Cereals	1,830,529	1,804,815	1,715,562	1,766,447	1,819,188	1,782,010	1,763,575	1,718,034
Pulses	6,327	6,008	5,708	5,277	7,830	9,362	9,788	10,582
Potato	56,062	52,852	52,040	50,740	51,987	42,158	40,713	38,472
Sugar beet	51,470	71,304	69,290	66,712	64,112	42,683	50,071	54,183
Industrial crops	362,919	367,795	383,881	368,671	346,524	376,812	408,867	449,147
Vegetables, watermelons and strawberries	58,028	56,470	54,574	52,898	52,680	66,935	68,183	66,488
Flowers	348	361	382	412	343	445	472	1,057
Fodder crops	270,454	268,553	256,008	257,652	242,041	250,359	236,684	240,088
Other crops	2,054	2,143	2,102	1,633	1,713	2,252	2,831	2,252
Fallow land	22,354	23,300	22,126	19,273	19,655	17,969	16,624	14,680
Meadows	376,970	376,918	381,654	381,654	381,654	368,738	342,926	321,812
Pastures	375,765	300,274	331,588	331,588	331,588	320,837	311,211	294,622
Orchards	163,885	164,197	163,310	167,868	174,729	175,917	180,173	183,609
Vineyards	24,070	23,566	22,150	22,150	22,150	22,150	22,150	22,150
Nurseries	1,733	1,669	1,327	1,598	1,531	1,182	1,112	1,246
Other permanent crops	669	644	512	617	524	565	618	587

 Table 1
 Utilized agricultural area in the Republic of Serbia (in ha), 2008-2017

Source: MPŠV, 2018, 77; RZS, 2018, 208-209

domestic agriculture can provide the appropriate quantity and type of the products necessary to carry out the planned tourist activity.

A decline in the net physical volume of agricultural production by about 12% in 2017, compared to 2016, is primarily due to a decline in the physical volume of plant production, especially cereals and fruits. A general fall in yields is observed with grapes and some fruit, with plant production down by 23.5%, and livestock production higher by only 1.5%, along with a decline in the production of beef and sheep meat, eggs, etc. - Table 2 (MPŠV, 2018, 1-22; RZS, 2018, 199). The observed trends indicate that domestic agriculture development is not in line with the development of the food industry, tourism and other related activities.

Out of a total of 631,552 agricultural holdings in RS, about 12% have related income from non-agricultural profitable activities. The largest number of farms deal with milk processing (about 57%), fruit and vegetable processing (about 30%), whereas only 0.66% of the households are engaged in tourism (Bogdanov and Babović, 2014, 280-283).

The share of agro-food exports in the total Serbian export decreased in 2017 to 19.4%, whereas the share of imports increased to 9.5%. Despite the rising surplus in the trade of these products in the last decade, the year 2017 recorded a surplus lower by one-third compared to 2016. The exports structure is still dominated by a 75% share of primary products, and a 67% share of imports (MPŠV, 2018, 11, 24-35). One-fifth of the export value of agro-food products in 2017 came from trade in fresh fruit (Table 3). The

	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.
Number of livestock	< (000)									
Cattle	1,057	1,002	938	937	921	913	920	916	893	899
Pigs	3,594	3,631	3,489	3,287	3,139	3,144	3,236	3,284	3,021	2,911
Sheep	1,605	1,504	1,475	1,460	1,635	1,616	1,748	1,789	1,665	1,704
Goats	284	263	237	239	232	225	219	203	200	183
Poultry	17,188	22,821	20,156	19,103	18,234	17,860	17,167	17,450	16,242	16,338
Hives	485	490	520	593	665	653	677	792	792	849
Gross meat product	tion (ooo t	:)								
Beef meat	99	100	96	81	82	70	73	77	77	71
Pork	266	252	269	271	252	249	258	278	301	307
Poultry meat	76	80	84	103	94	92	94	86	88	95
Sheep meat	23	24	23	24	22	30	27	30	34	30
Milk (mil. I)										
Cow milk	1,561	1,505	1,485	1,462	1,465	1,451	1,492	1,501	1,504	1,506
Sheep milk	14	10	10	11	12	18	20	19	17	14
Goat milk	36	28	27	29	33	34	38	44	37	33
Eggs (mil. pcs.)	1,726	1,711	1,705	1,760	1,794	1,755	1,892	2,061	1,853	1,759
Honey (mil. t)	4.16	7.35	7.28	6.96	6.98	8.55	4.38	12.26	5.76	7.01
Wool (mil. t)	2.60	2.40	2.46	2.38	2.66	2.72	2.69	2.77	2.85	2.83

Table 2 Livestock breeding in the Republic of Serbia, 2008-2017

*Source:* MPŠV, 2018, 80-81

export of these products is important for the foreign trade balance of domestic agriculture, as well as for motivating foreign tourists to visit Serbia. However, the positive effects on this basis are still insufficient.

The EU is a dominant foreign trade partner of RS given the fact that almost one-half of the agro-food export goes to this market. Exporting to CEFTA countries accounts for about 30%, and to other countries about 20%. In addition to the Russian Federation, the most important foreign trade partner in the group of other countries, the following countries are also important: Japan, the USA, Hong Kong, Turkey, etc. (MPŠV, 2018, 30-34). Except for direct relevance to agriculture, international cooperation on this basis is also important from the point of view of encouraging travel, although this potential is still inadequately exploited.

The strategic framework for improving the export, production, and resource potential of agriculture is defined by the Strategy of Agriculture and Rural Development of the Republic of Serbia for the period 2014-2024. The funds intended for incentives in this area are defined by the Budget Law (MPŠV, 2018, 43). In the period 2007-2017, the MPŠV budget had a number of oscillations, with a relatively low share in the total budget.

In 2017, 15% more funds were spent on incentives for agriculture and rural development than in the previous year (MPŠV, 2018, 8). Nevertheless, the real situation in agriculture and the rural economy points to insufficient institutional support and particularly to insufficient support to linking agriculture with tourism.

## The Key Indicators of Tourism Development in the Republic of Serbia Relevant for Directing the Agricultural Activity

The total number of tourists in RS in 2017 was almost 3,086,000. Domestic tourists accounted for 1,589,000

Tariff heading	%	Tariff line	%
4 Funch for it		1. Corn, other than corn seeds	8.6
1. Fresh fruit	20.0	2. Cigarettes containing tobacco	7.1
		3. Raspberry, frozen, without added sugar	7.1
2. Cereals	12.4	4. Apples, fresh, other	3.8
> Tabaaaa and tabaaaa nuu duuta	0 -	5. White sugar, in a solid state	2.7
3. Tobacco and tobacco products	8.7	6. Edible sunflower oil, other, for other purposes	2.0
		7. Other wheat, spelt and meslin, except for planting	1.9
4. Beverages, spirits, and vinegar	6.3	8. Non-alcoholic beverages, not containing dairy products, other	1.8
• Animal and a state black to a dail		9. Cherries, frozen, without sugar	1.8
5.Animal and vegetable fat and oil	5.9	10. Sunflower oil, raw, for other purposes	1.6
Total top 5 tariff headings 53.4		Total top 10 products	38.3
Total export 100.0		Total export	100.0

Table 3 The highest values of the exports of agro-food products of the Republic of Serbia (share in %, 2017)

Source: MPŠV, 2018, 27-29

(7.9% more than in 2016), with 1,497,000 foreigners (16.8% more than in 2016). Although significantly varying in the period 2007-2017, the total tourist arrivals and overnight stays in RS had a growing trend in the last three years of the observed period -Figure 1 (RZS, 2018, 341-343). In addition, the volume and structure of agricultural production did not sufficiently follow these tourism trends.

was about 8,325,000 (an increase of 10.5% compared to 2016), with domestic tourists recording about 5,150,000 overnight stays (7.4% more than in the previous year), whereas the number of the overnight stays of foreign tourists was around 3,175,000 (15.9% more than in 2016). Spas recorded 26.8% and mountains 25% of the total number of overnight stays, with 38% of the overnight stays of domestic tourists in spas and 34.1% in the mountains. The structure of the overnight stays shows that 53.3% foreign tourists stayed in Belgrade,



In 2017, the number of overnight stays in RS (Table 4)



Source: Authors, on the basis of RZS, 2018, 343

Type of accommodation	Total number of rooms	Total number of beds	Tourist arrivals	Overnight stays
TOTAL	44,813	106,029	3,085,866	8,325,144
Hotels	15,889	32,175	1,670,821	3,938,449
Garni hotels	2,740	5,748	374,440	695,725
Apart hotels	467	1,538	38,464	135,604
Boarding houses	90	221	8,995	31,862
Motels	374	883	22,015	37,616
Tourist settlements	209	392	23,299	45,519
Apartments	1,318	3,902	74,228	225,988
Campsites	294	980	5,970	8,835
Camping grounds	2,289	5,333	7,579	29,798
Private rooms	7,778	20,245	132,536	452,811
Private houses	1,587	2,725	150,220	428,804
Hunting lodges and cottages	30	61	195	318
Inns with overnight stays	809	2,023	39,206	92,473
Overnight stays	3,609	8,879	223,612	538,131
Hostels	2,323	6,854	77,136	210,837
Spa cures	1,966	4,130	65,223	597,386
Climatic cures	688	1,817	34,168	213,651
Mountain shelters	228	834	10,598	37,954
Workers' resorts	301	801	20,107	80,971
Children and youth resorts	1,080	4,478	90,788	493,301
Sleeper and dining cars	40	175	10,478	10,478
Rural tourist households	675	1,723	5,061	16,040
Other catering accommodation facilities	29	112	727	2,593

Table 4Accommodation capacities, arrivals and overnight stays in the Republic of Serbia, by the types of tourist<br/>facilities, 2017

Source: RZS, 2018, 344-345, 351

7.3% in Novi Sad, 8.5% in the spas, and 10.1% in the mountains. In addition, the largest number of the foreign tourists who visited RS in 2017 were tourists from Bosnia and Herzegovina, Turkey, Bulgaria, Croatia, and Montenegro (RZS, 2018, 341), which is not sufficiently taken into account when planning the structure and volume of agricultural production in RS.

Out of a total of 5,061 tourist arrivals (16,040 overnight stays) referring to rural tourist households, foreign tourists recorded 293 arrivals in 2017 (727 overnight stays) (RZS, 2018, 344-345). Out of a total of 675 rooms (1,723 beds) in rural tourist households, 104 rooms

(320 beds) refer to the spas, 120 rooms (307 beds) to the mountain areas, 390 rooms (941 beds) to other tourist resorts, and 61 rooms (155 beds) to other places. The rooms and beds of rural tourist households participate with only 1.5% in the total number of the rooms (beds), i.e. 1.6% (RZS, 2018, 351). Among the rural accommodation capacities, houses are dominant, only to be followed by apartments and villas, chalets and cottages, holiday homes, ethno-villages, farms, mansions, hotels, and very few exclusive buildings and residences.

Regarding the turnover structure in the Serbian catering industry in 2017, the largest share is that

of the services related to food and drinks, then beverages and overnight stays (Figure 2), which indicates some changes in relation to the previous periods. Nevertheless, the turnover structure in the catering industry is not satisfactory (RZS, 2018, 354).

In the regular annual World Economic Forum (WEF) report on tourism competitiveness, measured by the Travel and Tourism Competitiveness Index (TTCI), RS was ranked the 78th among 133 countries in 2008; in 2009, it was in the 88th position; in 2015, it ranked the 95th out of 141 countries, and in 2017 (Table 5) it was the 95th among 136 countries (WEF, 2017).

Although health and hygiene, ICT equipment, and environmental protection are better ranked than the other TTCI components in the case of RS in 2017, the TTCI still points to the inadequate budget allocation for tourism, as well as other problems in this area.

The Tourism Sector of the Serbian Ministry of Trade, Tourism, and Telecommunications has specific internal units dealing with (MTTT, 2016): market research and tourist product development, increasing competitiveness and tourism quality management, study-analytical activities, etc. The National Tourism Organization of Serbia carries out the activities of tourism promotion and advancement. Funds for tourism organizations are provided from the budget and other sources. However, as the TTCI shows, the allocation of funds for tourism development is still insufficient, as well as its links with agriculture are.

65

Table 5 TTCI index - Republic of Serbia, 2017

Elements of TTCI Index	Ranking
Business environment	112
Sustainability (preservation) of the environment	61
Security and safety	72
Health and hygiene	42
Priority (importance) of travel and tourism	116
Aviation transport infrastructure	84
Land and water transport infrastructure	94
Tourist infrastructure	76
ICT (Information and Communication Technology)	57
International openness	106
Price competitiveness	76
Human resources and labor market	82
Natural resources	130
Cultural resources and business travel	71
ТТСІ	95

Source: WEF, 2017, 294-295



Figure 2 The turnover structure in the catering sector of the Republic of Serbia

The Tourism Development Strategy of the Republic of Serbia for the period from 2006 to 2015 points to the following tourist products as particularly interesting (Vlada Republike Srbije, 2006): city breaks; circle trips; business tourism + MICE; health tourism; mountains and lakes; nautics; events; rural tourism and special interests. This strategy was implemented to a lesser degree due to a number of constraints, which also limited the integral development of tourism and agriculture. The new Tourism Development Strategy for the period 2016-2025 states that tourism should be systemically accessed not only through economic indicators as a possible sustainable source of creating new value added and employment, but also through the multiple effects that tourism has on local and regional development, the development of culture and education, the improvement of the environment and the development of complementary activities, such as trade, agriculture, construction, etc. The goals of this strategy are (MTTT, 2016, 5-6):

- Sustainable tourism development;
- Strengthening the competitiveness of the tourism economy and related activities;
- Increasing the share of tourism in the GDP and employment;
- Improving the image of the Republic of Serbia.

The Strategy emphasizes the fact that the Republic of Serbia possesses a significant resource potential for tourism development (MTTT, 2016, 39): a preserved, natural environment; attractive and diverse authentic gastronomy and cultural heritage, recognizable capital, etc. Nevertheless, the sector is still insufficiently institutionalized and developed, lacking in modern management and marketing, higher investment activities and better sources of financing, and particularly higher budget funds for integral development with agriculture and other related activities.

# The Link between Agriculture and Tourism in the Republic of Serbia

Agriculture and tourism are basically very interconnected and interdependent. Quantitative changes in tourism turnover (the number of arrivals and overnight stays, the average length of the stay at a destination and similar indicators) determine the dynamics of tourist consumption, and consequently the consumption and production of agricultural and food products included in the tourist offer (Tomić, 2008). On the other hand, changes in agro-food production and turnover affect the content of the tourist offer.

The strongest connection between agriculture and tourism is present in rural areas due to the fact that agricultural production takes place in these areas, where many forms of tourism can develop.

Rural tourism best reflects the links between agriculture and tourism, encompassing a whole range of activities, products and services, offering tourists a number of the elements of the natural environment, a natural experience, a rural tradition, culture and the other values of the local community, combining different forms of tourism, linking traditional and modern, i.e. rural heritage with contemporary trends (UN & Government of the Republic of Serbia, 2011, 15). The link between agriculture and tourism is also clearly evident in the various aspects of rural tourism, such as agro-tourism, gastronomic tourism, and similar forms of tourism. Considering the fact that agro-tourism means a guest stay in agricultural households and that gastronomic tourism points to the prime importance of local food and local specialties as tourists' main motives to visit a certain destination, these relations confirm the pronounced connection between agriculture, i.e. food production, and rural tourism.

Although theory and practice offer various models for the successful linking of agriculture and tourism, the ways in which they are connect with each other in RS, as well as the benefits achieved on this basis, are not at an enviable level.

STRENGTHS	WEAKNESSES				
<ul> <li>Natural resources, relief, climate</li> <li>Biodiversity</li> <li>Cultural heritage</li> <li>Hospitality</li> <li>Traditional agriculture</li> <li>Local identity, customs, folklore, folk art</li> <li>Events</li> <li>Gastronomic offer</li> <li>Price competitiveness</li> </ul>	<ul> <li>Undeveloped infrastructure</li> <li>Adverse demographic structure</li> <li>Insufficient institutional support</li> <li>Insufficient quality sources of funding</li> <li>Insufficient promotional activities</li> <li>Insufficient care for the preservation of cultural and historical heritage</li> <li>Lack of the accommodation capacity</li> <li>Insufficiently diversified and integrated agro-tourist offer</li> <li>Insufficiently improved quality of the tourist offer</li> </ul>				
OPPORTUNITIES	THREATS				
<ul> <li>Changing trends in tourism</li> <li>Funds for rural development and tourism</li> <li>Connecting rural with other forms of tourism</li> <li>Improving the quality of the tourist offer</li> <li>Development of SMEs (small and medium-sized enterprises) and entrepreneurship</li> <li>Public-private partnerships</li> <li>Raising the level of attractiveness of natural and cultural assets</li> <li>Creating integrated tourism products</li> <li>Area branding</li> </ul>	<ul> <li>Insufficient funding</li> <li>Insufficient institutional support</li> <li>Economic and political instability</li> <li>Climate changes</li> <li>Exhaustion of natural resources</li> <li>Strong competition</li> <li>Inadequate management of cultural goods</li> <li>Inadequate waste management</li> <li>Decreasing quality and attractiveness of the tourist offer</li> <li>Inadequate linking of traditional and contemporary values</li> <li>Insufficient investment in the development and maintenance of the infrastructure</li> </ul>				

## Table 6 The SWOT analysis of rural tourism in the Republic of Serbia

## Source: Authors

The Republic of Serbia is characterized by an incomplete and insufficiently differentiated offer of rural tourism (Table 6), the insufficient coordination and non-synchronization of most relevant components, as well as non-compliance with other important sectors (Vandić, 2016, 5-6).

Apart from rural tourism, domestic agricultural food products are poorly represented in the other forms of tourism as well, which is not promising either for agriculture or for tourism. However, both the state and local self-governments have been undertaking certain measures to improve rural and tourist content. Institutional support to the integral development of agriculture and tourism in RS is most often provided through (UAP, 2018):

 programs for improving the competitiveness of agriculture, while simultaneously preserving the environment and natural resources (the sustainable use of agricultural land and forest resources, the preservation of plant and animal genetic resources, as well as the areas of high natural value, support to agroecological measures, good agricultural practice and the environmental protection policy);

- support to investment in processing and marketing in agricultural holdings;
- support to income diversification and the improvement of life quality in rural areas (investment in the rural infrastructure development, the improvement of economic activities in the countryside, support to nonagricultural activities, the youth, etc.);
- improving the knowledge creation and transfer system.

The Ministry of Agriculture, Forestry, and Water Management finances and co-finances individual projects in which priority thematic areas of importance for tourism are: the diversification of the rural economy, the preservation of cultural and natural heritage, etc. The Tourism Sector of the Ministry of Trade, Tourism, and Telecommunications has been undertaking certain measures that directly relate to tourism development, and indirectly to agriculture. However, neither the efforts of the line ministries nor the efforts of the other important stakeholders in this area are sufficient, meaning that the connection between agriculture and tourism in RS is still insufficient and institutionally unorganized, as is confirmed by the unfavorable situation in domestic agriculture and tourism.

## Priorities and Perspectives of the Sustainable Integral Development of Agriculture and Tourism

The creation and implementation of the Serbian agricultural policy is limited by a number of factors. The financial constraints are a chronic problem, not only in terms of incentives, but also in terms of the investment activity. No lesser problem is the frequently irrational spending of the available funds. The EU rural development funds are a potential opportunity to improve funding, but they require a number of institutional reforms, technological and organizational innovation. In this context, a new agricultural policy must be stable, predictable, and consistent, based on realistic goals and harmonized with international trends, taking into account national interests. Establishing a sustainable agricultural production system is one of the imperatives, which requires strong political will and considerable investment. Agriculture has opportunities for development if it develops integrally with the sectors "around agriculture" through the concept of multifunctionality (Pejanović, 2016, 76-89). More dynamic structural reforms in agriculture will contribute to the recruitment of a part of the labor force in non-agricultural sectors (tourism, industry, etc.), which suggests the need to define a wider range of consistent policies (Bogdanov and Babović, 2014, 285-287). The complementarity of agriculture with other activities, especially tourism, is necessary, so changes should be carried out gradually and thoughtfully, with the development policy makers' responsible attitude towards this issue.

Considering the context of contemporary economic trends on the global tourism market, the geostrategic position and the process of the EU accession of RS, the current situation and the tourism resource potential, it is necessary to establish an adequate business mission in tourism, in the medium and long term, with greater commitment to the measures for energy, industry, and agriculture development, as well as for the implementation of the infrastructure projects. In this regard, it is necessary (MTTT, 2016, 42-43):

- to more effectively use and protect natural and cultural assets;
- to raise energy efficiency and the use of renewable energy sources in tourist facilities and at tourist destinations;
- to encourage sustainable rural and regional development, as well as reducing depopulation;
- to create and maintain a positive image.

The complex issue of building an effective tourism policy relates to: the infrastructure development, the improvement of tourism products, networking with other sectors, the improvement of the national tourism marketing system, etc. In order to identify the key areas of intervention, it is necessary to define the priority products which can realistically be commercialized on the market and identify the destinations that already have or can develop these products within acceptable deadlines (MTTT, 2016, 52-55). Tourism can activate the activities that do not have a tourist feature themselves through the conversion process. The development of the tourism economy may create a need for a greater supply of food and drinks, new accommodation facilities, sports facilities, entertainment facilities, etc. Also, there may be more needs for the development of transport, utility, and another infrastructure, which then "opens" the need for staff with different qualifications and of different profiles, i.e. greater employment opportunities (Vojnović, Grujić and Grujić, 2013, 11-12). In doing so, the business mission of the integral development of agriculture and tourism should be conceived in accordance with financial and institutional capacities, while sector performance, the macroeconomic situation, as well as external factors will still determine the speed and direction of changes in this field.

The Serbian agro-tourism offer is not integrated, which points to the necessity of creating an integrated marketing plan which will put the promotion and sale of agro-food and tourism products to the forefront, creating conditions for a greater integration and quality of the offer in this domain. In this way, tourism could help (Vujović, Cvijanović and Štetić, 2012, 198-200):

- create additional sources of income,
- increase employment and improve the life quality of the rural population,
- boost the sales of agricultural and food products,
- prevent a further depopulation of villages,
- revive cultural content, events, and ethno-content.

This could also launch other important social processes.

Adjusting the agricultural production structure to tourism is an important issue of tourism consumption. Expanding and improving organic food production, products with a well-known geographical origin and the like are considered to be particularly important. Also, it is necessary to look at the possibilities of the greater integration and contractual linking of agro-tourism economic entities, which requires the elaboration of the economic policy incentives to harmonize complementary activities. Permanent agricultural and tourist market research, the introduction of modern solutions in business practice, as well as an ecological approach with comprehensive education are also significant in this regard (Tomić, 2008, 148-150). A greater availability of funds and institutional support, stronger social capital and market links should strengthen the integral development of agriculture and tourism and contribute to their sustainable development, through local cooperation, regional cooperation, and integration into wider frameworks.

Agro-economic, socio-cultural, spatial-ecological, and tourist-development goals require care for the vitality of the available resources at all development stages. A permanent loss of agricultural land due to the construction of tourist facilities and roads is the negative effect of tourism development, which good spatial plans, adequate fiscal and environmental policies, etc. can significantly mitigate (Tomić, 2008, 145).

The synthesis of theoretical concepts and empirical research confirms that rural tourism and associated tourism forms provide great opportunities for an atypical and diversified offer (Vujović, Cvijanović and Štetić, 2012, 210-211). Although the future of a great number of rural areas is uncertain, rural tourism can be an appropriate approach to revitalize some villages. Tourism development in rural areas can absorb the rural workforce surplus, without pressure on cities and adverse socio-economic and environmental consequences, and can help solve the problem of the depopulation and aging of villages. Out of all direct effects, one of the most important is the foreign-exchange or balance-of-payments effects of tourism. Specifically, economic theory knows of the so-called invisible exports phenomenon as a form of the sales of agricultural and food products to foreign tourists in the country (Tomić, 2008, 144-145).

In order to realize the concept of sustainable development, it is important to highlight the types

of agricultural production that fit in with the concept of sustainable tourism development. Accordingly, environmental directions are more and more interesting. Organic agriculture is considered as one of the most important development opportunities in this regard (Table 7) and the destination concept of tourism development, in terms of the compatibility of organic production and environmental protection, is gaining in importance.

TT 11 F	TT1 (	1. 11	C*1 C	•	1 1
Table 7	The pote	enfial bei	netits of	organic	production
	110 000		cierres or	or genne	protection.

Area	Expected positive changes
Agriculture	Better quality of land and agricultural
	products, sustainable production
Tourism	Improving the quality of the tourist
	offer, the sustainable use of resources
Economic	Support to local economic development
benefits	on sustainable bases, increasing
	revenue
Environment	Reducing environmental pollution,
	preserving ecosystems, ecological
	compatibility with the economy,
	reducing the risks inherent in
	conventional production
Social	Preservation and improvement of
benefits	human health, higher employment in
	the organic sector, support to the social
	component of sustainable development

*Source*: Authors, on the basis of IFOAM-Organics International, 2018

In addition to organic agriculture, domestic conventional agriculture should also be included in the tourist offer in the future, assuring a standard quality and product safety.

## CONCLUSION

The integral development of agriculture and tourism is determined by numerous internal and external factors, some of which positively influence their development, whereas others have a very negative effect. Regardless of the origin and direction of these factors, no economy and no economic sector can remain isolated from them. Therefore, it is important to adequately institutionalize all relevant contemporary challenges, especially due to the fact that certain constraints are of an economic-political nature, some are social, and there are the ecological constraints that human beings cannot influence despite state-of-the-art technology. Due to all of the foregoing, and given the fact that it is very difficult to accurately predict the future of the sustainable integral development of agriculture and tourism, it is important at almost all levels to ensure an adequate approach, appropriate to the area specifics.

Based on the conducted research, taking into consideration the results of the previous studies and the real situation in the field of agriculture and tourism, it can be concluded that the integral development of agriculture and tourism is very important in modern conditions in accordance with the principles of sustainable development and the area specifics. If agriculture and tourism are adequately institutionalized and integrated on a sustainable basis, one can expect multiple positive socio-economic effects, economic benefits in particular: growth in income from agriculture and tourism and other directly or indirectly related activities; a rise in employment in the agro-food sector, tourism, and the rural economy, with their rising contribution to the growth of the GDP and exports; a rising volume of agricultural production, tourist arrivals, and overnight stays; a higher quality and the attractiveness of agro-food and tourism products; the diversification of agricultural production, the nonagricultural rural economy and the tourist offer as a whole; reducing poverty and the social exclusion of the rural population, while simultaneously improving the demographic picture of the areas in which agriculture and tourism will develop in the long term and integrally.

The starting hypothesis in the paper has been confirmed because the research results confirm that it is extremely important in RS to more intensively institutionalize the links between agriculture and tourism within the realization of the concept of sustainable development, since only such an approach can bring the economic benefits relevant for agriculture and tourism (the activity diversification, growth in employment, income, investment activities and exports, the improvement of international economic relations in the field of agriculture and tourism, etc.). In addition to the economic effects, a great number of the positive non-economic effects relating to the important social and ecological aspects of sustainable development can also arise as a result of a more active approach to the integral development of agriculture and tourism, where demographic revitalization is especially evident, with the preservation and a more creative use of the available resource potential in agriculture and tourism.

The institutional framework is one of the most important components of the sustainable integral development of agriculture and tourism. Accordingly, this research is addressed to the development policy makers in the field of agriculture and tourism in Serbia, and, along with a great number of other relevant studies, discussions, and views of the authors directly or indirectly dealing with this issue, it can influence the reform processes in the field of the integral development of agriculture and tourism. The research suggests that institutional support to the sustainable integral development of agriculture and tourism in RS is insufficient, which is not in line with the natural and anthropogenic resources Serbia has, so this support should significantly increase in the future, both in terms of funding and in terms of creating a more stimulating environment for the longterm survival and development of domestic economic entities in agriculture and tourism. The survey is also a signal to economic entities that it is necessary that business in agriculture and tourism should be modernized and significantly integrated.

The basic limitation of this research relates first of all to the difficulty of the precise measurement of the mutual impact of agriculture and tourism, i.e. the insufficiency of economic and similar quantitative indicators of the intensity of the agricultural impact on tourism development, and vice versa, as well as lacking the indicators of their integral development. Also, the scope of the research can be regarded as a limitation because the study focused on one country only. Therefore, some future research could deal with a larger sample, i.e. it should consider the possibilities of conducting a comparative analysis with the countries in the region, the countries that are more recognizable on the agricultural and tourism market or represent an example of good practice in the field of the integral development of agriculture and tourism, without ignoring any country similar to RS, especially when unused agro-tourism resources and numerous internal and external limitations preventing the sustainable integral development of agriculture and tourism are concerned.

The main contribution of this research is the emphasis on the possibilities of and constraints on the integral development of agriculture and tourism in RS, with the recommendations to the development policy makers regarding an improvement in this area and the emphasis on the irreplaceable role and responsibility of the state throughout the process. In addition to highlighting the great socio-economic importance, necessity, priorities, and possible future directions of the sustainable integral development of agriculture and tourism in RS, the contribution of this paper also relates to the possibility of initiating a new research study of this issue and applying its results in practice.

## REFERENCES

- Bogdanov, N. i Babović, M. (2014). Radna snaga i diverzifikacija prihoda na poljoprivrednim gazdinstvima u Srbiji - stanje i izazovi za politiku ruralnog razvoja. U D. Vukmirović (Ur.). Primena podataka Popisa poljoprivrede 2012. u analizi stanja poljoprivrede i u planiranju agrarne politike u Republici Srbiji (str. 262-288). Beograd, Republika Srbija: Republički zavod za statistiku.
- Budiasa, I. W., & Ambarawati, I. G. A. A. (2014). Community based agro-tourism as an innovative integrated farming system development model towards sustainable agriculture and tourism in Bali. *Journal of the International Society for Southeast Asian Agricultural Sciences*, 20(1), 29-40.

- Cărătuş Stanciu, M. (2015). Aspects of sustainable rural tourism
   farmers' markets and farm visits. Management, Economic Engineering in Agriculture & Rural Development, 15(4), 15-19.
- Cvetanović, S., Despotović, D., Živković, Lj., & Nedić, V. (2014). Environmental dimension of sustainable competitiveness of Serbia and selected European countries. *Bulgarian Journal* of Agricultural Science, 20(4), 767-778.
- Đekić, S. (2000). Agrarni i neagrarni aspekti ruralnog razvoja. *Ekonomski horizonti*, 2(1-2), 53-59.
- IFOAM Organics International. (2018). Organic's benefits. Bonn, Germany: International Federation of Organic Agriculture Movements - Organics International. Retrieved August 9, 2018, from https://www.ifoam-eu.org/en/organicinfographics/organics-benefits
- Milenković, S., Ristić, L. i Bošković, N. (2013). Integralno korišćenje resursa u turističko-ruralnom prostoru Srbije. U Lj. Maksimović, G. Marjanović i S. Obradović (Red.). *Efekti* tranzicije i perspektive privrede Srbije (str. 175-196). Kragujevac, Republika Srbija: Ekonomski fakultet Univerziteta u Kragujevcu.
- Mirani, S. Z., & Farahani, M. B. (2015). Second homes tourism and sustainable rural development in all around the world. *International Journal of Leisure and Tourism Marketing*, 4(3/4), 176-188. doi:10.1504/ijltm.2015.072076
- MPŠV. (2018). *Izveštaj o stanju u poljoprivredi u Republici Srbiji u 2017. godini -* knjiga I. Beograd, Republika Srbija: Ministarstvo poljoprivrede, šumarstva i vodoprivrede.
- MTTT. (2016). Strategija razvoja turizma Republike Srbije 2016-2025. Beograd, Republika Srbija: Ministarstvo trgovine, turizma i telekomunikacija.
- Paci, R., & Marrocu, E. (2014). Tourism and regional growth in Europe. *Papers in Regional Science*, 93(1), S25-S50. doi. org/10.1111/pirs.12085
- Pejanović, R. (2016). O razvojnim problemima naše agroprivrede. U Ž. Stojanović i N. Bogdanov (Red.). *Stanje i perspektive agroprivrede i sela u Srbiji* (str. 69-91). Beograd, Republika Srbija: Ekonomski fakultet Univerziteta u Beogradu.
- Pillay, M., & Rogerson, C.M. (2013). Agriculture-tourism linkages and pro-poor impacts: The accommodation sector of urban coastal KwaZulu-Natal, South Africa. *Applied Geography*, 36, 49-58. doi.org/10.1016/j.apgeog.2012.06.005

- RZS. (2013). Census of Agriculture 2012 Book 1. Belgrade, Republic of Serbia: Statistical Office of the Republic of Serbia.
- RZS. (2018). Statistical Yearbook of the Republic of Serbia 2018. Belgrade, Republic of Serbia: Statistical Office of the Republic of Serbia.
- Sandilyan, S., Thiyagesan, K., & Nagarajan, R. (2008). Ecotourism in wetlands causes loss of biodiversity. *Current Science*, 95(11), 1511.
- Tomić, D. (2008). *Poljoprivreda i selo ideje i inicijative*. Beograd, Republika Srbija: Društvo agrarnih ekonomista Srbije i Institut za ekonomiku poljoprivrede.
- Turkalj, Ž., Ham, M., & Fosić, I. (2013). The synergy of sustainable tourism and agriculture as a factor of regional development management in Croatia. *Ekonomski Vjesnik*, 26(1), 71-82.
- UAP. (2018). Podsticaji merama ruralnog razvoja. Beograd, Republika Srbija: MPŠV - Uprava za agrarna plaćanja/ Directorate for Agrarian Payments. Retrieved September 5, 2018, from http://uap.gov.rs/podsticaji-merama-ruralnograzvoja/
- UN. (2016). International Year of Sustainable Tourism for Development, 2017. New York, NY: United Nations.
- UN & Government of the Republic of Serbia. (2011). *Master plan održivog razvoja ruralnog turizma u Srbiji*. Beograd, Republika Srbija: UN i Vlada Republike Srbije.
- UNWTO. (2017). Tourism Highlights: 2017 Edition. Madrid, Spain: World Tourism Organization.
- Vandić, V. (2016). Podrška i podsticaj ruralnog turizma u okviru IPARD II programa Republike Srbije. Donji Milanovac, Republika Srbija: Bios fond.
- Vlada Republike Srbije. (2006). *Strategija razvoja turizma Republike Srbije*. Beograd, Republika Srbija: Službeni glasnik RS, 91/2006.
- Vlada Republike Srbije. (2008). Nacionalna strategija održivog razvoja. Beograd, Republika Srbija: Službeni glasnik RS, 57/2008.
- Vlada Republike Srbije. (2018). Nacionalni program ruralnog razvoja od 2018. do 2020. godine. Beograd, Republika Srbija: Službeni glasnik RS, 60/2018.

- Vojnović, B., Grujić, D. i Grujić, S. (2013). *Poljoprivreda, turizam i saobraćaj u funkciji privrednog razvoja*. Beograd, Republika Srbija: Institut za ekonomiku poljoprivrede.
- Von Braun, J., & Birner, R. (2017). Designing Global Governance for Agricultural Development and Food and Nutrition Security. *Review of Development Economics*, 21(2), 265-284. doi.org/10.1111/rode.12261
- Vujičić, M. i Rosić, I. (2000). Interakcije agrara i strategije ruralnog razvoja Jugoslavije. *Ekonomski horizonti*, 2(1-2), 45-51.

- Vujović, S., Cvijanović, D. i Štetić, S. (2012). *Destinacijski koncept razvoja turizma*. Beograd, Republika Srbija: Institut za ekonomiku poljoprivrede.
- WCED. (1987). *Our Common Future*. New York, NY: United Nations, World Commission on Environment and Development.
- WEF. (2017). The Travel & Tourism Competitiveness Report 2017. Geneva, Switzerland: World Economic Forum.
- Yudina, E. V., Uhina, T. V., Bushueva, I. V., & Pirozhenko, N. T. (2016). Tourism in a globalizing World. *International Journal* of Environmental and Science Education, 11(17), 10599-10608.

Received on 16<sup>th</sup> January 2019, after revision, accepted for publication on 17<sup>th</sup> April 2019 Published online on 25<sup>th</sup> April 2019

*Lela Ristic* is an associate professor at the University of Kragujevac - Faculty of Economics, where she received her doctor's degree. She teaches the following courses: Economics of Agriculture, Tourism and Environment, Tourism ana Agribusiness, Management of Rural Development. The key areas of her scientific research are: sustainable agriculture and rural development, tourism and agribusiness management.

*Nikola Boskovic* is an assistant professor at the University of Kragujevac - Faculty of Economics, where he received his doctor's degree. He teaches the following courses: Economics of Natural and Anthropogenic Resources, Economics of Tourism, Tourism and Environment, Tourism ana Agribusiness, Management of Tourism Destination. His scientific interests are primarily related to the natural resources, environment and sustainable tourism.

**Danijela Despotovic** is an associate professor at the University of Kragujevac - Faculty of Economics, where she received her doctor's degree. She teaches the following courses: Theory and Analysis of Economic Policy, Financing Economic Development, Economic Policy at Crisis Times. Her main research interests include: economic policy and development, policy to improve competitiveness, sustainable development.