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# STATE OF ORGANIC PRODUCTION IN KOSOVO AND METOHIJA - GREAT PERSPECTIVE OR IDEA WITHOUT THE FUTURE

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## ABSTRACT

The resource potential of the agricultural sector in Kosovo and Metohija is not sufficiently used, but there is certainly a need for agricultural production, as one of the primary activities, in places inhabited by non-Albanians. The aim of this paper is to analyze the development and potential of organic production in Kosovo and Metohija. For the purposes of this paper, an original questionnaire was formulated, based on when a direct survey conducted in July and August 2021 was conducted. Also, the owner of the only agricultural cooperative „Zubin Potok“ in this area, was interviewed. The research showed that a more than thirty-four percent (34,7%) of respondents answered that they plan to expand production, good part of the respondents (23,3%) pointed out that they are interested in a some kind of education if it would be organized by professionals, while more than 90% of respondents involved in organic production said it would mean some form of subsidy or local or international aid. The authors point out that for the development of organic production in Kosovo and Metohija, it is necessary to provide financial support to farms, but also to build a stable market of organic products, which would contribute to the stability and competitiveness of this food production system.

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## Introduction

*„Nature is, after all, the only book that offers important content on every page.“*

*Johann Wolfgang von Goethe*

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Agriculture is as old as human society. Clive Ponting (Ponting, 2009) points out that the beginnings of agricultural production were linked to Southwest Asia, or, more precisely, to the area around the Levant, well known for the fact that during the ancient century, the influences of numerous ancient civilizations changed, from the Assyrians, Babylonians, Phoenicians, all the way to the ancient Greeks and ancient Romans and left trace on it.

The implementation of the global process of economic, political and cultural integration as well as the unification has significantly contributed to the growth of global competition, including the agricultural sector (Zolotnytska and Opalov, 2020). The crucial changes in agricultural production occurred in the middle of the twentieth century, when the Green Revolution took place. Concerns of the population regarding the potential risks to human health have encouraged a number of alternative production methods, where organic production occupies a special place. The concept of organic production was established at the beginning of the twentieth century, first in Europe, then in the United States (Tomaš-Simin and Glavaš-Trbić, 2016). According to some individual authors (Melović et al., 2020), organic production, as a specific system that affects the health of soil, ecosystems and people, arose in response to the imbalance of ecosystems.

According to the Global Organic Agriculture Survey (FiBL-IFOAM, 2021), more than 72 million hectares of land have been used for organic production, including those areas that are in the process of conversion. Since 1999, global sales of organic food and beverages have increased almost sixfold, reaching a value of about \$ 105,5 billion in 2018. Whether it is a need or a trend is still unknown, but one thing is for sure, organic production and its products are an integral part of the life of modern man.

Oceania occupies half of the global organic agricultural land (9,6%), followed by Europe (3,3%) and Latin America (1,2%). The growing demand for organic products is concentrated in North America and Europe, as the two largest organic markets in the world. The importance of the segment of organic production for the territory of Europe was highlighted in the middle of 2020, when the European Commission presented a plan on the development and sustainability of the food system in Europe called „farm to fork“. This plan was seen as „heart“ of the European Green Agreement since it advocates redesigning current food systems. However, the growth of the European organic food market is not uniform, that is, it varies between different countries. While one group of countries, France, Ireland, Denmark, achieves double-digit market growth rates, in other countries market growth rates are below average (Vehapi, 2019). Organic production in the Western Balkans is facing numerous obstacles to development, which is a consequence of insufficient use of natural resources. Insufficient areas under organic production are also a limiting factor in development. Almost all countries in the Western Balkans have areas under organic production whose share in agricultural land is below the European average. It is encouraging that, despite numerous limitations, Serbia and Bosnia and Herzegovina achieved the highest growth of organic agricultural land in Europe during 2015, around 60-63% (Willer and Lernoud, 2017). Increasing

exports, education, seminars, engaging the working population, preserving traditions, preserving the environment, preventing migration from rural to urban areas may be just some of the motives for promoting the development of organic production in the Western Balkans.

**Table 1.** Overview of the growth of organic agricultural land in the world over a period of ten years

Area	Organic agricultural land (ha) in 2008.	Organic agricultural land (ha) in 2018.	Organic agricultural land (ha) in 2019.	One-year growth (%)	Ten years of growth (%)
Africa	880 898	1 854 646	2 030 830	9,5	89,4
Asia	3 293 945	6 363 778	5 911 622	-7,1	140,5
Europe	8 176 075	15 607 636	16 528 677	5,9	64,8
Latin America	8 065 890	8 008 581	8 292 139	3,5	10,0
North America	2 449 641	3 342 849	3 647 623	9,1	47,5
Oceania	12 140 107	35 999 373	35 881 053	-0,3	195,4
World	35 006 557	71 172 783	72 285 656	1,6	102,4

Source: FiBL-IFOAM, 2010; FiBL-IFOAM, 2021.

The production of agricultural products has always been at the top of economic activities in the Republic of Serbia, with about 7% of total GDP, and known as a rare agricultural sector of the Republic of Serbia with a constant surplus in foreign trade (MAFWM, 2020). Agricultural land is one of the primary potentials of the Republic of Serbia and occupies the most important place among the potentials of its development. Good geostrategic position, temperate continental climate, preserved agricultural system and over 70% of land that does not contain harmful organic matter or heavy metals, are just some of the advantages of our country that can be directed towards intensifying and developing organic production.

In the Republic of Serbia, organic production began to develop in the eighties, thanks to the efforts of Den Juro Organic company. The year 2020 was certainly a jubilee year for the Republic of Serbia. In addition to marking the 30th anniversary of the first export of organic fruit, 30 years have passed since the beginning of the development of the non-governmental sector, 20 years since the adoption of the first Law on Organic Agriculture and 10 years since the adoption of the first Law on Organic Production. For the sake of comparison, in 2009 only 108 producers were engaged in organic production on an area of 2 400 hectares, while in the next ten years that number increased significantly, so in 2019 about 6 300 producers were engaged in organic production on an area of 21 000 hectares (National Association Serbia Organica, 2020). Despite the above, the main reason for the backwardness of Serbian organic agriculture is the poorly developed domestic market of organic products (Kovačević, 2021).

Kosovo and Metohija is a province in the south of the Republic of Serbia, and this area is divided into five districts, namely: Kosovska Mitrovica, Kosovo, Kosovo - Pomoravlje, <http://ea.bg.ac.rs>

Prizren and Peć. In all districts, agriculture has long been the main activity of the inhabitants of Serbian enclaves in Kosovo and Metohija. The area rich in meadows, pastures and numerous natural resources is suitable for the development of farming, fruit growing, viticulture and livestock (Figure 1).

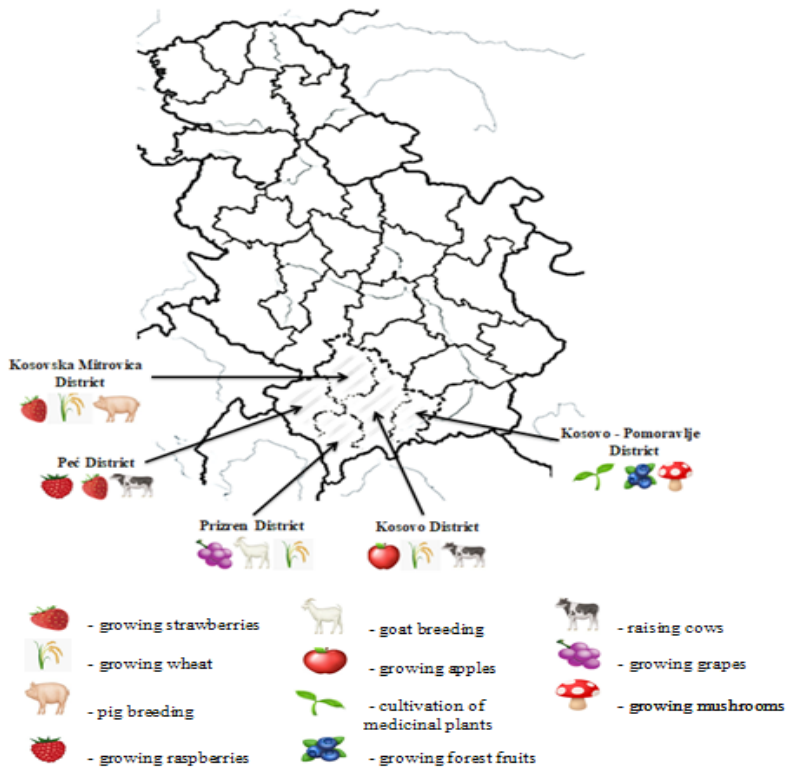
In this area, agricultural production is not only a source of subsistence, but also provides social security to a large number of poor and elderly people. Agricultural farms in Kosovo and Metohija are small, and families possess an average of about 3,2 hectares of land, half of which is arable land (available at: <http://www.sasb-eu.org/sr/priroda/zapadni-balkan/kosovo>). According to the Ministry of Agriculture, Forestry and Rural Development of the Provisional Self-Government in Priština from 2014, the share of arable land in the total agricultural land area is 43,6% (180 381 ha), and the largest part of arable land is cereals (131 949 ha). At the end of the last century, nine agricultural cooperatives operated in Kosovo and Metohija in Serbian areas.

**Table 2.** An overview of registered Serbian agricultural farms in Kosovo and Metohija

District	Less than 0,5 ha	0,5 – 2,00 ha	2,01 – 5,00 ha	5,01 – 10,00 ha	10,01 – 15,00 ha	15,01 – 20,00 ha	More than 20,00 ha
Kosovo	7	453	838	352	33	4	5
Kosovska Mitrovica	29	495	945	534	163	57	44
Kosovo – Pomoravlje	3	698	882	215	20	3	0
Peć	0	75	143	59	14	4	0
Prizren	1	15	15	3	1	0	0
Total	40	1 735	2 823	1 163	231	68	49

*Source:* Office for Kosovo and Metohija, 2013.

Unfortunately, today the only surviving agricultural cooperative is in Zubin Potok. From Leposavić, Gračanica, Prekovac, Osojane, all the way to Uroševac and Štrpce, agricultural cooperatives have been a symbol of preserving centuries-old hearths. The primary activity of all these cooperatives was based on supplying farmers with raw materials and on the purchase of surplus agricultural products. Also, the local population was employed in cooperative production, trade, management and administration, which reduced the unemployment rate in rural areas. The importance of cooperative business is confirmed by the experience of the European Union, where cooperatives are becoming an important factor in the development of local and regional economy, which is in line with the concept of integrated rural development (Bijman et al., 2014).

**Figure 1.** Production characteristics by districts in Kosovo and Metohija

Source: Authors' research

Organic production is on the territory of Kosovo and Metohija at the very beginning. The reason for that is that most farmers strive to intensify their production so they use pesticides and fertilizers, without taking into account the environment. Only a small number of farmers are committed to environmentally healthy production and environmental protection.

### Methodology

The subject of the research is organic producers in Kosovo and Metohija, with special emphasis on the conditions and environment in which organic productions occurs. The research process was conducted in two stages in July and August 2021. The first stage was related to the design of an adequate questionnaire that is adapted to the subject and goal of the research. The questionnaire includes 29 questions divided into three groups. The first group of questions is related to basic data on respondents, gender, age, municipality in which they live, average household income, number of household members, area of arable land. The second group of questions refers to the respondents' attitudes about the importance of organic products, the frequency of purchases of organic products, the category of products that are most often purchased, the motives

for buying and the place of purchase. The last, most important group of questions refers to the primary production that respondents are engaged in, attitudes about the conditions for the development of organic production, motives for organic production, barriers to production and marketing that organic producers face and the necessary financial resources for further development of organic production. Respondents were also asked questions to determine their views on the importance of organic production and organic producers using the Likert scale, from 1 „strongly disagree” to 5 „strongly agree”. The research included four districts in the territory of Kosovo and Metohija, namely: Kosovska Mitrovica District (municipalities of Kosovska Mitrovica, Zvečan, Leposavić, Zubin Potok and Vučitrn), Kosovo District (municipalities of Priština, Obilić, Gračanica, Štrpce and Lipljan), Kosovo – Pomoravlje District (municipalities Kosovska Kamenica, Novo Brdo, Vitina, Gnjilane and Ranilug) and the Prizren District (Prizren Municipality only). Target group in this research are all farms in the territory of Kosovo And Metohija that could be contacted due to the existence of well-known obstacles. The survey process itself was based on a combined method that included online questionnaire completion, as well as a door-to-door method. The second stage of the research referred to the interview, which was done with the director of the agricultural cooperative „Zubin Potok“, Mr. Rade Utvić. The main goal of this form of research is to present the most interesting parts of the conversation in order to obtain information about organic production, but from the aspect of an experienced producer.

Further methodology of the work is focused on the review and review of current literature and on the comparison of previous research on the development of organic production. The obtained results were processed in the program IBM SPSS Statistics-version 26, in which descriptive statistics, Kolmogorov-Smirnov test, Cronbach’s coefficient, cross-tabulation and Pearson’s correlation coefficient (correlation is significant at the 0,05 level) were performed. The limiting factor in this paper is the lack of statistical data of the Statistical Office of the Republic of Serbia since 1999, which refer to the area of Kosovo and Metohija.

## **Research Results**

Agricultural production has been recognized as one of the key development sectors in the territory of Kosovo and Metohija. Intensive and economically justified agricultural production in Serbian enclaves has been hampered by a number of factors for many years (Maksimović et al., 2015). Measures applied by agricultural producers in order to achieve higher yields in production, in addition to positive ones, can also have negative impacts on the agricultural system. However, organic production requires much more time, patience and dedication. It is not easy to preserve vegetables, fruits, cereals, plants and other products without the use of chemical preservatives.

Precisely 295 respondents from the area of Kosovo and Metohija participated in the research. When it comes to the gender of the respondents, it comprises 63,9% of the male respondents and 36,1% of the female respondents. Concerning age, the largest number of respondents is aged 21-30 (31,4%), and the smallest number is respondents older than 60 (11,5%). This research also confirmed the long-established fact that households in urban

areas and municipal centers generally have a smaller number of farms, mostly up to 3 members, while households in rural areas have four to five family members. These are mostly two-generation families with parents with children, or extended families, where, in addition to parents and children, there are other relatives in the family household, grandparents. Numerous factors have influenced the changes in the number of households in our region, children are migrating and thus creating a desire for modernization in them, while parents are attached to their households and mainly dedicated to agriculture.

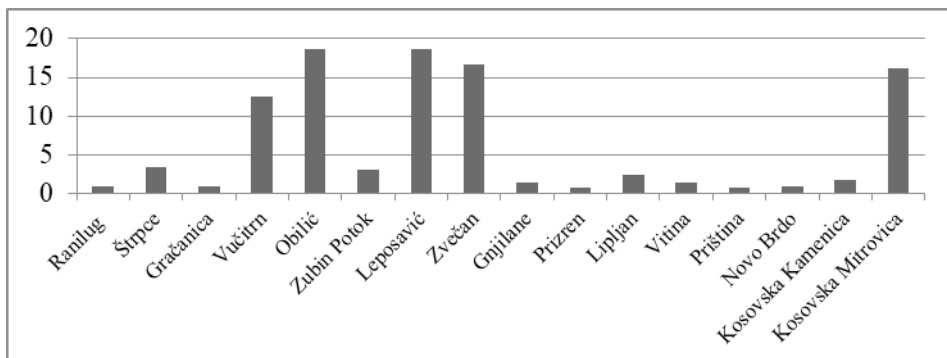
**Table 3.** Sample structured by gender, age and level of education

Gender	Number of respondents (N)	Percentage (%)
Male	189	63,9
Female	107	36,1
Age	Number of respondents (N)	Percentage (%)
21-30	93	31,4
31-40	59	19,9
41-50	63	21,3
51-60	47	15,9
60 +	34	11,5
Education level	Number of respondents (N)	Percentage (%)
Primary education	4	1,7
High school	108	36,5
College	32	10,8
Higher education	62	20,9
Master	88	29,7
PHD	1	0,3

Source: Authors' research

Agriculture is one of the few industries that is primary for the population in many municipalities. However, for most it is the only source of income. This is especially true for municipalities where Serbs are a minority population and are to some extent isolated from the Albanian majority population.

**Figure 2.** Sample structure by dwelling place



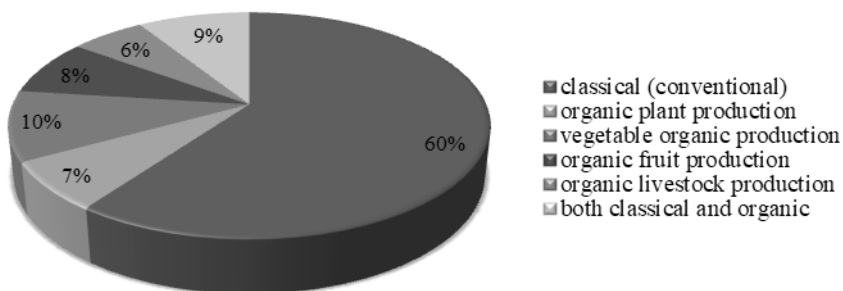
Source: Authors' research



In the 1960s Bogdanović (Bogdanović, 1963) described the area of Kosovo and Metohija as an area with a relatively large number of peasant farms, small land ownership, a large share of the rural population in the total population, underdeveloped productive forces, low productivity and low income, but as distinctly agrarian. For comparison, in our study the largest number of respondents owns up to 3 hectares of land (61,4% of respondents), from 4 to 7 hectares are owned by 21,5% of respondents, 9,9% of respondents are owners from 8 to 11 hectares of land, 5,5% of respondents own 12 to 15 hectares of land, and the smallest number has more than 15 hectares of land (1,7%). Contemporary consumers care more about their health than ever before, and environmental awareness, the availability of information about the benefits of organic food and smells and tastes reminiscent of childhood are just some of the reasons for the increasing purchase of these products. As many as 84,1% of respondents know what organic products are, while 35,5% of respondents buy organic products occasionally. A relatively small group within the surveyed population does not buy this type of product at all (10,5%), which shows that people are mostly aware of the basic benefits offered by organic food products. As the demand for organic products is growing, so are the demands in terms of quality, and this is a great challenge for farmers from Kosovo and Metohija.

The research showed that a small number of respondents have been involved in organic production, and that the primary form of production is still classical (conventional) production (Figure 3). Currently, a number of farmers in Kosovo and Metohija are in the phase of conversion to organic agriculture. Organic farming is, basically, the method that refrains from the use of chemosynthetic fertilizers, pesticides and pharmaceuticals, placing the greatest emphasis on protecting and improving the environment and minimizing pollution (Moser et al. 2010). However, one of the major problems for the development of organic agriculture in Kosovo and Metohija is product certification. Legally, in both the United States and Europe, a producer must be certified as organic in order to market its production as organic (Veldstra et al. 2014). Furthermore, there is no accredited body for certification of organic products in Kosovo and Metohija, and the organizations from Macedonia and Albania have been appointed for that purpose. One of the conceptual solutions is the possibility of group certification, which requires the association of farmers.

**Figure 3.** Type of production that the respondents have been involved in



Source: Authors' research



The cultivation of agricultural crops has a long tradition in the territory of Kosovo and Metohija, which is confirmed by our research. The process of growing these crops directly depends on the age of the respondents, the average income of the household, the number of household members, as well as the area of land owned by the respondents. Having analyzed the obtained results, the authors came to interesting facts that are of great importance when considering the real situation on the ground which is presented in Table 4.

**Table 4.** Corellation matrix of analyzed parameters

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
income (1)	1										
purchase OP (2)	.175**	1									
years (3)	.211	-.126**	1								
eduacation (4)	.097	.328**	.368	1							
satisfaction OP (5)	.318	.550**	.014	.220	1						
nutritional value (6)	.157	-.141	.057	.128	-.193**	1					
municipality (7)	.210	.323	-.178	.261	.314	-.137	1				
production (8)	.073	-.145**	.201	-.329	.229	-.271	.034**	1			
terms for OP (9)	-.110	.547	.191**	.101	.351	.035	-.391	-.122	1		
land area (10)	.248	.424	.016	-.216	.363	.036	.218	.125	-.269	1	
costs (11)	-.108	.286	.101	.431	-.303	.088	-.076	.347	.057	.261**	1
subsidies (12)	-.026	.238	.137	-.252	.119	-.067	.096	.393	.164	.268**	-.076

Source: Authors' research

Respondents were asked „do you think that organic production is possible in their immediate vicinity“. The largest number of respondents answered that engaging in organic production is possible and that natural potentials allow it (66,9% of respondents), while almost a third of respondents believe that engaging in organic production is not possible or have no opinion (34,1% of respondents). Agricultural production in almost all municipalities is in a period of stagnation, and the main shortcomings, according to respondents, are the low level of technical equipment suitable for production and the lack of adequate mechanization. Respondents were generally opposed to the question „do you have the need or conditions to expand production“ in terms of answers. More than thirty/four percent (34,7%) of respondents answered that they plan to expand production, but there are no conditions for that, 18,6% of respondents point out that they plan to expand production, but for them the limiting factor is the lack of knowledge about the essence of organic production. Only 11% of respondents have the conditions and plan to expand production, while 35,8% of respondents neither think nor need to expand production. Continuing the question about the planned expansion of production, the respondents expressed their views on the possibility of training (courses, education) in the field of organic production. Almost thirty percent (28,7%) of respondents stated that they would attend some kind of education or course on organic production if it were organized in their municipality. Also, a good part of the respondents (23,3%) pointed out that they are interested in a some kind of education if it would be organized by professionals, or if they would receive certificates of completion of the course

(13,2%). A significantly smaller number of respondents are certainly planning training in this area (11,1%), while slightly less than a quarter of respondents (23,6%) do not think about it at all. More than 90% of respondents involved in organic production said it would mean some form of subsidy or local or international aid. When it comes to a specific amount that would encourage them to further work, mostly all respondents were unanimous and regardless of the differences in the area of land they own, they pointed out that the amount of more than 4 000 euros would mean the most to them.

### Discussion

As can be seen in Table 4, although there is a highly statistically significant relationship between the variables „*average household income of respondents*“ with the „*degree of frequency of purchases of organic products*“ ( $p = 0,003$ ), Pearson's correlation coefficient is quite low ( $\rho = 0,175$ ), so this relationship can be characterized as a slight positive relationship. This shows that we can claim with high probability that the buyers of organic products are of high purchasing power, but not that those who do not buy them, do not do it just because of lack of money. Authors Kuhar and Juvancic (2010) came to similar results in their research on determinants that influence consumer behavior when buying organic products in Slovenia. The slight positive relationship between the observed variables is a consequence of the difference in the place of residence of the respondents. Namely, respondents in the Kosovska Mitrovica and Kosovo districts have higher average household incomes, which allows them to spend more money on the purchase of organic products, unlike respondents in the Kosovo – Pomoravlje and Prizren districts whose average household incomes are significantly lower. Also, a highly statistically significant relationship ( $p = 0,031$ ) was found between the variables „*frequency of purchases of organic products*“ and „*years of respondents*“ with the value of Pearson's coefficient ( $\rho = -0,126$ ), which indicates that there is a slight negative relationship between them, ie that older respondents are less likely to buy organic products and vice versa. The largest number of respondents over the age of 40 live in rural areas, the municipalities of Obilić and Vučitrn, as well as in the urban areas, the municipality of Lepsavić. What is characteristic for this group of respondents is that in most cases they have only completed primary or secondary school, and this factor is directly related to consumer awareness of decisions to purchase organic products. Thus, the „*frequency of purchases of organic products*“ is weakly but positively related to the „*level of education of respondents*“ ( $p = 0,000$ ;  $\rho = 0,328$ ).

Correlation matrix shows that there is a relationship between „*frequency of purchases of organic products*“ and „*satisfaction with the supply of organic products*“, which means that the greater the satisfaction with the offer of organic products, the more often organic products are bought. Male respondents are proved to be more satisfied with the offer of organic products on our market. This satisfaction is attributed to the fact that the male sex is an epithet for someone who is the „head of the house“ and who has a higher average income compared to female respondents, which was confirmed

by this research. It is not easy to process a product that is authentic and that provides something new and different to consumers compared to those that can already be found on the market. The slightly negative correlation ( $\rho = -0,193$ ) between „*satisfaction with the supply of organic products*“ and „*nutritional value*“ of organic products as the main reason for buying is highly statistically significant ( $p = 0,002$ ). Nutritional value is one of the most important reasons for buying organic products, but it is not the most important. However, younger respondents mostly cite nutritional values as the main motive for buying organic products. On the other hand, older examinees point out that the primary place, however, belongs to taste and the positive health impact that organic products have. In addition to the positive impact on health, nutritional values and all other attributes attributed to organic products, consumers expect the offer of organic producers to justify the premium price they are willing to pay. It is interesting that the respondents claim that they mostly buy organic products on the markets from people they trust, relatives or neighbors.

There is a very highly statistically significant correlation between the variables „*municipality to which you belong*“ and „*type of production you have been engaged in*“ ( $p = 0,000$ ;  $\rho = 0,034$ ), which means that the respondents are engaged in the type of production typical for the municipality in which they live. The municipality of Zubin Potok is distinguished by its hilly and mountainous landscapes, and agriculture is the main activity of the population. An example of good practice in organic production is the agricultural cooperative „Zubin Potok“, which was founded before the Second World War. This cooperative started dealing with organic food production in 2012, listening to the wishes and needs of consumers in the local market. Mr. Rade Utvić, director of the cooperative, points out the following in the conversation:

*„We are not specifically engaged in organic production, but our subcontractors are, and do it for us. We cooperate with a dozen countries in Europe: Slovenia, Bosnia and Herzegovina, Macedonia, Montenegro, Albania, Austria, Germany, Switzerland, Italy, Bulgaria and Poland. The very process of production and processing of our products implies a strict ban on the use of pesticides and fertilizers, and what is allowed is the use of nettle as a natural growth stimulant with care and manual processing. Our cooperative offers 25 types of organic juices, 6 types of organic fruit spreads, 3 types of marmalade (pomegranate, dogwood and mixed) and beets. The largest export is directed to Germany, there we have 4 or 5 partners with whom we cooperate. Customers are very demanding, when it comes to organic products, they take care of the smallest details. What is interesting is that our cooperative is the winner of the „Ethnobrاند 2018“ award given by the Cooperative Union of Serbia, which is just another proof that good products have been widely recognized.“*

The correlation matrix also shows that there is a relationship between the variables „*age*“ and the „*type of production*“ that respondents deal with (Table 4). The bearers of agricultural farms in the enclaves are people of primary age who, primarily, take part in agricultural activities, while the younger population mostly migrates looking for better living conditions

with easier and better paid jobs and is not interested in cultivating the land. The exceptions are the municipalities of Obilić, Vučitrn and Leposavić, where most of the younger respondents are involved in classical or organic production. According to them, the feeling that you are „on your own“ with the desire to „be your own boss“ is the basic motive for the revival of Serbian farms in these municipalities. However, it is notably important to know that the village still remains as one of the options for dwelling place. As this study comprises mainly young and middle-aged people, it is assumed that any form of financial support would encourage them to be better at what they do, and thus certainly ensure survival in their hometown despite rather poor living conditions. However, the access to finance in agriculture and organic production has been identified as a limiting factor for development, in terms of fixed and variable inputs (Ljumović et al. 2015).

The results of the reserach highlight the relationship between the variable „age“ and the attitudes of the respondents about whether „engaging in organic production is possible in their immediate vicinity“ as a very highly statistically significant ( $p = 0,001$ ;  $\rho = 0,191$ ). Organic production is present in almost all districts in Kosovo and Metohija, with certain oscillations. Low level of education, insufficient financial support, traditional habits and lack of support from younger family members are just some of the reasons that limit farms to engage in organic production.

Pearson's coefficient ( $\rho = 0,261$ ) indicates a weak positive correlation between the variables „arable land“ of organic producers and „investment costs“ with high statistical significance ( $p = 0,004$ ). Investment costs as the main limiting factor in production, based on research results, directly affect the needs of organic producers to expand production capacity. This is especially true for organic fruit producers in the municipalities of Leposavić and Zvečan, bearing in mind that fruit types and varieties must be strictly adapted to local conditions. In contrast, producers of vegetable organic products in the municipalities of Gračanica and Novo Brdo face the problem of fragmentation of land, which is an obstacle to the development of sustainable production, cost-effective use of modern machinery and reducing production costs. Expenditures of organic producers can be offset by some form of subsidies from state or local authorities. Consequently, there is a highly statistically significant link between the variables „arable land“ and „subsidies“ ( $p = 0,004$ ;  $\rho = 0,268$ ), which would encourage the development of organic production. Almost unanimously, all respondents pointed out that any form of subsidy would mean an incentive for the development of organic production. relatively small number of organic producers from the Kosovska Mitrovica district who cultivate up to 3 ha of land. Some of the reasons for refusing any form of subsidy are good average income and joint work of household members, so they can cover all costs incurred in production without the use of modern machinery With the production and placement of organic products on the local market, the enclave can generate surplus revenue and thus create an economic basis for sustainable development of multifunctional agricultural households in Serbian enclaves (Maksimović et al., 2015).

In general, organic food production is underdeveloped in the Western Balkans, despite numerous efforts. The countries of the Western Balkans, on their way to the European Union, are increasingly committed to mutual and joint cooperation. Taking into account the importance of the agricultural sector in the economic development of these countries, it is essential that this process brings the desired results in increasing competitiveness, improving regional trade, fostering food chain rehabilitation and economic growth (Volk et al., 2015). Good cooperation between the countries of the Western Balkans, in political, economic, environmental and other aspects, can significantly encourage the development of the agricultural sector, which in contemporary conditions of promoting the green economy can be reflected in increasing expansion and development of organic production in this area. However, almost all countries of the Western Balkans face insufficient financial support, and as one of the recommendations for further development in the field of healthy food production, in addition to direct payments per hectare and head of livestock / hive, measures to improve the quality of organic products are covered, as well as controls and certifications, procurement of grants and other support measures (Vehapi, 2019). The European Union Office is one of the major donors supporting the agriculture and rural development sector in the surrounding countries. Donations are continuously awarded to producers in Kosovo and Metohija and are focused on several programs, EURED III, Grant Scheme for the North I and II. So far, a total of 79 projects have been approved, of which 44 are aimed at agricultural and rural development. The distribution of projects by municipalities in the north of Kosovo and Metohija is represented in Table 5.

**Table 5.** European Union donations for the development of agriculture in the north of Kosovo i Metohija

Municipality	Number of approved projects in GS I and GS II	Number of projects for agricultural development in GS I and GS II	Projects for agricultural development (%)
Kosovska Mitrovica	19	2	10,5
Zvečan	16	8	50
Zubin Potok	12	10	83,4
Leposavić	29	24	82,7

Source: Study „Are we living better?“, InTER, 2016.

What is especially considered in organic production in Kosovo and Metohija is the cost-effectiveness in relation to conventional products. The question is whether the higher costs and lower yields that can be expected from organic agriculture can be compensated, that is, whether the purchasing power and awareness of the population for the use of environmentally healthy food is so great that this branch of agriculture is profitable? The ratio of profits and costs in organic production is not known to agricultural producers. In organic production, yields are significantly lower, so the achieved price premium is a key determinant of the attractiveness and profitability of organic agriculture (Kuhar and Juvancic, 2010).

**Table 6.** Comparison of prices of conventional products and prices of organic products in Kosovo and Metohija

Product	Amount	Average price of conventional product on the market (dinars)	Average price of organic product on the market (dinars)
Tomato	kg	80	140
Cucumber	kg	60	120
Raspberry	kg	400	650
Potato	kg	60	150
Watermelon	kg	70	130
Apple	kg	70	280
Plums	kg	60	190
Pear	kg	130	240

Source: Authors' research

Based on the research on the development of organic production in Kosovo and Metohija, a SWOT analysis was conducted in which the strengths, weaknesses, opportunities and threats to its implementation were presented.

**Table 7.** SWOT analysis of organic production in Kosovo and Metohija

<p><b>STRENGTHS:</b></p> <ul style="list-style-type: none"> <li>✓ the structure of agricultural land in Kosovo and Metohija is suitable for the development of organic production;</li> <li>✓ interest of the population in organic production;</li> <li>✓ high unemployment rate as a chance to start your own business;</li> <li>✓ consumer awareness of how healthy organic products are;</li> <li>✓ interest of foreign investors.</li> </ul>	<p><b>WEAKNESSES:</b></p> <ul style="list-style-type: none"> <li>✓ lack of legal regulations;</li> <li>✓ difficulties with certification of organic products;</li> <li>✓ insufficiently developed market of organic products;</li> <li>✓ weak cooperation between subcontractors;</li> <li>✓ lack of subsidies.</li> </ul>
<p><b>OPPORTUNITIES:</b></p> <ul style="list-style-type: none"> <li>✓ export of organic products with special emphasis on fruit products;</li> <li>✓ placement of organic products in EU member states;</li> <li>✓ placement of organic products in the countries of the Western Balkans, which strengthens cooperation between countries;</li> <li>✓ the possibility of providing mutual support and exchange of experiences between subcontractors;</li> <li>✓ organizing the first organic fair where organic products of producers from the territory of Kosovo and Metohija would be presented.</li> </ul>	<p><b>THREATS:</b></p> <ul style="list-style-type: none"> <li>✓ an increasing percentage of the elderly population in rural areas;</li> <li>✓ low level of competitiveness;</li> <li>✓ poor marketing channels;</li> <li>✓ the lack of education aimed at organic producers;</li> <li>✓ insufficient support to producers in the conversion period.</li> </ul>

Source: Authors' research



## Conclusion

Organic production plays an important role in the economic and social development of Serbian farms in Kosovo and Metohija. Rich natural potentials, mostly rural areas, small areas of arable land and traditional families are just some of the characteristics that can intensify its application in the future. As organic production is most represented in the Kosovo and Mitrovica District, and the least in the Prizren District, it is necessary to strike a balance, ie create a sustainable development program that will influence those engaged in agricultural production to slowly embark on the conversion process by which they would make balance between the needs of the local market and local territory. Respondents were given the opportunity to express their opinion and give concluding guidelines that may be helpful to organic producers. The most interesting ones can be singled out:

- it is necessary to conduct mapping of plantations (registered and unregistered) in order to help individual producers south of the Ibar;
- an association of organic producers in the territory of Kosovo and Metohija should be established in order to exchange experiences;
- mandatory organization of seminars and additional education on the importance of organic products should be organized;
- a HUB information center for the development of organic production should be opened, where a younger population could be hired, while the older population would be mentoring;
- individual producers could be connected with small shops in order to exchange products;
- it should be insisted on the help of local and state authorities;
- greater financial support in the form of subsidies should be provided;
- people should fight for a higher price of organic products;
- it should be established a stable market of organic products through joint cooperation of subcontractors from Kosovo and Metohija.

Due to the problems with land fragmentation, organic producers are advised to try to slowly and thoroughly build a production space on their land where the line between human activities and nature will be barely noticeable. In this way, great benefits can be left as a legacy to some future generations. However, in order to achieve the aim to make organic production to fully flourish among households in Kosovo and Metohija in the coming period, the priorities must be to revitalize rural areas and retain young people in the countryside, which would inevitably lead to a better life and increase employment by investing in production and processing of organic products. Even though chance and ideas exist as basic drivers, it takes a lot of time and enthusiasm for organic production



to get its loyal caregivers and consumers, since their satisfaction and dedication is a reflection of the success of this concept, as the famous Ciceron once said, „if we follow nature as a leader, we will never go astray.“

### Conflict of interests

The authors declare no conflict of interest.

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