

UDC 332.14/.15:631.147(497.11)
332.14/.15:631.147(497.4)
332.14/.15:631.147(436)
Professional paper

HADZI NAUMOVA-MIHAILOVSKA KATERINA*

**ORGANIC AGRICULTURE IN SERBIA, SLOVENIA AND AUSTRIA-
POSITIVE EXPERIENCES FOR DEVELOPMENT OF ORGANIC
AGRICULTURE IN THE REPUBLIC OF MACEDONIA**

Abstract:

Organic production is recognized as one of the ways that lead to sustainable development, meet social expectations when it comes to environmental and sustainable management of natural conditions and development of rural areas. In recent years it has increased interest and an upward trend in terms of consumption and production worldwide. In the countries of European Union (EU) there's a great interest and public support for organic farming. This stems from the fact that in 1991 the European Union adopted Council Regulation no.2092 / 91 (EEC No.2092 / 91), which in detail defines the requirements to be met for certain agricultural products or food can be labeled as organic. In order to emphasize the possibilities offered by organic production in terms of its organization of entities, the paper presents the positive experiences in countries where organic agriculture is an important and developed production system. It comes to Serbia, Slovenia and Austria, i.e. countries that are characterized by specific features which arise significant findings in efforts to promote the development of organic farming in the Republic of Macedonia.

Key word: development of organic agriculture, organic production, organic farming

JEL classification: Q16, Q19

* PhD, Research Associate, Institute of Economic, University Ss. Cyril and Methodius, Skopje, katerina@ek-inst.ukim.edu.mk

Introduction

Organic farming offers a safe and healthy diet, on the one hand, and on the other hand, because it features traditional way of cultivation, builds and preserves local knowledge and tradition. The principle of organic production is utilizing local resources (seeds, seedlings, fertilizers, etc.) and it enables greater cost-effectiveness on one side and contributing to a more rational use of existing resources on the other. Republic of Macedonia follows the world trends in organic production and it is a significant part of Macedonian agriculture. The organic sector in the country is characterized by a heterogeneous structure in which besides agriculture, are included environmental, social, health and economic structures. The organic sector in Republic of Macedonia is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy. Practice show that all participants are united by certifying the method and procedure of producing organic products. Nevertheless, there is inadequate internal organization in the structure which is results as poor market organization, insufficient promotion and recognition of organic production in the Republic of Macedonia.

In order to promote and strengthen the organic farming in the Republic of Macedonia, the paper presents some positive experiences in Serbia, Slovenia and Austria, countries that are characterized by specific features and where organic agriculture is an important and developed production system. The main goal is to identify positive experiences from mention countries and to estimate the opportunities for their reception in organic sector in Republic of Macedonia.

The analysis is based on official data obtained from the State Statistical Office from the countries taken for example. Also, for the analysis were used the National strategy for organic agriculture, Law for organic production and the annual reports on agriculture and rural development prepared by the Ministry of Agriculture of the mention countries.

1. CONDITION OF THE ORGANIC AGRICULTURAL PRODUCTION SECTOR IN THE REPUBLIC OF SERBIA

The development of organic production in the Republic of Serbia started at the end of the 1980s from the last century, first in the northern parts, more

precisely on the territory of Vojvodina. In 2000, the Law on Organic Production was adopted, and since then, faster development has been observed, which is still ongoing.¹ Despite the potential and steady increase in the main indicators, organic farming in the Republic of Serbia hardly achieves the desired development. With the support of the Ministry of Agriculture and Water Management, six centers for organic production development have been established (Selena, Leskovac, Svilanac, Valjevo, Negotin, Uzice) and the Vojvodina Cluster for Organic Agriculture, which has joined all stakeholders from the territory of Vojvodina. Also, some local municipalities have implemented initiatives for organic farming development with the support of producers of organic production (Subotica, Novi Sad, Belgrade). Consequently, some movements in the organization of the sector have been developed, such as a number of different, locally active associations, clusters, organizations, cooperatives and interest groups. With the adoption of the Law on Associations, it appeared opportunity for achieving business activities and create capital.²

Based on data from the Ministry of Agriculture of the Republic of Serbia, there is a trend of increasing interest for organic farming. (Table 1). Participation of organic farming in the total agricultural production in 2015 was 0.44%. This area does not cover areas for collecting wild berries, mushrooms and medicinal herbs because there is no official methodology on the basis of which it is possible to obtain data on the total area on which the collection of wild self-growing plants.

Table 1 Areas under organic production in the period 2012-2015 in the Republic of Serbia

	Areas under organic farming in hectares	Participation of organic farming in the total agricultural production in percent %
2012	6.340	0,18
2013	8.228	0,23
2014	95.47,8	0,28
2015	15.298	0,44

Source: Ministry for agriculture, forestry and water management of Republic of Serbia, <http://www.minpolj.gov.rs/>, 31.3.2018

¹ Law on Organic Production, Official Gazette RS No. 30/10

² Law on Associations, Official Gazette RS No. 51/09

The highest percentage is organic crop production - 68.7% (including meadows and pastures). The most common crops are cereals, then fruits and vegetables. From livestock production, sheep breeding, cattle breeding and goat breeding is most commonly available.³ Vojvodina is most developed region with a share of 75.85% in the total organic production in the year 2015.⁴

The main unit of the organization of organic sector in the Republic of Serbia are the producers divided into two groups:⁵

- Individual farmers, those who have signed a contract directly with some of the control organizations
- Subcontractors, whose production is subject to group certification (in accordance with the Law on organic production). Thus all producers are in a contractual relationship with a company that purchases all the production intended for the market. Also, is providing support in the form of raw materials, education and covering the certification costs (the company is the holder of the certification, and not the manufacturer).

The second type of organization proved to be very successful judging by the number of participants that far exceeds the number of individual agricultural producers. According to the structure, size and production orientation of the economy, there are three categories of holdings, i.e. farms. The first group is small, mainly family farms in which plant and animal production is integrated. The second group is specialized farms, for example organic fruit production or organic wine production, which is not favorable for this type of production. The third group is large farms that combine plant and animal production on large surfaces, often also have a processing center, which is a model for this production.

Companies with refrigerators dominate the organic sector because it is easier to get a cooling certificate than to invest in a complete processing line. In the Republic of Serbia, there are more than 40 companies that are engaged in the processing of organic food. In some of them, the main activity is processing a conventional food, but they have an additional line for processing organic food, while in the other main activity is the processing of organic raw material. Also, there are producers dealing with the processing of organic food,

³ Simić I., *Organska poljoprivreda u Srbiji 2017*, Nacionalno udruženje za razvoj organske proizvodnje Serbia organika, 2017, p. 16

⁴ *Ibid*, 17

⁵ *Ibid*, p.18

but most of them have signed an agreement with large companies. Producers who do not have a cooperative contract with purchasers sell their products on the farm or to known buyers. Fruit and vegetable producers, often due to small quantities, make jams, juices and the like, and sell it to known buyers or on the nearby market.⁶

In the Republic of Serbia there are 35 advisory services for which the Ministry of agriculture, forestry and water management Economy and the Provincial Secretariat for Agriculture, Water Management and Forestry are responsible.⁷

The civil sector has greatly contributed to the development of organic farming, although there is an evident problem with the lack of funds needed for the functioning and implementation of their activities. The Ministry keeps records of all registered associations. Many of these organizations are organizers or co-organizers of fairs, gatherings and manifestations in the field of organic farming and have continuity for many years.

2. CONDITION OF THE ORGANIC AGRICULTURAL PRODUCTION SECTOR IN THE REPUBLIC OF SLOVENIA

A significant part of the arable agricultural land in the Republic of Slovenia falls into unfavorably developed areas. Therefore the state decides that the narrow selection of crops should be towards ecological production of exceptional quality. The main goal of the Slovenian agricultural policy is to improve the position of farmers in terms of revenues by diverting the processing industry to their needs, to set up appropriate organizational forms and to complement the agricultural activity with other economic activities such as tourism, craftsmanship in accordance with the environment. The beginnings of organic farming in Slovenia are observed from the nineties of the 20th century when environmental lectures were organized by professors from foreign countries and non-governmental organizations for environmental production were formed. In 1998 it was established Institute for Sustainable Development with Department of International Education of supervisors for organic farming.⁸ The same year it's

⁶ Ibid, p.20

⁷ Ibid, p.27

⁸ Akcijski nacrt razvoja ekoloskega kmetijstva v Sloveniji do leta 2015, Ministrstvo za kmetijstvo, gozdarstvo in prehrano (MKGP) Vlade Republike Slovenie, 2006, p.17

performed controls by foreign international certification houses for 41 manufacturers and the interest for this type of production has growing. This year (1998) is considered the beginning of intensive development of the market for organic agricultural products. Namely, the first fair of organic products was organized in Ljubljana, the state advisory service is involved and organizes trainings and education for organic agricultural production.

According to the latest statistics, organic agricultural production represents 8.69% of the total agricultural production in the Republic of Slovenia, which is a very high percentage, compared to the EU countries.⁹ The number of organic agricultural holdings varies steadily from year to year (Graph 1). In 2016, 2933 organic agricultural holdings were registered, which represent 65% of the total number of registered agricultural holdings in Slovenia. So far, the largest share (83%) of the entire organic land in the utilized agricultural area is still permanent meadows and pastures. In the production, from year to year, the first place is far ahead of everyone involved in the participation of pastures and indirect livestock production.¹⁰

The control of organic production or processing is carried out by control organizations that meet the technical, administrative and organizational requirements prescribed by the Minister for agriculture. Environmental products or food products must be accompanied by a certificate and an official eco-label market. Organic products or food products must additionally be marked with brands such as Biodar and Demeter. Inspection of the control organization is carried out by the Agricultural Inspection and the Inspection Service for quality control of agricultural products and food products.

⁹ Slovenia – The structure of agriculture, www.forumoragriculture.com/news_feature/slovenia, 20.6.2018

¹⁰ *Ibidem*

Graph 1 Organic agricultural holdings in the Republic of Slovenia in the period 2008-2016



Source: Statistical office of Republic of Slovenia, <http://www.stat.si/StatWeb/en/News/Index/6784>, 31.3.2018

In Republic of Slovenia there are two major organizations of producers of organic farming: Union of Slovenian Organic Agricultural Associations (also called Biodarska Association) and the Association AJDA. Within the Union there are five regional associations that cover the entire state that share the same production standards and strive for greater conversion of the farm: Slovenian Association of Organic producers (SOFA), Association for organic agriculture in north-east Slovenia, - The Association of Organic Farmers in the Coastal Region, Association of organic farmers Health Living and Association of organic agriculture Gorenjka. Since the establishment of the Union, two other associations have been established in 1999, which aim to enter the Union: Detlenica (Association of organic agricultural farmers and producers) and Association for organic agriculture Dolenska, Posavje and Belokozina. The Union sells its products with a joint logo (organic logo) for organic products - Biodar.

AJDA is an association of biodynamic production with about 400 members of most non-farmers. They use the international logo for biodynamic production Demeter-Logo.

There are several other organizations that participate in organic farming or support its development, such as the Slovenian Per culture Society and some local organizations. The main drivers of organic farming in the Republic of

Slovenia are non-governmental organizations for raising the environmental awareness among the citizens.

What gives a special feature in the organization of the organic sector in the Republic of Slovenia is the participation of tourism in the development of this sector. Namely, out of 503 registered organic farms in the Republic of Slovenia, 39 are also engaged in tourism.¹¹ Most of the organic farms are members of Biodarska Association, and more than half of them use the brand Biodar. The Association of Tourist Farms of Slovenia promotes these farms along with other tourist farms through promotional catalogs and websites.

3. CONDITION OF THE ORGANIC AGRICULTURAL PRODUCTION SECTOR IN THE REPUBLIC OF AUSTRIA

In the Austrian agricultural policy, there are four main influential actors, the Ministry of Agriculture, the Agricultural Chamber, Cooperatives (united in Raiffeisen Wernbund) and AMA (Agrarmarkt Austria). In particular, the agricultural chamber and its social partners are considered relatively more important in the political process than the parliament. Austria is one of the countries with a successful story about organic farming, both in terms of production size and political support at the national and EU level. Organic farming is concentrated in the regions around the Alps, in particular the Tyrol, then Steiermark, Salzburg, Burgenland. About 65% of all organic farms are members of an organic producer organization and private certification bodies. There are 11 organizations in Austria, but Ernte is the oldest and the largest percentages are members of this body (55%). The others follow the Code of Standards inspired by the Agricultural Chambers. Most of these farms are located in the Tyrol and Salzburg area, while Ernte is concentrated in the southern and southeastern regions.¹²

Until 1990, organic producers were motivated to produce organic products from their beliefs. This changed with the introduction of subsidies for this type of production and the possibility of selling these products at a higher price. Ernte played an important role in promoting organic farming as a way to

¹¹ Organic farming in Slovenia, <http://www.organic-europe.net/country-info/country-report/slovenia.html>, 2.06.2018

¹² Michelsen J., Lynggaard K., Padel S., Foster C., Organic Farming Development and Agricultural Institutions in Europe: A Study of Six Countries, Organic Farming in Europe: Economics and Policy Vol. 9, Stuttgart-Hohenheim, 2001, p.24

maintain the Austrian traditional model of family farming. Thus, the promotion of organic farming focuses on health, animal welfare and survival strategies for the traditional Austrian-type farmer.

At the beginning of the development of organic farming in Austria, information and introduction was imposed by farmers through informal links between producers. Then, they themselves began to form information and advisory services. This was supported by the official institutions that conducted trainings for farmers, partly because of the regional development of certain areas under which organic initiatives are covered. As a result of the rapid development in the period 1992-1995, the agricultural chambers recognized the need to be involved, primarily because of the growing number of farmers who joined, but also because of the number of farmers who produced organic production and were not members of organizations. In the development of organic farming in Austria several parties are involved such:¹³

- Ministry of Consumer Protection;
- Ministry of Agriculture, which has introduced grants for organic producers associations with a national subsidy for redirecting farmers to organic production;
- AMA (Agrarmarkt Austria) is an organization that organizes the marketing of agricultural products;
- The Organic Organizer Organization (Ernte) is an important factor in lobbying for organic agriculture; it supports members in the marketing of their products and provides direct marketing. It is the leading organization in the umbrella organization ARGE Biolandbau (Arbeitsgemeinschaft zu Förderung des biologischen Landbaus).
- Trade companies, especially the Billa and Merkur markets, which introduced three main brands of organic products (“Ja natürlich” from Bil / Mercury, “Landfrieden” of some dairies and “Spar” Natur pur);
- Regional cooperatives.

There is no formal organization that coordinates all organic production and farming organizations in Austria. For Austrian agriculture in general, the Agricultural Chambers are the official representatives of all Austrian farmers and organic farmers are included as compulsory members.

¹³ Ibid, p.27

4. CONDITION AND ORGANIZATION OF THE ORGANIC AGRICULTURAL PRODUCTION SECTOR IN THE REPUBLIC OF MACEDONIA

Although it is part of agriculture, organic sector in Republic of Macedonia is characterized by a complex and heterogeneous structure in which, besides agriculture are included environmental, social, certification, health and economic structures. This complexity and heterogeneity, of course, is reflected in the way in which the entities are organized in organic farming, and even makes them different from other ways of ecological production. The organic sector in the country is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy.

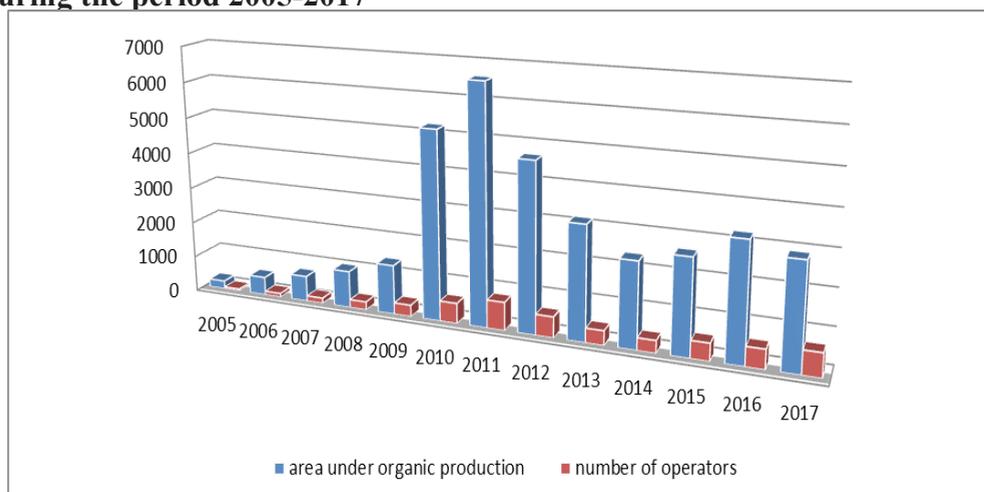
- The producers are in the form of an individual farmer and family farm (farm which the family constitutes the basic workforce).
- The cooperatives in the country are regulated by the Law on Cooperatives¹⁴ and aiming economic association of producers on a voluntary basis, to promote organic production and joint market. Given the mentality, lack of confidence in the system that result in negative experiences Cooperatives from the previous system, cooperatives in the Republic of Macedonia are very few in number.
- The associations are often common form of jointly organizing of the producers. The main purpose of associations is a joint purchase of raw materials, purchase of equipment and other fixed assets and exercising the rights to influence relevant government institutions.
- The highest form of association in the country's Federation of Organic Producers (FPOP) aimed at ensuring the coordination and leadership of the organic movement in the country.
- Advisory entities for organic production offer assistance in developing business plans, development plans and feasibility studies, as well as filling in all necessary documents in the control and certification of organic production.
- Certification bodies accredited by the Accreditation Institute and authorized by the Ministry of Agriculture, Forestry and Water Management: Balkans Biocert and Pro-CERT.

¹⁴ Law on Associations and Foundations, Official Gazette of the Republic of Macedonia, No.52/2010 and No.135/2011

- In the implementation of organic agricultural policy, directly or indirectly participate: Ministry of Agriculture, Forestry and Water Management, Ministry of Environment and Physical Planning, Ministry of Economy, Ministry of Finance, Institute for Accreditation of Macedonia (IARM), Standardization Institute of the Republic of Macedonia (ISRM), National Institute of Industrial Property (SIPO), Higher education and scientific research institutions, Agency for Promotion of Agricultural Development (NEA), Agency for Financial Supports Agriculture and Rural Development (AFSARD).

Organic production in the Republic of Macedonia is recognized because of traditional mode of production in some regions where they are produced. The Macedonian organic production comprises 2.74% of the total cultivated land in the country.¹⁵ The area under organic production has intensive growth in 2010 and 2011 which is in the period of establishing of Law of organic production.¹⁶ (Graph 2)

Graph 2 Area under organic production and the number of operators during the period 2005-2017



Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.03.2018

¹⁵ National Strategy and Action Plan for Organic Farming 2007-2013, MAFWE, 2007, p.14

¹⁶ Law on Organic Agriculture, Official Gazette of the Republic of Macedonia, No.146/2009 (Law on Organic Agriculture came into force in 2010 and since, it regulates the production, preparation, processing, finishing, storage, transportation, distribution, marketing, sale, labeling and control of organic products that are used in the methods of organic production)

In the Republic of Macedonia organic agriculture is regarded as important to the development of the national agriculture and food production. It enables the producers to perform on the same market with quality products which in turn is related to the possibility of achieving higher profits compared to when it could produce products in a conventional way, and large subsidies granted by the state. However, practice shows many problems related with organization, cooperation and communication between all entities in organic sector:¹⁷ organic market is limited by uncertain sale of the production, export disorganized followed by inadequate organization of producers of organic products or associations (fragmentation among the associations i.e. the existence of several associations of producers of organic products for the same products in the same region); insufficient promotion and recognition of organic production in the country.; low supply of raw materials for vegetable production from the domestic market, including seeds and planting material and protection products which are permitted for use in organic crop production; the discontinuous and insufficient promotion of the benefits of organic agriculture for environment and human health, contributes to low consumer awareness of these products.

Recommendation and conclusion

Organic agriculture production in the Republic of Macedonia is one of the high interest agricultural sectors because its concept that united traditional, health care, protection and promotion of the environment and economic viable of production. Besides that the method of production in the country is not an issue because all participants are united by certifying the method and procedure of producing organic products and state support for organic agriculture is high, practice shows that Macedonian organic sector are facing problems in terms of organization cooperation and communication between all entities. The paper present countries with successful organic agriculture sector where it is an important and developed production system. Republic of Macedonia should take in consider this experience:

- ✓ In Republic of Serbia most of the producers are united as subcontractors i.e. all producers are in a contractual relationship with a company that purchases all the production intended for the market. Also, the company is providing support in the form of raw materials, education and covering the certification costs (the company is the holder of the

¹⁷ IPA Rural Development Program “2014-2020”, 2015

- certification, and not the manufacturer).
- ✓ Organic products or food products from republic of Slovenia must be marked with brands such as Biodar and Demeter. In the organization of the organic sector in the Republic of Slovenia special feature gives the participation of tourism and craftsmanship. The Association of Tourist Farms of Slovenia promotes these farms along with other tourist farms through promotional catalogs and websites.
 - ✓ In Republic of Austria, the Ministry of Agriculture, the Agricultural Chamber, Cooperatives (united in Raiffeisen Wernbund) and AMA (Agrarmarkt Austria) are the official representatives for promotion and development of organic farming. They are official institution that support and coordinate the development of organic agricultural sector in the country.

References :

1. Akcijski nacrt razvoja ekoloskega kmetijstva v Sloveniji do leta 2015, Vlade Republike Slovenie
2. IPA Rural Development Program "2014-2020", 2015
3. Michelsen J., Lynggaard K., Padel S., Foster C., Organic Farming Development and Agricultural Institutions in Europe: A Study of Six Countries, Organic Farming in Europe: Economics and Policy Vol. 9, Stuttgart-Hohenheim, 2001
4. Law on Associations, Official Gazette RS No. 51/09
5. Law on Associations and Foundations, Official Gazette of the Republic of Macedonia, No.52/2010 and No.135/2011 Law on Organic Production, Official Gazette RS No. 30/10
6. Law on Organic Production, Official Gazette of Republic of Macedonia, No.146/2009
7. Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.03.2018
8. National Strategy and Action Plan for Organic Farming 2007-2013, MAFWE, 2007
9. Organic farming in Slovenia, <http://www.organic-europe.net/country-info/country-report/slovenia.html>, 2.06.2018
10. Simić I., Organska poljoprivreda u Srbiji 2017, Nacionalno udruženje za razvoj organske proizvodnje Serbia organika, 2017, p. 12
11. Slovenia – The structure of agriculture, www.forumagriculture.com/news_feature/slovenia, 20.6.2018
12. Statistical office of Republic of Slovenia, <http://www.stat.si/StatWeb/en/News/Index/6784>, 31.3.2018