

ORGANIC AGRICULTURE AND RURAL DEVELOPMENT IN AP VOJVODINA

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SUMMARY: The authors discuss the link between the concept of organic food production and the concept of rural development. They are discussing the limiting factors and problems of implementation these concepts in the Republic of Serbia and Vojvodina. The problems of rural areas in Serbia are primarily reflected in the fact that in most villages the population is mainly elderly people and the young are trying to achieve employment in large urban centres. As a possibility of reviving the village, the authors propose the concept of rural development which develops not only agriculture but also activities related to agriculture. The authors are especially considering organic farming and its role in this concept of development.

Key words: rural development, organic agriculture, farming, R. Serbia, Vojvodina.

INTRODUCTION

Contemporary trends in the movement of population place an emphasis on the uneven regional distribution of people. As a consequence of industrialization, speedy urban development and neglect of rural areas, there is a problem of rural depopulation and land reclamation. In the EU countries, these problems have been manifested in the sixties. In response to the growing problems of rural areas EU countries developed a new concept of rural development which emphasizes the development of agriculture, as well as activities related to agriculture. In Serbia, this concept is relatively new where the problem is primarily in the fact that Serbia has long applied a uniform concept of development that favoured the cities and neglected rural areas, which led to disparities and uneven development of rural and urban area (Tomaš, 2010).

Scientific review paper / *Pregledni naučni rad*

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The AP of Vojvodina, according to the OECD, classification is divided into seven regions. In each of these regions problems with the population have been observed in rural areas. Among the most significant issues are the problems of land fragmentation and the so-called problems of “nursing households” or senility of rural population (Njegovan and Pejanović, 2009).

The paper starts from the hypothesis that organic farming, due to its characteristics and level of development in Serbia, could be a possibility of development and revival of rural areas.

STATE AND PROBLEMS OF RURAL DEVELOPMENT IN VOJVODINA

The AP Vojvodina is a region of Serbia, in which agriculture is the dominant economic activity in most municipalities. Consequently, agricultural activity is the main source of income for many households in this region. However, the infrastructure is underdeveloped and existing capacity under-maintained and non-functional in terms of today’s, let alone future needs. Some municipalities have developed differently due to different levels of development of formal and informal institutions that reflect the different level of development of rural and urban population. So, there are drastic structural imbalances, institutional problems, unfavourable demographic trends and material constraints in most municipalities (Njegovan and Pejanovic, 2009).

In the AP Vojvodina there are 2,031,992 inhabitants (which makes 27.1% of the total population of the Republic of Serbia) living in 464 settlements, of which 412 are villages. In spite of that, for quite a long period of time there has been a trend of a drastic reduction in the total and active population in rural areas (Njegovan et al., 2010) (Table 1).

Table 1: Changes in population of Vojvodina according to the censuses from 1961- 2002.

Tabela 1: Kretanje stanovništva AP Vojvodine prema popisima od 1961- 2002. godine

	1961.	1971.	1981.	1991.	2002.
<i>Total population</i> Ukupno stanovništvo	1.854.956	1.952.533	2.034.772	2.013.889	2.031.992
<i>Agricultural population</i> Poljoprivredno stanovništvo	961.000	761.000	391.426	269.438	215.147
<i>% of total population</i> % od ukupnog	52	39	19	13	11
<i>Active agricultural population</i> Aktivno poljoprivredno stanovništvo	457.400	385.100	213.307	149.583	125.506

Source: Statistical Yearbook of the Republic of Serbia, 2007., pg. 74.

Although the nominal number of inhabitants is permanently increasing, the agricultural population in the last 40 years recorded a drastic decline (from 52% of the total population in 1961 to 11% in 2001 or 4.47 times less).

Out of the total available arable land, 67.2% accounts for privately owned rural properties. Private farms, despite their majority of land, have an unfavourable property structure. Specifically, the average size of arable land used by private farms is 3.52 hectares. This area is usually divided into three parts, the average size totalling 125 acres. These parameters are not good for conventional agriculture but, due to the higher prices

of organic products in the market, and the fact that organic agriculture is labour intensive, they can be considered as an advantage in organic agricultural production.

Number of agricultural households by 2002 census amounted to 201,475. As significant production units, there are also cooperatives and agricultural companies. In the AP Vojvodina there is a total of 497 cooperatives and agricultural companies that have around 624,000 ha of agricultural land, of which about 511,000 ha is arable land. Most of the cooperatives and companies have a surface area of 1,000 to 2,500 ha. Since organic agriculture depends on small and family households, the aspect of cooperation among producers is highly important, and in Serbia and AP Vojvodina is a segment that needs to be more efficient and active.

One of the most important factors of rural development of Vojvodina is its' population and civil society. The first is the consciousness of the people about the necessity of proactive attitude in relation to the development of local communities and rural areas in general, and its participation through the groups of citizens, associations, activities and all other groups that have an interest to participate in these processes. So far, this important aspect of rural development - participation of citizens and work to raise their capacity limit has represented a fundamental obstacle for more intensive development.

Summarizing, it can be pointed out that the problems of rural development in Vojvodina are, in fact, that agriculture is still dominant economic activity in most municipalities, that infrastructure is underdeveloped and existing capacity under-maintained and non-functional in terms of today, let alone future needs. Also, a significant problem is the insufficient development of formal and informal institutions and civil society and, therefore, marked disproportion between the development levels of municipalities.

Increased regional disparities are often the result of inefficient use of the local development area. (Pejanović et al, 2009). The rapid establishment of institutional conditions for more consistent and therefore more creative and more effective rural policy should result in reducing rural issues and in promoting local development potential. Reference to this is, in our opinion, the concept of organic agriculture which can bring the development of local area on higher level, providing more chance for local population to earn income.

In this developmental orientation significant socio-economic problems escalated and in the period after the year of 2000 Serbia started the process of transition of the economy and society. This process has not bypassed the rural areas that predominantly occupied the total area of the APV. As a result, it is reflected in the position of the rural population and the impact on the overall situation in rural areas.

SOME ASPECTS OF ORGANIC AGRICULTURE IN THE REPUBLIC OF SERBIA

Since January 2011, in the Republic of Serbia, organic farming is regulated by the Law on Organic Production („Official Gazette of RS“ No.30/10) which was enacted in the Republic Parliament in May 2010. This law and following legal acts had been prepared according to the, European Council Regulation (EC) No. 834/2007, Reg. (EC) No. 889/2008. and Reg. (EC) No. 1235/2008. The law is followed by the two rulebooks on organic production and import rules.

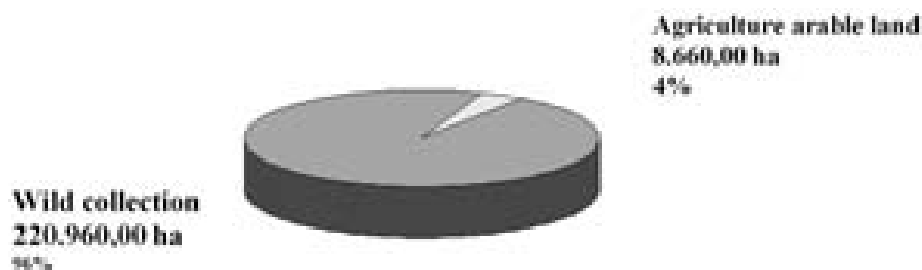
In order to achieve the standards set by world markets, support to the organic sector is necessary. The action plan for organic farming in Serbia reflects the political will

to establish strategic goals in the field as well as to engage all state administration capacities in achieving them. The overall objective of the action plan is to increase the total area of cultivated land as certified organic or in conversion to 50,000 ha until 2014.

After a number of activities aimed at supporting the organic sector, in May 2010, GTZ launched a project on organic sector analysis as well as opportunities for the development of different segments that can contribute to the improvement organic production in Vojvodina and Serbia, and indirectly, to the development of rural areas. For the purpose of research, GTZ engaged advisory consortium comprising German consulting houses AFC and the Swiss Research Institute of Organic Agriculture FIBL, with the support and cooperation of Serbian experts. The conducted research has so far included: site visits and scanning of the situation in the sector through interviews with various stakeholders in the sector; sector analysis with the collection of statistical data (area, species, regional distribution, number and type of actors, processing, etc.) in cooperation with relevant institutions and certification bodies whose activity is registered in the Republic of Serbia; farm survey with number of certified organic farmers from all over the country.

STRUCTURE OF ORGANIC AGRICULTURE IN THE REPUBLIC OF SERBIA

According to the GTZ survey data based on the information from active certification bodies, around 230.000 ha of land are currently either organically certified or in the certification process. This surface includes the land which is used for the collection of wild growing berries, mushrooms and herbals, representing 96% of the total organically certified national surface (almost 201'000 ha). The organic arable land is 3.5-4% of that area and accounts to about 8.660 ha. (Graph 1: source: Organic Agriculture in Serbia, At a glance, GTZ, 2010.)

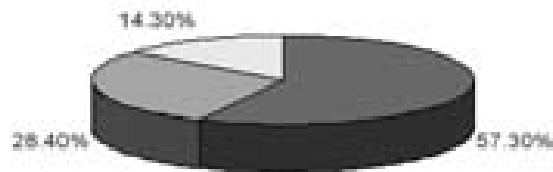


Graph 1: Structure of organic land in Republic of Serbia
Grafikon 1: Struktura organskih površina u Republici Srbiji

Out of the total agricultural land under organic cultivation, perennial crops are planted on almost 60% and annual crops on 15% ha. The balance 25% goes to grassland and pasture. (Graph 2)

Within the category of perennials, apples dominate, followed by different berries, notably raspberries, and plums. Cereals, soybeans and vegetables are the main annual crops cultivated.

Field and vegetable crops
1.237,00ha



Grassland and pasture
2.460,00ha

Perennial crops
4.964,00ha

Graph 2: Structure of organic crops in Republic of Serbia
Grafikon 2: Struktura useva na organskim površinama u R. Srbiji

Source: Organic Agriculture in Serbia, At a glance, GTZ, 2010.

In terms of regional distribution and importance of organic farming in some regions, research has shown that 90% of field and vegetable crops are produced in Vojvodina, while perennials and pastures and meadows are mainly localized in the region of Southern and Western Serbia. In Vojvodina, the most important are soybeans, corn and wheat and most of these areas are in the period of conversion. In addition to cereals and industrial crops in Vojvodina in the system of organic farming are also fruits and various vegetables.

In South and West Serbia, the production of fruit species is significant, especially raspberries, strawberries, and blackberries, but also apples and plums. Almost all production is export driven.

The survey data estimate that at least 3,000 small-scale farmers are involved in organic production. In addition, farmers involved in wild collection in certified regions are not registered. Regarding market-near actors, most of them are involved in different activities at the same time (processors are likely to be also exporters, traders, input suppliers, and importers). The survey data relates to approx. 20 companies who are currently involved in organic processing and trading activities.

Additionally, retailers, certification bodies, and supporting government and non-governmental institutions are relevant for the sector.

MAIN CHARACTERISTICS OF ORGANIC PRODUCTION IN THE REPUBLIC OF SERBIA

Recent survey enable GTZ experts to define profile of typical organic farmer in Serbia, which is of great help to have a good overview over the sector and understand how it is evolving. On behalf of the GTZ, in August 2010 the AFC/FIBL Consortium and Serbian experts conducted an organic farm survey. The number of farms which cultivate land according to organic practise in 2010 is estimated at 3,000. The Organic Farm Survey aimed to collect more detailed data on the typical Serbian organic farmer. The survey encompasses 140 organic farms (GTZ, 2010).

The results of survey have shown:

- More than 60% of such farms operate on acreage of less than six hectares and 25% on 10-20 hectares. Such areas are worked typically by household members, and every second farm hires seasonal labour for harvesting. However, small farms with less than five hectares cultivate cereals on small plots and for home consumption only, growing fruit trees and berries on most of their land instead. Vegetables are grown mostly on farms whose ranges from 5 to 10 ha.
- The larger the farm, the bigger its acreage under organic certification, but it never accounts more than 15-25% of total land available. It generally goes to berry cultivation, which is mostly certified, followed by fruits and vegetables. In the category of berries raspberries dominate, while plums and apples are most important crops among fruits.
- There has recently not been much investment in organic farming: plantations are usually old, machinery likewise (usually older than ten years), greenhouses and organized stores available only to every third farmer and leasing land or purchasing inputs or machinery on credits is practiced by just 5-20% of all farmers surveyed. Future investment plans are therefore very moderate. They concentrate on rehabilitating the irrigation infrastructure, deemed problematic mostly for fruit farmers.
- Obtaining organic inputs is considered by virtually all participants as a challenge. Certified seed is only rarely available; pesticides permitted under organic regimes practically not existing and even fertilizing is an issue: organic farming relies on manure and on compost. But considering that only every second farmer keeps animals and if so only a few, manure available to them is hardly enough to provide.
- Organically certified product is typically sold to wholesalers and to processing companies, with which almost 70% of the growers conclude contracts prior to the start of the season. Direct selling e.g. on the green market is practiced only by 20% of farmers. Due to such system, the mark-up in price they obtain for their organic produce is very moderate (with 10-20% on average) and confirms that value-addition is not generated on the farm level. However the products offered are usually also not ready for optimum marketing: since there is often lack of storage facilities, products are only available during peak periods, when the growers flood the market. Sorting is only carried out by every second farmer and usually according to size, rarely according to quality. Packaging and transport logistic are also mayor issue.
- To some extent, farmers are aware of these problems: while low yield (insufficient fertilization), diseases and pests (absence of appropriate pesticides), as well as irrigation are seen as mayor production constraints.
- Such economic situation, however, has not motivated farmers to form cooperatives or associations. Only 5% of them are organized in associations and only 30% in business associations, such as Serbia Organica, Terra's and Topas –these three being the most popular.

In Vojvodina, the most important crops produced in organic farming are grains, where dominates spelt and rye, followed by industrial plants (primarily soya), fruits (mostly apples) and various vegetables.

Farmers involved in organic production in Serbia and Vojvodina are faced with many problems. However, organic production is a new concept of agriculture production in our country and as such is still adapting to conditions at the macroeconomic

level. On the other hand, it is a concept that could partially solve the existing problems in rural areas (fragmentation properties and senility) because it relies on traditional production methods using modern scientific approaches. On the global scale, the organic market has shown continuously growth and resistant to negative economic trends, which proved its prosperity despite the global economic crisis.

CONCLUSION

Organic production has a significant role in the development of rural areas because it enables economic growth, diversification of activities, attraction of financial resources and it is also an integral part of the Strategy for agriculture and rural development (National Action Plan, 2010).

In contrast to conventional agriculture, organic production enable successful development of multifunctional agriculture, which includes food production as well as non-agricultural products (e.g. souvenirs, handicrafts) and services such as education, recreation, agro, eco, ethno and rural tourism, (Lazic, 2009). This is of great importance in rural areas in Vojvodina, where 65.5% of farms have less than 3 hectares of land. Multifunctional agriculture contributes to the conservation of soil, water, health of plants, animals and people, biodiversity and agrobiodiversity, and to preserving the values of rural environment, household farms, local ethnological, cultural values and traditions. (Branka Lazic, 2009). Overall ecological and economic importance of organic production is reflected in the revitalization of rural areas.

Organic production enables hiring of young people and active involving of women in agribusiness, which leads to decrease of the unemployment rate in Serbia and contributes to economic development of rural areas, creating added value to the product or service.

Vojvodina is mostly field and vegetable crop region and in the organic farming the most important are soybeans, wheat and corn and vegetable variety. Also great wealth in Vojvodina are the indigenous varieties of apples, pears, plums, with high resistance to pests and pathogens, so they can be grown without the use of chemical fertilizers and pesticides. The development of organic fruit production provides the basis for the development and organic beekeeping. In addition, in these areas, extending the natural meadows and pastures are suitable for raising livestock.

According to these facts, it is concluded that Vojvodina has a high agricultural potential for the development of organic production, and that there is an increasing interest in the private sector to invest in organic production. This would contribute mainly to human health and the health environment; enhance quality of life and economic development, while preserving the values of rural environment, cultural values and traditions of the region.

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ORGANSKA POLJOPRIVREDA I RURALNI RAZVOJ U AP VOJVODINI

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Izvod

Autori razmatraju vezu između koncepta organske proizvodnje hrane i koncepta ruralnog razvoja. Pri tom ističu ograničavajuće faktore i probleme realizacije ovih konceptata u Republici Srbiji i AP Vojvodini. Problemi ruralnih područja u Republici Srbiji se pre svega ogledaju u činjenici da se u većini sela nalazi mahom starije stanovništvo i da mladi pretežno pokušavaju da svoje zaposlenje ostvare u većim urbanim centrima.

Kao mogućnost oživljavanja sela, autori predlažu koncept ruralnog razvoja koji razvija ne samo poljoprivredu već i delatnosti oko poljoprivrede. Posebno se razmatra organska poljoprivredna proizvodnja i njena uloga u ovom konceptu razvoja.

Ključne reči: ruralni razvoj, organska proizvodnja, poljoprivreda, R. Srbija, AP Vojvodina.

Received / *Primljen*: 20.02.2011.

Accepted / *Prihvaćen*: 18.05.2011.