

Katerina HADZINAUMOVA-MIHAJOVSKA*)

CONDITIONS AND PERSPECTIVE OF ORGANIC PRODUCTION IN THE REPUBLIC OF MACEDONIA

Abstract

Main hypothesis in this paper is that organic agriculture is a great potential for Republic of Macedonia because the attendance of traditional agriculture. The attention is on the actual condition of the organic agriculture and there is analyze the perspectives for future organic agriculture development.

Key words: organic agriculture, Republic of Macedonia, market of organic products, farmers association.

JEL Classification : Q56

Introduction

The agriculture crisis, depopulation of rural areas, demographic draining of certain regions brought an initiative of alternative unconventional production of food. The raised standard of living, revival of village life inducted the younger generation of farmers to accept the organic agriculture. Organic agriculture is known in the world as the one taking care of environmental protection and preservation of biological balance, a coordinated relationship between production of crops and cattle raising, sustainable systems of land cultivation, usage of organic materials, limited usage of synthetic products, higher standard and better employment, as well as production of food with special quality.

Organic agriculture is of particular interest to developing countries because it is in consonance with long-term sustainable development strategies. Furthermore, the

*) M.Sc. Institute of economics-Skopje E-mail: katerina@ek-inst.ukim.edu.mk

spectacular growth in demand for organic agriculture that took place in recent years has opened up export possibilities for developing countries.

The main purpose of this article is to establish the state of organic agriculture in Republic of Macedonia and to give some perspective trends for further development. The organic production in Republic of Macedonia has a great potential because the attendance of traditional agriculture mostly in mountainous regions. Products of these regions are known between Macedonians consumers as “ecological products” because of the familiar method of production.

1. CONCEPT OF ORGANIC PRODUCTION

Organic agriculture is best known as a farming method where no synthetic fertilizers and pesticides are used. However, this description does not mention the essence of this form of agriculture, which is the holistic management of the farming system. According to the definition of the Codex Alimentarius, “organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological and mechanical methods, as opposed to using synthetic materials, to fulfill any specific function within the system.”¹⁾

Best way to understand organic production is to make effort to reject all former perception for agriculture, because:

- main purpose of organic production is not high profit, but quality of the product
- main point to start organic production is not the financial effect, but production of health food
- production of any crop must be in complete harmony with environment
- the soil cultivation must be when is advantageous, not when it's become
- the point of irrigate is to make optimal condition for development of micro-organisms who lives in the soil
- in organic agriculture are acceptable crop loss made of vermin
- in organic production leading registrar must be regular for all process on the farm

¹⁾ European Action Plan for Organic Food and Farming, Commission Staff Working Document, 2004, p. 3.

- for achievement of optimal outcome it's necessary cooperation with specialist.

According to FIBL (Research Institute of Organic Agriculture - Switzerland, Germany and Austria) contribution of organic production can group as:

1. **Ecological** – in organic agriculture is excluded or strictly limited the use of synthetic fertilizers and synthetic pesticides, plant growth regulators, live-stock feed additives, and genetically modified organisms (GMO). In this way improve biological diversity, soil fertility and energy save.
2. **Social** – organic agriculture offer save and healthy food for families, and on the other hand organic agriculture is traditional, it preserve local knowledge. In this way families participate in business with organic production, and it's make conditions for rural development and agro-tourism.
3. **Economical** - organic agriculture characterize with low cost inputs and because is traditional, has need of employment.

Actually, this group is inseparable and they are conditional and recompense side by side. Because organic agriculture constantly research, this group can increase.

2. THE ROLE OF ORGANIC PRODUCTION IN AGRICULTURE POLICY OF REPUBLIC OF MACEDONIA

Republic of Macedonia is predominantly mountainous country with numbers of basins. There are heterogeneous natural conditions and land structure in the Republic of Macedonia. It is situated between 40⁰51' and 42⁰22' northern geographic latitude and eastern geographic longitude of 20⁰27' and 23⁰02'. As to these geographic parameters, the Republic of Macedonia is situated in the southern part of the moderate zone and is bordered by the subtropical zone where almost all the crops can be successfully produced according to their requirements.

The Republic of Macedonia is mainly under the influence of 3 (three) climate types: continental, mountain and the Mediterranean climate. The climate indicators, especially the drought, the early autumn and late spring ice, are also limitation factors in regards to the intensiveness and the range of crops.

Out of the total area of the Republic of Macedonia, the agricultural area takes up 12.225 km² or 47.64%. Out of the total agricultural area, 35.84% are arable area (tab. 2). There have been great changes, mostly decreasing, of the arable area in the last ten years in the Republic of Macedonia. Thus, the size of arable land in the period 2000-2006 decreased from nearly 500 thousand ha, to 439 thousand ha in 2006 (tab. 2), while the meadows and pastures have increased from 692 up to 747 thousand ha. Nearly half of the arable land is under cereal crops, where wheat is the dominant crop with nearly 108 thousand ha. Vine-growing is present on about 25 thousand ha, or-

chards on about 15 thousand ha, vegetable production of 50 thousand ha and tobacco on about 24 thousand ha. ²⁾

The agriculture has been very significant for the national economy of the Republic of Macedonia. Besides the many policies and economic problems, that were previously stated, this sector has indicated an important flexibility, and for this period it has contributed significantly to the social and economic stability. The agriculture has a share of about 12% in the GDP, two thirds of which are covered by crop production and the remainder by livestock production. The total share of the agri-food sector, coupled with the food industry, accounts for approximately 16% of the GDP.

The share of the labour force in agriculture, in relation to the total labour force is noteworthy, representing about 20%. This significant share of the labour force in agriculture indicates the agricultural character of the Republic of Macedonia. It should be noted that in many rural areas there is a hidden labour force, such as the agricultural overpopulation, which largely worsens the situation in the sector. On the other side, in some rural areas there is a lack of labour force, especially qualified one, while a large part of the agricultural areas and the other production resources and potentials remain unused i.e. abandoned. The closing down of many industrial facilities contributed to the high number of labour force in agriculture since a large part of the workers returned to agriculture in order for them to provide for existence. ³⁾

Biological diversity in agriculture is especial important for persistence of people, primarily because of gratification of basic needs for food. With civilization development has create new type with better quality. But, in time, many of types and breed were destroy as genetic resource. Types, sorts and races who are domestic for Macedonia should be save above all for economic, science, cultural, socio-economic and ecological arouse. Republic of Macedonia characterize with traditional agriculture especial in mountain areas. Organic agriculture is close to traditional agriculture, so it has a potential for development. Main distinguishes between organic and traditional agriculture is the certification of organic products. There is two certifications body in Republic of Macedonia, "Balcan biosert" and "Procert".

Number of certificated producers of organic food in Republic of Macedonia notes continual intensive increase (Table 1). In total cultivated land, organic production is 0.1%, and 0.01% in organic wild collections area.

²⁾ <http://www.stat.gov.mk/>

³⁾ Dimitrievski D., Kotevska A., "Challenges faced by the agro-food sector in the Republic of Macedonia regarding its integration in the EU markets", http://www.daes.si/Konf07/MACEDONIA_Dimitrievski_Kotevska.pdf, 5.07.2010

Table 1

NUMBER OF CERTIFICATED ORGANIC PRODUCERS AND NUMBER OF CERTIFICATED AREA ⁴⁾

Year	Total certified production areas	Number of farmers	Areas under pastures and wild plants and fruits	Number of bee hives	Firms for processing and trade
2005	266	50	1.300	110	0
2006	509,42	102	1.593	505	2
2007	714,47	150	11.162	1.832	3
2008	1.029	226	50.000	11.709	8
2009	1.373,83	327	204.956	15.455	8

In 2006, 105 clients are apply for certification, 102 were certificated for primary production – farmers and 2 were companies for processing of organic food. and 1 were certificated for trade of organic food. In 2008 number of farmers is increase for 100%, respectively in 2006. Number of companies for processing and trade of organic food substantially is increase, from 3 to 8. Interest for organic production partly is increase because the increase of subvention from the government. (Table 2)

Table 2

STATE SUPPORT FOR ORGANIC AGRICULTURE IN REPUBLIC OF MACEDONIA ⁵⁾

Year	Amount/MKD denars
2005	6.000.000,00
2006	/
2007	11.000.000,00
2008	36.500.000,00
2009	50.100.000,00

Leading crop in organic production in Republic of Macedonia are the cereal with 166,35 ha certificated area, second are forage crop with 82.05 ha and orchards with 73,55 ha are third. (Table 3). In animal breeding organic production predominantly are goats – 248, and 21844 sheep are certificated as organic in conversion.

In Republic of Macedonia purchase is practice by 3 certificated points for organic products. Mostly, they purchase wild collection crops and they are organized by the companies for processing and trade of organic food.

The market of organic products in Republic of Macedonia is on low level, offer by quantity and assortment doesn't enable some significant export, and on the other

⁴⁾ MZSV, 2009, <http://www.mzsv.gov.mk/Tabela%20organsko.pdf>

⁵⁾ ibid

Table 3**ORGANIC PRODUCTION IN 2009 ⁴⁾**

Crop/animal	Organic in conversion /ha/number	Organic production /ha/number	Total /ha/number
Cereal	501,52	166,35	667,87
Forage	101,04	82,05	183,09
Industrial	12,31	31,32	43,63
Orchards	137,48	73,55	211,03
Vineyard	46,25	13,92	60,17
Gardening	84,22	58,64	142,86
Beef breeding	180	197	377
Sheep	21844	208	22052
Goats	791	248	1039
Pigs	5	0	5

side low domestic demand is limiting organic production. Deficiency of domestic organic processing products additional is limiting organic market development. Also, the logo of organic products from Republic of Macedonia is unknown for significant number of Macedonian consumers (45,9% didn't know at all, and 35,9% were not shore about the look of the logo). For Macedonian consumers organic food represents healthy and expensive food, they are ready to pay 10-30% more, and they trust more to foreign products than domestic.⁷⁾

3. PERSPECTIVE TRENDS FOR FURTHER DEVELOPMENT OF ORGANIC PRODUCTION IN REPUBLIC OF MACEDONIA

Main characteristic of Macedonian agriculture is traditional extensive agriculture, witch is main precondition for development of organic production. Traditional agriculture is proceed in mountain areas with utilize of old family methods. Also, traditional and organic agriculture can contribute for agro ecotourism development. State support for organic agriculture is high, except subventions main role has legislation which establish the rules for organic production in Republic of Macedonia.

Main problem for organic farmers is impossibility to produce enough quantity for export or processing of the products. Purchase of organic products is practice by 3 certificated points and they are organized by the companies for processing and trade of organic food. Mainly, purchase is high on wild collection crops or fresh organic products. For processing of organic products there's low interest because of the low

⁶⁾ Ibid

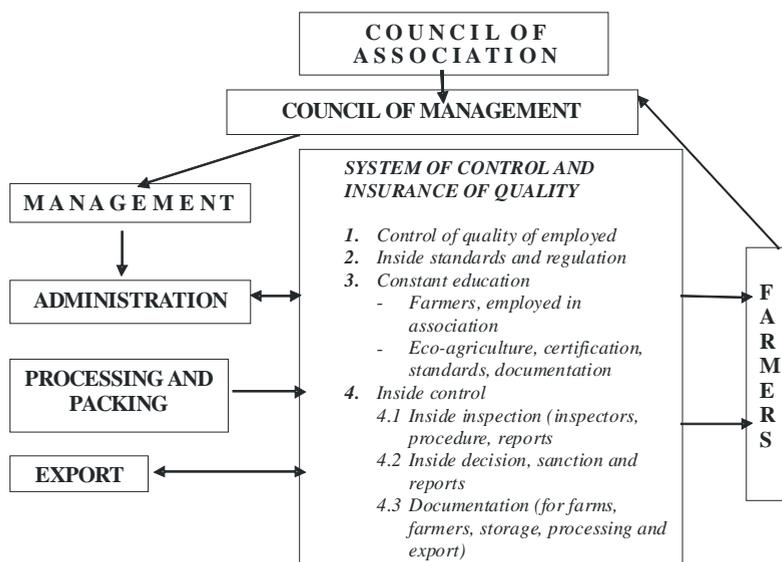
⁷⁾ Research of Blagica Sekovska, "Organic market development in the Republic of Macedonia with emphasis of domestic demand", Economic development, year 11, num. 1-2, 2009

quantity. Food processing companies don't have interest for processing organic food because certificate is expensive, there's a need of additional processing cost, and on the other side, quantity is low. Farmers are force to sell theirs organic products as conventional, in other words low price. Thus, it cannot get true number of quantity of organic production. So, great deficiency is nonattendance of register for export and import of organic products. Because of that, it cannot to provide some serious researches for possibilities of organic products market in Republic of Macedonia.

Also, problem is expensive certification for small farmers as farmers of organic production. There for it is necessary existing of association with Inside system of control of quality⁸ who will enable permanent support through initiation and implementation of organic production and reduction of certification cost. Image1 present an example of association of farmers with inside system of control of quality and system of control of small farms.

Image 3

QUALITY CONTROL MANUAL ORGANIC PRODUCTION IN SMALLHOLDERS FARMERS



Source: Frantz Augstburger; “Quality Control Manual Organic production in Smallholders Farmers” taken from the project “Развој кластера органске пољопривредне производње“, <http://docs.google.com/viewer?a=v&q=cache:Qdg9xbK7a5cJ:80.71.144.22/download.php%3FID%3D12403+razvoj+klastera+organske+poljoprivredne+proizvodnje&hl=en&pid=bl&srcid=ADGEESieHv23Y62Evn3VkCqrpvEiohj1hkrsZq7PdDKDMLLS1ymZMRnJZnd6WVfjyriDHD ux5BlAaLki3fP 4Gj 1mk8dfBKb 1pshh6gMTsx7lv1ICGJn7Tj9WEfKfYWnYJ01mDyvO&sig=AHIEtbRMUvvXkrmXOMdG8z4E1ZmmkivuHA>

Market of organic products in Republic of Macedonia is on an early stage. For Macedonian consumers main deficiency of domestic organic products is indistinguishable and distrust of the logo. Ministry of agriculture should perform campaign for promotion of the logo, were it will be known under what condition this logo is published and used. The logo should be found on the packing of the organic products, market stall, but most of all should be used freely in medium for public informing as TV, radio, newspapers who because of their own purpose need to publish news, interviews and reportages of this domain.

For movement toward we need a correct research plan, establishing organic research programs, organic research centers, farms and greenhouses are also necessary. In those research centers are required several sections for research on different aspect of agriculture such as plant production, irrigation science, soil and nutrition science, plant protection, agricultural economics, food processing and other relative sciences. However, training of specialists in organic sector is the key point. In Republic of Macedonia there is not any course on organic agriculture and farming at the universities. Such universities and collages should work on establishing organic courses and researches focusing on organic issues for MSc and PhD students' thesis. In addition, governments, organic association, organic research centers and universities must arrange on-farm workshops and internship or apprenticeship programs to improve expert's experience and knowledge.

CONCLUSION

Organic agriculture is regarded as one important to agriculture and food production that is environmentally sustainable and can generate several positive impacts to rural society in Republic of Macedonia. Defining the main feature of organic agriculture and its importance is the starting point for conceptual establishment of organic agriculture.

The consumption of the organic food in Republic of Macedonia is, in spite of its permanent growth, still on a very low level. The reason is both on the side of supply and demand of organic food. Organic food products are new products on the Macedonia's market, so they are still not well-known to the costumers. The important role in informing potential customers quicker and easier plays the promotion of organic food at agricultural fairs, symposia and trough the activities of organic food production association. To produce enough quantity for export or processing of the products, farmers should be organized in associations that will establish advisory services and technical supports to help them and solve problems.

In this respect, it's necessary to evolve further research that would objectify the differences and support and information by the scientific studies.

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