

## ORGANIC FARMING IN ROMANIA AND BULGARIA

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### Abstract

*These days, agriculture and also food business confront new tendencies of developing environmentally friendly options. This kind of agriculture sector surfaced due to folk's worries regarding health and ecosystem because of the new technologies. These issues appeared and recognized by the developed nations and the like, are usually firmly associated with ecological pollution along with escalating troubles of health degradation. This research compares Romania with Bulgaria, and indicates the possibilities of developing de organic farming sector. The results of this study indicate that this sector has a great potential of developing over the years, in both of the countries that are analysed. In this exploratory research, statistics data were collected from both official governments in Romania and Bulgaria, and this paper indicates the resources on witch both nations can count for developing this sector.*

**Key words:** agriculture, Bulgaria, organic farming, Romania

### INTRODUCTION

Organic agriculture is a wide spread trend, and has the opportunity to attract a higher return for a farmer in a saturated bulk market. The organic food production seems a very interesting segment for small farmers who cannot benefit from the development of technologically [2]. Organic industry throughout Romania has become bigger in past years [15]. The reason is usually costumer desire for healthy food [12].

Organic agriculture is one segment of general agriculture that uses pesticides, fertilizers that are considered to be natural. Moreover, the organic agriculture prohibits the use of synthetic pesticide and fertilizers, hormones, antibiotic use in livestock, and even the genetically modified organism [13].

Organic agriculture is encouraged within Romania employing different tools regarding farming policy [14]. The EU is devoted in principle to encourage sustainable farming in its Common Agricultural Policy (CAP). As member nation of EU, Romania utilizes the Common Agricultural Policy and so, the principle of encouraging sustainable farming [18]. This calls for ecological and social troubles and, thus, unique equipment for stimulating organic agriculture [6]. To benefit

of natural farming subsidies, farmers need to conform to a number of regulations: ceasing the use of chemicals, farms' adaptation towards the natural biological circuit regarding vegetal and/or animal manufacturing, ventures for alterations and changes (Art. 17, Rules CE 834/2007) [10]. Consequently, Romanian strategy for agriculture can be driven in the direction of natural farming, amid different things.

Organic agriculture started being implemented early in 20th century together with the effective use of several alternative strategies of agricultural manufacturing. Bulgaria is one of the most potential nations in agricultural areas that can be cultivated organic, because of their water purity and earth fertility [11]. According to the situation and the legislation in Bulgaria, the priority in my research is having some results that can improve the situation of organic agriculture [3].

The present document tries to find an answer to the question: what is the organic agriculture prospect for development? Comparative research among Romania and Bulgaria, as neighbour nations, using comparative similar agro-food methods, can be conducted, through gathering record facts from both nations. The aim of this document is to spot the assets that

states can depend on in developing methods based on organic farming.

## MATERIALS AND METHODS

In order to analyse the organic farming sector in Romania and Bulgaria, the data that were used have been collected from the official statistics provided by the Ministry of Agriculture and Rural Development, Romania, and the Ministry of Agriculture and Food, Bulgaria.

Also, in order to analyse the organic farming sector from both countries, I also studied the scientific literature, consulting a more diversified number of specialized books and scientific articles.

Based on the collected data, and on the conclusions of different authors from the scientific literature, a critical approach of the situation of organic farming in the both countries was run by author.

## RESULTS AND DISCUSSIONS

### The situation of organic agriculture in Romania

Romania position is sixteenth worldwide for overall area of accredited organic agriculture areas, and is on the 20th place worldwide for organic goods export.

Table 1. Dynamics of terrain cultivated with main cultures under organic agriculture in Romania (hectares)

Crop/Culture	2010	2011	2012
1. Area with organic agriculture, crop on arable land, of which:	148,033	147,581	174,643
Cereals	72,298	79,167	130,000
Oil crops and pulses	53,375	51,028	105,000
Vegetables	734	914	1200
2. Area with organic permanent crops: orchards and vineyards, of which:	3,093	4,166	7,781
Orchards	2,199	3,324	-
Vineyards	894	842	-
3. Organic Pasture and hayfields	31,579	78,198	105,835
4. Organic Spontaneous flora cultures	77,294	338,051	1,082,138

Source: The Ministry of Agriculture and Rural Development (ROMANIA) [20]

This is quite amazing, given that the farming terrain used in the “ae” system is merely 3.38% of the overall agricultural terrain of the nation. Organic agriculture is a vibrant system in Romania which has a weighted regular rate of yearly raise of 23% [9]. In year 2012, the arable terrain on witch was cultivated organic production was 174,643 ha.

In Romania, on the area of 1 mil. hectares was cultivated spontaneous flora. Throughout 2012, terrain in organic system increased by 45% since 2011, which represents around 3.38% of the overall employed farming terrain of Romania.

The terrain grown using cereals under organic agriculture is 130,000 hectares, the terrain grown using oil crops as well as pulses is 105,000 hectares, the terrain grown using vegetables is 1,200 hectares, the terrain under organic orchards as well as vineyards is 7,781 hectares, the terrain with pasture and hayfields under organic program are 105,835 hectares. In the 2012 year, in Romania were cultivated 1,082,138 hectares of organic spontaneous flora (Table 1).

Regarding the livestock sector in 2012, Romania recorded a growth of organic livestock. Sheep and goats registered in 2012 were 160,000 heads, 85,000 heads laying hens and 60,000 heads of dairy cows (Table 2).

Table 2. Dynamics of livestock under organic agriculture in Romania (heads)

Species	2012
Dairy cows	60,000
Poultry	85,000
Sheep and goats	160,000
Bees	102,882

Source: The Ministry of Agriculture and Rural Development (ROMANIA) [20]

Several providers (producers, manufacturers as well as investors, importers and exporters) listed inside organic growth method, in 2012 totalize 26,736 (Ministry of Agriculture and Rural Development - Romania). Since 2010, the number of providers expanded yearly by around 3 times a year. This was largely because of the recent support methods intended for the period conversion given below. In 2012, from 26,736 suppliers, 103

work inside the processing sector, 211 in trade and promoting and 26,390 tend to be farmers. In relation to manufacturing sector, in 2012 it was an expansion in the volume of processors (from 48 products in 2007 to 103 in 2012) and the assortment of organic goods seemed to be more assorted, such as: product manufacturing sheep and cow milk (cheese, butter, and so on), goods prepared of soy (milk, tofu, in addition to croquettes), sunflower oil, and numerous types of bakery goods (bread, pasta, cookies), prepared rice goods, cereal, natural and organic teas, juices, berries, prepared goods hemp seeds, bee goods (wax, pollen), prepared goods of pork animal meat (sausage, ham) and natural wine. The common surface of a holding for organic agriculture, for vegetable growth, ranges from around 100 square meters for planting vegetables in greenhouses, around 2000 ha for field crops growth. The standard surface of farm, in 2011, was around 20 to 22 ha.

The market involving organic merchandise is increasing. Desire for organic goods is constantly growing. Organic goods tend to be marketed straight from the farm gate or even through special merchants as well as through grocery stores [5]. As for international trade, a lot of goods harvested from organic farming were meant for exports. Yearly, around 70-80% of organic goods are exported. The international markets are very keen on buying Romanian organic goods. In every Western nation, with higher economic power than Romania, the organic goods are sold at a very expensive price. Imports of organic products are greater each year, due to hypermarkets effort in retail distribution. Hence, in 2011 the worth of imports achieved the value of around seventy five million Euros.

### The situation of organic agriculture in Bulgaria

Most significant issues pertaining to Bulgaria in the act of financial restructuring and setup involving organic manufacturing would be to assure some sort of sense of balance involving ample food processing, to enhance employment and preventative security of the natural environment [16].

According to the official data collected from the Ministry of Agriculture and Food

(Bulgaria), during the analysed period 2010-2012, we can indicate that the areas under organic growth in Bulgaria is substantial raising (Table 3).

Table 3. Dynamics of terrain cultivated with main cultures under organic agriculture in Bulgaria (hectares)

Crop/Culture	2010	2011	2012
1. Area with organic agriculture,			
crop on arable land, of which:			
Cereals	5,339	6,521	7,532
Oil crops	-	5,845	7,909
Vegetables, melons, strawberries, mushrooms	428	670	1421
2. Area with organic permanent crops: orchards and			
vineyards, of which:			
Orchards	-	6,443	10,959
Vineyards	-	1,455	2,058

Source: Ministry of Agriculture and Food (Republic of Bulgaria) [19]

The data collected from the governmental authorities of Bulgaria indicates that in 2012, the areas under organic farming method was of 40,378 ha. The comparison with the facts from 2010 demonstrates that the areas under organic farming are increasing.

Regarding the livestock sector in 2012, Bulgaria recorded a growth of organic livestock. Sheep and goats registered in 2012 were 12,006 heads, 1,173 heads cattle and 85,346 heads of bees (Table 4).

Table 4. Dynamics of livestock under organic agriculture in Bulgaria (heads)

Species	2010	2011	2012
Cattle	364	976	1,173
Sheep and Goats	9,471	10,045	12,006
Bees	46,429	58,855	85,346

Source: Ministry of Agriculture and Food (Republic of Bulgaria) [19]

During the analysed period (2010-2013), the organic livestock in Bulgaria is increasing, and in this period we can notice the increasing number of sheep and goats, cattle and bees. Because of increasing the number of bee, we

can notice that the organic honey is also increasing (Table 4).

Without a doubt, Bulgaria is a customary maker of different sorts of confirmed organic honey with astounding quality indicators, as a significant part of the production is sent out to be exported to the world business sector [4].

In Bulgaria during the analysed period, we identified that one of the biggest production that this country had was the organic rose oil and the organic cucumbers.

The primary explanation behind the adjustments in organic cultivating is overproduction of sponsored yields, as well as expanded sensitivity of European nations to ensure the earth, biodiversity and creature welfare.

Collecting the data from Ministry of Agriculture and Food (Republic of Bulgaria) we can identify the potential of developing the organic production (Table 5).

Table 5. Organic Production in Bulgaria holds for 2010-2012 Kg/Da

Organic production	Area (da)	Average yield	Total yield
Wheat	20	400	8,000
Sunflower	20	180	3,600
Tomatoes	2	3,500	7,000
Pepper	2	3,900	7,800
Cucumbers	2	2,500	5,000
Apples	10	1,600	16,000
Peaches	10	1,800	18,000

Source: Ministry of Agriculture and Food (Republic of Bulgaria) [19]

In Table 5, we can see that the organic production of apples and pears involves a significant organic farming production. On the other way, peppers and tomatoes, even if involves smaller areas, they have a better average yield. Regarding the organic production, in Bulgaria, is one which has a big potential, because of increasing exports request for organic products.

The negative elements on organic agriculture and promoting are the absence of attention to organic items quality, absence of showcasing system and publicizing, and solid rivalry from imported natural items [1]. Unquestionably, Bulgaria requires vast speculations for

promoting and publicizing. Since the accomplishment of open and focused worldwide business sector can't depend just on the natural items quality [17].

Analysing the organic sector in the two countries, we can see that the area with organic agriculture, crop on arable land is much higher in Romania compared to Bulgaria. In 2012, the area with organic agriculture, crop on arable land in Romania is approximately 4 times higher than Bulgaria.

In terms of organic livestock, Romania had a number of certified organic animal heads much higher than in Bulgaria, during the analysed period.

In Bulgaria the organic production is sustained by the Ministry of Agriculture and Food (Republic of Bulgaria), which has important legal laws regarding this sector, and according to this fact, more and more farmers are swinging to organic manufacturing.

Nowadays, Romanian agriculture and Bulgarian agriculture are one of the most important sectors in their country's economy. Because of the new trends of consumers, farmers are beginning to realize the importance of producing organic products.

The most important thing is that the product is organic and healthy, but also has a very high value added [8]. Both countries that were analysed have a huge potential for development of the organic sector. This follows from the data collected from official institutions of the two countries and further interpretation of these data.

## CONCLUSIONS

The organic sector in Romania is highly increasing from year to year, and is characterized by diversity. This sector has an insignificant weight in agro-food system, regarding agricultural area and livestock production. However, it has a high potential of development due to accelerated growth of indicators. This sector can bring significant contribution to a sustainable development, and can increase the economic activities, thanks to the significant added value of the organic products. The premium price of organic products is paid by people from

countries where there is a sizeable middleclass in the population, and where consumers are more educated and informed of food issues, and they incline to buy organic products, whether for food safety, concern over the environment or health reasons [7]. The organic market is increasing, and is characterized by diversity from year to year and the supply of products on the market. The demand for certified organic products is growing in Europe, because the consumers are more educated. However, consumption of organic products in Romania still remains at a low level compared with other European countries - which is determined mainly by the low purchasing power of the population and additional price difference of about 20-40% compared to conventional products (eco products consumption in Romania, representing about 1% on total consumption of products, while the European average is 3-5%). Even in these circumstances, with the appropriate information and promotion, designed to increase public awareness regarding organic products, Romania could significantly increase market share and attractiveness of the organic products.

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