

ANALYSIS OF ECOLOGICAL PRODUCTS MARKET IN ROMANIA

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Abstract: Sustainable development of agricultural ecosystems and the possibility of producing high quality food can be the most important contribution of agriculture to ensuring human existence. [3] Sustainable agriculture is characterized through a number of defining elements, such as: it is economically viable, offers healthy and high-quality food, guarantees long-term protection and improvement of natural resources and ensures the sustainability for future generations.

Key words: agriculture, biological products, demand, supply

INTRODUCTION

Sustainable agriculture implies the pursuit of an alternative productive activity in the broad sense of the word, by gradually moving from the purely biological one to sustainable and biologically integrated one. [2] This must use fully, but judicious, the achievements of chemistry, machine building and biology in order to raise crop yields.

Sustainability as an ecological concept with economic consequences, recognizing the dependence of economic growth and agriculture on the natural resources on which supports all living systems, cultivated plants and domestic animals.

FAO considers that "for a sustainable development, natural resources must be arranged and conserved and must be made technical and institutional changes in such a manner as to meet the needs of current and future generations. [12] In agricultural sector, forestry and fisheries sectors, land, water and zoological and phytogenetic heritage, and to use means without danger for environment, viable of technical, economical point of view and acceptable from the point of view of social view ". [1]

The objectives of organic farming are mainly subordinated to the sustainable development of agro-ecological systems [9]: objectives regarding the environment, objectives regarding crop plants, objectives regarding livestock and socio-economic objectives.

The idea of a sustainable agriculture is to increase its productivity, with obtaining constant profiles with minimal negative effects on the environment and to ensure the food security of the population. Sustainable agriculture is a broad concept that provides the complexity of this production system, the biological stability of plants and cultivated varieties, the preservation and protection of natural resources, and the introduction and then generalization of the most productive modern technologies. [5] Of course, there is a particular interest in the problems of the profitability of family agriculture, exercised on small plots, which produces more for subsistence. These farms cannot promote profitable technical and economic solutions, due to the aggravation of agricultural land and the lack of tools and machinery systems. And this is costly and inefficient in such conditions. [7]

MATERIALS AND METHODS

In achieving this paper were used a series of bibliographical and information sources: specialized books, articles published in international databases and publications of some national institutions: INSS, MADR etc. The collected data were subjected to analyze, using different processing way, to capture the evolution of the phenomenon and to draw the correct conclusions. The economic indicators used showed the progress in increasing

production and economic efficiency, meaning the report between the efforts submitted and the result obtained.

RESEARCH RESULTS

The offer of organic agricultural products is the one that generates the market of ecological products from Romania, their presence on the market determining the interest of consumers for the consumption of such products. [4] The formation of the organic market actually leads to the change of some lifestyles and mentalities, efforts necessary to educate and inform individuals, given the novelty of these products, which the Romanians did not know, products having a special character. The main issue of the organic product market from Romania is that the number of organic products processors is reduced, which makes the raw material exported abroad, where organic products are produced, and returns to the country at prices four times higher. [10]

Conversion to organic agriculture requires a period of two years, a fairly long period of time that stops obtaining the production, as well as periodic inspections from authorized bodies, and registration to MADR every year. The production obtained is lower, reaching up to 20-50%, compared to the crop harvest obtained in traditional agriculture, and the export price for BIO products can be two to three times bigger. [6, 8]

According to studies realized by the International Federation of the Organic Farming Movement, the ecologically cultivated area in 160 countries was 37 million hectares. Argentina and Australia are the world's first owners of lands, ecologically cultivated, 12 million hectares and 4.2 million hectares.

The International Federation of the Movement for Ecological Agriculture has in recent years reduced the number of producers from 1.8 million to 1.6 million at worldwide level.

At EU level there are registered also countries, where the eco area is less than 4% from the total agricultural area used: Malta (0.1%, 24 ha), Romania (1.7%, 226000 ha), Ireland (1.7%, 77000 ha), The United Kingdom (2.8%, 490000 ha), the Netherlands (2.9%, 52000 ha), Bulgaria (3.2%, 161000 ha), Luxembourg (3.3%, 4300 ha), 537000 ha).

At the EU level, the area occupied by organic crops accounts for 3.7% from the total agricultural area, with most organic farms being registered in Italy, Austria, Spain and Germany.

At the level of the European Union, the total area occupied by organic agriculture is 11.9 million ha. Out of this area, more than half, 54.4% is concentrated in 4 big states: Spain, Italy, France and Germany.

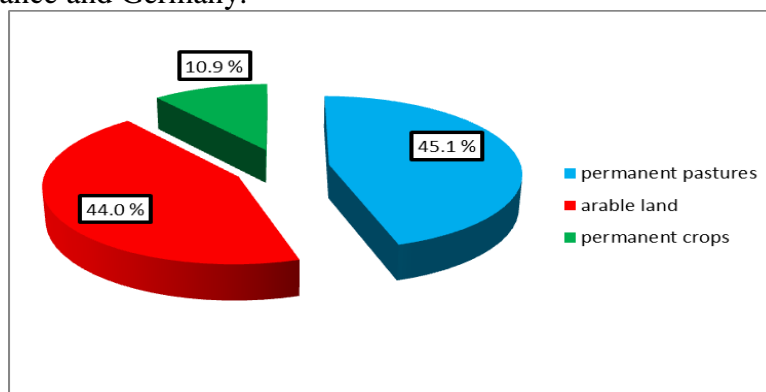


Figure 1. Characteristics of organic agriculture, in European Union

Regarding the structure of the cultivated ecological areas, it is as follows: 45.1% permanent pastures, 44.0% arable land, especially cereals, fresh vegetables, green fodder

and industrial crops and 10.9% permanent crops (fruit trees and berries, olives and vineyards).

Spain, Italy, France, Germany are countries with large ecologically cultivated areas, among the largest from the EU, each of them having over 1 million hectares of ecologically certified land.

Regarding the organic vegetable culture, the European leader is Poland, with a cultivated area of 41,819 ha, followed by other two other large producers Italy with a cultivated area of 29,487 ha and France with 16,832 ha. In 2015, Poland was the largest strawberry producer from the EU-cultivated in organic system with, a cultivated area of 2900 ha.

In 2015, the areas cultivated with organic cereals at EU level were around 1.7 million ha, about 3% from the total cultivated agricultural area. The European leaders for these crops are Germany, Italy and Spain, with an average cultivated area of 200000 ha, each.

For legumes the European leader is France with a cultivated area of 68000 ha followed by Spain with 39000 ha and Italy with 37000 ha.

The most common cultures are: nuts plantations, vineyards, olive groves, vegetables and fruits in general, they occupy the most land.

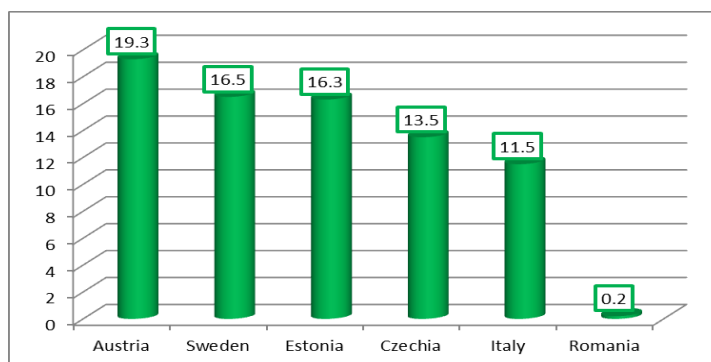


Figure 2. The share of areas ecologically cultivated, in total agricultural area, %

Compared to other EU Member States, Romania has a small percentage of organic cultivated areas, only 0.2% compared to Austria (19.3%), Sweden (16.5%) and Estonia (16.3%), where the share of surfaces certificated as organic areas exceeds 15%.

In European Union, organic vineyards occupy 21.0% from the total organic crops, the percentage in our country being 3.0%. [13]

Practicing organic farming in Romania is encouraging, although there is no internal market for biological products. In Romania, in the last years, the organic economy sector is characterized by a dynamic, growing evolution in both sectors: vegetal and livestock. [14]

In Romania, in 2010, the number of organic agricultural operators registered at the Ministry of Agriculture and Rural Development was 3.155; gradually increased to 15,194 and then dropped to 10,562 in 2016, figure 3. The number of organic farming operators increased with 300% in 2011 compared to 2010 as a result of subsidies for conversion farms (switching from conventional farming to organic farming) in 2011.

The area ecologically cultivated worldwide is about 31.4 million hectares, Romania ranks 16th place for the cultivated area. In our country the area occupied by ecological cultures, after 2000, has increased more than 20 times. Bio products represent a low percentage of total purchases of food, due to higher prices for these products.

In 2007, the total organic cultivated area was 123,666 ha; has reached a peak in 2013 by 301,148 ha, and then fall considerably.

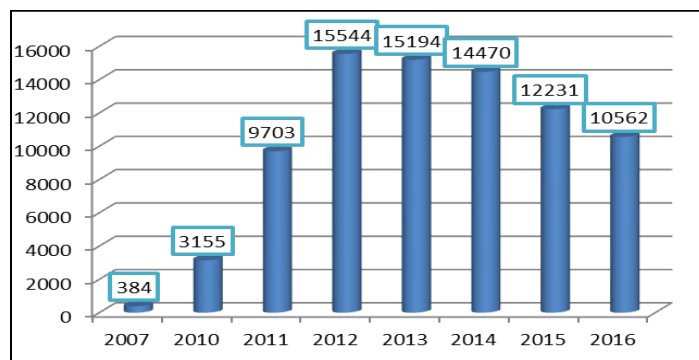


Figure 3. Number of organic operators in Romania

The Romanian market for organic products is quite limited. Most products are brought from other countries (canned vegetables, fruits, some bakery products, cosmetics). The most demanded and consumed bio products are milk, eggs, yogurt, fruit, vegetables, and sausages.

In present, organic products account for less than 1%, Romanians still trailing to traditional products because of lower prices compared to organic products. Organic products that are predominantly cultivated are oleaginous plants, cereals, vegetables and fruits and forest fruits, but since 2006 Romania has started to produce bread, soy beverages, sunflower oil, medicinal teas and apple juice. [15]

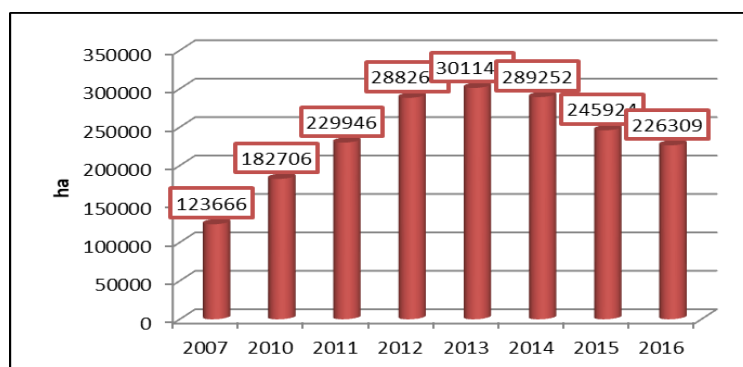


Figure 4. Areas occupied with organic crops (ha)

In 2016, the areas cultivated with organic cereals occupied the largest areas (75,198.31 ha), followed by pastures and farm fields (57,611.65 ha). The areas cultivated with fruit trees and vineyards are only 12,019.81 ha, while the vegetables have less (1,210.08 ha). [11]

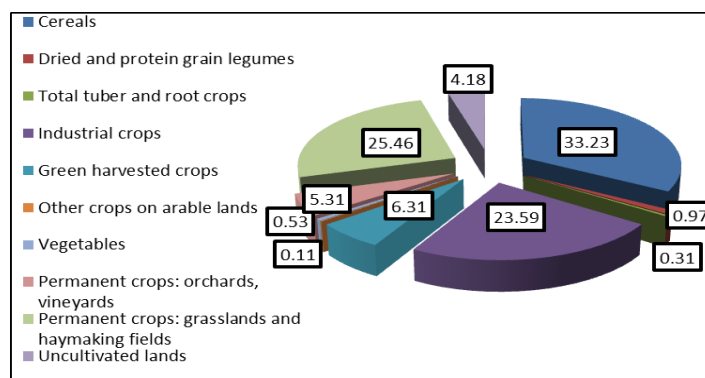


Figure 5. Organic crop structure in Romania in 2016, %

The average consumption of organic products in the western part of Europe is 3-5%. So in Germany the consumption of organic products is 5%, in England and Austria the consumption of organic products is around 3%, while Romania is situated on the last place. Thus, the average consumption of organic products in Western Europe is between 3-5%.

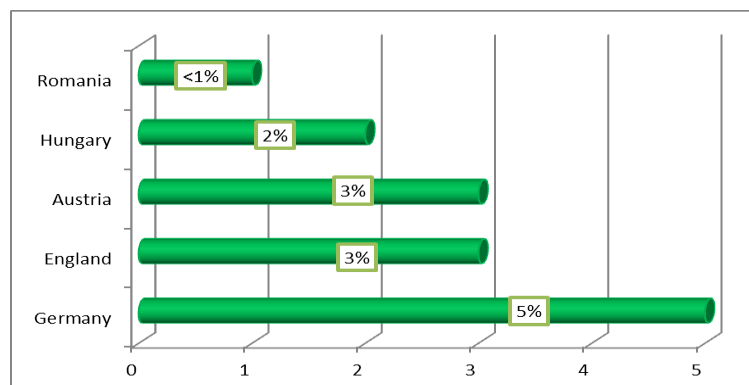


Figure 6. Consumption of organic products in Europe, % of total consumption

With an area of 11.8 million hectares of ecological culture, Australia is considered the most "bio" continent. Europe ranks second with 6.9 million ha, and Latin America with about 5.8 million ha on third place.

The importance of organic agriculture comes from the provision of cleaner food, more suited to human metabolism, in full harmony with the protection of the environment while respecting natural laws. One of the main objectives of organic agriculture is to produce foods with authentic, attractive flavor and texture. These foods can be produced at farm level by strictly protecting genetically modified organisms (GMOs and their derivatives) and by drastic restrictions regarding the use of synthetic fertilizers and pesticides, growth stimulants and regulators, hormones, antibiotics and intensive livestock farming systems.

CONCLUSION

Organic agriculture contributes in a great extent to lasting economic development and has an important role to play in protecting the environment through: biodiversity, soil preservation, nature protection and water quality improvement. In rural economy, ecological agriculture has a particular involvement through investments made especially on economic activities generating value. The development of the food industry of BIO products will determine the development of external trade relations. So, new jobs will be created, with a particular impact on the overall development of the rural area, but also on the quality of life of the people in these areas.

At national level, BIO agriculture is a dynamic sector, which is characterized by an upward trend regarding the size of the sector, with growth in both the vegetable and animal sectors in recent years.

In Romania, total sales for BIO products are around 10 million Euros, representing only 1% of the retail market, a small value, compared to the European average, 5-6%.

In European Union, organic agriculture accounts for significant shares from the total cultivated agricultural area, with significant differences from one Member State to another.

Eurostat sources show that in the Nordic countries (Austria, Estonia and Sweden), areas for organic agriculture account for 15% of agricultural land, and in Eastern European countries the largest organic farms are located. In Slovakia, the average size of a holding is

474 ha, in the Czech Republic the average area of a holding is 178 ha and in Estonia it is around 92 ha.

According to European statistics, at EU level there is still potential for the expansion of biological agriculture. In 2015, the EU-28 area of this sector accounted for 6.2% of the European agricultural area. In the period 2010-2018, areas for organic farming increased by 21% from 9 million hectares in 2010 to 11.1 million hectares in 2018. Growth in the area cultivated in organic system was recorded in all Member States, except England, where the area decreased with 29% and the Netherlands with 4%.

Organic agriculture is a dynamic sector in Romania: its trend in recent years has been an upward trend since the number of certified organic farmers has increased from 3,834 in 2007 to 10,562 in 2016: this sector can grow by transforming subsistence farms into organic farms while opening up on the modern market (switching from conventional farming to organic farming and from subsistence agriculture to commercial farming).

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