THE EVOLUTION AND PROSPECT OF ORGANIC PRODUCTS – ROMANIA AND POLAND

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Abstract
There is no clear definition of organic farming in the literature, but this concept is based on sever production rules and principles, regulated by the legislation in the area. The organic production requires to build a sustainable, balanced and diversified system, aiming at protecting the environment and the supply of agro-food products with certain nutritional and sanitary quality. In the present age, the knowledge about vital processes from plants and the mechanisms that control them have evolved enormously. This study shows the impact of human activity on organic food production and the evolution of organic farming in Romania and Poland.

Key words: organic products, agriculture, Romania, Poland

INTRODUCTION

If we were to define organic farming in the easiest way, it would be agriculture that provides consumers with fresh, authentic and tasty food, while respecting the life cycle of the systems. The US Department of Agriculture has set the following for organic farming: "Organic farming is a production system that avoids or excludes the use of synthetic fertilizers, pesticides, growth regulators and additives in animal nutrition"(Stan V.). Organic farming (also called Organic or Biological) has emerged in Europe as a result of negative experiences caused by the use of synthetic chemicals generated by intensive, industrial farming technologies based on the excessive mechanization and automation of production technologies, and due to the large use of pesticides for the protection of plants and bio-stimulators in animal feed, antibiotics or hormones(Mihai D.).

Organic products can have more synonyms, but they can likewise be easily mixed up with other conditions, such as natural products, healthy products, and so on. In the food industry, the term "natural" is often used to indicate that a food has been processed to a minimum and that preservatives are not added. This does not mean, however, that these foods are also environmentally friendly. In order to be able to say that a product is organic, it means: it was obtained without the use of synthetic chemicals or genetically modified components, it was not exposed to irradiation and, after its production, and the environment did not suffer. In order to be considered organic, agricultural or livestock production must be carried out according to the minimum ecological principles for a period of time that differs from one product to another.

LITERATURE REVIEW

The literature shows a significant development of organic farming in Europe, but with considerable differences between countries. These depend on general agricultural policy (the set of regulations and laws), specific policy incentives, and also on differences in

consumer behavior. This paper reviews the scientific literature on the evaluation of the technical, economic and environmental aspects of conversion from conventional towards organic production. There are many definitions of organic farming. Mannion (1995) refers to it as a holistic view of agriculture that aims to reflect the profound interrelationship between farm, agricultural production and the overall environment. Scofield (1986) stresses that organic farming does not simply refer to the use of living materials, but emphasizes the concept of 'wholeness', implying the "systematic connection or co-ordination of parts in one whole". As Scofield points out, the concerns that motivated the early adopters of organic farming include issues of soil health and structure, the exhaustible nature of artificial fertilizers, and human health. According to the Codex Alimentarius (Le Guillou & Scharpe, 2001), organic farming involves holistic production management systems (for crops and livestock) emphasizing the use of management practices in preference to the use of on-farm inputs. This is accomplished by using, if and when possible, cultural, biological and mechanical methods in preference to synthetic materials.

The current growth of organic farming is being fueled by market demand. Nicolas Lambkin's book in 1990, Organic Farming, spells out both the principles underlying organic farming and the practical ways in which farmers can respond. He is particularly concerned with the economics of organic farming – a key point for farmers thinking of converting their land. He said that organic farming claims have the potential to provide benefits in terms of environmental protection, conservation of non-renewable resources, improved food quality, reduction in output of surplus products and the reorientation of agriculture towards areas of market demand. Some European governments have recognized these potential benefits and responded to them by encouraging farmers to adopt organic farming practices, either directly through financial incentives or indirectly through support of research, extension and marketing initiatives. However, farmers' decisions on whether or not to make the switch from conventional to organic farming have not been studied extensively thus far. The information was provided from the Food and Agriculture Organization of the United Nations (FAO) Organic Agriculture program, whose primary objective is to develop sustainable livelihood, encourage rural development and provide food safety by encouraging organic farming in the member nations and also Eurostat Database.

ORGANIC FARMING – THE BASIS OF ORGANIC AGRO-FOOD PRODUCTS

Ecological agro-food production aims at achieving sustainable, diversified and balanced agricultural systems that ensure the protection of natural resources and consumer health and refers to the production of unprocessed products, processed animal and plant products and feed materials for animal feed on farms organic production. Respecting the following principles:

a. The principle of health: Organic farming must ensure and enhance the health of the soil, plants, animals, humans and the entire planet as a whole and indivisible. This principle reveals that the health of individuals and communities cannot be separated from the health of ecosystems – healthy soils produce healthy crops that support the health of animals and humans. Health means the fullness and integrity of living systems. This does not just mean the simple absence of diseases, but also maintaining well-being under the physical, mental, social and ecological conditions. The essential features of this concept are: immunity, elasticity and regeneration. The role of organic farming in production, processing, distribution or consumption is to ensure and enhance the health of ecosystems and organisms, from the microscopic ones existing in the soil to the beings human. Particularly, organic farming is intended for the production of foods

of superior nutritional quality, which contribute to disease prevention and well-being. In this respect, the use of fertilizers, pesticides, medicines and food additives which may have harmful effects on health should be avoided.

b. Ecological principle: Organic farming must rely on living systems and ecological cycles, work with them, try to stimulate them and support them. This principle specifies the place of organic farming within the living ecological systems. According to him, production is based on ecological processes and recycling. Nutrition and well-being are achieved by greening the specific production environment. For example, for crops, the specific environment is soil; in the case of animals, this is the ecosystem of the farm; in the case of fish and marine organisms, this is the aquatic environment. Systems of organic farming, shepherding and harvesting of products from nature must correspond to ecological cycles and ecological balances. These cycles are universal, but their operation has a local specificity. Ecological management must be adapted to the local environmental conditions, the methods of cultivation and the place occupied by it. It is necessary to reduce inputs through the reuse, recycling and efficient management of materials and energy, in order to maintain and improve the quality of the environment, as well as to preserve resources. Organic farming must achieve an ecological balance by organizing agricultural production systems, managing habitats and maintaining genetic and agricultural diversity. It is necessary for all those who produce, process, market or consume organic products to protect and help the environment that belongs to everyone, including the landscape, climate, habitats, biodiversity, air and water.

c. The principle of fairness: Organic farming must develop relationships that ensure fairness in terms of the common environment and living conditions. Fairness is expressed through equity, respect, justice, and respect for the surrounding world, both in human relationships and in relationships between humans and other living beings. This principle emphasizes that everyone involved in organic farming must develop human relations in a manner that ensures fairness at all levels to all involved – farmers, workers, processors, distributors, traders and consumers. Organic farming must ensure that everyone involved has a good quality of life and contributes to their food independence and poverty reduction. The goal of organic farming is to produce sufficient food and other good quality products. This principle insists that animals must provide life conditions in accordance with their physiological characteristics, natural behavior and well-being. The natural and environmental resources used for production and consumption must be managed in a socially and environmentally sound manner and must take into account the responsibility towards future generations. Fairness requires fair, equitable production, distribution and marketing systems that take into account real social and environmental costs.

d. Administration principle: Organic farming must be managed in a prudent and responsible manner to protect the health and welfare of current and future generations and the environment. Organic farming is a living and dynamic system that responds to internal and external requirements and conditions. Those who practice organic farming can increase efficiency and productivity, but not at risk of endangering the health and well-being of living organisms. As a result, new technologies must be evaluated and existing methods reviewed. Care must be taken to ensure that the understanding of ecosystems and agriculture is not incomplete. This principle establishes that prudence and accountability are essential elements of strategies for the management, development and choice of technologies in organic farming. Science needs to ensure that organic farming is sound, safe and environmentally sound.

ORGANIC FOOD MARKET IN ROMANIA AND EU

The essential feature of the Romanian organic product market is that most domestic products do not reach the Romanian market, being exported mainly in the form of raw materials and, on the other hand, a series of organic food products as finished products. One of the most important aspects of the development of the organic products market in Romania is the consumer. Producers say that the main problem they face is related to the lack of consumer information, most Romanians preferring to buy cheaper products at the expense of more expensive but healthier organic ones. Ignorance of what the ecological product means by the consumer is a big barrier for these products on the Romanian market. Even when they have lowered the price, below the real level to which it should have been set, in order to get closer to the prices of conventional products, vegetable producers have found that they cannot sell their products. There are small organic vegetables, primarily in big stores, generally coming from small producers who cannot afford to export.

On the Romanian market of domestic products are added a series of organic products imported from Germany, Brazil, Poland, Italy and the Netherlands such as: sugar cane brown sugar, chocolate cream, natural oil, whole rye bread, soy, rice and oats, organic coffee and tea, maple syrup, fruit juices, whole pasta, organic biscuits and waffles, dietary sweets, canned vegetables and fruit. The main imported products demanded by Romanian consumers in recent years were organic brown sugar, imported from Brazil, rye bread, pudding and vegetable milk. Although most of the organic products obtained in Romania are currently being exported, it is intended that an increasing share remains and is sold on the domestic market.

In the recent years, the demand of European consumers for organic products has grown enormously. By "organic" product we mean food and agricultural products that have been obtained without the use of pesticides, chemical fertilizers, and zoo-veterinary drugs and medicines in large quantities. Sales of organic farming grew 40% a year. In order to encourage organic farming, the European Union has developed a set of regulations to this end, including the labeling of these products under the sign of "Biological Agriculture". Due to the remaining residues in the soil over time, products are considered environmentally friendly only after two or, in some cases, many years from when farmers apply the principles and rules of organic farming (Gruia R.). In this transition period from intensive farming to organic farming, farmers receive financial aid from the Union budget, up to 8% of the budget allocated to agriculture and the environment. Farmers can receive aid up to EUR 900 per hectare to compensate for the income loss resulting from the shift to organic farming (Healthy food for Europe's citizens – The European Union and food quality, European Commission, 2000, Brussels).

The European Union is promoting a policy of the qualitative diversity of agricultural and food products to meet the changing demands of consumers. Quality assessment of a product is highly subjective. If the diversity of consumption patterns in the Member States adds to it, a harmonious policy on quality and composition of food is very difficult to achieve. The European Union operates with the principle of mutual recognition, a Member State recognizes the quality of food products in other Member States, even though the way of preparation and composition are very different from those used in that Member State. Many agricultural and food products are protected by special regulations, such as wine and strong alcoholic beverages. Certain strict rules on the area of provenance of wine and how to obtain it should be observed. Similar rules exist for beer. Consumers benefit from the quality assurance of agricultural products and other indirect regulations. In agricultural legislation, there are strict rules on the quality and practices of cultivation used in the production of vegetables and fruit. Other products, such as beef and cereals, must comply

with certain technical specifications to enter the public intervention system. This justifies that farmers do not only produce to receive financial aid from the Union budget but to obtain quality goods that can be successfully sold on the market.

ROMANIA AND POLAND – WITHOUT PERFORMANCES IN ORGANIC AGRICULTURE

According to a study by FIBL Switzerland (Switzerland's Institute for Organic Farming Research – FIBL, the world's best-known research organization in the world), Romania is showing modest performance in the organic farming sector, compared to other East European countries and together with Poland, there is a decline in ecologically certified areas, with only 0.7% of the world's total area cultivated and bio-certified. The event was held at the "Innovation Networks in the Central Eastern European Region", organized on February 14, 2018 at ExpoBiofach Nürnberg, the world's largest international environmental fair. However, according to a USH Pro Business website, the two member countries are among the top 10 countries as the total organic agricultural area (Poland 1st place, Romania 7th place). Analysts say that if we are to report the share of organic areas to total cultivation areas, Romania is not in the top 10 places, the leading places being occupied by smaller countries such as Estonia, Lithuania or the Czech Republic. "In fact, these countries are among the top 10 and world-class organic farming intensities, relative to total organic farming," the document added.

Along with Poland, Romania is in decline as well as the total number of organic farmers. Slovenia, followed by Croatia, the Czech Republic, Poland and Romania, has the largest sales of organic products in their countries. This shows that the last two countries benefit from a larger volume of domestic sales, based on increasing consumer interest in the population, even though they are declining as surface and economic operators. The findings of the FIBL report, using comparable 2016 statistical data, is that the area is growing at a lower rate than other regions of the world in terms of the environmental sector, with developments being marked by lower consumption and export-oriented raw materials, rather than products processed under their own brand. Croatia has been given an example in terms of the relationship between export performance and the development of the internal market. In low-performing countries, including Romania, the lack of subsidies, instability of regulations and the internal market as well, represent the modest or negative image of external performance of the sector. Also, lack of knowledge and technology in the field, financing, coherent national support networks, lack of understanding of principles and value chains in this field and knowledge of export markets have been highlighted as possible explanations. Last year, subsidies for organic farming were also paid out of European funds, allocated through the 2014-2020 National Rural Development Program. The amounts per hectare have remained consistent, but the conditions that farmers have to respect were very strict.

Subsidies for organic farmers were included in Measure 11 – Organic Farming and were paid through the Agency for Payments and Intervention in Agriculture (APIA). Measure 11 promotes the application of organic farming practices by providing financial support for both conversion to organic farming methods and for maintaining organic farming practices. According to Eurostat database, Romania recorded a decline in organic production, with a decrease of 204.971, in 2014-2016. In 2015, higher values were recorded for oats and spring cereal mixtures, rice, root crops and fresh vegetables, compared to the previous year, but unfortunately lower than in 2016, except for root crops, which have grown steadily.

Table 1. Organic crop production by crops in Romania (ha.)

	2014	2015	2016
Cereals for the production of grain (including seed)	290081	254867	218318
Wheat and spelt	137474	127231	110552
Cereals (excluding rice) for the production of grain (including seed)	277560	239394	208575
Rye and winter cereal mixtures	298	154	327
Barley	34916	20259	10571
Oats and spring cereal mixtures	2394	3486	29464
Grain maize and corn-cob-mix	95403	86581	55405
Rice	12521	15473	9743
Dry pulses and protein crops for the production of grain	3659	2276	2009
Root crops	6571	7766	9936
Fresh vegetables (including melons)	2315	3639	3321
Total	**863192**	**761126**	**658221**

Source: Eurostat

Table 2. Organic livestock of animals in Romania

	2014	2015	2016
Live bovine animals	33782	29313	20093
Live swine, domestic species	126	86	20
Pigs	126	86	20
Sheep	114843	85419	66401
Goats	6440	5816	2618
Poultry	57797	107639	63254
Total	**213114**	**228359**	**152406**

Source: Eurostat

Analyzing the tables above, is the green business a profitable segment? Or rather risky business? Regarding the number of agricultural products and animals grown in ecological system in Romania, the number of these products shows a major decrease in the 2014-2016 period. One factor that influences this can be the number of organic operators, which also show a downward trend for both analyzed states. In the figure below, it can be seen an easy upward for Poland in 2015-2016 period.

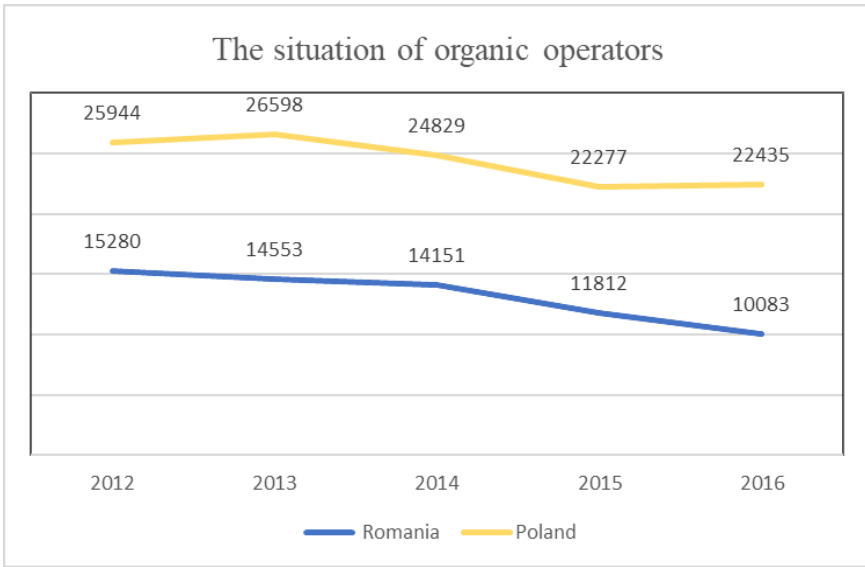

Figure 1. The situation of organic operators in Romania and Poland

Source: Eurostat

According to the Eurostat database, the number of organic operators declined in both countries in the period 2012-2015, and in 2016 Poland shows an increase of 158 more than in the previous year, while Romania is continuously decreasing. One of the factors influencing this decline in Romania is the small number of agricultural high schools, of which only one specialized exclusively on organic farming, which narrows the chances of young people to become organic farmers. Rural areas are already struggling to create attractive jobs in general, pushing for ongoing migration to urban or foreign centers, where wages are higher.

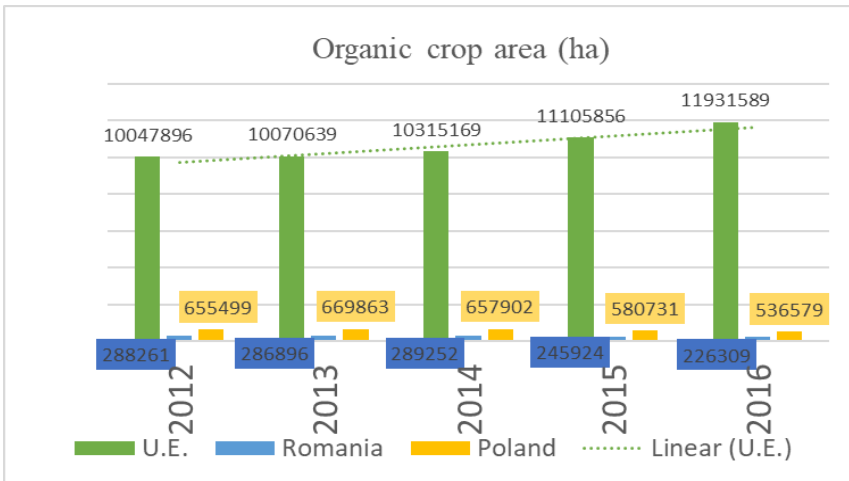

Figure 2. Organic crop area (ha)

Source: Eurostat

Romania and Poland record a decline in organic certificated areas and agricultural operators in the sector, although countries are in the top 10 as the total organic farmland. If at European Union level the areas cultivated with organic methods have grown annually in the last decade by 500.000 ha, the upward trend is not found for Romania and Poland where the eco-cultivated areas have fallen from 288.261 ha in 2012 to 226.309 ha in 2016 in Romania and from 655.499 ha in 2012 to 536.579 ha in 2016 in Poland. Farmers say organic farming is not sustainable in our country. The area where organic farming is practiced in Poland represents 5.2% of the organic area cultivated in the European Union. The organic farming area amounted to 657.902 ha in Poland. The proportion of the area already transformed into organic farming and the area still undergoing transformation shows good potential for the future growth of organic farming in Poland. Surface growth between 2004 and 2014 was spectacular, ranging from 84.000 ha to 658.000 ha. In spite of this rapid increase, the share of organic farming is still much lower than in the most important countries producing organic products in the European Union. An upward trend in the green area is expected in the near future, as demand for organic products and the organic market is projected to grow in Poland (www.europa.eu/eurostat).

Romania has been mentioned in a study FIBL Switzerland, the most prestigious environmental research organization in the world, with modest performances compared to other Eastern European countries. Thus, out of the 23 Eastern European countries analyzed in the study, which together account for only 0.7% of the world's total area cultivated and certified ecologically, only Romania and Poland are declining ecologically certified areas, being considered from this point of view counter-performances (USH Pro Business, February, 2018). Even so, Poland and Romania are still among the top 10 countries as total organic agricultural area (Poland 1st place, Romania 7th place). The real potential was shown According to European statistics, between 2010 and 2015, where the number of organic farms in Romania increased by almost 300 percent, reaching 11.869 organic farms in 2015, from 2.989 of such farms in 2010.

CONCLUSIONS

The most important thing that emerges from the study above is that we need agriculture, farming jobs, healthy eating, and great confidence that we have a huge potential. Romania has, perhaps, the greatest ecological potential in Europe, possessing large areas of arable land. The programs developed by the Government, as well as the Associations of Professionals, should lead to a better information of the people about both the importance of organic food consumption and the opportunities that exist in the development of business in the environmental field, of the road to the other states of the Union. The case study presented above is the best proof that we still have needs that we can satisfy with some courage and patience. It brings to light the return to the base, that is, to an agriculture capable of bringing back the wheat from which the grandmother's bread comes, but in a way worthy of this century. Also, the reunion of organic associations can generate a favorable result for increasing organic productivity.

In general, the organic transformed products are more efficiently than the cultivations and the olive cultivation have had the lowest level of efficiency. Organic farms have underscored a lower level of efficiency than normal farmers underling as some parameters such as the agrarian capital and labor force may be two pivotal variables in improving the level of economic and allocative efficiency.

For the future it is pivotal to implement funds and subsides allocated by the European Union in the Common Agricultural Policy towards organic farmers, in particular in favor of

many of them living in less favored areas, where are located a significant percentage of organic farms in order to reduce the marginalization and the out-migration from the countryside. Romanian and Polish farms should have positive consequences by the introduction of incentives correlated with the level of greening, in the new process of rural planning proposed by the European Union, aimed in stimulating the intensification of crops and in reducing the negative impact on the environment.

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