

ORGANIC FARMING - VECTOR OF INFLUENCE IN THE SUSTAINABLE DEVELOPMENT OF THE ROMANIAN AGRICULTURAL SECTOR

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Abstract

The purpose of this study is to outline an overview of the market for organic food products, as well as the progress made by Romania in the transition to organic farming as its size and evolution and we draw attention to the current situation of organic farming in the EU, but especially that of Romania. The importance of this paper is highlighted by the role of organic farming in global agriculture sector which is the defining element of improvement and modernization of Romanian agriculture, the conversion to organic farming and the adaptation to a new model, widely encountered, that of sustainable development by passing to a model of value added generating development. The working methodology includes the analyses of statistical data regarding surfaces and production of the agrofood organic products and of the operators who are certified in organic farming in Romania, between 2010 and until 2018, the carrying out of a quantitative statistical method for an observation of the evolution in time for organic productions and for the types of operators certified organic. The main outcome reflects the position of organic farming in Romania and in relation to the EU average.

Keywords: Sustainable development, agrofood sector, organic farming

DOI: 10.24818/CAFEE/2019/8/17

Introduction

In order to achieve a sustainable development of agriculture sector, we must accelerate our actions and pilot solutions to existing problems. There is also a need to reassess the entire production and consumption value chain, and all stakeholders, producers, processors, brands, retailers, as well as consumers have a responsibility to move towards a sustainable production and consumption. The conventional model of agricultural development emphasizes the increase of production and its intensification, but organic farming aims to achieve the dual objectives of increasing agricultural productivity and reducing the impact on the environment.

We analyze part of the progress made by Romania in the transition to organic, sustainable agriculture, as well as the causes and effects of delays in Romanian agriculture. In this analytical approach we rely on various scientific articles in the field and statistical data relevant to organic farming sector.

The importance of this study shows from the attention to the agricultural field, this being the most important economic sector since the implementation of the Common Agricultural Policy (CAP), from the first years of the European Union. One of the keys to the CAP, rural development, aims to promote organic farming and thus through this paper, we draw attention to the current situation of organic farming in the European Union (EU), but especially that of

Romania where are some openings and progress, but also serious lags behind the average level in the EU. The CAP has been and continues to contribute to supporting organic farming at EU level to stimulate organic farming, which provides protection of biodiversity, reducing pollution, reducing carbon dioxide emissions, ensuring animal welfare conditions and developing local economic activities. The impact of the CAP reform in the case of organic farms was a positive one, mainly due to the financial support that the farmers received. (Mirela Ionela Aceleanu, 2016)

In Romania as well as in the other Member States, in the last years there has been an increase of the organic farming sector, an increase to which the reforms of the CAP has contributed, which focus on the orientation of the production towards the supply of quality products to meet the demands. as the support of the European Union has been fundamental to the development of organic farming and its specific market in our country. (Daniela Bădescu et al., 2015)

Organic farming is in a broad development process, both nationally and internationally, in recent years, great importance has been given to the development and promotion of organic farming, considering this being beneficial for both consumers of agri-food products, as well as for the environment, this type of agriculture offering the necessary protection for the sustainable development of the agricultural sector. Also, organic farming has positive and long-term effects for the national economy it contributes to the development of the agricultural sector in country builds a competitive agricultural market, according to the current demand and support rural development from a social point of view and providing protection for environment and all natural resources.

1. Literature review

Organic farming combines tradition, innovation and science to promote fair relationships and good quality of life and positive and sustainable effects for all involved, so it focuses on how farmers deal with soil, water, plants and animals to produces, processes and markets food, an objective being to improve the quality of agri-food products. (Cristina Burghelea et al., 2016) The Food and Agriculture Organization (FAO) defined in 1988 the development of sustainable agriculture as "the management and conservation of the base of natural resources and the orientation of these changes to ensure the continuous satisfaction of human needs, both for present and future generations. Sustainable agriculture conserves soil, water and plant resources and is non-degrading from an ecological point of view, technically appropriate, economically viable and socially satisfactory", the vision being towards sustainable agriculture where food is nutritious and accessible to the entire population and natural resources are managed in a rational manner that maintains ecosystem functions to support current and especially the future human needs.

The community logo specifies the organic products that can be found on their label and helps the consumer in identifying them, giving the certainty and certainty that these products are obtained according to the methods specific to organic farming. The organic logo is a useful way for consumers to recognize environmentally certified products and an important step in ensuring that organic products always have the same high standards. (Paula Ionela Nastase et al., 2016)

In farms that are being converted to organic farming systems and those that are ecologically certified, pesticides, growth hormones, antibiotics and genetically modified organisms are forbidden, so soil pollution is zero. As far as obtaining organic produce is concerned, farmers must go through a certification process that includes a conversion period of agricultural land, the duration of the conversion period being different depending on the specific type, crop or

animal farm, as well as inspection inspections on at all stages of the process of realization of agri-food products, of vegetal and organic type: cultivation or breeding of animals, processing of raw materials, storage, distribution and marketing of organic agri-food products. (Aceleanu Mirela Ionela, 2016). Each operator involved in the trade of organic food products (producer, processor, trader, importer or exporter) is required to comply with the requirements and the legislation of the European Union and is verified and certified annually by a certification and certification body. (Paula Ionela Nastase et al., 2016)

2. Methodology

The paper will present an analysis of data correlated with the organic agriculture sector, statistical data from national and international databases, such as Ministry of Agriculture and Rural Development of Romania (MARD) and EUROSTAT. The working methodology for the applicative part of the research includes the creation of a statistical database on the certified surfaces and the certified operators in organic farming in Romania, starting with 2010 and until 2018, and carrying out a quantitative statistical analysis to observe the evolution over time of each category of organic surface, as well as of the organic operators. The methodological basis of the research includes a comprehensive and systematic approach, analyzes and forecasts, exploring the challenges for the organic agri-food sector of Romania and at European level, methods as analysis, synthesis, comparison using studies and statistical data were used in this study.

3. Organic farming in Romania

The Romanian organic farming sector is regulated at national level by the MARD and at Community level by the European Commission. The legislative framework of the European Union that regulates the organic sector of agriculture and organic production wants to offer the support for the sustainable development of agriculture, guaranteeing for the confidence of the consumers in this type of agriculture and in the offered products, ensuring the efficient functioning of the market. The rules on organic farming cover all stages of production, processing and distribution (from primary production to storage, processing, transport, distribution and supply to the final consumer) and the organic farming certification means that all the certified products, from Romania or EU, follow the strict rules, from seed to plate. At present, there is a considerable emphasis on organic farming as an important measure for the restoration, conservation and development of biodiversity in areas facing natural or specific constraints and in agricultural activities of high natural value. Rural development policy is an important and relevant tool to support the sustainable development of rural areas and agriculture, including organic farming. Support for organic farming can make an important contribution to the objectives of this policy, as it contributes to improving the competitiveness of agriculture and contributes to the improvement of the environment and the rural area from a socio-economic point of view. Also, organic farming contributes to improving the management of water, fertilizers and pesticides, as well as preventing soil erosion and improving soil management. (Romania's rural development strategy 2014-2020)

3.1. The organic agrofood market in Romania

The supply is a range of organic agrofood products produced in Romania includes fruits and vegetables, meat and meat products, milk and dairy products, cereals and cereal products, eggs, aromatic and medicinal plants, wines and honey. According to a study developed by Research Institute of Organic Agriculture (FIBL), milk and dairy products are particularly successful products in the organic sector, and in terms of fruits, however, it must be considered that tropical and exotic fruits that are imported, such as bananas and citrus fruits, usually plays a more important role in the organic market than apples that are produced nationally.

The demand for organic agrofood products in Romania is increasing due to the awareness of the population about the benefits offered by this category of products. Analyzing the demand of consumers to choose organic products to the detriment of conventional products, it is found that they mainly focus on developed economies, and this can be explained due to price. The high prices of organic food compared to other conventional products are closely linked to the purchasing power of organic consumers in economically developed regions. An organic product is at least 20% more expensive compared to a conventional one, and consumers prefer the idea of buying cheaper or not allowing the purchase of these products. (Dana Tapaloaga et al., 2017). The rise of ethical consumerism has increased consumer support for products from environmentally and socially responsible production systems, consumer awareness of the benefits of consuming organic products is growing because organic farming is a form of sustainable production and in harmony with the components of the environment, and by choosing to consume organic products, consumers consider that they support sustainable production as well as consumption. Ethical consumers have a concern that includes not only the well-being of their own and that of society, but also of the environment. The distribution of organic agrofood products is mainly through retail, which annually improves their assortment of organic food products, both under known brands and their own brand, with organic food sales accounting for only 1% of food sales. Unfortunately, most of the organic products are imported, Romania exporting most of the organic production and importing organic certified finished products due to the lack of specific infrastructure for processing and production, as well as the small number of certified producers. (Vladimir Vietoris et al., 2016). The marketing of organic products is also carried out through specialized stores, online or directly from the farming, but they have a limited number of organic products with limited availability, seasonal, and the impact is less on what looks at the volume of sales. (Elena-Ana Popovici et al., 2018)

3.2. Production of organic agrofood products in Romania

In order to ensure sustainable development of the agricultural sector, ensuring the sustainability of productive agricultural systems and aquaculture is a priority and must be considered to meet the demand for food and to provide stable, sustainable, safe and high-quality food at affordable prices for the whole population. The development of agriculture must aim at ensuring a safe and healthy quantity of food, now and in the future, especially in the face of challenges such as climate change and population growth.

3.2.1 Organic certified operators in Romania

If in 2010 the number of organic operators was only 3,155, due to the European support granted through the specific measures and subsidies for organic farming, in 2012 the highest total number of certified operators in the organic agricultural sector was registered, in all their forms, 15,544. Since 2013 there has been a decrease in the number of organic operators, in

2018 the number of its was with 40.71 % lower. (Chart 1). Throughout the period analyzed, the largest share of the total number of organic operators is represented by organic farmers, the processors being in a very small number, which is why Romania exports a large quantity of raw materials and fresh fruits and exports processed products within the EU.

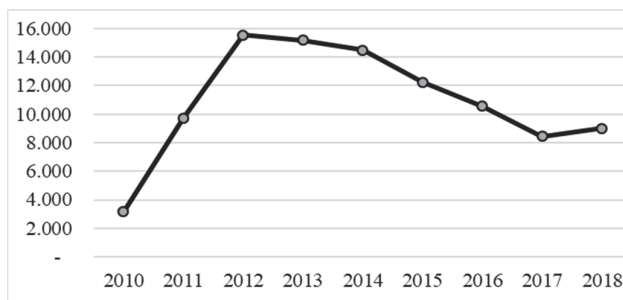


Figure 1. The evolution of total number of certified operators in organic farming in Romania

Source: MARD

The main reasons for this drastic decrease in the number of operators are the lack of experience and knowledge related to organic agriculture, the impossibility of integrating in a supply chain, the lack of the market and the failure to comply with national and Community legislation. The return of the organic operators to the conventional sector represents a possibility of stopping the development of the organic agricultural sector, while the sector is in full development, the abandonment rates of the operators increase, this aspect representing a considerable degree of vulnerability in the sector, for the majority of the farmers, the economic reasons have were the most important followed by the processing of organic production. Also, this withdrawal can affect the sustainability of the sector's development from an ecological point of view, because ecological management takes time to have an impact on soils, water and biodiversity, so the environmental benefits do not have immediate effects if the ecological management is abandoned quickly.

3.2.2 Surfaces organic certified in Romania

The organic surface reached in 2018 for the first time in history almost 300,000 hectares, that is just over 2% of the total cultivated area of Romania. This happened, on the one hand, because there is demand for this products and certification is a document that potential customers trust. On the other hand, the producers want to be certified organic because the document offers them a competitive advantage on the agrofood market.

According table 1, the total agricultural area organic certified increased in 2018 compared to 2010 with 79%, respectively 143,553 ha. The most representative growth is that of the area cultivated with cereals, which had an increase of 42,130 hectares, at the opposite pole being other crops on arable land that had a decrease of the surface with 467 hectares.

Analyzing chart 2 we find that in period 2010-2018 the highest share of agricultural crops in organic farming is represented by cereals, recording a share value higher than 35% of the total organic surfaces, the most representative crops in 2018, according to Eurostat sources being wheat and sunflower seeds.

Table 1. The evolution of organic certified surfaces in Romania

Organic area type (100 ha)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total organic farming area, from which:	1,827	2,299	2,883	3,011	2,893	2,459	2,263	2,585	3,263
Total cereals	723	792	1,051	1,091	1,025	814	752	849	1,144
Industrial crops	478	479	448	518	541	526	534	724	802
Permanent crops of grassland and meadow	316	782	1,058	1,037	957	759	576	507	669
Green harvested plants	103	48	111	132	135	136	143	204	283
Permanent crops orchards, fruit bushes, nuts	31	42	78	94	94	111	120	132	186
Dried and protein vegetables for grain production	56	31	28	24	23	18	22	50	88
Uncultivated organic land	102	98	88	95	91	72	95	97	76
Fresh vegetables	7	9	9	11	19	12	12	15	10
Total root plants	5	11	11	7	6	7	7	7	5
Other crops on arable land	6	9	0	3	0	4	3	1	1

Source: MARD

Permanent crops along with pastures and meadows, all of this being organic certified, registered an evolution of two percentage points, these areas being especially important for the breeding of animals in the organic agrofood system.

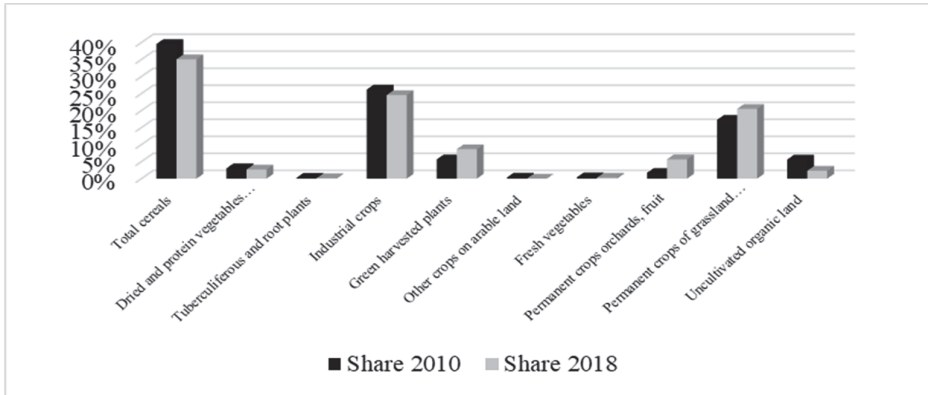


Figure 2. The share of organic surface by types in Romania
Source: MARD

Regarding the permanent crops characterized by surfaces destined to the production of organic fruits, according Eurostat, during the analyzed period they have been constantly increasing trend, its increased in 2018 by 15,476 hectares compared to 2010, the largest areas in 2018 being those with apples, plums and grapes.

In 2018 was registered the largest area cultivated organic in Romania ever, but the number of certified operators has been decreasing compared to other years. The number of operators is on an upward trend, but it is far from the maximum of 2015, when they were registered over 15,000 operators. This means that existing farmers operate larger areas and the smaller number of organic certified producers can be explained by the bigger challenges compared to those of classical agriculture.

3.3. The organic farming in Romania versus the EU average

Reporting Romania to other EU countries in a ranking that reflects the share of cultivated areas in the organic system of the total agricultural areas, it is at the bottom of it, while countries such as Austria (23.37%), Sweden (19.16%), Estonia (19.6%), Italy (14.86%) have a significant share of organic certified crops, Romania, in 2017, registered only 1.93% organic crops from the total agricultural areas. (Fig no.1) Austria and Sweden are top-ranking countries because of well-defined and implemented sustainable development policies that have in turn generated a high demand for organic products from the population.

The penetration of organic food products varies between EU countries. According Eurostat, the largest EU markets for organic are Germany with 10 billion EUR (5.1 % organic in total retail sales) and France which registered 7.9 billion EUR (4.4 %).

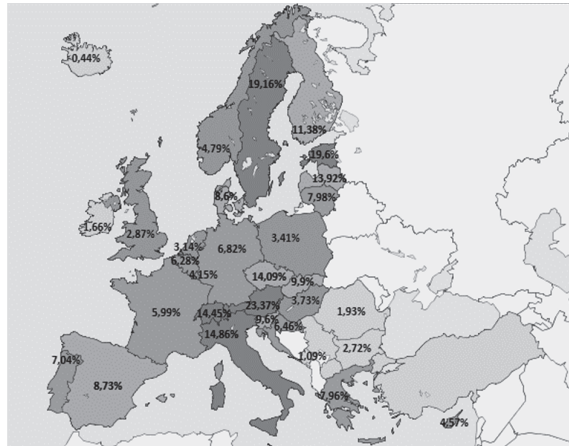


Figure 3. Share of organic farming surface in EU 2017
Source: Eurostat

Consumers have become more environmentally aware thus organic sales increase significantly (18 % in 2017) and over the last ten years, the EU organic market doubled its size and it continues its upward trend, indicating that it has not yet reached full maturity. In 2010 Romania had much lower values of the benchmarks for organic farming compared to the European Union average, but due to the favorable financial instruments for this sector and the increase of concerns regarding human health and environmental protection, Romania reached in 2015 is approaching the average of the European Union in terms of organic surface and even exceed the average number of operators registered in organic farming by 2,533. In 2017, Romania was ranked on 8th place, with 67,439 less operators than Italy which was first place in EU and with 30% less than EU average.

Organic farming is further recognized for sustainable food because the organic sector responds to an increasing desire for sustainable food production being an important vector for the development of agriculture sector. Organic farming must enable large-scale use of truly sustainable agricultural systems and agrofood markets, based on ecological principles and combined with innovation, progressive improvement to the most economic efficiency practices, transparent integrity and inclusive social collaboration.

Conclusions

Organic farming has a small share in the agricultural sector, in terms of agricultural production and animal husbandry. However, it has a high potential for development due to the accelerated growth of indicators and can make a significant contribution to sustainable as well as economic development, due to the significant added value of organic products. Organic farming is not sufficiently exploited, the development potential of the agricultural sector is still uncertain. The growth of the market of organic farming in Romania can be achieved through financial instruments offered by the competent authorities, both for setting up organic certified farms and for the market, by creating market support levers, which will guarantee the expansion of the offer of organic products and consumer education on the benefits of organic products, both for human health and for the environment. The development of the organic agrofood products market in Romania offers an added value for

the Romanian agricultural sector and can be achieved through the expansion and technological endowment for processing the national producers of organic products in order to process the organic raw material for the diversification of the assortment range on the market. In order to develop this market, well-implemented market policies are needed to encourage the practice of organic farming and to promote this agriculture system.

The economic sustainability of organic farming development depends on the ability of many individual producers to create and maintain the economically viable of organic agrofood businesses and this development approach requires not only a relatively stable market that responds to consumer demands, but also to actors throughout the entire supply chain, able to maintain profitable organic agrofood enterprises in this sector, dominated by conventional agricultural production.

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