THE STATE AND PERSPECTIVES OF DEVELOPMENT OF ORGANIC CROP PRODUCTION IN UKRAINE

Kateryna Bogomolova,
PhD in Economics, Associate Professor,
Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine

Olena Smihunova,
PhD in Economics, Associate Professor,
Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine

Hanna Holovanova,
PhD in Economics, Senior Lecturer, Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine

The development of organic agricultural production is a topical and at the same time controversial issue of the functioning of agricultural formations in a competitive environment. Organic farming is a holistic system that combines best practices in terms of environmental protection, biodiversity, natural resources, high standards and production methods. Discussions among scientists and practitioners about the economic feasibility and organizational possibilities of introducing organic production in agricultural formations are related to the conditions of imbalance of the external environment, increased competition and intensification of the effects of the global environment. The current level and structure of requirements for the quality of product consumption, the prospects of integration into the European market, requiring increased efforts in the direction of production of environmentally friendly products have a direct impact. At the same time, many years of foreign experience demonstrate the economic, environmental and social benefits of organic production [1].

The difficulty of complying with all technological requirements for organic agriculture, the inability to obtain sufficient raw materials capable of ensuring food security, lack of domestic demand for organic products due to low solvency of consumers, etc. – the main reasons why farmers are forced to use traditional technologies.

Organic products are currently in high demand worldwide, and the number of its producers is growing every year. Organic agriculture is tolerant of the environment and is based on the principles of ecology – the science of the environment, and the deep laws of biology – a set of sciences of wildlife. Therefore, it can be argued that organic agriculture is essentially both ecological and biological. Thus, the use of the terms "ecological" and "biological" does not contradict EU regulatory directives when it comes to organic agriculture [7, p.233].

The growing popularity of organic production in Ukraine is facilitated by the active work of public organizations and associations, such as the International Association of Organic Production "BIOLan Ukraine", the certification body "Organic Standard", the Union of Organic Agriculture "Naturproduct", All-Ukrainian NGO "Organic Agriculture Club", Ukrainian public organization "Living Planet", Trading House "Organic Era", information center "Green Dossier" and others. Many of these organizations are members of the Federation of Organic Movement of Ukraine, whose activities are aimed at uniting the efforts of producers, scientific and educational institutions and other enterprises, as well as individuals and institutions interested in the production and distribution of healthy, safe products [4, p.204].

According to the commercial service of the US Embassy in Ukraine [1], the average return on investment in Ukrainian organic farming is about 300%, which makes it one of the most attractive areas for investment in Ukraine. Organic farms are often participants in projects to implement organic farming in Ukraine and cooperate with foreign companies, primarily from Switzerland, the Netherlands and Germany [3, p.411].

At the same time, in recent years, the macroeconomic environment of business is characterized by trends that hinder the growth of domestic exports of organic crop products. The growth of international competition, the acceleration of global climate change, the lack of developed logistics infrastructure, the spread of national protectionism are the most significant [5, c.108].

Organic Ukrainian products are grown on the territory of 1% of land intended for agricultural activities. This is a very low figure. But it gives the chance to develop ecological manufactures. The emergence of new producers of organic products is proof of this.

Ukraine specializes in the production of organic crop products. Cereals (wheat, barley, rye, oats), oilseeds (sunflowers) and legumes (peas, soybeans) are grown. Growing vegetables and fruits is at an early stage. In the structure of crops, 17% falls on wheat, 16% – on barley and sunflower, 11% – on corn; 4% is occupied by peas; 1% each – rapeseed and buckwheat. The rest (34% of sown area) is allocated for soybeans, rye, oats, sorghum, millet, mustard, sugar beets, sainfoin, etc. [4, c.204]. In general, 48.1% of land certified as organic is used for grain cultivation, which puts Ukraine in 7th place among countries producing organic grain [1].

For organic production, fertile soils are used, on which stable crop yields can be grown without the use of mineral fertilizers. Farms growing organic products must adhere to crop rotations, include legumes and perennial legumes in the structure of the sown area to provide nutrients and reproduction of humus in the soil.

The total area of agricultural land certified according to the standard amounted to 309,100 hectares, including 233,500 hectares – land with organic status. At the same time, there were 635 operators of the organic market, of which 501 were agricultural producers [10]. The regions with the highest concentration of certified lands and certified operators are Kherson (66479 ha and 52 operators respectively), Odesa (38245 ha and 41 operators respectively) and Zhytomyr (32196 ha and 43 operators).

Some researchers believe that organic production should be developed in large farms, where the value of gross output at comparable prices exceeds UAH 10 million, which will cover the costs of production development and certification [8, p.140.]. Production should be aimed at a competitive market and maintain its capacity primarily at the level of the enterprise and the regional market. In this regard, the main indicator of competitiveness is the difference between production and sales prices. Thus, changes in production should focus on these two indicators. Since the organic market of Ukraine today can be called oligopolistic, which indicates the impossibility of a particular producer to influence it, the strategic goals of the enterprise should focus on reducing the unit cost of production. Moreover, the company must be sure that it uses organic raw materials.

In general, in 2019, Ukraine took 2nd place out of 123 countries in terms of imports of organic products in the EU, rising by two places compared to the previous year [2].

It is noted that in 2019 the EU imported 3.24 million tons of organic agri-food products, more than 10% of which is accounted for by Ukraine [imports of organic]. Thus, Ukrainian imports to the EU increased by 27% – from 265,817 thousand tons in 2018 to 337,856 thousand tons in 2019.

It is interesting to note that the first significant volume of processed value-added products was imported from Ukraine only in recent years. Although volumes are still small, the fact that these products have been imported means that Ukraine is already able to offer such categories of goods internationally, with the right conditions to significantly increase production and trade if buyers are satisfied with the quality.

However, only 13.3% of domestic producers of organic grains export organic products by concluding direct contracts with foreign buyers. These are companies with a powerful land bank, for which organic crop production is one of the areas of agricultural production. Such companies have an impeccable reputation and the financial ability to cover potential losses from organic farming through other activities. At the same time, small farms specializing in fruit, vegetables and berries cannot export due to the following factors:

1. Foreign companies are interested in large batches of products. Small producers who grow different crops cannot meet the stable demand for organic raw materials and processed organic food.

2. Export operations are accompanied by large transport and overhead costs (costs of storage and delivery of products that spoil quickly and can be damaged by pests and diseases, the cost of legal support, laboratory examination, insurance, etc.). Given the full coverage of such costs, the supply of small batches by sole producers is economically impractical.

3. The implementation of foreign economic activity by farms is also complicated by the lack of qualified personnel, access to logistics infrastructure, high currency, logistics risks [5, c.110].

In the EU, Ukraine exports grain (except rice and wheat, 76.9% of grain of Ukrainian origin), wheat (31.8% from Ukraine), oilseeds (except soybeans, 18.2% and second only to Turkey), soybeans (4th place and 13% of soybean imports from Ukraine). Ukraine is also one of the largest exporters of cake.

The Netherlands, Germany, Great Britain, Italy, Austria, Poland, Switzerland, Belgium, the Czech Republic, Bulgaria and Hungary consume the most Ukrainian organic products. Ukrainian producers also export "organic" to the United States, Canada, Australia, and some Asian countries.

It so happened that the export of Ukrainian organic products is three times higher than the volume of the domestic consumer market in Ukraine and currently amounts to 99 million euros.

Ukrainians consume significantly less organic products than EU residents. This figure is € 3 per capita, while in the EU it is € 53.7. In terms of the volume of the domestic market of organic products, Ukraine ranks 25th in Europe: from a hectare of organic land to the domestic market gets products at € 50, while in Europe – at € 2345. Today, the domestic consumer market of organic products in Ukraine continues to expand through major networks supermarkets [10].

Despite generally high prices for organic products in the domestic market, a significant number of "middle-income consumers" are apparently aware of the benefits of organic products and consider the purchase of organic products an important investment. It is likely that most of these consumers also belong to the category of "health-conscious consumers", who, along with high-income buyers and foreigners, are an important element in the growth of demand for organic products.

Analysis of the development of the market of organic products in Ukraine showed that it could develop faster if not for the main deterrent – the high cost of organic products (approximately an order of magnitude, compared with the cost of products grown in a sacramental way). It is established that in European countries the standard markup on organic products is 20-30%, in our country – 50 – 300% and higher than inorganic analogues of food and household goods [9, p. 27] This significant difference can be explained by the following factors of influence: the direct high costs of the production process, especially in animal husbandry; much more expensive is the processing process, as well as storage of organic products; small production volumes and transportation distances with special shelf life of such products; significantly higher labor costs in the production of organic products, as well as taking into account the costs of its certification.

For most arable crops, the use of efficient technologies of organic production is less problematic – with good equipment and knowledge of agricultural technologies [11]. With a well-thought-out crop rotation, preparation of the soil for sowing and proper mechanical control of weeds, you can get a high gross profit by engaging in organic production. Analyzing the parameters used to calculate gross profit, especially for arable crops, it becomes clear that, although the high price compensates for lower yields, gross profit in organic production is generally higher due to lower costs of purchasing ancillary products. In other words, without the use of chemical pesticides and fertilizers, organic farmers have lower total costs, which means higher profitability. However, the calculation of gross profit does not reflect the initial investment in the transition period, when farmers can sell their products at the price of inorganic products, while receiving lower yields than before. In addition, the costs of organic certification are not taken into account, but for Ukrainian farms they are quite low, given their large size, namely: from 1 to 5 euros / ha, depending on the size of the farm and the certification body.

One of the ways to strengthen the competitiveness of large and small producers of organic crop products in Ukraine is the creation and development of clusters as an innovative means of cooperation between companies in order to achieve common economic, market and national interests. The creation of clusters for the production and circulation of organic crop products will facilitate the development and implementation of economic, market and organizational tools to strengthen the competitiveness of national producers in the face of global economic and climatic challenges [5, p. 110].

The cluster form of association of producers of organic crop products will help increase the competitiveness of producers in national and international markets by:

- determination of geographical specialization of producers of organic products and development of tools to improve the quality of finished products, taking into account natural and territorial features, identification of promising niches in international and national markets;

- development and implementation of an organizational mechanism for the formation of financial resources for the implementation of large-scale research, improvement of logistics infrastructure, intensification of marketing support in international markets, conducting capital environmental measures, etc.;

- implementation of comprehensive organizational, economic and financial measures to prevent the effects of natural and climatic changes, eliminate their impact on the organization of agricultural production;

- formation of institutional support to protect the interests of producers and operators of the organic products market in state, regional and local authorities;

- introduction of a system of legal support and market consulting for small agricultural producers;

- development and application of a mechanism to counter unfair competition from producers of traditional agricultural crop products, as well as procurement companies.

References

1. Analiz rynku orhanichnoyiproduktsiyi v Ukrayini. Retrieved from https://agropolit.com

2. V 2019 hodu Ukrayna zanyala 2e mesto yz 123 stran po ob″emam ymportyruemoy orhanycheskoy produktsyy v ES. Retrieved from https://www.apk-inform.com.

3. Vdovych, V. H., Cherkas′ka, I. S. (2013). Suchasnyy stan vyrobnytstva orhanichnoyi produktsiyi v Ukrayini. Naukovyy visnyk Natsional′noho universytetu bioresursiv i pryrodokorystuvannya Ukrayiny. Ser. : Ekonomika, ahrarnyy menedzhment, biznes. 181(6). 408. http://nbuv.gov.ua/UJRN/nvnau_econ_2013_181(6)__70.

4. Havaza, YE.V. Suchasnyy stan vyrobnytstva ta realizatsiyi orhanichnoyi produktsiyi na vitchyznyanomu rynku. Orhanichne vyrobnytstvo i prodovol′cha bezpeka. 203 – 208. http://www.znau.edu.ua/media/nauka_innovation/organic/Organic_20132.pdf.

5. Honcharenko, N.V. (2018). Klasteryzatsiya yak instrument pidvyshchennya konkurentospromozhnosti orhanichnoho roslynnytstva v umovakh mizhnarodnoyi konkurentsiyi. Derzhava ta rehiony, 106 – 112.

6. Hranovs′ka, V.H. (2017). Prespektyvy rozvytku rynku orhanichnoyi produktsiyi v Ukrayini. Ekonomika APK, № 4, 31 – 40.

7. Zbars′ka, A.V. (2013). Ahrarne vyrobnytstvo Poltavshchyny: stan i perspektyvy rozvytku. Orhanichne vyrobnytstvo i prodovol′cha bezpeka, 230 – 235.

8. Leheza, D. H. (2011). Model′ orhanichnoho vyrobnytstva produktsiyi u sil′s′kohospodars′kykh pidpryyemstvakh. Visnyk Khmel′nyts′koho natsional′noho universytetu, № 5, T. 2, 139 – 143. Retrieved from http://organic.com.ua.

9. Marmul′, L.O., Novak, N.P. (2016). Rozvytokorhanichnohovyrobnytstva v Ukrayini na zasadakh kooperatsiyi. *Ekonomika APK*, №9, 26-32.

10. Orhanichnevyrobnytstvo v Ukrayini. Retrieved from https://agro.me.gov.ua

11. Kalinichenko, S., Dudnyk, E., Zaika, S, Gridin, A. (2016). The essential characteristics of innovative agricultural technologies. Impact factor: 1.436 5-Yr impact factor: 1.828, 99, 1280-1286.