Entrepreneurial Activity as an Important Factor in the Development of the "Green" Economy

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Abstract: Organic production as a global trend in progressive socio-economic development and the guarantor of the food and environmental security of countries and regions is becoming an attractive field for entrepreneurs. However, in Russia, only a few entrepreneurs currently consider organic production as the main type of business. The article analyses the factors that favour and impede the development of entrepreneurial activity in the field of organic agriculture and substantiates the basic mechanisms to encourage entrepreneurship in organic production. The results of the analysis can be used in the development and implementation of regulatory policies on entrepreneurial activity in organic agriculture. The purpose of this study is to substantiate the mechanisms of entrepreneurial activity and the organizational and economic prerequisites for the development of organic agriculture in Russia. The basic objectives include the development of mechanisms to stimulate entrepreneurial activity in the organic production sector, as well as the socio-economic assessment of the effectiveness of organic agriculture in the context of the formation and development of a "green" economy.

Keywords: entrepreneurial activity, organic agriculture, "green" economy, government regulation, incentive mechanisms

I. INTRODUCTION

The International Federation of Organic Agriculture Movements (IFOAM) defines organic agriculture as a "production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic farming combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved" (Altukhov, 2008).

Modern society is concerned with assessing the current environmental situation in the world. Thus, the interest in environmental issues of agriculture has grown over the last twenty years, which contributes to the natural restoration of soil fertility and maintaining a balance of the natural ecosystem (Shatunova et al., 2019; Meier, 2019; Bozhkova et al., 2019; Jones, 2019). Such agricultural technology can be considered as an alternative to traditional (industrial) agriculture (Danilov-Danilian, 2003).

II. METHODS

The works of Russian and foreign scientists served as a theoretical basis for this research. The study applied a systematic approach that ensured the complexity, consistency, and reasonableness of the study. The incentive system encouraging entrepreneurial activity in organic production, as well as economic and environmental processes in organic production, serve as an object of study. The author used economic and statistical, monographic, expert and other research methods.

III. RESULTS

Summarizing foreign experience in the production and consumption of organic products makes it possible to conclude that organic agriculture is a dynamically developing area. In recent years, global demand for organic products has shown considerable growth: while in 1999 the volume of sales in this market was around $15 billion, by 2010 the figure had increased to $59 billion, and it is forecasted that in 2015 the volume of sales of organic products will amount to $88 billion (Kryukov, 2018). Today, there is steady growth in the global market for organic products – around 15-20% per year. However, several Western experts predict "rapid" growth in the coming years, up to 50% per year. Today, the leading consumers in the market for organic products are the most developed countries, and the leading manufacturers are developing countries (Altukhov, 2008; Dunets et al., 2019a,b).

Currently, the economy-environmental issues are raised in all spheres of human activity and, especially, in agriculture (Grakhova et al., 2019; Kireev et al., 2019). The economic development of an agricultural enterprise cannot be considered apart from its impact on the state of land resources and the environment, from the pollution of the environment with industrial waste and chemical components of plant protection products.

Today, domestic agricultural producers are increasingly interested in the production of environmental products. Their production costs in Russia are much lower than in other countries. This is due to the availability of large areas of agricultural lands, including unused fallow lands, and cheaper labor (Yarlykapov, 2013; Baharuddin and Dalle, 2019). The topic of organic agriculture has recently been increasingly discussed both at the state level and the level of the business community and consumers. Organic agriculture is often considered as an alternative to traditional agriculture for food production with reduced environmental impact. Despite the fact that organic...
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agriculture accounts for less than 1% of global agricultural lands, 6.2% of all EU arable lands and less than 5% of retail sales in most high-income countries (Poltarykhin et al., 2018; Vedenin, 1980; Kuznetsova et al., 2019; Goryushkina et al., 2019), this sector is one of the fastest-growing food sectors, and, therefore, it is a promising sector for entrepreneurs. The "organic" label is the most recognizable food brand for consumers around the world. For producers, organic agriculture is the only farming system, the management practices of which in most countries are strictly regulated by the law, which is a sort of quality guarantee for consumers. The analysis of more than 50 publications on the development and regulation of organic agriculture allowed the author to conclude that the issue of incentive mechanisms encouraging entrepreneurial activity in organic production has yet to be addressed. Several publications of Russian authors analyse the problems of the development of organic agriculture with a focus on the issues of Russian legislation and certification problems (Altukhov, 2008, Danilov-Danilian, 2003, Plaskova et al., 2017; Kryukov, 2018; Dharmawan et al., 2019; Trofimova et al., 2019). Foreign authors generally examine individual problems, mainly social and legislative aspects of the development of the organic sector (Podprugin, 2012, Poltarykhin, et al., 2018; Vedenin, 1980). When considering the problem of entrepreneurial activity incentives, the authors of publications also ignore organic production (Kolesova, 2015; Akhmetshin et al., 2018a,b; Sagdieva et al., 2019; Armiatiet al., 2019).

The article attempts to provide a comprehensive review of business entities in organic agriculture, as well as a set of mechanisms, specified by both the state and the market, to stimulate entrepreneurial activity in the field of organic agriculture. Entrepreneurial activity in agriculture is the core of its sustainable development (Korableva et al., 2019), as well as a guarantee of the normal functioning of the market based on productive competition and positive economic dynamics. However, according to the official Russian statistics, by the end of 2017, such demographic indicator as the birth rate in the agriculture and forestry sector ranked 8th among all other sectors and amounted to 39.9, exceeding only the values of this coefficient for such areas as government, health, and education. This undoubtedly reveals several problems and barriers when entering this area (Melgui et al., 2018; Saenko et al., 2019; Boutetier, 2019; Fedulova et al., 2019; Kayumova et al., 2019; Raba’ and Harzallah, 2018; Popova et al., 2019; Titova et al., 2019).

Unfortunately, there are no official statistics on entrepreneurial activity in organic production. However, according to the study conducted by the Union of Organic Agriculture from March 2017 to April 2018, there were 70 certified organic agricultural producers in Russia, 53 of which were certified according to international standards. 17 – according to Russian standards (Kuznetsova et al., 2012; Gabidullina et al., 2019; Kustati and Al-Azmi, 2018; Johnson and Hinton, 2019; Kovalchuk et al., 2016; Yehya et al., 2019; Prodanova et al., 2019a,b,c). Of all the farms 38 specialize in crop production, 15 in livestock, 14 in wild plants, 1 enterprise – in alcohol production, and 2 enterprises – in recycling. A very small share of processing enterprises in this sector indicates the lack of cooperation between direct producers of raw materials and potential processing companies, as well as the low interest of agricultural producers to create processing plants on their premises, since, as the above study showed, Russian organic production mainly focuses on raw materials (Kuznetsova et al., 2012).

Entrepreneurial activity in organic production can be subdivided into supporting production, marketing, and servicing, i.e. providing a range of services (Goloshchapova et al., 2018). Consequently, the subjects of entrepreneurial activity are direct producers of organic crops and livestock products, processing companies, marketing organizations (stores, online stores, cooperatives), companies providing consulting services in the field of organic agriculture, including suppliers of biological products for organic crops and livestock. An analysis of prerequisites that form a favourable environment for entrepreneurial activity is important for understanding its development prospects and the development of incentive mechanisms in organic agriculture (Kashirskaya et al., 2019; Frolova et al., 2019a,b; Sycheva et al., 2019.a,b).

Prerequisites for the development of entrepreneurial activity in the field of organic production are the global growth trend of the organic sector and the service sector – agricultural biotechnologies, which include veterinary bio preparations, feed bio components, and biological plant protection products. At the same time, by 2035, the expected share of Russian enterprises in this sector will amount to 0.8-1% under the inertia scenario, the volume of production will reach 6.4 million US dollars. Under the accelerated scenario, the indicators will grow increasingly – the share of Russian enterprises in the sector of agricultural biotechnology and organic agriculture will amount to 11.1% or 108.2 million US dollars (Ziuzya et al., 2019).

The prerequisites for the growth of entrepreneurial activity in organic production can also include significant export potential (given the high cost of the currency, this is an additional incentive for entrepreneurs to switch to this type of activity) and margins, which are 30-40% higher than in the traditional agriculture sector (however, according to foreign studies, this factor is unstable in the medium-long term, and increases the risks of fluctuations in prices for organic products, and, therefore, becomes a deterrent, since lower prices provoke entrepreneurs to abandon this type of activity (Vedenin, 1980)).

Another important prerequisite is "responsible consumption", which becomes a growing trend around the world and in the Russian Federation. Worldwide, 68% of consumers with incomes below $20,000 per year are ready to pay for environmental friendliness, while among consumers with incomes from $50,000 per year the figure is 63%. In the Russian Federation, 56% of consumers prefer products with organic ingredients, 53% – healthy foods, and 22% – products in organic packaging (Dzhavatov et al., 2018). These data correlate with a study held by the Romir company: 58% of Russian consumers are willing to buy organic foods and pay more for them.

According to the Union of Organic Agriculture, 21% of the Russian population is well aware of organic and environmentally friendly foods and seeks to buy this kind of product. Of these, 45% are young mothers, 30% stick to a healthy lifestyle, 10% have health problems, 10% are consumers of the luxury segment, 5% are people for whom organics is a tribute to fashion (Kryukov, 2018). The development and improvement of incentive...
mechanisms for entrepreneurial activity in organic production are also conditioned by the market specifics, which are manifested by the following parameters of comparison with the traditional agricultural products market:

1. The institutional framework in the form of a regulatory framework: the need for an institute of organic certification, along with a special legal framework.

2. Specifics of entrepreneurial activity: suppliers must necessarily have a relevant certificate (international if they enter the foreign market); there are no producers of mineral fertilizers and synthetic pesticides in the market; this business sector targets consumers with incomes above the national average; the infrastructure of commodity distribution must include separate storage facilities for organic products.

3. Product specifics: high elasticity of demand for all product groups; shorter shelf life, which implies quicker product delivery to the consumer.

An analysis of the mechanisms encouraging entrepreneurial activity in organic agriculture suggests two trajectories: the "state – entrepreneurs" trajectory and the "market environment – entrepreneurs" trajectory. The first trajectory implies the development of all those incentives that, according to the experience of other countries, are included in the system of state policy in this sector of the economy and government regulation measures (Ivanova et al., 2019; Vasilev, 2019; Kaluev, 2019; Paptsov and Nechaev, 2019; Puryaev et al., 2019; Chitsaz et al., 2019; Khalikov et al., 2018; Movchan et al., 2019). The second trajectory suggests involvement of mechanisms of self-organization, self-regulation and network interactions: "bottom-up" cooperation in the form of various professional unions, associations, consumer cooperatives, clusters, the formation of a network of influence agents, opinion leaders, etc. In any case, movement along these two trajectories should include mechanisms for the development of supply and demand (Bure and Tengeh, 2019; Magsumov, 2019; Debarma and Purkayasth, 2019; Bužavaït et al., 2019).

Table 1 summarizes the mechanisms that can be divided into those that form the demand in the organic sector and those that form the supply. The author suggests these mechanisms based on the analysis of the regulatory documents and publications of both Russian and foreign authors on the topic, i.e. considering best world practices in managing organic agriculture.

### Table 1. Mechanisms for stimulating entrepreneurial activity in organic production

<table>
<thead>
<tr>
<th>Trajectory/mechanisms</th>
<th>Mechanisms that form the supply</th>
<th>Mechanisms that form the demand</th>
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<tr>
<td>&quot;State – entrepreneurs&quot; trajectory in organic agriculture production</td>
<td>Financial mechanisms: Financial mechanisms: Payments to producers for the transition to/continuation of organic farming; Compensation for inspection control; Investment grants; Farm animal health program; Soft loans, tax incentives; Institutional mechanisms: Regulatory acts (including federal laws, targeted programs) that prioritize organic production; Entrepreneurship support infrastructure (creation of special units in organic agriculture based on the existing national support infrastructure (entrepreneurship support centres, cluster development centres, etc.)); Training programs in organic agriculture; Supporting entrepreneurs participating in exhibitions and fairs.</td>
<td>Financial mechanisms: Investment grants for promotion and distribution; Compensation for conducting marketing analysis and marketing research; Investment grants for consumer cooperatives and clusters; Subsidies to agricultural producers for the use of biological products. Institutional mechanisms: Regulatory acts (including federal laws, targeted programs) that prioritize organic production; possible regulation of public procurement in the organic production sector for a certain category of citizens in relation to the procurement of biological preparations; Information campaigns; Educational programs for consumers; Sponsored trade shows and fairs; Formation of market statistics.</td>
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<tr>
<td>&quot;Market environment&quot; trajectory</td>
<td>Institutional mechanisms: Institutional mechanisms: Financial mechanisms for entrepreneurs in the sector of organic agriculture; &quot;Bottom-up&quot; formation of professional associations of organic producers and other interested agents, &quot;bottom-up&quot; creation of organic agribusiness clusters with specialization by region; Communication mechanisms: Formation of awareness of biological preparations for organic agriculture among producers of agricultural products, as well as the formation of networking with a loyal retailer.</td>
<td>Formation of loyal consumer communities by entrepreneurs with state support and the introduction of a consumption culture for organic products to the masses. Communication mechanisms: Promotion of a healthy lifestyle and organic products in cooperation with the scientific community, local and regional authorities (targeting schools, childcare facilities, etc.); Creation of information portals on the Internet for organic products, chain stores, etc.</td>
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### IV. CONCLUSION

According to the results of the study, it should be emphasized that the development of entrepreneurial incentives in organic agriculture must combine both trajectories. The experience of the Russian Federation shows that government support may be insufficient for the effective functioning of production. Without the development of self-organization institutions, network interactions, it is impossible to create an environment favorable for the development of entrepreneurial activity, especially in new areas, such as organic production. In the presence of adequate and effective public mechanisms to encourage entrepreneurial activity, the institutions of self-organization of business are additional insurance reserves for entrepreneurs. Those launch self-defense mechanisms against various entrepreneurial risks, as well as mechanisms for sustainable business development in a competitive environment and unstable market conditions.
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REFERENCES


