E3S Web of Conferences **363**, 03023 (2022)
INTERAGROMASH 2022
https://doi.org/10.1051/e3sconf/202236303023

Barriers and prospects for development of the organic farming market in Russia

Yulia Oleynikova[1] and *Lidia* Shcherba[1*]

[1] Don State Technical University, 1, Gagarin Sq., Rostov-on-Don, 344002, Russia

Abstract. The development of the organic food market in Russia on the example of the Southern Federal District is examined in the article. The purpose of this study is to identify factors and barriers to the development of the organic food market, considering contemporary economic conditions of Russia. To meet this objective, a survey of representatives of agricultural organizations of the Southern Federal District was conducted, as a result of which internal and external barriers to the transition of agricultural organizations to an organic food production model along with the factors contributing to this transition were identified, and the distribution channels and promotion tools used by the companies were discussed. The analysis made it possible to develop main recommendations aimed at overcoming barriers to the development of the Russian organic food market, which are mentioned in the article.

1 Introduction

Organic agriculture can be considered as one of the areas of sustainable development due to the reduction of the negative impact on the environment along with more efficient and environmentally sound use of resources. It is necessary to mention current dynamic growth of organic agriculture in the developed world, where it is perceived as a way of addressing the problems related to enhanced intensity of farming, including, for instance, deterioration in the quality of food products, reduction of the attractiveness of rural areas, and environmental degradation [1- 2]. The application of an organic approach helps to improve soil condition by maintaining soil fertility and biological activity due to the elimination of using chemicals [3-5].

Consumer demand for organic food is increasing all over the world, which is one of the most significant factors in the development of organic farming. In this process, a special role is also played by the increased activity of people on social media, the growing awareness of the consequences of malnutrition, the policy of healthy nutrition actively promoted by influential individuals, and other factors that arise in modern society [6-7].

The concept of organic agriculture as an alternative to traditional farming is based on the idea of developing a food production process management system that combines environmental protection methods, natural resource protection policies and ways of production, which include the use of natural substances [8]. The concept development

[*] Corresponding author: limitli@mail.ru

began in post-industrial countries due to the availability of necessary resources, increasing public awareness and evolution of environmental movements. In the United States, for instance, the upward trend in organic farming manifested in the form of creation of small rural farms selling organic products on the Internet, after which it turned into a policy of growing food plants in cities due to the fact that much of the country's population lives in houses with small gardens. According to the Global Organic Food Market Report, the world organic food market in 2020 amounts to 201.77 bln US dollars. The average annual growth rate is 9.7%. Growth drivers in 2021 include the reactivation of a number of companies, along with their adjustment to new market requirements during the recovery from the challenges caused by the impact of the COVID-19 pandemic. According to experts, in 2025 the global market for organic food products will reach 380.84 bln US dollars with an average annual growth rate of 14.5% [9].

It seems important to emphasize that the idea of organic agriculture is also connected with the sustainable development concept, that was initially limited to discussions about the need to reduce the negative impact of enterprises on the environment. Sustainable development was defined by the World Commission on Environment and Development as the development that meets the needs of the present generation without compromising the chances of future generations to meet their needs. In recent years, this concept has expanded from the idea of reducing the negative impact on environment to the concept of sustainable development of society, including spatial, social, ecological and economic areas [10-11].

The increased dynamics of the processes taking place in the current economy contributes to the acceleration of changes in all of its sectors, including agriculture, which is of strategic importance for the Russian economy and consumer sector. In this regard, the purpose of this study is to identify factors and barriers to the development of the organic food market in Russia, considering current economic trends and conditions.

2 Materials and methods

It should be noted that the Russian organic food market remains in its early stages of development [12-14]. The Federal Law of the Russian Federation "On organic products" came into force on January 1, 2020. The share of organic food in the Russian food market is about 0.1% with sales of organic products of about 124.6 thousand US dollars according to data for 2020 [15]. Currently, according to experts, about 85% of the demand for organic products in Russia is met by imports. Considering the increasing sanctions pressure of Western countries on the Russian economy, a reduction in the import of organic products and corresponding excess of demand over supply is possible in the future.

In Russia, according to the National Organic Union, in early January 2021, there were 138 certified companies operating in the organic food market and approximately 30-50 organizations were at the conversion stage. About 10% of certified organic producers operate in the Southern Federal District [15]. Among them, organizations of the Krasnodar Territory have the greatest potential for development [16].

Within the framework of this study, the questionnaire method was applied to survey representatives of agricultural enterprises. The survey was carried out in 2021 using the Google Forms survey platform based on questionnaires developed by the authors. A total of 176 representatives of agricultural organizations were interviewed. Respondents were informed about the objectives of the study. The questionnaire included 18 open and closed questions related to the factors contributing to the introduction of organic production, barriers to its development in the current economic conditions, as well as marketing tools and distribution channels used in the organizations under study. The profile of the studied agricultural companies covered both plant production (66.3%), including the production of crops, vegetables and fruits, and animal husbandry (33.7%). Among these organizations, 4 were certified producers of organic products, 2 more were at the stage of conversion at the time of the survey. Most of the analyzed organizations (84%) do not plan to enhance their profile, while 16% of companies are considering this possibility in the future.

3 Results

In several studies, the production of ecologically clean products is considered as a factor of increasing food security and ensuring the sustainable development of the agricultural sector [17-18]. At the same time, it should be considered that the transition to an organic model of food production is associated with certain challenges and constraints. Figure 1 presents the barriers to organic food market development identified by the survey respondents.

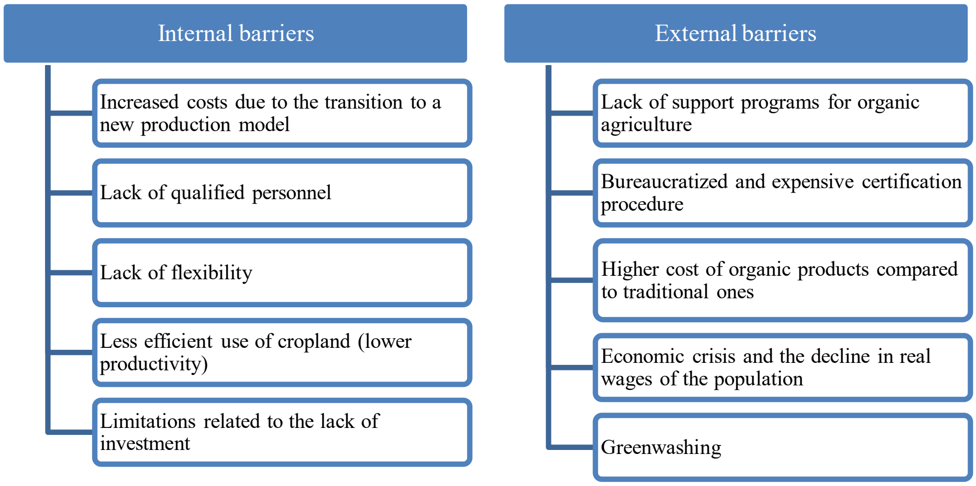

Fig. 1. Barriers to the transition of Russian agricultural organizations to an organic model of food production. Source: original development based on research results.

As indicated in Figure 1, according to the opinion of the interviewed respondents, there are both internal and external barriers to the transition of agricultural organizations to the organic production model. 83.5% of respondents highlighted the lack of support for organic agriculture at the federal and regional levels as a key external barrier. Investments in the development of the organizations under study are of an exceptionally private nature, which is also reflected in the internal barriers identified by the respondents (limitations associated with the lack of investment). It is important to note that in European countries the government is actively involved in the development and support of the organic agriculture sector through subsidies and other tools. 62.2% of respondents ranked second among external barriers the challenges related to the certification process, in particular, bureaucratic burden and certification costs (from 1.7 thousand US dollars for the national certification and from 3.5 thousand US dollars for international certification). It is worth mentioning that, to a certain extent, bureaucratization is justified by the need to ensure confidence in the products of certified producers and reduce the impact of greenwashing on consumers. This problem was also mentioned by 27% of respondents as an external barrier to the development of organic food market. Greenwashing is based on misleading consumers about the environmental friendliness of products produced by a certain company. However, after the introduction of the law on organic products in Russia, only

 https://doi.org/10.1051/e3sconf/202236303023

organizations that meet the necessary criteria can receive a certificate of organic producer. Therefore, in order to minimize the impact of greenwashing on consumer behavior, it is necessary to increase consumer awareness that only an organic production certificate confirms that the food produced by a certain company is ecologically clean. The high cost of certification is a significant barrier for organizations, that can be mitigated through the development of state support programs for organic agriculture. In addition, respondents highlighted the difference in the cost of organic and traditional products (38.6% of respondents), as well as a decline in real wages of the population due to increased inflation rate, the consequences of the COVID-19 pandemic and other factors (32.5% of respondents). These barriers may lead to a decrease in demand for environmentally friendly products in the domestic market.

In addition to financial limitations, respondents identified internal barriers associated with rising costs and possible reduced productivity in case of switching to organic production model (Figure 1). Since organic production and processing of agricultural products may require innovative technologies, respective staff resources, change in the organization's management system, 62% of respondents defined a lack of qualified personnel and 47.2% of respondents highlighted potentially insufficient flexibility of companies as internal barriers to the transition to an organic model. From this perspective, both the provision of state financial support for organic agriculture, and the development of consulting and educational services for agricultural organizations, along with the system for advanced training of personnel of these companies seem to be key areas for the development of organic agriculture in the country.

Figure 2 shows the factors identified by the respondents that support the transition of agricultural organizations to organic food production.

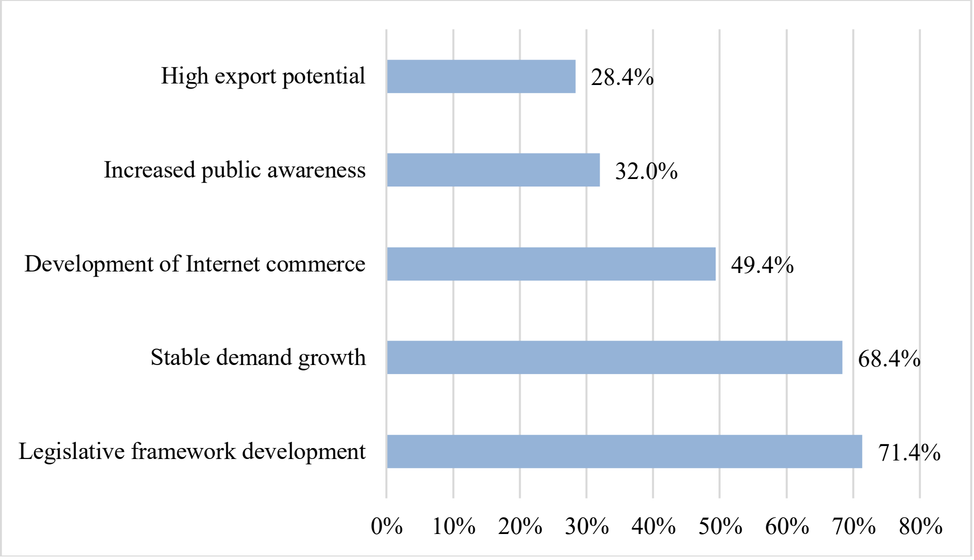

Fig. 2. The key factors contributing to the transition of agricultural organizations to an organic model of food production. Source: original development based on research results.

In accordance with the data presented in Figure 2, the development of the legislative framework, namely the introduction of the law on organic products from January 1, 2020, which regulates the processes of production, storage, sale, and labeling of organic products within the country, significantly contributes to the development of organic farming according to the majority of respondents. At the same time, many of them mentioned the

https://doi.org/10.1051/e3sconf/202236303023

problem associated with double certification in their answers to open questions. Currently, certificates obtained according to the national standard are not recognized abroad, and in order to export organic products, organizations need to undergo international certification procedure.

68.4% of respondents consider a steady increase in demand for organic food both in the domestic and foreign markets to be a significant factor in the growth of the organic agriculture sector. This factor is also related to increased awareness of the population about organic products and their benefits also mentioned by the respondents, an increase in the number of healthy food promoters, which contributes to the growth of consumer awareness. However, some respondents (16%) also indicated that the demand for organic products is distributed unevenly: the need for organic products in large cities with high population density is higher than in small towns.

According to the opinion of almost 50% of respondents, one of the factors in the development of organic food market is the evolution of online marketplaces. The advent of organic food online stores has accelerated the development of the organic food market in Russia. In addition, respondents also mentioned high export potential of environmentally friendly products due to the high demand abroad, especially in European countries, for organic wheat, barley, oilseed, legumes, organic wild mushrooms, berries, nuts, herbs.

Apart from the factors that support or hinder the transition of agricultural organizations to an organic production model, it seems important to study the actual relationship of companies with the market, including the distribution channels and marketing tools used. Figure 3 shows the sales channels used by the organizations under study in accordance with the respondents' answers.

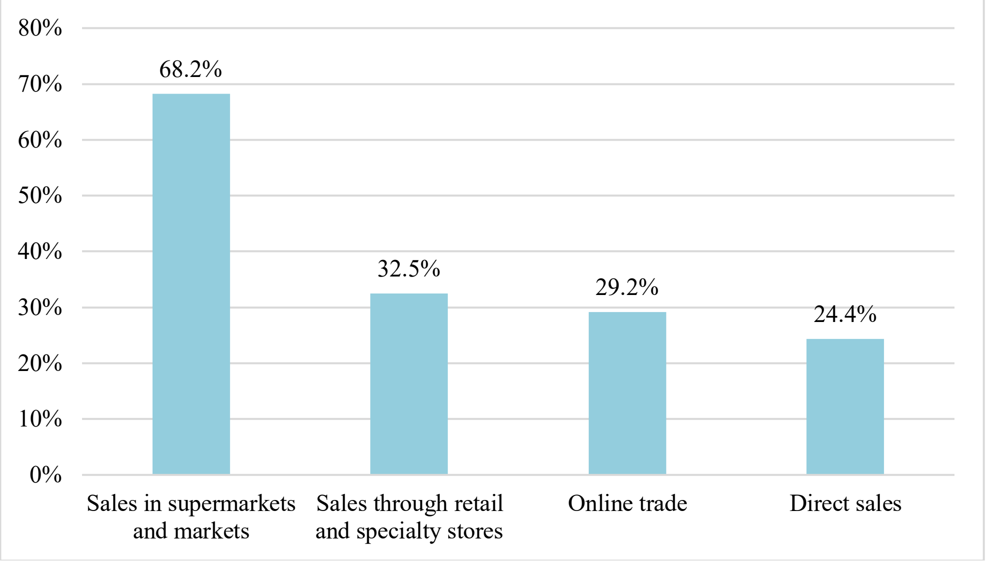

Fig. 3. Distribution channels used by the agricultural organizations under study. Source: original development based on research results.

As presented in Figure 3, the highest percentage of the organizations under study sell their products indirectly (most often, through sales in supermarkets and markets). At the same time, 32.5% of companies use retail outlets and specialty stores for sales, while almost 30% of organizations use online marketplaces to sell their products. In terms of the organic market development, the growth of online sales will require significant educational and marketing activities aimed at raising consumer awareness of the benefits of purchasing products online, as well as the ability to recognize organic products among traditional ones online. For 24.4% of organizations direct sales of products are still popular, which may remain an important distribution channel if organizations switch to organic production. A developed sector of direct sales in the organization provides an opportunity to sell products at lower prices, as well as interact directly with consumers. For organic products, the majority of respondents (51.4%) considered sales through specialty stores of organic products as the most promising distribution channel. 24% of respondents also specified that in case of a significant increase in demand for natural food, online stores and trade in markets can be efficient distribution channels.

Table 1 presents the data obtained as a result of the survey on the marketing tools used in the studied agricultural organizations to promote their products.

Table 1. Product promotion tools used in the agricultural organizations under study.

Tool	Percentage of studied organizations using this promotion tool (depending on frequency of use)			
	often (regularly)	from time to time	rarely (1-3 times a year or less)	never
Promotion at fairs and exhibitions	38.2%	22.7%	6.2%	32.9%
Distribution of advertising materials (flyers, leaflets, etc.)	26.5%	25.9%	12.6%	35%
Advertising in mass-media	12.4%	10.2%	15.2%	62.2%
Promotion on social media, company's website and other types of Internet advertising	26.4%	18.4%	3.6%	48.4%
Direct sales	13.2%	8.7%	6.2%	71.9%
Loyalty and bonus programs	18.7%	7.2%	5.2%	68.9%

Source: original development based on research results

Based on the data presented in Table 1, it can be noted that the most popular promotion tool in the companies under study is participation in agricultural fairs and exhibitions (this tool is used by 67.1% of companies). Gradually, organizations are moving away from advertising in mass-media and are increasingly using online marketing tools to promote their products. 37.8% of organizations still advertise products in mass-media, but only 12.4% of firms regularly use this tool, while 26.4% prefer to promote products on the Internet on a regular basis. Another popular promotional tool used by 65% of the surveyed organizations is the distribution of advertising materials. Less common is the use of direct sales and consumer bonus programs to promote the products of the organizations under study. As the most effective way to promote organic products, 43.8% of respondents identified advertising on social media and other online marketing tools, 29.2% of respondents named promotion at fairs, exhibitions and other specialized events.

4 Conclusions

In conclusion, it is important to emphasize that Russian organic market remains in the early stages of development. The Federal Law "On organic products" was put into force not so long ago (in 2020) and, as of 2021, there are less than 150 certified organic producers registered in the country. The survey of representatives of agricultural organizations of the

Southern Federal District made it possible to identify the basic internal and external barriers that impede the transition of organizations to an organic model, as well as factors supporting the development of organic farming. According to the majority of respondents, the costs of organic production in agriculture are higher and productivity is lower than in traditional agriculture. These factors can be considered as the key internal barriers to organic agriculture development. The factor contributing to overcoming the considered barriers can include the introduction of various programs to support the organic agriculture development at the federal and regional levels, including subsidizing, concessional lending and other tools. Despite the fact that implementation of support programs is highly likely to increase bureaucratization, which is identified by respondents as one of the key external barriers to organic food market development, this tool will help organizations to access the financing necessary for transition to an organic model. Hence, application of the given tool appears to be effective. Equally important seems to be further improvement of the certification system for organic producers, development of consulting support for them along with the introduction of activities aimed at raising public awareness concerning organic food and ways to identify certified organic products among traditional ones. It should be noted that agricultural organizations are interested in using modern tools for product promotion, in particular online marketing, as well as development of distribution channels through online places and specialty stores, which can serve as an additional factor contributing to the transition to an organic production model. In this regard, the analysis of the development of organic agricultural organizations in Russia, efficiency of their activities and interaction with the market can be of particular interest for further research.

References

1. I. Bostan, M. Onofrei, A.F. Gavriluţă (Vatamanu), et al., Foods **8(5)** (2019)
2. V. Nechaev, P. Mikhailushkin, A. Alieva, MATEC Web of Conferences **212**, 01001 (2018)
3. F. Eyhorn, A. Muller, J.P. Reganold, et al., Nature Sustainability **2** (2019)
4. V. Kundius, SHS Web of Conferences **101** (2021)
5. L. Kachanova, A. Bondarenko, E3S Web of Conferences **210**, 04004 (2020)
6. N. Dangi, S. Gupta, S. Narula, Management of Environmental Quality **31(6)** (2020)
7. I. Merzlyakova, I. Kairova, M. Koshman, IOP Conference Series: Earth and Environmental Science **937**, 032077 (2021)
8. E-M. Meemken, M. Qaim, Annual Review of Resource Economics **10** (2018)
9. Global Organic Food Market Report, available at: https://www.globenewswire.com/news-release/2021/11/23/2339637/28124/en/Global-Organic-Food-Market-Report-2021-to-2030-Featuring-General-Mills-Cargill-and-Danone-Among-Others.html (accessed 20.03.2022)
10. J. Mensah, Cogent Social Sciences **5(1)** (2019)
11. K. Tomislav, Zagreb International Review of Economics & Business **21(1)** (2018)
12. O. Sokolov, N. Castornov, D. Zhilyakov, IOP Conference Series: Earth and Environmental Science **845(1)**, 012048 (2021)
13. O. Grigorieva, E3S Web of Conferences **217(1/2)**, 07020 (2020)
14. Z. Medelyaeva, S. Korzhov, V. Malitskaya, N. Shilova, International conference on Policies and Economic Measures for Agricultural Development (2020)

15. National Organic Union of Russia, available at: http://rosorganic.ru/. Accessed 24 Mar 2022
16. F. Zecca, S. Khasanova, N. Rastorgueva, Transylvanian Review **26** (2018)
17. L. Akhmetshina, T. Pokrovskaya, D. Semernin, MATEC Web of Conferences **193**, 05047 (2018)
18. S. Plotnikova, T. Kiyan, N. Mikheeva, D. Kravtsov, IOP Conference Series: Earth and Environmental Science **548(2)**, 022050 (2020)