The Produce Organic Product as Strategic Elements of System Provision Security

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Abstract. Food security is a strategic element of the state's economic policy, which allows to provide quality food not only to the population of the state, but also to carry out export activities. The growing trend of demand for ecological products all over the world allows Russia to develop the production of organic and ecologically clean products, occupying a stable segment in the world market. Organic agriculture is the most popular alternative to traditional agriculture in the world; the volume of the global organic food market has been increasing annually for a long time. An analytical review of the state of the world and national markets for organic agricultural products is presented in various aspects: agricultural land area, concentration of producers, international trade. The place of Russia in the world market of organic agricultural products has been determined. The key trends, problems and prospects for the development of organic agricultural production in Russia are highlighted. The presented data demonstrate the continuation of the positive trend in demand for organic products in developed countries. The Russian market is characterized by the following: high average annual growth rates of organic lands; increasing the share of land for the production of organic agricultural products; unstable number of producers; stabilization of the volume of the internal market for organic products at the level of 120 million euro; stabilization of the export volume of organic products at the level of 4 million euro. The production of organic products is advisable in local product markets, since the production of organic products is a product with high added value, increased requirements for certification of organic products and a narrow segment of consumers.

1. Introduction

Food security is characterized by a number of indicators, one of which is the degree (level) of food consumption as a result of providing the population with certain types of food. This indicator is largely determined by the level of purchasing power of the population, while characterizing the possibility of purchasing food. The formation of the market for organic products as a constituent element of food security is considered by us as a structural element of the local market for the production and sale of products, since there is no production of organic products on an industrial scale in Russia. Considering the functioning of the local market as an organizational and economic mechanism, one must get keen on explanation the particulars of the arrangement of the agricultural sector market, since a new segment stands out for the organic product market, which is formed by a complex of micro-markets that have their own development parameters in terms of factor elements [1]. The organic market in Russia is not developing as intensively as the European one. On the one hand, this can be explained by...
low effective demand. On the other hand, there is insufficient supply due to the imperfection of the regulatory framework, the lack of individual measures to support producers of organic agricultural products, including during the transition from the traditional type of production and other barriers [2]. One of the most important problems in the development of the organic market is the issue of product certification. In this study, the authors study the development trends of the global and national market for organic agricultural products, special attention is paid to barriers to the development of the national market and the certification of organic food.

2. Materials and methods
The theoretical and methodological basis of this study was the works of domestic and foreign scientists-economists dedicated to the development of industry-specific product sub-complexes. The information base of the study was made up of statistical data from the Federal State Statistics Service, the Unified Interdepartmental Information Reference System, the Territorial Body of the Federal State Statistics Service for the Altai Territory, materials of scientific and practical conferences on the problem under consideration, periodicals and special publications. The study used the following methods: abstract logical, economic and statistical, monographic, as well as methods of system analysis, economic comparison, expert assessments, economic modeling.

3. Results
Food security is largely determined by the state of the food market both at the state level, as well as at the regional level. The food balance is considered by us as a system of indicators characterizing the sources of formation of the resources of the main types of food and the channels of their use.

The level of food security allows you to calculate the actual level of self-sufficiency for each specific type of food. According to the methodology used by the Federal State Statistics Service, the level of self-sufficiency in the main types of agricultural products is calculated as the percentage of the production of the corresponding types of agricultural products to their domestic consumption in the territory of the country or region. The formation and development of the organic market in Russia is showing steady growth. The volume of the world market for organic food continues to grow from year to year, as a result, there is an increase in the area under the cultivation of organic products in many countries. Russia in 2018 ranked 16th in terms of the area of organic land (606.9 million hectares), it is worth noting a significant increase in land for the period 2008-2018.[3,4] The presence of a reserve of land resources can become the main prerequisite for the development of the organic sector in the presence of stable demand in the external and internal markets. In 2018, the closest countries in terms of organic land area: Austria, Sweden, Turkey and the Czech Republic. The change in the area of organic land for the period 2008-2018 is shown in Figure 1. The highest value of the average annual growth rate is observed in the Russian Federation (129.16%) and Turkey (119.44%), the smallest (101.83%) in Austria, according to other considered countries also observe a tendency to increase the area of organic land, an average annual growth rate of 105-106%.[5,6,7].

Figure 1. Organic land area in Russia and other countries, ha.
In 2018, more than 80% of organic producers are concentrated in Asia, Africa and Latin America [4]. It is worth noting that most of the research results in organic agriculture are published in relation to developed countries, where the production of organic food is focused on the domestic market. At the same time, there is a lack of information on the development of the organic sector in developing countries, which are the main producers and exporters of organic food. The country with the largest number of producers is India, followed by Uganda and Mexico [3]. In Russia, since 2015, there has been a decrease in the number of producers of organic agricultural products (Figure 2). The main types of organic products produced in the Russian Federation are beans, flax, corn, lentils, peas, rice and soybeans.

![Figure 2. Producers of organic agricultural products in the Russian Federation from 2008 to 2018.](image)

The country with the largest organic food market is the United States, followed by Germany, France and China (Figure 3). The highest consumption of organic products per capita is in Switzerland, Denmark, Sweden [3, 4, 5].

![Figure 3. World market: structure of retail sales of organic food by countries (2018), %.]  
(compiled from Statistics.FiBL.org data [3])

Retail sales of organic products in the Russian Federation tend to increase since 2008 (Figure 4), for the period 2012-2018 according to the data presented, the organic market over the past five years has not developed as intensively as the American and European ones. This can be explained by low effective demand, as the world experience shows, the average premium for organic products relative to those produced within the framework of the traditional approach is about 30-50%.
According to the data on the value of exports, the leaders are Australia and New Zealand. In many parts of Africa, Asia and Latin America, organic products are produced exclusively for export, the same trend is observed for the countries of Eastern Europe, which is associated with the unpreparedness of the domestic market for environmental consumption due to low living standards. The development potential of production in these countries is associated with a lower level of environmental pollution and lower production costs. One of the main importers of organic agricultural products is the EU, the main importing countries are China, Ecuador, Dominican Republic, Ukraine, Turkey.[6,8,9,10]

Data on the value of export-import in the Russian Federation are presented in Figure 5. For the period 2009-2018 the volume of exports of organic products remained at the same level – 4 million euro, imports for the period 2008-2011 amounted to 30 million euro annually, from 2012 to 2018 no import data.

One of the most important problems in the development of the organic market is the issue of product certification. In connection with the adoption of the national standard GOST R 56508-2015 «Organic products. Rules of production, storage, transportation», which was put into effect on January 1, 2016. The main issue on the cost of certification remains uncertain, since the cost of certification is determined only after receiving applications. Depending on the products being manufactured, the cost of certification is different in each specific case [5,10,11,12]. Objects and categories of organic certification of food and agricultural products distinguish the following:

- Organic – products grown and produced only in ecologically clean conditions and conditions of biodynamic farming. Products must meet GOST R 56508-2015.
- Natural – products containing at least 95% of ingredients of natural origin. Also, the products may contain no more than 25% of the maximum permissible concentration of harmful substances, pesticides and agrochemicals (The equivalent of GOST R 56508-2015 is used, but with some restrictions).
– Manufacturer – manufacturer of organic food and agricultural products, production must meet the requirements of GOST R 56508-2015.

– Seller is a seller of organic food and agricultural products. It is sown if there is at least 75% of certified organic products in the assortment. All requirements are set out in GOST R 56508-2015, certification rules – in GOST R 57022-2016, terms and definitions in GOST R 56104-2014. For the certification of products supplied abroad, EU regulations 834/2007 and 889/2008 are applied. Organic product certification includes the following elements:

1) A sample of organic labeling applied to products (applied since September 2014). If the size of the logo is reduced and it is impossible to read the certificate number, the certificate number is indicated next to the logo. The certificate number must be legible. The assigned product status (organic, etc.) is applied in a convenient place on the label or nearby.

2) Documents: the main regulatory document is the Federal Law of August 3, 2018 N 280-FZ «On organic products and on amendments to certain legislative acts of the Russian Federation», which entered into force on 01.01.2020; GOST 33980-2016 Organic products. Rules for production, processing, labeling and sale; GOST R 56508-2015 «Organic products. Rules of production, storage, transportation»; GOST R 57022-2016 «Organic products. The procedure for conducting voluntary certification»; GOST R 56104-2014 «Organic food products terms and definitions»; Additions and amendments No. 8 to SanPiN 2.3.2.1078-01 hygienic requirements for the safety and nutritional value of food products (Sanitary-Epidemiological Rules and Norms SanPiN 2.3.2.2354-08)

According to TR CU, food processing enterprises must be certified according to GOST R ISO 22000 (ISO 22000). It is possible to simultaneously pass certification according to ISO 22000 and organic. This greatly reduces the cost of obtaining certificates.

To successfully pass certification of organic products, the enterprise must implement an organic production system in accordance with the current standard. In connection with the introduction of GOST R 57022-2016 «Organic products. The procedure for conducting voluntary certification «in the SDS» a new procedure for certification of organic products and rules for the production of organic products.

The preliminary stage includes an assessment of the possibility of carrying out organic certification. At this stage, the possibility of carrying out organic certification of products and the rules for the production of organic products is being investigated. To do this, you need fill out and send an application for certification. After submitting the application and providing a set of necessary documentation, a preliminary analysis of the state of production and products is carried out.[13]

Based on the analysis, a decision is made on the possibility or impossibility of certification. If certification is refused, the reasons for the refusal are listed. After elimination of these reasons, it is possible to re-submit the application for certification. If a positive decision on certification is made, the first stage of certification begins.[14]

Stage I: conclusion of a certification agreement. Request for additional information on certified objects and processes, carrying out the necessary laboratory analyzes. Making a decision on the possibility of carrying out the next stages of certification.

Stage II: involves an on-site inspection of the certified objects; a visit to the enterprise of an inspector (inspectors) to check the conformity of the certified objects; the final decision on certification.

Stage III: making a decision on certification. In case of a positive decision – issuance of a certificate. In case of a negative decision, the certification body issues recommendations on the identified deficiencies to eliminate them. After elimination of the identified deficiencies, the applicant can submit an application for re-certification. It is possible to issue a certificate in the presence of minor violations of GOST, subject to the implementation of corrective actions to the nearest inspection control.
4. Conclusion
Organic agriculture is the most popular alternative to traditional agriculture in the world; the volume of the global organic food market has been increasing annually for a long time. The presented data demonstrate the continuation of the positive trend in demand for organic products in developed countries. The Russian market is characterized by the following: high average annual growth rates of organic lands; increasing the share of land for the production of organic agricultural products; unstable number of producers; stabilization of the volume of the domestic market and the volume of exports of organic products. Income during the transition period, as well as Measures for the development of organic agriculture, namely the improvement of legislation, the structure of certification and supervisory institutions, the provision of financial, information and marketing support is advisable to carry out within a separate strategic direction. Organic agriculture may be show like strategic elements of system provision security.

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