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THEORETICAL ANALYSIS OF FOREIGN EXPERIENCE IN ORGANIC AGRICULTURE DEVELOPMENT

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Abstract

Currently, the concept of organic agriculture, designed to solve issues of economic efficiency of agriculture and preservation of environmental quality, is recognized as one of the most promising areas for sustainable development of the agro-industrial complex in the world economy. The article reveals the essence of organic agriculture, examines global trends in the production of organic products, reveals the advantages, identifies problems and evaluates the prospects for its development.

Key words: foreign experience, organic agriculture, sustainable development, world economy, global trends, production of organic products, organic producers, bio product, consumption of organic products.

Introduction. One of the modern world trends - organic agriculture is actively gaining momentum all over the world. Over the past 16 years, its area has increased 4 times, more than 2 million organic producers are certified, more than three quarters of which are in developing countries. Currently, about 1% of the world's agricultural land area is involved in organic production. Trends in the development of organic production are relevant in more than 170 countries around the world, and this figure increases every year due to the fact that organic products are becoming in demand among many segments of the population for various objective reasons. The development of organic production is in an active stage of formation. Currently, there are about 30 producers certified according to international standards, which account for more than 300 thousand hectares of land developed for the production of organic products.

Individual associations, especially farmers' associations such as Bioland, Soil Association or BioSuisse, developed and implemented their own voluntary standards, which then became the basis for the legal framework that began to emerge in the field of organic agriculture. The first international rules "Basic Standards", harmonized by the International Federation of Organic Agriculture Movements (IFOAM), appeared in 1983. These Core Standards outlined the minimum requirements for organic agriculture and provided the basis for the writing of more detailed standards for organic agriculture. It should be noted that before this, there were several organic farming methods in the world, which developed mainly in the UK, France and German-speaking countries.

Since 1991, after the EU countries adopted the law on organic production, a kind of harmonization of these methods has occurred. From now on we can talk about a unified and regulated definition of organic agriculture. Today, only the biodynamic method of farming and its regulation is different. This is the highest standard (supra-standard), which has its own certification and the Demeter trademark. It takes into account spiritual aspects that correspond to the claims of Rudolf Steiner's anthroposophy. Since 1999, there has also been a definition of organic agriculture in the Codex Alimentarius (Basic Principles for the Production, Processing, Labeling and Marketing of Organic Foods).

Discussion and methods. According to the Research Institute for Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM), the area of land under organic production in the world is continuously growing [1]. Statistical information on organic agricultural production comes from 172

countries. Every year their number is gradually growing. In Europe, all countries without exception have an organic sector. In Africa, organic production is developing in 70% of countries, Asia - 79%, South America - 72% (Table 1).

Table 1.

Organic production indicators in the world

Indicator	Countries with organic agriculture	Countries all over the world	Share of countries with organic agriculture to the total, %
Africa	39	56	70
Asia	37	47	79
Europe	37	47	100
South America	33	46	72
North America	3	5	60
Australia and Oceania	13	26	50
Total	172	227	76

There are 2.3 million certified organic producers worldwide, more than three-quarters of which are in developing countries. Currently, about 1% of the world's agricultural land area is involved in organic production. In general, quite large areas are allocated for organic agriculture in the world, in particular: in North America - 3.0 million hectares, Latin America - 6.6 million hectares, Europe - 11.5 million hectares, Asia - 3, 4 million hectares, Africa 1.2 million hectares, Australia and Oceania - 17.3 million hectares (Fig. 2).

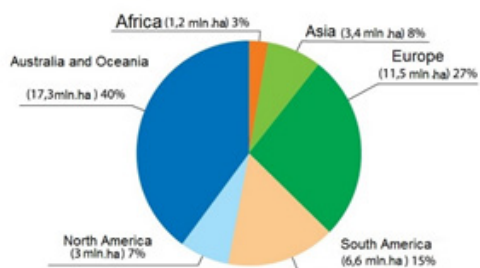
The world leaders in areas occupied by organic production are Australia - 17.2 million hectares, 97% of which are pastures, Argentina - 3.1 million hectares and the USA - 2.2 million hectares (Fig. 3). The average size of a single farm in these countries is 10,046 hectares, 3,078 hectares and 169 hectares, respectively. In general, the top ten countries with the largest areas of agricultural land occupied by organic production account for 31.8 million hectares, which is 73% of all organic land in the world [2].

Markets for organic agricultural products and food operate in many countries around the world, primarily in the USA and the EU, where the appropriate infrastructure for the certification and sale of organic products has been created and successfully operates.

The motivation for consuming organic products is:

- Environmental food safety; High quality and freshness of products; The best taste properties of organic products;
- Preservation of the natural environment during the production process;

- No genetically modified organisms.

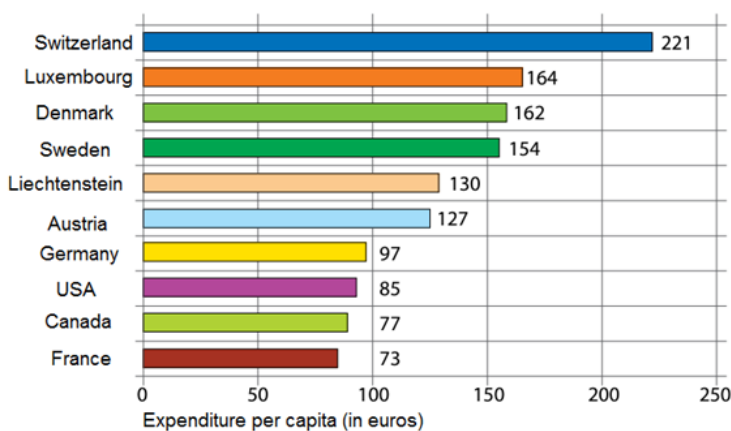


Pic-1. Distribution of certified organic agricultural land worldwide (by continent)

Analyzing foreign experience, typical consumers of organic products have been identified - these are urban residents with high purchasing power, belonging to the middle and upper social class, caring about family health and focusing on high-quality products.

Organic products are sold to European consumers through the following distribution channels [1]: Direct sales (sale directly on the farm, weekly markets, own store in the city, sale through the postal system and the Internet); Direct agreement between farmers and retailers and restaurants; Sales through production cooperatives; Sales to certified processing enterprises (mills, bakeries, butchers, dairies, breweries, etc.); Sales to wholesalers. Also the most important distribution channels are large grocery stores, which, along with traditional goods, offer a wide range of organic products. It should be noted that the term "large grocery stores" combines food stores with a sales area of up to 400 m², supermarkets - 400-800 m² and hypermarkets - more than 800 m². In most countries, such stores account for more than 50% of total sales of organic products [3]. The Asian organic food market is growing at a steady pace. Every year there is an increase in the level of public awareness about organic production methods, which contributes to an increase in demand for organic food and drinks.

However, Asian countries are divided into two groups - countries that consume and countries that produce. The largest share of organic food sales comes from rich countries, namely China, Japan, South Korea, Taiwan, Hong Kong, Malaysia and Singapore. However, only a small portion of the organic food consumed is grown directly in these countries. Large quantities of organic food and drink (especially processed products) are imported into these countries from Australia and Oceania, Europe and the USA.



Countries with the highest consumption of organic products per capita

Another group of Asian countries has a predominantly export-oriented organic food sector.

Over the past two decades, the concept of "environmentally friendly product" has become widespread in the market. In addition, manufacturers declare their products as "ecological", "environmentally safe". At the moment, the market offers at least 10 more options for the names of this category of products: natural, eco-friendly, environmentally friendly, farm-made, natural, biological, organic, organic, etc. It should be noted that at the international level (UN, EU countries) the terms "biological" and "ecological" are used to describe the organic production system. Accordingly, concepts such as "ecological product", "organic product", "biological product" and their various abbreviations and combinations (for example, "bio/eco/organic product") are used interchangeably to mean a certified organic product. The established practice of applying the above concepts and terms and their interpretations is as follows. Biological, BIO, Bio or "live" product:

1. Products enriched with nutrients, vitamins, beneficial bacteria, etc.;
2. Certified organic products and their points of sale;
3. Non-certified products grown using organic fertilizers, without the use of synthetic chemicals, without GMOs;
4. Used for marketing purposes only and the product is no different from traditional products.

Eco-friendly product, environmentally friendly, ecological, ECO (ECO):

1. The product is certified in accordance with the "Environmentally friendly product" standard. Marked with the "ECO" sign;
2. Pseudo-eco-product - used only for marketing purposes and the product does not differ from traditional products;
3. The product is manufactured without or with limited use of synthetic chemicals. Not certified;
4. Product produced in environmentally friendly areas. For example, in areas remote from anthropogenic sources of pollution.

Organic product, organic:

1. The product is certified according to international organic standards. There is a certificate and corresponding markings;
2. The product is manufactured without or with limited use of synthetic chemicals and is non-GMO. Not certified;
3. Pseudo-organic product - used only for marketing purposes, the product does not differ from traditional products;
4. Product of plant or animal origin. For example, organic fertilizer;
5. A brand not related to organic agriculture. For example, Juice "Organic", organic, organic. Natural(bio):

1. A product produced without the use of synthetic chemicals and GMOs. Often simultaneously labeled as "No Chemicals," "No GMOs," "No Preservatives," etc.;

2. Used for marketing purposes only and the product is no different from traditional products.

Farm or village product:

1. A product from a small family farm, grown using fair technologies with love and care for the environment [29]. It also assumes the

possibility of direct contact with the manufacturer and his personal responsibility. There is no certification;

2. Used for marketing purposes only, the product is no different from traditional products. Example, "Country Milk";

3. A product produced by a small or medium-sized farmer. High Quality. Without the use of synthetic chemicals and GMOs. Striving for organicist and naturalness. Possibility of the buyer returning the product [30]. There are no standards or certification;

4. Product produced by small and medium-sized farms.

In such a variety of concepts and their interpretations, quality criteria are blurred and lost, which hinders both the manufacturer, who does not understand what standards to focus on, and the buyer, who does not understand how, for example, ecological products differ from organic products. Under such conditions, the unreasonable labeling of any product with such terms is detrimental to the development of the market for those products that actually meet organic requirements. The current situation is due to the underdevelopment of the relevant regulatory framework and the legal consequences of the unreasonable use of labeling. However, for this study, four groups of products can be distinguished on the market: The first group is organic products certified according to international standards; The second group - products certified in accordance with the standard ST RK 1618-2007 "Environmentally friendly product", hereinafter "Products with the ECO mark"; The third group is the products of manufacturers who, intuitively or intentionally, strive to

fulfill organic requirements for production and processing processes, but are not certified. Let's designate this group as "Non-certified products from Bio-farmers"; The fourth group is products that are not related to organic production and are pseudo-organic, pseudo-ecological products that use labeling only for marketing purposes. Further "Pseudo-organic products". Below is an analysis of each of the groups; issues of standardization, certification, control and labeling of these product groups on the market, as well as production, pricing and sales channels are considered.

Conclusion. The constant increase in the area of organic agricultural land is due to the relevance of the basic principles of organic agriculture in many countries of the world. The countries of the European Union are characterized by positive dynamics in retail sales - from 2010 to 2017. In most countries, retail sales of organic products have more than doubled. Increased production and consumption of organic products helps improve the quality of life of the population and provide employment in rural areas, as well as increase farm incomes. The general problem of reducing the yield of farms turning to organic farming in the transition period is solved by direct state support (payments per hectare of area), along with preferential taxation and preferential lending, as well as indirect state support for the production of organic products: product certification, insurance, laboratory research.

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