

Development of Organic Farming in Uzbekistan

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Abstract

Organic agriculture is gaining popularity across the world as it contributes to the production of healthy foods, the protection of the environment, and the restoration of the natural characteristics of the soil. The article examines certain theoretical features of organic agriculture, as well as the present situation of its growth worldwide and in Uzbekistan.

Keywords: *standardization, ecology, certification, organic production, agriculture, labeling, export.*

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Introduction

Currently, alternative types of agriculture are becoming more common. The methods of organic agriculture have become widespread in foreign countries, the development of which is also noted in the Strategy for the transition of the Republic of Uzbekistan to a "green" economy for the period 2019-2030 [1]. Trends in the development of organic production are relevant in more than 190 countries of the world, and this figure is growing every year due to the fact that organic products are becoming more and more popular among many segments of the population for various objective reasons. The increase in demand for organic agricultural products is due not only to providing the population with environmentally friendly food, but also to the need to restore the natural properties of the soil. The use of mineral fertilizers and pesticides, genetically modified seeds and breeds of livestock, preservatives and other negative impacts on the environment, so these methods are replaced in organic agriculture by special practices that preserve and increase the life of soil fertility, prevent reproduction pests and the growth of diseases [3]. To solve the environmental problem, many European and American scientists and practitioners have proposed to switch to organic agriculture, which has become very popular in various countries since the 90s of the XX century and is becoming an economically important industry.

The world's condition.

According to the data for 2020 [4], the practice of organic agriculture is widespread in 190 countries of the world, of which 76 countries have fully implemented the regulation of organic agriculture. The total area under organic agriculture has reached 74.9 million hectares, which is 1.6% of the total area of agricultural land in the world. The regions with the largest areas of organic agricultural land are Oceania (35.9 million hectares - almost half of the world's organic agricultural land) and Europe (17.1 million hectares, 23%). Latin America has 9.9 million ha (13.3%), followed by Asia (6.1 million ha, 8.2%), North America (3.7 million ha, 5.0%) and Africa (2.1 million hectares, 2.8%).

In 2020, the area of organic agricultural land increased by 3.0 million hectares (4.1%). Many countries reported significant increases. For example, Chile showed an increase of 650%, or more than 135,000 hectares (mainly due to an increase in the area of organic pastures), and in Papua New Guinea, the area of organic agricultural land increased by 322% (more than 72,000 ha). In absolute terms, the largest increases were in Argentina, Uruguay and India.

There are at least 3.4 million registered organic producers worldwide. India is the country with the largest number of organic producers, followed by Ethiopia and Tanzania (Table 1). With 56% of the world's organic producers located in Asia, further shares are distributed as follows: Africa (24%), Europe (12%) and Latin America (8%).

Table 1 Organic Agriculture: Key Indicators and Leading Countries

Indicators	World	Leading countries
Countries with certified organic farming data	2020: 190 countries	
Total area of agricultural land under organic production	2020: 74.9 million ha (1999: 11 million ha)	Australia (35.7 million ha) Argentina (4.5 million ha) Uruguay (2.7 million ha)
share of agricultural land under	2020: 1,6%	Liechtenstein (41.6%)

organic production of the total area of agricultural land		Austria (26.5%) Estonia (22.4%)
Increase in land area for organic production: 2019/2020	3 million hectares; +4.1%	Argentina: 781 thousand ha (+21%) Uruguay: 589 thousand ha (+28%) India: 359 thousand ha (+16%)
Number of manufacturers	2020: 3.4 million (1999: 200k)	India (1,599,010) Ethiopia (219,566) Tanzania (148,607)
Organic market size	2020: €120.6 billion 2000: (€15.1 billion)	United States (49.5 billion euros) Germany (15 billion euros) France (€12.7 billion)
consumption of organic products per capita	2020: €15.8	Switzerland (418 euros) Denmark (384 euros) Luxembourg (285 euros)
Number of countries with organic legislation	2020: 76 countries (fully implemented)	

Source: FiBL survey 2022, based on national data sources, data from certifiers and IFOAM – Organics International.

Situation in Uzbekistan

The development of organic agriculture in Uzbekistan is in the active stage of formation. For the first time the term “organic product” was introduced into the legislation of Uzbekistan in 2016 by the State Standard of the Republic of Uzbekistan O‘zDSt 3084:2016 “Organic agricultural and food products. Terms and definitions”. This document includes 50 terms and definitions in the field of production, composition and properties of organic agricultural and food products and products of their processing.

In 2018, a new standard O‘zDSt 3290:2017 “Organic agricultural and food products. Rules of production, storage and transportation”. The new standard reflects the general rules for the transition to organic production, the rules for organic crop production, animal husbandry and beekeeping, the rules for the production of organic food and feed, as well as the rules for collecting, packaging, transporting and storing products.

In order to regulate relations in the field of organic products, in April 2022, the Law “On Organic Products” was adopted in the republic. The Law defines the concepts of "organic products" and other related terms. The Law establishes a number of requirements for the cultivation of organic products. In particular, the use of healthy animals and plants, as well as without hazardous materials of natural origin (for example, feed), a ban on the use of various pesticides, hormones, antibiotics, chemical treatments, as well as methods and products of genetic modification.

Organic producers can voluntarily undergo an assessment of compliance with production, processing and storage standards. As a result, they receive a certificate of organic conformity, and with it the right to use the organic label. Certified manufacturers can also legally label their products. It is allowed to use the words “organic” (organic), “biologic” (biological), “ecologic”

(environmental), “natural” (natural) in the labeling [2].

In order to start the production of organic products, agro-clusters, farms and dehqan farms can apply to the "Agricultural Standardization Center" under the Ministry of Agriculture, and to the ACIS Agro Services Centers in each region, as well as to companies providing consulting services in the areas. These centers provide manufacturers with consulting services on the basis of a contract, including:

- what product should be produced;
- which conformity assessment body should be contacted to obtain a certificate of organic conformity;
- conclusion of an agreement on voluntary certification of organic agriculture and organic food production;
- a recommendation is given to which country to export the manufacturer's products;
- maintenance of regulatory documents, conformity assessment methods and methodological documents in the field of technical regulation in organic production [7].

When switching from the production of inorganic products to the production of organic, a transitional period is established during which the manufacturer ensures compliance with the requirements of the legislation on organic products and regulatory documents in the field of technical regulation.

According to IFOAM [4], in 2020, the area of land allocated for organic agriculture in Uzbekistan amounted to 3,781 hectares, which is more than 4 times higher than in 2019 (932 hectares).

In total, from 2020 to the present, agricultural and food industry enterprises in the country have received 34 Organic certificates and 239 Global G.A.P. certificates³. On the basis of these certificates, a variety of products are grown and produced in Uzbekistan: wheat, cotton, capers, grapes (including dried), apricots, apricot oil, dried apricots, melons, watermelons, cauliflower, processed cotton (textile products), various cellulose paper, etc.

According to the Textile Exchange Organic Cotton Report [8], in the 2020/21 season, Uzbekistan has grown about 465 tons of organic cotton fiber on 1,035 hectares of certified organic land. Uzbekistan accounts for 0.1% of the world's organic cotton production, while the share of organic cotton production in the country is estimated at 0.1% of the total cotton production of the republic.

Main barriers to the introduction or scaling up of organic agriculture in Uzbekistan.

The main barriers to the development of organic agriculture in Uzbekistan include:

- Lack of knowledge about the production, processing and sale of organic products, as well as a low level of awareness among consumers;
- Lack of statistics on the number of manufacturers, regions and volumes of production and sales;
- Distributors and agents have limited access to information;
- No national associations or networks of organic producers;

- Interest in selling on the domestic market is not high;
- Due to high interest in exports, competition (price, quality and choice) in domestic markets is low;
- Consumers are dissatisfied with the lack of diversity, low supply volumes and prices for organic products;
- Lack of research specifically focused on locally adapted organic farming systems covering issues related to climate change.

It is also worth noting that despite the fact that chemicalization processes are not used in the production of organic products, a number of studies [5] show that organically grown products have a greater impact on the climate than products produced in the traditional way. One reason for this is that organic farming requires larger areas of land than traditional farming.

Recommendations.

Due to the fact that a significant part of agricultural products in the Republic of Uzbekistan is produced on lands used by dekhkan (personal subsidiary) farms, where the use of chemicals is limited, a certain amount of this product could be classified as “organic” . However, to resolve this issue, it is necessary to develop national standards and systems for certification of organic crop, livestock, and beekeeping products.

To support all households, consumers and organizations that are actively involved in the development of organic farming in Uzbekistan, an "umbrella" organization can be created, such as the Association of Organic Producers of Uzbekistan.

Educational and training projects are needed to raise the level of knowledge in all aspects of organic production, from the basics to consumer demand. It is necessary to disseminate objective information about legislation and system management, as well as about accreditation and certification procedures, in the media and among officials.

Also, in order to popularize the products of organic agriculture, it is necessary to carry out activities to form healthy eating habits among the population through the use of environmentally friendly products, holding thematic seminars and conferences.

The development of organic agriculture in the republic will solve the following problems:

- ensuring employment of the rural population, which will reduce the level of poverty and low income of local residents;
- export of organic products - will ensure the growth of sales volumes, income and image of the national producer;
- the use of organic products will improve the health of the population, and can also reduce the cost of maintaining working capacity and losses from diseases;
- the development of natural farming, which will reduce environmental pollution, soil erosion and compaction, improve its fertility and productivity, and preserve its natural potential for future generations.

Uzbekistan can become a central platform for the production of high-value organic products such as dried apricots, walnuts, honey and other bee products, raisins, nuts and dried fruits, as well as medicinal and aromatic plants. In the republic, preference is given to so-called “natural

products”, as they contain much less toxic chemicals, additives, artificial flavors and colors, as well as preservatives, and are of higher quality. Also, the private sector can play an important role in the development of the organic movement in Uzbekistan in order to develop both the domestic and export markets.

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