



# The first international scientific and practical forum on bioeconomy Bioeconomy - new approach for sustainable development of countries and regions



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### WAYS TO IMPROVE CULTIVATION OF ORGANIC AGRICULTURAL PRODUCTS

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#### **Abstract**

The article investigates the prospects for goods in cultivating organic agricultural Uzbekistan. The global market has a high demand for eco-friendly and organic food of organic products. A SWOT analysis agricultural production in the region was carried out. Innovative ways of growing organic agricultural products have been developed in Uzbekistan

#### **Aim**

Analysis of the production of organic agricultural products in Uzbekistan and the development of proposals for its development.

#### **Tasks**

Based on the above objectives, the following tasks were attempted: Analysis of the state of production of organic agricultural products in Uzbekistan; study of opportunities for agricultural production in Uzbekistan; development of proposals to improve the production of organic agricultural products in Uzbekistan.

#### **Materials and methods**

In preparing the scientific article, concepts and strategies for the development of organic agricultural products, legal framework, data from the Statistics Committee and the views of experts in this field were used. A SWOT analysis on the development of organic farming in agriculture was conducted. Expert analysis, monographic analysis and a systematic approach were used in conducting this analysis.

#### Results

In our country, special attention is paid to the cultivation of organic agricultural products. In 2020, the Presidential Decree "On additional measures to ensure compliance of quality and safety indicators of agricultural products with international standards" was adopted. The decree aims to develop production, regulatory and coordination systems in accordance with the requirements of international standards of organic and global GAP, to improve the quality and safety of agricultural and forestry products, to adopt world standards in 2020-2025 to expand export geography, gradual transition to organic production on fund lands; cultivation of the main export-oriented crops of land certified in accordance with the requirements of the international standard of optimal agricultural practice (Global G.A.P.); The enterprises and clusters of cotton and textile production have developed a plan of practical measures for the cultivation of organic cotton and the organization of production of organic textile products, and practical work has begun.

There are enough opportunities for agricultural development in the country. In 2020, all categories of farms will produce 7566.6 thousand tons of grain (1.7% more than in 2019), 3143.5 thousand tons of potatoes (1.7% more), 10459.5 thousand tons vegetables (increased by 2.4%), 2134.4 thousand tons of melons (increased by 3.2%), 2864.0 thousand tons of fruits and berries (increased by 4.0%), 1 639.2 thousand tons of grapes (Increased by 2.2%).

In 2021, all categories of farms will produce 7540.9 thousand tons of grain (1.2% less than in 2020), 3292.3 thousand tons of potatoes (4.7% more), 10859.3 thousand tons of vegetables (an increase of 4.1%), 2281.1 thousand tons of melons (an increase of 6.9%), 2852.5 thousand tons of fruits and berries (an increase of 1.4%), 1695.1 thousand tons of grapes (more than 5.5%).

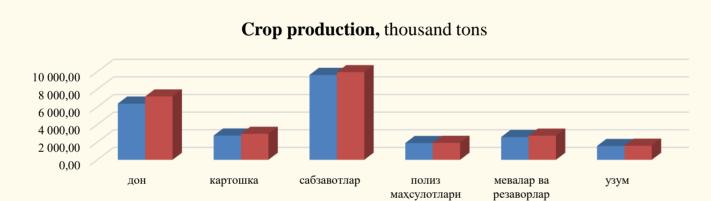


Figure 1. Indicators of the volume of agricultural products grown in Uzbekistan.

Consistent implementation of measures to increase the domestic capacity of the livestock sector, as well as the provision of systematic assistance to them by the state has allowed to increase the number of livestock, to fill the domestic consumer markets with livestock products.

In 2020, all categories of farms will produce 2526.2 thousand tons of meat in live weight (2.1% more than in 2019), 11009.9 thousand tons of milk (2.8% more), 7 825.0 mln. eggs (an increase of 0.7%), 35.7 thousand tons of wool (an increase of 1.5%) and 144,085 tons of fish (an increase of 18.4%) were caught.

In 2021, all categories of farms will produce 2640.4 thousand tons of meat in live weight (4.8% more than in 2020), 11286.9 thousand tons of milk (2.8% more), 8053.1 mln. eggs (up 3.5%) were raised and 173,866 tons of fish (up 20.7%) were caught.

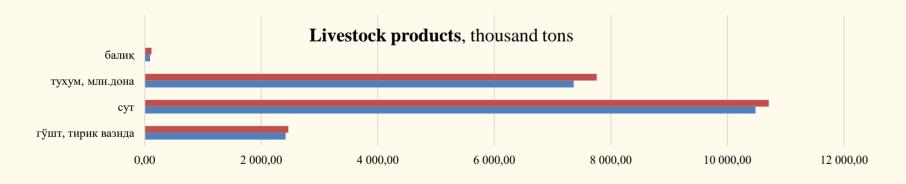


Figure 2. Indicators of the volume of livestock products grown in Uzbekistan.

In 2020, all categories of farms will produce 2526.2 thousand tons of meat in live weight (2.1% more than in January-December 2019), 11009.9 thousand tons of milk (2.8% more), 7 825.0 mln. eggs (an increase of 0.7%), 35.7 thousand tons of wool (an increase of 1.5%) and 144,085 tons of fish (an increase of 18.4%) were caught.

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The food and agriculture sector faces many challenges. This includes the growth of the population and their incomes, as well as the growing global demand for environmentally friendly and organic products, as well as meeting the demand for biomass supply to meet the needs of the energy and industrial raw materials sectors. In addition, the sector needs to adapt to climate change.

Meeting these requirements will increase the pressure on the agro-food sector to supply food and raw materials from scarce natural resources, while preserving the environment in the face of climate change. Solving these problems in a sustainable way requires the development of new products that can mitigate the effects of climate change and the improvement of existing technologies and practices.

An organic product is a product that fully meets international standards and does not exceed the permissible concentration of toxic substances (nitrates, toxic salts, heavy metals, pesticides). The main issue in the cultivation of ecologically pure products is the ecological condition of the soil and water used in the areas where agricultural crops are grown.

Depending on the ecological conditions in Uzbekistan, the cultivation of organic agricultural products is divided into: 1. Irrigated agriculture. 2. Lalmikor farming. 3. Agriculture in areas where groundwater is close to the surface. 4. Agriculture in saline soils. 5. Agriculture on lands prone to erosion (water, wind and irrigation erosions).

Currently, according to the Institute for Organic Agriculture Research, 103 countries have adopted laws on organic agriculture, and 6 countries are developing laws. According to the World Federation of Organic Agriculture statistics of the International Federation of Organic Agriculture, Uzbekistan has become one of the 10 countries in the world with favorable conditions for fruit growing and has good land for organic fruit production.

At present, 1276 standards related to the agricultural sector have been implemented. Of these, 309 are international and 6 are foreign standards. In addition, about 70 UN standards for agricultural products have been adopted.

A SWOT analysis of the development of organic agriculture in Uzbekistan was conducted: Strengths:

- In Uzbekistan, most of the year is sunny, which ensures the cultivation of agricultural products and several harvests throughout the year.

- Rich scientific experience in the cultivation of organic agricultural and livestock products;

- A legal framework has been created to support the production of organic agricultural products;

Availability of tax incentives for the export of organic agricultural products.

### Weaknesses:

- Insufficient development of methods of rational use of water resources;
- Deterioration of soil composition as a result of chronic use of chemicals in the cultivation of agricultural products;
- Increased soil degradation, desertification and salinity.

### **Opportunities:**

- Possibility to improve breeding and selection work;
- Opportunity to improve the financial situation of farmers on a cooperative basis;
- Existence of a mechanism of state financial support for the cultivation of organic products, the allocation of soft loans and subsidies.
- Improving soil ecology and quality through the cultivation of organic products;
- Improving quality and safety indicators at the international level;
- The demand for food is met.

### Threats:

- Lack of water resources in the country (only 20% of water resources are generated in the country);
- Global climate change, ie global warming, increasing natural disasters;
- Unsatisfactory financial and economic condition of farms.

In many countries, taking into account the fact that the health of the nation depends on human nutrition and the quality of the products consumed, the Program and Concepts of public policy in the field of healthy eating have been developed. In these programs, special attention is paid to the consumption of vegetables. The level of consumption of organic products often determines the working capacity and life expectancy of the population. Therefore, it is important to popularize knowledge about healthy eating and ways to prevent the cultivation of products that are dangerous to human health. Organic agriculture is a global trend. In recent years, the trade turnover of organic agriculture in international markets amounted to 96.7 billion euros, amounting to 71.5 million. 2.8 million producers are engaged in this activity per hectare. According to experts, the world market for organic products has grown by an average of 15% per year over the past five years, and in 2022 the trade turnover will reach 212 billion. dollars.

### **Conclusion**

In order to increase the production and export potential of organic agricultural products in Uzbekistan, it is necessary to develop cooperative relations between growers of organic products. This (consulting-export) cooperative informs growers about international standards for organic agricultural products and provides other consulting services; control of organic production; financing of farmers; to organize storage of cultivated products; organize exports and take on others.

In a consulting-export cooperative, it would be expedient to distribute the profits on the basis of the share of member farmers and the right to supply products (depending on the volume of products delivered). Then the incentive to supply organic products would increase and the financial interest would also increase.

The volume of organic agricultural production will increase through the establishment of a consulting and export cooperative; farmers' financial situation will improve; additional jobs will be created; improves soil ecology and quality through the cultivation of organic products; international quality and safety indicators are achieved; the population's demand for food is met.

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