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Article

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CURRENT STATE AND PROSPECTS OF ORGANIC PRODUCTION DEVELOPMENT IN UKRAINE: LOOKING TO THE FUTURE

The article substantiates the importance of the production of organic agricultural products as a component of a healthy lifestyle, as well as ensuring the preservation and restoration of the environment. The authors reveal the ecological, economic and social benefits of organic production, in particular, preservation of the nation's natural and health; reproduction of soil fertility; increased competitiveness of domestic producers on domestic and foreign markets; improving the welfare of the rural population, etc. It is stated that organic production includes the conscious use of soil as an ecosystem; application of production methods and preventive protection of crops. It is established that presently the interest of consumers in the consumption of environmentally friendly foods, whose production has no negative impact on the environment, is currently growing.

The study of the global organic market shows an active growth in both the number of organic producers and the output of organic products. The market of organic products in Ukraine is at an early stage of development, but there is a steady trend towards increased number of organic producers, expanded range of certified products, and increased exports of organic foodstuffs.

The authors analyze a number of factors hindering the development of organic production in Ukraine, in particular, the lack of public awareness of the properties of organic foods and their difference from conventional ones; shortage of qualified specialists in producing organic foods; insufficient solution of logistical problems; low purchasing power of the population, etc. The key changes in EU

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legislation on organic production are considered, one of the important innovations being the possibility of using "group certification", which allows small farmers to unite, produce and jointly pass the certification of organic products. Emphasis is placed on the prospects of this model for Ukrainian producers. The study shows the possibility of using organic foods in schools based on the example of the positive experience of EU countries – for the growing a healthy, conscious and responsible generation that will take care of the future of the state.

Keywords: *agriculture; organic production; group certification model; organic products market; Healthy Eating*

The current rate of global biodiversity loss far exceeds the rate of natural loss of agricultural resources. The loss of biodiversity is a serious threat to society's ability to produce food, use fresh drinking water and adapt to ongoing climate change. Humankind urgently needs to rebalance nature and ensure a sustainable global food system, and organic production can be one way of meeting this challenge. The development of organic production preserves the natural environment and provides the population with safe, environmentally friendly and high quality agricultural products. Thus, organic products are part of a healthy lifestyle and at the same time serve to preserve and restore the environment.

Currently the relevance of organic production is determined by a number of environmental, economic and social benefits. Environmental benefits include: preservation of the natural environment; conservation and restoration of biodiversity in agro-landscapes, reproduction of soil fertility; prevention of pollution of natural waters; and reduction of carbon dioxide, methane and nitrous oxide emissions leading to global warming. Economic benefits: increased competitiveness of producers on Ukraine's and foreign markets; and resource-conserving agricultural production. Social preferences include: preservation of the nation's health (production without the use of GMOs and their derivatives, chemical plant protection products and mineral fertilizers); improvement of the welfare of rural population through diversified activities; and increased employment and improved development of rural areas. The consumption of organic products also has a positive impact on public health, as they contain 1.5 times more nutrients, minerals and vitamins (vitamin C, iron, magnesium and phosphorus) than conventional products.

The issues of development of organic agricultural production as a basis to ensure the quality and safety of agricultural products in Ukraine are addressed in the publications of Ukraine's scientists V. Harmashov [1], T. Dudar [2], I. Kudinova [3], T. Chaika [4], O. Shubravska [5].

The purpose of the study is to assess the role of organic production and to identify promising areas for its further development in Ukraine.

The United Nations, represented by the Food and Agriculture Organization of the United Nations (FAO), and the World Health Organization (WHO) initiated the establishment and development of interstate regulation of organic agriculture by establishing in 1963 a Commission called Codex Alimentarius (Latin: Codex Alimentarius - collection of standards for food), which developed requirements for specific types of food according to the founding and programme documents of the above international organizations. In 1999, the Commission adopted requirements for the production, processing, labelling and marketing of organic agricultural products [6].

As defined by the International Federation of Organic Agriculture Movements (IFOAM) [7], organic agriculture is a production system that supports the health of soils, ecosystems and people; depends on ecological processes, biodiversity and natural cycles specific to local conditions, avoiding use of unfavorable resources; organic agriculture combines tradition, innovation and science to improve the environment and develop equal relations and a decent standard of living for everything mentioned above. We believe foreign scientists who interpret organic agriculture as an agricultural production system that uses matter, energy, knowledge and vital activities of natural organisms for production (e.g. food) and processes (e.g. food processing), as well as for the provision of services [8].

According to the Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labelling of Organic Products", organic production organic production shall mean certified activities related to the production of agricultural products, including all stages of the technological process, namely primary production (including harvesting), preparation, treatment, mixing and related procedures, filling, packaging, processing, regeneration and other changes of products state), which is carried out in compliance with the legal requirements in the field of organic production, circulation and labelling of organic products [9].

So, organic farming is about maintaining the long-term health of the specific objects it deals with (plants, animals, soil, people) as well as of the planet as a whole.

Organic producers have developed production systems that maintain a balanced use of the environment as a natural agricultural resource. In livestock farming, such production systems provide the following prerequisites: livestock must be protected from thirst, hunger and malnutrition, be free from physical and physiological discomfort, pain,

injury or disease and be able to exhibit normal behavioral characteristics in the absence of fear or chronic stress [10].

In organic farming, the use of soil is based on the principle that soil is an ecosystem. Knowledge of natural soil development processes helps farmers to find effective ways of converting their farms to organic production. Organic production technologies do not allow the use of: in crop production - toxic chemicals to control weeds, plant pests and diseases, mineral fertilizers of synthetic origin, as well as GMOs; in livestock farming - growth stimulants, hormones and antibiotics. In organic production, the use of crop rotations, the use of locally adapted seeds and species is mandatory, thereby improving soil health and fertility and restoring functional biodiversity [2].

Consequently, the holistic approach of organic production includes the conscious use of soil as an ecosystem, leading to the protection of soils and groundwater; the use of production methods and crop protection that reduce dependence on chemical pesticides.

Today there is a growing consumer interest in organic food, whose production has no negative impact on the environment. The global organic market is one of the fastest growing markets in recent decades, with both the area of organic agricultural land and the number of organic producers and volumes of organic products growing. In particular, in 2020 the organic market in Austria, Germany and Switzerland grew by 20% and in the USA and the UK by 12%.

According to FiBL (the Research Institute of Organic Agriculture, Switzerland) and IFOAM, 187 countries conducted organic farming in 2019. The area of organic farmland increased to 72.3 million hectares in 2019 from 1.1 million hectares in 1999 and its share in total agricultural land was 1.5%. During the last 20 years the number of producers of organic products increased from 200 thousand to 3.1 million and the organic market grew accordingly from 15.1 to 106.4 billion euros [11].

The global organic agricultural land use is dominated by pasture (over two-thirds), with arable land occupying 18% and perennial crops 6.5%. Cropland is mostly occupied by grain crops (about 40%), fodder crops (24.4%), oil crops (13%), legumes crops and vegetables. The most important perennial crops in organic production are oilseeds (19%), coffee (15%), nuts (13%), grapes (10%) and cocoa (8%).

In terms of individual countries, the largest areas under organic production are in Australia (35.7 million ha), Argentina (3.7 million ha), and Spain (2.4 million ha), and Liechtenstein has the largest share of organic land (41.0%), followed by Austria (26.1%), and São Tomé and Príncipe

(24.9%). The largest organic markets include the USA (€44.7 billion), Germany (€12.0 billion) and France (€11.3 billion), and the EU as a whole €41.4 billion. The population of Denmark (344 euros per person), Switzerland (338 euros) and Luxembourg (265 euros) consume the most organic products. Thus, the main consumer of organic products is the population of Europe with a fairly large share of organic agricultural land - 23%, but half of organic land is located in Oceania, 11% in Latin America, 8% in Asia, 5% in North America and 3% in Africa [11].

While Europe and North America remain the largest markets, the markets of Asia and Australia and Oceania are showing significant growth, both in terms of sales volumes and per capita consumption (Table 1). That is, it can be assumed that there is significant potential for such markets there, especially in Asia, with its large population.

Table 1

Main characteristics of the global organic market by region

Region	Sales volume, *million euros*		Consumption per person, *euros*		Organic area change index 2018/2019, *%*
	2018	2019	2018	2019	
World	**96683**	**106404**	**12,9**	**14,0**	**101,6**
North America	43677	48201	119.9	132.3	109.1
Europe	40729	45049	50.5	55.8	105.9
Asia	10071	10949	2.4	2.4	92.9
Australia and Oceania	1378	1378	33.5	33.5	99.7
Latin America	810	810	1.5	1.5	103.5
Africa	17	17	0.01	0.01	109.5

Source: [11].

Unlike in the USA and Western Europe, the organic market in Ukraine is now at an early stage of development. Buying organic food in Ukraine is often seen as a new trend rather than a conscious choice to improve health. Organic production is unattractive for Ukraine's producers due to high costs and lack of state support, which results in high retail prices. However, despite this, sales of organic products in Ukraine's market are growing, although at a low rate.

Ukrainians now consume much less organic products than residents of EU countries: per person, this figure is less than 1 euro, while in the EU it is 84 euro per year. The share of organic products on Ukraine's market today is less than 1% of total sales of food products (for comparison, the highest

share of organic products (in the Danish market) exceeds 12%). However, today there is a steady trend of the emergence of new organic producers, the expansion of the range of certified products, and increased in exports of organic products (Table 2).

Table 2

Organic production in Ukraine

Indicator	2016	2017	2018	2019	2020
The number of organic producers	426	504	635	617	549
among them agricultural producers	294	304	501	470	419
The area of agricultural land (organic and transitional period), *thousand hectares*	381.2	289.0	309.1	468.0	462.2
with organic status among them, *thousand hectares*	289.6	201.0	233.5	384.5	410.6

Source: Organic production / Ministry of Economy of Ukraine. URL: https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=ed6463ce-f338-4ef0-a8a8-e778d3d0ffd1&title=OrganichneVirobnitstvoVUkraini

In Ukraine, the development of organic production is restrained by a number of factors, such as:

- lack of public awareness of the properties of organic products and how they differ from conventional products;
- a shortage of qualified organic farming professionals (including agronomists);
- insufficiently solved logistics problems regarding regularity of deliveries and certification of logistics centers (due to rising costs, retail chains find it more profitable to deal with products with a longer expiration date);
- price factor due to the low purchasing power of the population (the price is influenced by small production volumes, lack of state support and preferential credit resources);
- economic factors - financial losses due to reduced output; financial costs due to the need to purchase special machinery and equipment; the conversion period can take up to three years, which is a risk and an additional cost for the organic producer;
- probable increase of conflicts between producers of organic and conventional producers over pests and diseases on the borders of their land plots. Certain pests and diseases, GMO contamination and health problems

force the organic sector to comply with basic laws and regulations, which is complicated by the proximity to areas where compliance is not required.

Another important factor inhibiting the development of organic production in Ukraine is the lack of state support for producers. On the one hand, the state budget plans budgetary subsidies per unit of cultivated land and/or one head of cattle; reimbursement of up to 30% of the cost of organic certification; and reimbursement of up to 30% of the cost of purchasing approved plant protection products and fertilizers, seeds, planting material and fodder. On the other hand, these resources were not used due to the absence of a "Procedure for the distribution and use of funds for the direction of organic production".

Large investors are interested in technologies that give a quick return on investment and maximize income , including genetic technology and precision farming, while organic farming is difficult to manage and unpromising for quick profits.

In comparison with conventional agriculture the average yield of organic crop production is lower. To compensate for the lower yields, higher risks and additional costs for certification, and logistics and trade, organic producers have to sell their products at a higher price. However, market prices, including those for organic products, are under pressure from the prices of conventional products, so it is important to encourage consumption of organic products at stable prices.

One of the risks that the producer bears when converting to organic crop production is the increased demand for labor. The high demand for labor in organic farming is a consequence of labor-intensive weed control, which is particularly acute during conversion and in the early years of organic production [12].

Despite a number of problems, Ukraine's market for organic products is developing. Experts estimate that while in 2008 the market was worth $0.57 million, in 2010 it was worth $3.4 million, then in 2020 - already $25.1 million.

However, most producers are certified according to standards equivalent to those of the EU, and over 90% of all products grown in Ukraine are exported. The main organic products exported from Ukraine are cereals, oilseeds and pulses, wild berries, mushrooms, nuts and herbs (Table 3).

Table 3

Main agricultural organic products exported by Ukraine

Type of product	Export volumes, *ths tonnes*		Rate of change, *%*
	2019	**2020**	
Maize	227.7	103.9	45.6
Soya	59.9	88.1	147.1
Wheat	71.6	50.8	70.9
Sunflower oil	16.1	20.5	127.2
Rapeseed	11.1	10.1	91.0
Sunflower meal	8.8	7.4	83.9
Sunflower	20.7	7.4	35.6
Blueberries frozen	7.2	6.0	84.1
Millet	4.3	4.2	96.5
Peas	6.7	3.9	58.5

Source: Organic Market Study of Ukraine 2019-2020 / Organic Standard Ltd, FiBL. . Kyiv, 2021, 66 p.

According to estimates of the certification body Organic Standard, the main organic products (by volume) exported from Ukraine in 2020 were maize, wheat, soya, sunflower oil, rapeseed, sunflower meal, sunflower seed, blueberries (frozen), berries and millet.

Ukrainian operators are selling abroad not only raw materials, but also organic semi-processed and processed products. For example, exports of organic sunflower oil, honey, frozen berries, apple juice and other products are increasing. Ukraine exported more than 45 different organic products in 2020 and the total value of organic exports was more than USD 204 million.

The commodities with the highest value per kilo in 2020 were wild berry oil, chilled or frozen salmon, sunflower phosphatide concentrate, dried herbs, ice cream, berries, dairy products and pumpkin seeds.

In recent years, organic products from Ukraine were exported to 38 countries, 20 of which are EU members. European countries are traditionally the main consumers of Ukrainian organic products. Apart from the EU member states (217.210 t in 2020), the UK (16.904 t), Switzerland (4.943 t) and Norway (2,831 t) also import Ukrainian organic products.

The Netherlands is the leading importer of Ukrainian organic products because Dutch legislation supports organic farming policy and clearly regulates the organic sector, and the presence of one of the largest port infrastructures in the world facilitates convenient logistics in transporting products to the rest of the world. Raw materials are generally exported to the Netherlands. Ukraine is surpassed only by Ecuador, the Dominican

Republic and China in terms of the volume of organic products exported to the EU.

Many countries are striving to take organic production to the next level. In particular, the EU plans to convert 25% of agricultural land to organic agriculture by 2030. The National Economic Strategy until 2030 [13] provides for an increase in the area of land with organic status of at least 3% of the total area of agricultural land, and an increase in exports of organic products to 1 billion USD.

For the successful development of Ukraine's organic production, it is necessary to create an institutional support, taking into account both the successful experience of developed countries and the national peculiarities of Ukraine. Let us briefly review the key legislation on organic production in EU countries.

From 1 January 2022, the European Union introduced a new Regulation of the European Parliament and of the Council (EC) No 2018/848 on organic production and labelling of organic products [14]. The key changes of this Regulation are the extension of its scope, strengthening the responsibility of operators in case of suspected contamination of products, the shift from equivalence to full compliance with and establishing requirements for group certification. The promotion of short distribution channels and local production is the new objective of the Regulation; this objective is important in the context of supporting small producers.

The Regulation strengthens the principles relating to the ecologic component of organic agriculture, namely the principle of soil-related production is reinforced through "soil-related crop production as well as land-related livestock production". The regulation also fixes the principles of "promoting a non-toxic environment", "maintaining long-term soil fertility" and "biodiversity" and adds new principles to encourage the use of organic reproductive material of plants and animal breeds with high levels of genetic diversity, resistance to disease and longevity.

Among the regulation's novelties are a ban on hydroponic production; processed organic food production must not include products containing or consisting of nanomaterials; and the creation of a group certification system for small farmers and operators to reduce inspection and certification costs and administrative constraints, strengthening local networks, promoting retail development and ensuring a level playing field for operators from third countries; under certain conditions, the farm may produce both organic and conventional products; operators and groups of operators are subject to compliance checks at least once a year.

An important innovation of the Regulation is the possibility of "group certification", which allows small farmers to come together, produce and go through organic certification together. This model is very promising for Ukraine's producers as it will make it easier for small farmers to do business by allowing them to go through group certification, saving a great deal of time and money. In addition, organic and conventional farming are allowed to run in parallel as long as they are separated according to regulations, which will make the costly transition to organic production much easier.

This model is quite common around the world. According to FiBL, 2.6 million organic producers were covered in 2019, organized into 5,900 groups with internal control systems. These producers operated on 4.5 million hectares (average farm size was 1-4 hectares, depending on the region). The main products were coffee and cocoa, but also sugar, honey, cotton, aromatic plants and tropical fruits.

Group certification today is represented by two types of organizations, namely organized farmer groups such as cooperatives, farmers' associations, cooperative federations (globally half the total, but they have a limited range of organic products) and trader-led groups (less than half the total, but they cover 1-1.3 million organic producers, and have a wide range of organic products certified according to this system).

Group certification is not clearly defined in the new Regulation, but it is defined in the European Commission Guidelines of 2008 and is only allowed for the control of small operators in developing countries as defined by the OECD. According to the Guidelines, only small farms can be members of a group covered by group certification. Large farms (namely farms bearing certification costs of less than 2% of their annual turnover) may also be members of the group, but must undergo annual inspection by an independent certification body.

In addition, processors and exporters may also be part of the group structure, but must also undergo annual inspection by an independent certification body. Farmers belonging to the group must use the same production systems and be geographically adjacent.

The group may be self-organized, namely in the form of a cooperative or a structured group of producers under a processor or exporter. This means that it must be formally registered on the basis of written agreements with the members, have central management, established decision-making procedures and legal capacity. When export-oriented, marketing of products must be done on behalf of the group. A system of internal controls must also be introduced.

Each group of operators shall consist only of members:

- for which the value of the individual certification is more than 2% of the turnover or standard organic output and whose annual organic production turnover does not exceed EUR 25 000 or whose standard organic production volume does not exceed EUR 15 000 per year; **or**

- each member has a farm with an area of no more than:

5 ha; or

0.5 ha for greenhouses; or

15 ha, including perennial pastures.

Thus, in 2022, for group certification in the EU, each group of operators must be established in a member state or third country; have legal personality; consist of members operating geographically close to each other; adopt a common marketing system for the products produced by the group; and introduce an internal control system consisting of a documented set of controls and procedures whereby a specific person or body is responsible for checking that each group member meets the requirements of these Regulations.

An important use of organic products is the distribution of their consumption in school establishments. Children are more vulnerable to pesticide residues, nitrates, heavy metals and antibiotics in food, so organic products are particularly beneficial for children. European countries introduced a certain percentage of organic products in the public procurement system for school meals and stimulated the production of organic products. However, in European countries these programmes are supported by substantial budgetary allocations from both the country itself and from the EU.

Since 2014, "The EU School Programme for Fruit" was introduced in some German federal states to provide fruit to schools for preventive health care purposes. The programme calls for three servings of fruit/vegetable per child per week (300 g in total) as a snack. Children's participation in the programme is free of charge (primary school children (grades 1-4) - optional). This programme was supported by educational institutions, as the number of those interested grew over the years. Starting in 2017, the "The EU School Programme for Fruit, Vegetables, and Milk" was launched. If children wish, they are provided for 200-250 ml of milk per week in addition to fruit and vegetables in their diet [15, 16]. However, pupils prefer to consume fruit and vegetables. The programme is still in force today. Positive effects of the EU organic fruit, vegetable and milk programme include: improved knowledge of fruit, vegetable and milk among the pupils; improved motor skills of the children due to cutting fruit and vegetables into pieces; and increased demand for fruit and vegetable consumption.

Since the introduction of organic cooking in German school canteens, the consumption of organic products increased as a result of the attractive appearance of the dishes; meat consumption decreased with an increase in vegetable consumption; vegetarian dishes increased; regional and seasonal products increased in school canteens; and the optimal amount of food is calculated.

This process has been launched in Ukraine too. In particular, an active reform of the school nutrition system began and legislation on child nutrition is being improved. The aim of the reform is to improve the overall quality, nutrition and safety of food products in Ukrainian school menus. Guidelines are developed, requirements for catering in educational are updated, canteens are being modernized and menus are developed. The reform introduces healthy eating in educational institutions.

The legislative framework for baby food is now quite broad. This includes the Laws of Ukraine "On Baby Food"", "On Childhood Protection", "On the Safety and Quality of Foodstuffs" and "On Milk and Dairy Products", etc., and the clinical protocol for the medical care of a healthy child under the age of three can also be included here. However, the current recommendations on feeding children from three to five years of age are still rather general and incomplete, and the current official standards of nutrient consumption for the category of children from zero to five years of age in Ukraine since 2000 have not been revised and still differ from the current world standards. In particular, the Law of Ukraine "On Baby Food" was adopted in 2006, its provisions are in many cases outdated and contradict the new Ukrainian legislation on food safety and quality and do not meet the requirements of EU legislation.

In October 2021, the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Concerning Bringing the Legislation of Ukraine in the Sphere of Baby Food into Compliance with the Requirements of EU Legislation" was adopted. [17], according to which Ukraine’s regulation will be harmonized with EU regulation. Ukrainian producers who meet the new requirements will be able to supply the same products to both Ukraine’s and foreign markets at the same time. Only high-quality milk may be used for the production of baby food. The list of ingredients prohibited for use in baby food production will be brought fully in line with EU legislation, including the ban on gluten. The labelling of baby food will also be brought fully in line with EU legislation, where pictures and images of children cannot be used. The Ministry of Health will approve the minimum and maximum allowable amounts of minerals and vitamins in baby food. Also, the so-called "social component" will be retained - the state will

provide free meals to certain categories of children. Provision will be made through kits in accordance with the procedure established by the Cabinet of Ministers of Ukraine.

However, the existing institutional system in Ukraine does not provide for the use of organic products in the daily menu of schools. That is why it is advisable to pay attention to the adaptation of the European experience on the regulation of the provision of organic fruit, vegetables and milk in school establishments.

Conclusions and Recommendations

The prospects for the development of organic agricultural production, both globally and in Ukraine, are justified by the need to conserve fauna and flora, protect soils and waters, use resources sustainably, reduce overall pollution, find alternative energy sources and provide healthy food. Promoting organic production and consumption requires the attention and action of all players in the organic market - from food producers to stakeholders in the food supply chain, food industry, retailers and consumers.

Ukraine's organic food market is developing steadily and is tending to increase. To develop it further, organic market operators need to promote consumer awareness of the benefits of organic food compared to conventional food.

The state must also be actively involved in stimulating organic production. This requires not only the allocation of relevant funds in the state budget, but also the possibility for producers to access these funds, in particular the approval of the "Procedure for the distribution and use of funds for organic production" as a measure.

In order to promote the entry of small agricultural producers into organic production, it is advisable to introduce a model of group certification of organic products. This group certification involves small businesses combining their efforts in organic production and certification to make it cheaper and easier to obtain certification, which would facilitate the entry of small producers into Ukraine's and foreign organic markets.

The adaptation of European legislation regarding state regulation and support for the implementation of the "School Organic Food Programme" also deserves attention, including the establishment and ongoing support of a network of organic suppliers; regulation of the optimal price for such products; partial state coverage of the costs of purchasing organic products for school meals, etc.

In the short term in Ukraine, taking into account the experience of European countries, it is advisable to introduce the use of organic products in the daily menu of school schools, thus increasing the consumption of organic fruit, vegetables and milk, which, compared to conventional ones, contain more nutrients needed to sustain the vitality of school children.

P.S. of 03.04.2022. The article was prepared for printing in the pre-war period and from a peacetime perspective, but today forces us to look at our reflections on the relevance of further development of this segment of the agricultural sector from a new perspective. The post-war recovery of Ukrainian agriculture provides an opportunity to ensure a structural transformation based on long-term stable growth of agri-food production in accordance with the sustainable development paradigm, and an important component of these changes should be the development of organic production, which ensures the restoration of balance in nature and shapes a sustainable global food system.

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СУЧАСНИЙ СТАН ТА ПЕРСПЕКТИВИ РОЗВИТКУ ОРГАНІЧНОГО ВИРОБНИЦТВА В УКРАЇНІ: ІЗ ДУМКОЮ ПРО МАЙБУТНЄ

Обґрунтовано важливість виробництва органічної сільськогосподарської продукції як складової здорового способу життя, а також забезпечення збереження та відновлення довкілля. Розкрито екологічні, економічні та соціальні переваги органічного виробництва, зокрема, збереження природного середовища та здоров'я нації; відтворення родючості ґрунтів; підвищення конкурентоспроможності виробників на внутрішньому та зовнішньому ринках; покращення добробуту сільського населення тощо. Констатовано, що органічне виробництво включає свідоме використання ґрунту як екосистеми; застосування виробничих методів та профілактичного захисту посівів. Встановлено, що наразі зростає зацікавленість споживачів у споживанні екологічно чистих продуктів харчування, виробництво яких не чинить негативного впливу на навколишнє середовище.

Дослідження світового органічного ринку засвідчило активне зростання як кількості органічних виробників, так і обсягів органічної продукції. Ринок органічної продукції в Україні перебуває на початковому етапі розвитку, проте прослідковується стійка тенденція зростання кількості органічних виробників, розширення асортименту сертифікованих продуктів, нарощування експорту органічних продуктів.

Здійснено аналіз ряду факторів, що стримують розвиток органічного виробництва в Україні, зокрема, це недостатній рівень обізнаності населення про властивості органічних продуктів та їх відмінності від конвенційних продуктів; дефіцит кваліфікованих спеціалістів із вирощування органічної продукції; необхідність вирішення логістичних проблем; низька

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купівельна спроможність населення тощо. Розглянуто ключові зміни у законодавстві ЄС щодо органічного виробництва, одним із важливих нововведень якого є можливість використання групової сертифікації, що дає дрібним фермерам змогу об'єднуватися, виробляти та спільно проходити сертифікацію органічної продукції. Наголошено на перспективності зазначеної моделі для українських виробників. Дослідження засвідчило можливість використання органічної продукції у шкільних закладах освіти на прикладі позитивного досвіду країн ЄС – задля зростання здорового, свідомого та відповідального покоління, яке дбатиме про майбутнє держави.

***Ключові слова**: сільське господарство; органічне виробництво; модель групової сертифікації; ринок органічної продукції; здорове харчування*