



colloquium-journal

ISSN 2520-6990

Międzynarodowe czasopismo naukowe

**Technical science
Chemical sciences
Economic sciences
Physics and mathematics**

№5(92) 2021

Część 1



colloquium-journal

ISSN 2520-6990

ISSN 2520-2480

Colloquium-journal №5 (92), 2021

Część 1

(Warszawa, Polska)

Redaktor naczelny - **Paweł Nowak**
Ewa Kowalczyk

Rada naukowa

- **Dorota Dobija** - profesor i rachunkowości i zarządzania na uniwersytecie Koźmińskiego
- **Jemielniak Dariusz** - profesor dyrektor centrum naukowo-badawczego w zakresie organizacji i miejsc pracy, kierownik katedry zarządzania Międzynarodowego w Ku.
- **Mateusz Jabłoński** - politechnika Krakowska im. Tadeusza Kościuszki.
- **Henryka Danuta Stryczewska** – profesor, dziekan wydziału elektrotechniki i informatyki Politechniki Lubelskiej.
- **Bulakh Iryna Valerievna** - profesor nadzwyczajny w katedrze projektowania środowiska architektonicznego, Kijowski narodowy Uniwersytet budownictwa i architektury.
- **Leontiev Rudolf Georgievich** - doktor nauk ekonomicznych, profesor wyższej komisji atestacyjnej, główny naukowiec federalnego centrum badawczego chabarowska, dalekowschodni oddział rosyjskiej akademii nauk
- **Serebrennikova Anna Valerievna** - doktor prawa, profesor wydziału prawa karnego i kryminologii uniwersytetu Moskiewskiego M.V. Lomonosova, Rosja
- **Skopa Vitaliy Aleksandrovich** - doktor nauk historycznych, kierownik katedry filozofii i kulturoznawstwa
- **Pogrebnaya Yana Vsevolodovna** - doktor filologii, profesor nadzwyczajny, stawropolski państwowy Instytut pedagogiczny
- **Fanil Timeryanowicz Kuzbekov** - kandydat nauk historycznych, doktor nauk filologicznych. profesor, wydział Dziennikarstwa, Bashgosuniversitet
- **Kanivets Alexander Vasilievich** - kandydat nauk technicznych, docent wydziału dyscypliny inżynierii ogólnej wydziału inżynierii i technologii państwowej akademii rolniczej w Połtawie
- **Yavorska-Vitkovska Monika** - doktor edukacji, szkoła Kuyavsky-Pomorsk w bidgoszczu, dziekan nauk o filozofii i biologii; doktor edukacji, profesor
- **Chernyak Lev Pavlovich** - doktor nauk technicznych, profesor, katedra technologii chemicznej materiałów kompozytowych narodowy uniwersytet techniczny Ukrainy „Politechnika w Kijowie”
- **Vorona-Slivinskaya Lyubov Grigoryevna** - doktor nauk ekonomicznych, profesor, St. Petersburg University of Management Technologia i ekonomia
- **Voskresenskaya Elena Vladimirovna** doktor prawa, kierownik Katedry Prawa Cywilnego i Ochrony Własności Intelektualnej w dziedzinie techniki, Politechnika im. Piotra Wielkiego w Sankt Petersburgu
- **Tengiz Magradze** - doktor filozofii w dziedzinie energetyki i elektrotechniki, Georgian Technical University, Tbilisi, Gruzja
- **Usta-Azizova Dilnoza Ahrarovna** - kandydat nauk pedagogicznych, profesor nadzwyczajny, Tashkent Pediatric Medical Institute, Uzbekistan

    SlideShare



INDEX COPERNICUS
INTERNATIONAL

НАУЧНАЯ ЭЛЕКТРОННАЯ
БИБЛИОТЕКА
LIBRARY.RU

«Colloquium-journal»

Wydrukowano w «Chocimska 24, 00-001 Warszawa, Poland»

E-mail: info@colloquium-journal.org

<http://www.colloquium-journal.org/>

CONTENTS

PHYSICS AND MATHEMATICS

Бабкина А.А., Андриюшечкина Н.А. ЭФФЕКТИВНЫЕ ТЕХНОЛОГИИ ДЛЯ ПРЕПОДАВАНИЯ МАТЕМАТИКИ В АГРАРНЫХ ВУЗАХ	4
Babkina A.A., Andryushechkina N.A. EFFECTIVE TECHNOLOGIES FOR TEACHING MATHEMATICS IN AG-RAR UNIVERSITIES	4
Дьомічев К., Петров О., Стебляно П. МОДЕЛЮВАННЯ ПОВЕДІНКИ ПСЕВДО-ПРУЖНО-ПЛАСТИЧНОГО NiTi СПЛАВУ ПРИ ВЕЛИКИХ ДЕФОРМАЦІЯХ	6
Domichev K., Petrov A., Steblyanko P. SIMULATION OF BEHAVIOR OF PSEUDO-ELASTIC-PLASTIC NiTi ALLOY AT LARGE DEFORMATIONS	6
Sadigova N., Isayev K., Sadigov A., Ahmadov F., Yilmaz E., Mammadli A., Gerayeva A. IMPROVEMENT OF BURIED PIXEL AVALANCHE PHOTODETECTORS	8

CHEMICAL SCIENCES

Суханов А.Е. БАЗА ДАННЫХ «QAMS» И ВОЗМОЖНОСТЬ ЕЁ ПРАКТИЧЕСКОГО ИСПОЛЬЗОВАНИЯ	12
Sukhanov A. E. THE "QAMS" DATABASE AND THE POSSIBILITY OF ITS PRACTICAL USE	12

ECONOMIC SCIENCES

Amons S.E. STATE AND PROSPECTS OF DEVELOPMENT OF ORGANIC PRODUCTION IN UKRAINE	20
Вершицкая Н.А. ПРИНЦИПЫ КОЭВОЛЮЦИОННОЙ КУЛЬТУРЫ В ГОСУДАРСТВЕННОМ УПРАВЛЕНИИ	25
Vershitskaya N.A. COEVOLUTIONARY CULTURE PRINCIPLES IN PUBLIC ADMINISTRATION	25
Татаренко С.А., Зурин В.В., Широкопад В.А. ТЕХНИЧЕСКАЯ МОДЕРНИЗАЦИЯ КАК ФАКТОР ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ АГРАРНОГО ПРОИЗВОДСТВА	27
Tatarenko S.A., Zurin V.V., Shirokorad V.A. TECHNICAL MODERNIZATION AS A FACTOR OF INCREASING THE EFFICIENCY OF AGRICULTURAL PRODUCTION	27
Руда О.Л. РИНОК МІЖБАНКІВСЬКОГО КРЕДИТУВАННЯ ТА ЙОГО РОЛЬ У ЗАБЕЗПЕЧЕНІ РОЗВИТКУ БАНКІВСЬКОЇ СИСТЕМИ	31
Ruda O.L. THE INTERBANK CREDIT MARKET AND ROLE IN PROVIDING THE DEVELOPMENT OF THE BANKING SYSTEM	31

ECONOMIC SCIENCES

UDC 338.432

Amons S.E.

*Candidate of Agricultural Sciences, Associate Professor,
Associate Professor of the Department of Botany, Genetics and Plant Protection,
Vinnitsia National Agrarian University*

[DOI: 10.24412/2520-6990-2021-592-20-25](https://doi.org/10.24412/2520-6990-2021-592-20-25)

STATE AND PROSPECTS OF DEVELOPMENT OF ORGANIC PRODUCTION IN UKRAINE

Abstract.

The article substantiates the relevance of research in the context of global trends in organic agriculture, analyzes the development of organic production in Ukraine and abroad, shows the main problems of domestic organic production.

Factors that can influence the development of the organic market and increase interest in such products from buyers have been identified. The necessity of transition to organic agriculture and its compliance with the goals of sustainable development is proved.

The authors are offered the main directions of actions that will promote the development of the Ukrainian organic market, namely: promoting the development of agricultural land under organic farming through the development of farming and the formation of marketing infrastructure; development of the state policy in the field of formation of culture of food of the population; training of qualified personnel.

Keywords: *organic agriculture, ecologically clean products, organic products, food, market, consumer.*

Formulation of the problem.

From the middle of the XX century the process of intensification of agriculture began all over the world, so a sharp increase in the amount of pesticides, nitrogen and other mineral fertilizers in crop production, in particular in vegetables, led to negative consequences: increased nitrates and residual pesticides in vegetables, decreased vitamins and sugars and, as a consequence, deteriorated environmental safety of products and their quality.

At the same time, the inhabitants of the planet are showing more and more interest in safe and healthy food every year. Residents of developed countries were willing to pay more for security. The governments of some countries have also begun to pay special attention and encourage the development of this line of business.

Therefore, in many developed countries and developing countries, the demand for "natural", "organic" agricultural products is growing.

Organic agriculture is considered to be quite resource-saving and environmentally friendly. At the same time, there are still many open questions and critical points regarding the significant benefits of organic farming, compared to traditional agriculture, for the environment and society as a whole.

Agriculture faces two main challenges: on the one hand, the world's growing population must continue to be provided with sufficient food, therefore agriculture must become more productive.

On the other hand, the increase in agricultural production is one of the factors of negative impact on the environment. So, as an alternative, agriculture should produce more environmentally friendly products. This raises the problematic question of how to address these conflicting goals arising from these agricultural production challenges for the development of sustainable agricultural and food systems, both in Ukraine and around the world.

At present, the market of organic agricultural products is quite promising and underdeveloped, so it opens wide prospects for producers and exporters. In our country there are the necessary prerequisites for the development of ecological land use: the country has a significant potential of arable land per capita, and the amount of mineral fertilizers per hectare of arable land is lower than in European countries.

There are also certain obstacles to the development of organic farming in Ukraine: the small amount of financial investment required for its formation; underdeveloped market of organic products; as well as the lack of a legal framework. The urgency of the research topic is due to the global trend of "green" economy, greening of production, including agricultural, which is focused on the organic model of development.

The purpose of the article is to analyze the state of organic agriculture in Ukraine, as well as to highlight the problems and prospects for the development of the domestic market of organic products.

Analysis of recent research and publications.

The main problem today is the production and sale of organic products. Organic products, or organics, are one of the most interesting and modern trends in the global agri-food market. The growing popularity of these products in the United States and the European Union is due to the usefulness and safety of such products safe for human health, it is available to the majority of the population, especially in developed countries to care for the environment, natural resources and future generations.

Many domestic and foreign scientists have studied this issue: N. Berlach, E. Boyko, T. Dudar, Y. Slavgorodskaya, H. Wheeler and J. Lerno, T. Zaychuk, E. Milovanov and others. However, at the present stage there are still a number of unexplored issues in the development of organic farming.

Research methodology.

In studying the state and problems of development of organic agriculture, the works of domestic and foreign scientists, primary materials of the author's own research, periodicals were studied. Monographic, statistical-economic, computational-constructive, abstract-logical and other methods were used as research methods.

Research results.

According to world statistics, the share of land under organic farming is just over 37.5 million hectares of agricultural land. The first place belongs to Australia (12 million hectares), where most of these lands are occupied by meadows and pastures. The second place is occupied by Argentina (3.6 million hectares).

Organic products do not contain genetically modified organisms, chemically synthesized preservatives, dyes and flavors. Such products are produced without the use of radiation or ultrasonic treatment, do not contain raw materials of agricultural origin, grown using pesticides, chemical fertilizers and other agrochemicals. At the same time, organic farming is becoming more common in the world.

Today, this method produces about 10% of world volume of agricultural production. In Germany, more than 21 thousand hectares, and in Poland, more than 17 thousand hectares of land are certified for the production of organic products. Ukraine is constantly increasing the area of organic land. Over the past 5 years, they have increased by 54% and today amount to 421,500 hectares. 48.1% are employed in the cultivation of cereals, which puts us in 7th place among countries producing organic cereals.

The most active consumers in the Euro zone are Germany, with a market share of 30%, and France - with 18%, while some of the products they are forced to import from other regions. Organic berries, nuts, and rare cereals are imported from Ukraine. Most of the products go to EU countries, as well as the United States and Japan. In 2018, the global market for organic products expanded to 90 billion EUR. Its largest representatives are: the United States (40 billion EUR), Germany (10 billion), France (7,9 billion) and China (7,6 billion EUR) [1].

Organic agriculture, ecological agriculture, biological agriculture – are a form of agriculture, in which there is a conscious minimization of the use of synthetic fertilizers, pesticides, plant growth regulators, feed additives, genetically modified organisms. On the contrary, to increase yields, provide crops with mineral nutrients, pest and weed control, the effect of crop rotations, organic fertilizers (manure, compost, crop residues, greens, etc.), various tillage methods is more actively used [2].

In organic agriculture, the maintenance of soil fertility and the return to the soil of harvested nutrients is achieved mainly through the use of organic fertilizers. Particular attention is paid to creating conditions for the functioning of soil biota, especially microorganisms that destroy organic compounds and release plant nutrients.

According to the authors [3], organic agriculture is a certain production system that supports the health

of soils, ecosystems and people. It depends on environmental processes, biodiversity and natural cycles specific to local conditions, avoiding the use of non-renewable resources. Organic agriculture combines the traditions of agriculture, innovation and science to improve the environment and develop equitable relationships, as well as a decent standard of living.

T. Zinchuk notes that clean production is a condition for creating a biotechnological base for medicine and improving the health of the rural population by reducing pollution of land and water resources, air basin, forest conservation and biodiversity [4].

According to G. Tarasyuk, our country has a huge potential for the organization of organic farming and production of sufficient amounts of organic food [5].

V. Kaminsky notes that the intensification of agricultural production has caused negative changes in the chains of ecosystems and the biological cycle, worsened the environment and human health. One of the possible ways to overcome this threat is an alternative approach to agriculture - organic production and consumption of various products [6].

According to N. Borodacheva, the production of organic products should be ensured in compliance with environmental requirements throughout the agri-food chain: production - processing - sale [7].

O. Maslak emphasizes that organic farming should be based on the application of minimal tillage and rejection of pesticides and fertilizers, which will restore the balance of nutrients in the soil, normalize the work of living organisms, increase the content of humus and, consequently, increase crop cultures. In this case, organic products are those that are manufactured in compliance with certain environmental standards at all technological and implementation stages [8].

According to O. Popova, organic agriculture is essentially a model of sustainable agriculture, which fully realizes the multifunctionality of agriculture and, above all, its socio-ecological orientation. Therefore, such management represents a new economy of agriculture, which successfully combines environmental concern, economic rationality and social logic [9].

In recent decades, agriculture around the world has had an increasing negative impact on the environment than any other sector of the economy. This industry occupies huge areas, creating unstable landscapes. At the same time, natural vegetation, including forests, is destroyed, water balance is disturbed due to land reclamation, soil degradation is observed, groundwater and surface water are contaminated, and the fertile part of the soil is removed along with the crop.

Unfortunately, other negative consequences of agricultural intensification have become obvious. Among them are the most important: pollution of soils, water and atmosphere with mineral fertilizers, pesticides, heavy metals; accumulation of toxic substances in food; emergence of resistant races of pests and pathogens; increasing the clogging of fields with weeds; reducing yields and increasing production costs; biodiversity loss.

As noted by Yu. Slavgorodskaya, anthropogenic pollution of territories in Ukraine is not continuous, but

local in nature, so for the development of organic production in the country there is significant potential [10].

Scientists V. Bugaychuk and I. Grabchuk believe that it is more expedient to introduce organic agriculture more widely in Ukraine, because it contributes to:

- reproduction of soil fertility and preservation of the environment;
- development of rural areas and raising the living standards of the rural population;
- improving the efficiency of agricultural production;
- providing the consumer market with healthy quality products;
- strengthening the export potential of the state;
- needing to improve the image of Ukraine as a producer and exporter of quality organic products;
- ensuring food security in Ukraine;
- improving the general welfare of citizens [11].

The International Federation of Organic Agriculture Movement (IFOAM) declares the basic principles on which the whole concept of organic farming and animal husbandry is based. In addition, these principles are enshrined in the standards of European legislation governing the market of organic products [12].

The basic principles of organic agriculture include:

1. Replacement of artificial fertilizers with vegetable and animal waste.
2. Refusal of fungicides and herbicides in crop production and the use of antibiotics in animal husbandry.
3. The use of crop rotation as the main technology for restoring the mineral composition of the soil.
4. The use of biological plant protection products against diseases and pests.
5. In animal husbandry - the abandonment of "industrial" breeding of animals indoors and the use of traditional grazing in conditions that correspond to the nature of a particular species.

The use of the principles of organic farming guarantees the production of environmentally friendly, safer compared to the products of traditional food production. Organic agriculture excludes the use of agrochemicals, pesticides, antibiotics, growth stimulants, hormonal drugs, genetically modified organisms.

According to many scientists who have studied the production of organic products, the advantages of organic agricultural production over traditional have a number of economic, environmental and social aspects: economic - are the prospect of increasing the profitability of organic production and its competitiveness; ecological - in preserving the environment in the production process; social - in providing the consumer market with quality products [1].

Along with the existing advantages of organic farming, there are a number of possible limitations. We must take into account the fact that over the past 40 years, the world's population has doubled, and food consumption plus feed production over the same period has increased 3 times. By 2030, the world's population could increase to 8-9 billion, of which 6,800 million will live in developing countries.

As the projected increase will be mainly in developing countries, food production in Africa will need to be increased by 300%, in Latin America by 80%, in Asia by 70%, and even in North America by 30%. There are two main opportunities to increase agricultural productivity: intensification of agricultural production on existing arable land or increase the area of arable land due to pastures, meadows, forests [13].

Organic food production is a global trend that has already covered more than 130 countries. But, despite such competition, our country, thanks to its natural resources, has chance to successfully develop in this direction.

The main requirements for the production of organic products are the rejection of chemical plant protection products and mineral fertilizers in agriculture, as well as growth stimulants and antibiotics in animal husbandry and the use of genetically modified organisms (GMO). It should take into account the ecological efficiency of land use, taking into account the construction of the relationship "man - agroecosystem" on the basis of objective environmental laws that determine natural processes.

An essential condition for efficient management is the preservation and increase of land fertility, taking into account the effectiveness of technological norms of growing crops, which affects the preservation of land quality and characterizes the level of efficient land use.

Today, there is a trend in which countries that consume a lot of organic products do not have the opportunity to produce it in sufficient quantities. Therefore, the most important task today, including for Ukraine, is to provide agricultural producers with the opportunity to smoothly transition from traditional to organic agriculture in various ways, as well as to promote the development of temporarily unused land.

Research has shown that Ukraine has all the prerequisites for the development of organic production: favorable climatic conditions, fertile soils, low use of fertilizers and plant protection products, a significant market of potential consumers, innovative developments in agriculture, positive experience of organically oriented enterprises, and most importantly - in the world there is a growing demand for organic products.

At the same time, the action of most socio-psychological, organizational, legal, financial and economic factors inhibits the further development of domestic organic production. The development of organic production in Ukraine is also constrained by other aspects. First of all, the Ukrainian consumer has not yet realized how much the economic factor depends on the environmental aspects of production. Consumption of organic products is also affected by the state of purchasing power of the population, so in our country the main consumers of organic products are urban residents with high purchasing power, belonging to the middle and upper social class and have the opportunity to care for family health, focusing for high quality food products.

The production of organic products is one of the most profitable and investment-attractive types of agribusiness in Ukraine. In this regard, it is proposed to

consider detailed information on the current state of development of organic agriculture in Ukraine and its potential.

In 2019, according to the Ministry of Economy of Ukraine, the total area of agricultural land with organic status and transition period amounted to 468 thousand hectares, which is 14,1% of the total area of agricultural land in Ukraine, currently in 2018 the area of land with organic and transitional status was 309 thousand hectares.

According to the State Statistics Service of Ukraine, in 1st December 2020, there are 722 operators of the organic market, including 470 - agricultural producers, 114 have processing as a type of certified activity, of which 64 operators package products for the trade shelf. Among the regions that are leaders in the number of such enterprises are Odessa, Kherson, Kyiv, Poltava, Vinnytsia and Lviv regions.

Today, the domestic consumer market of organic products in Ukraine continues to expand through the main supermarket chains. The main types of organic products produced in Ukraine are cereals, milk and dairy products, meat and meat products, fruits and vegetables. Domestic organic products are bought mainly by EU countries. In 2019, Ukraine ranked 2nd out of 123 countries in terms of imports of organic products to the EU, rising two places compared to the previous year.

Thus, in 2019, 3,24 million tons of organic agri-food products were imported into the EU, more than 10% of which are Ukrainian. At the same time, Ukrainian imports to the EU increased by 27% - from 265,8 thousand tons in 2018 to 337,9 thousand tons in 2019.

The largest consumers of domestic organic products are the Netherlands, Germany, USA, Switzerland, Italy, Great Britain, Austria, Poland, Czech Republic, France, Hungary, Romania, Belgium, Bulgaria, Lithuania, Canada and Denmark. Ukrainian producers also export to Australia and some Asian countries [1].

The peculiarity of the organization of production of organic products is that any production activity should be regulated by legal norms. The Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labeling of Organic Products", which came into force on August 2, 2019, defines that organic production is a certified activity, associated with the production of agricultural products, including all stages of the technological process, namely primary production (including harvesting), preparation, processing, mixing and related procedures, filling, packaging, processing, recovery and other changes in the state of production), which is carried out in compliance with the requirements of the legislation in the field of organic production, circulation and labeling of organic products [14].

The legislation of Ukraine on organic products provides basic requirements for its production, which prohibits the use of agrochemicals, pesticides, antibiotics, growth stimulants, except those allowed to apply in Ukraine interstate, national and international standards in the field of organic production.

Thus, for most small and medium-sized businesses, this law is a progressive step for export-oriented

development. Organic production is aimed at providing consumers with safe and high-quality food products that have a special label on the shelf and are clearly different from inorganic foods.

The level of awareness about organic products among consumers, producers, public authorities in Ukraine is still quite low. As in other countries, the price of organic products is higher than that of traditional (inorganic) products. The development of the organic domestic market depends on the level of public awareness, purchasing power and available supply (full range of products).

The world's leading organization for the standardization and certification of organic products is the International Federation of the Organic Agricultural Movement (IFOAM), an international non-governmental organization that brings together more than 750 member organizations from more than 120 countries.

In April 2019, its full members are 4 organizations from Ukraine, including LLC "QC", LLC "Organic Standard", LLC NPP "5 Element" and the Federation of Organic Movement of Ukraine [15].

Domestic organic production is under the strict control of the certification institution, which certifies compliance with the requirements for organic production standards by issuing certificate. In 2019, eighteen accredited international certification institutions are included in the official list of approved organic products of certification institution for Ukraine in accordance with EU Regulation 1235/2008. Most organic operators in Ukraine are certified according to the EU organic standard, ie equivalent EU Regulations № 834/2007 and № 889/2008, which are used for both exports and the internal market [16].

For Ukraine, the development of the organic market is a priority in accordance with the "Medium-term plan of priority actions of the Government until 2020" approved by the Cabinet of Ministers of Ukraine from 03.04.2017 № 275-r and "Concepts of farming development" approved by the Cabinet of Ministers of Ukraine from 13.09.2017 № 664-r, by increasing the area of agricultural land on which organic agricultural products are grown and / or produced and stimulating the transition of farms and other agricultural formations to the production of organic products [17].

For our country, at the moment, an important condition for the successful development of the market of organic products is compliance with a common vector of development with the European Union. Consolidation at the state level of relevant areas of support for organic production from 2021, in order to increase the production and export of organic products, as well as increase consumer awareness of organic products, should be another step towards stimulating the development of this industry.

The analysis of the researched problem showed that the implementation of strategic directions of development of the market of organic products in Ukraine should be carried out at the state and regional level, as well as at the level of individual economic entities. Based on this, state support for the organic industry for 2021-2023 provides compensation for farmers and ag-

ricultural formations for certification of organic production, subsidies for agricultural land, halving the cost of purchasing permitted for organic production of plant protection products and fertilizers [18].

State support for organic agriculture will be a guarantee of partnership and promotion of their own brands in the international market of organic agricultural products.

Based on the current situation in Ukraine, the key measures to increase opportunities for organic agriculture in Ukraine should be:

- practical implementation of the legal framework for the sector together with regulations that are in line with the EU framework laws on organic agriculture and products;
- development and application of a tracking and control system that meets EU standards and is actively used in both domestic and international markets, so that consumers can be sure that products that are called "organic" meet international standards;
- permanent public awareness campaign that equates the consumption of organic products with the consumption of higher taste, lifestyle and health;
- study, generalization and use of foreign experience in the field of organic agriculture;
- creating conditions for increasing the investment attractiveness of domestic organic agriculture;
- the obligation of state subjects of agricultural production, processing and marketing to provide full support for the growth of the organic sector of agricultural production.

The 2030 Sustainable Development Goals, published by the United Nations, include Goal №12 – responsible consumption and production. One important aspect of this goal is that by 2030, most people around the world should be informed about sustainable development and lifestyles in harmony with nature [19].

The development of organic production can provide solutions to a wide range of economic, environmental and social problems of humanity as a whole and a particular village, farm, field or land.

The problem of development of organic agriculture is multifaceted, and affects the interests of humanity as a whole, the state, business and ordinary citizens. Our civilization has prospects for development only if it can find a compromise between the growing needs of the population in food without the risk of uncontrolled mutations due to the consumption of genetically modified products and providing conditions for the reproduction of the earth's ecosystem [20].

The interests of the state cannot conflict with universal values and priorities, but any state, caring for the well-being of its citizens, creates mechanisms to regulate effective employment in the production of environmentally friendly food for domestic consumption and stimulate exports of these products. Business interests in the development of organic agriculture are associated with great opportunities to expand the market and obtain a higher rate of return through marketing and useful properties of organic products. For citizens, organic products should be associated with ensuring their own health and active longevity.

Thus, for Ukraine, the development and improvement of organic agriculture will contribute in the future to the harmonization and harmonization of environmental, economic and social goals in the agricultural sector of the economy. In our opinion, the main advantages of the production of organic, certified agricultural products include:

- minimization of the negative impact of agricultural production on the environment;
- refusal to use mineral fertilizers and pesticides and as a consequence - reducing the energy intensity of the national economy;
- creation of additional jobs in rural areas, state support of small and medium agrarian business;
- production and availability for consumers of biologically complete, useful and ecologically safe food products.

Conclusions.

Ukraine has almost untapped potential for the development of organic production, given the availability of adequate arable land, favorable soil and climatic conditions, the appropriate material and technical base, as well as scientific and practical recommendations developed by scientists for effective organic farming.

Scientifically - substantiated and supported by the state development of domestic organic agriculture in the future will: increase the share of quality products in the agri - food market; make a significant contribution to solving environmental problems and sustainable development of rural areas; will promote innovative development; expanding the export of competitive products and take one of the leading positions in the world market of organic products. The expected results, in our opinion, will be to improve the health of citizens, preserve and increase biodiversity, landscape diversity, and purity of groundwater, reduce soil erosion and preserve the climate.

References

1. Shkuratov O.I., Chudovskaya V.A., Vdovichenko A.V. Organic agriculture: ecological and economic imperatives of development: monograph. Kyiv: Dia LLC, 2015. 248 p.
2. Berlach N.A. Development of the organic direction in agriculture of Ukraine: author's ref. dis. for science. degree of Dr. jurid. Science: 12.00.07. Kyiv, 2010. 34 p.
3. Chigrin E.Yu., Treus A.A., Iskakov A.A. Organic farming as a promising sector of the Ukrainian economy. Mechanism of Economic Regulation. 2017. № 3. Pp. 16–25.
4. Zinchuk T.O. European integration: problems of adaptation of the agricultural sector of the economy: a monograph. Zhytomyr: State Higher Educational Institution State Agroecological University, 2008. 384p.
5. Tarasyuk G.N. The potential of food industry enterprises for the production of environmentally friendly products. Management of sustainable development in a transition economy: a monograph. Dnepropetrovsk. Cottbus: NSU-BTU, 2015. 430 p. Pp. 153–162.
6. Kaminsky V. Organic agriculture - the path to food security // Civil Society: electron. magazine version. 2014. URL: <http://www.viche.info/journal/4161>.

7. Borodacheva N. Demand and supply in the market of organic products. Agroperspective. 2004. № 9. Pp. 59–61.
8. Maslak O. The organic market in Ukraine: status and prospects. Agribusiness today. 2011. № 24 (223). Pp. 22–23.
9. Popova O.L. Sustainable development of the agrosphere: policy and mechanisms: textbook. way. Kyiv, 2009. 352 p.
10. Slavgorodskaya Yu.V. Production of organic products in Ukraine: status and prospects. Bulletin of the Poltava State Agrarian Academy. 2016. № 4. Pp. 49–54.
11. Bugaychuk V.V., Grabchuk I.F. Bioeconomics and its role in the development of modern society. Economics of agro-industrial complex. 2018. № 5. Pp. 110–116.
12. Willer H., Lernoud J. The World of Organic Agriculture. Statistics and Emerging trends. Germany: Medienhaus Plump. 2018. 348 p.
13. Principles of organic agriculture [Electronic resource] // IFOAM. URL: <https://www.ifoam.bio/en/organic-landmarks/principles-organic-agriculture>.
14. On Amendments to the Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labeling of Organic Products"
- Concerning the Improvement of Certain Provisions: Law of Ukraine of July 10, 2018 № 2496-VIII. URL: <https://zakon.rada.gov.ua/laws/show/2496-19#Text>.
15. Federation of Organic Movement of Ukraine [Electronic resource]: [Website]. Access mode: www.organic.com.
16. Organic market in Ukraine. URL: https://organicinfo.ua/wp-content/uploads/2017/05/MAPF_Organic_market_in_Ukraine_12022019_UA.pdf.
17. Green Paper. Market of production and circulation of organic products. URL: <https://eu4business.eu/files/medias/regulation.gov.ua>.
18. Current news of Ukraine. The development of the organic market is a priority of Ukraine's agricultural policy. URL: <https://mind.ua/news>.
19. The market for organic products is growing in Ukraine. Ukrainian State Fund for Support of Farms. URL: <http://udf.gov.ua>.
20. Dudar T.G., Dudar O.T. Development of organic agricultural production as a basis for ensuring the quality and safety of agricultural products in Ukraine. Science. Bulletin of the Mukachevo State. university. 2014. №1. Pp. 11–15.

УДК 65.014.1:353.2

Вершицкая Н. А.

Крымский Федеральный Университет имени В.И. Вернадского

ПРИНЦИПЫ КОЭВОЛЮЦИОННОЙ КУЛЬТУРЫ В ГОСУДАРСТВЕННОМ УПРАВЛЕНИИ

Vershitskaya N. A.

V.I. Vernadsky Crimean Federal University

COEVOLUTIONARY CULTURE PRINCIPLES IN PUBLIC ADMINISTRATION

Аннотация/

В работе рассматривается повышение эффективности деятельности государственных гражданских служащих для обеспечения социально-экономического развития государства. Поскольку эффективность работы государственных служащих не всегда возможно измерить финансовыми показателями, предложена среда использования интеллектуального капитала человека, которая может эффективно применяться в органах государственной власти и, которая основывается на шести условиях, формирующих гибкую корпоративную культуру в органах государственной власти.

Abstract/

The paper discusses improving efficiency of public civil servants to ensure the socio-economic development of the state. Since the performance of public servants is not always possible to measure with financial indicators, an environment for the use of human intellectual capital is proposed, which can be effectively applied in government bodies and which is based on six conditions that form a flexible corporate culture in government bodies.

Ключевые слова: *государственный сектор, государственные служащие, корпоративная культура, социально-экономическое развитие, эффективность, управление.*

Keywords: *public sector, civil servants, corporate culture, socio-economic development, efficiency, governance.*

Professional service activities of civil servants, their efficiency and quality increase of is one of the priority areas for improving the personnel policy of the civil service and the basis of laws (for instance, the Law of the Republic of Crimea "On the State Civil Service

of the Republic of Crimea" of May 21, 2014) and State Programs in the constituent entities of the Russian Federation. It is difficult to measure the civil servants' performance by financial indicators or to bring their as-