FORMATION OF NATIONAL CERTIFICATION SYSTEM OF ORGANIC AGRICULTURAL

Oleksii SHKURATOV¹, Viktor KYPORENKO¹, Tetyana KUSHNIRUK²

¹Institute of Agroecology and Nature Management of National Academy of Agrarian Sciences of Ukraine, 12 Metrological St., 03143, Kyiv, Ukraine, Phone: +380445263336, Mobile: +380982824994, E-mails: shkuratov_ai@ukr.net, viktor_kiporenko@ukr.net

²State Agrarian and Engineering University in Podilia, 13 Schevchenko Str., 32300, Kamianets-Podilskyi, Khmelnytskyi region, Ukraine, Phone: +380384925218, Mobile: +380683851005, E-mails: kuschniruk81@gmail.com

Corresponding author: shkuratov_ai@ukr.net

Abstract

It is proved that for the full functioning of certification institutions at the national level, it is necessary to legally fix a mixed (public-private) system for organizing certification of organic production. This, on the one hand, requires strict control over the activities of private certification bodies, but on the other, it will allow to avoid state monopolism and bureaucracy. A structural-functional organic certification scheme in Ukraine has been proposed, which includes three main levels: global, state, and enterprise level, and is also based on a combined certification system, in which state and private certification bodies operate under equal conditions with the involvement of control from the state accreditation body. The proposed scheme, first of all, is intended to make certification of organic enterprises more accessible (cheaper compared to foreign), which in turn will help stimulate the development of organic agriculture in Ukraine. The development of national accreditation and labeling systems and their registration at the international level will allow organic products to be positioned as a high-quality organic goods, create demand for such products by organizing educational activities and conducting a large-scale information campaign (for example, social advertising). In addition, this system will contribute to the promotion of an international partnership in the field of environmental certification and labeling, which will provide an opportunity to increase the export potential of organic products.

Key words: public-private system, certification, organic agricultural, control, level.

INTRODUCTION

The current dilemma of the further development of agricultural production and the preservation of the natural environment as the basis for the life of future generations has identified the search for alternative development options for the industry. Thus, over the past decades, leading foreign scientists and agrarian practitioners, in order to solve environmental problems and improve the quality of food, are gradually switching to organic farming methods, turning industry into a strategically important and significant sector of the economy [14].

Now the noticeable development of the organic sector of agricultural production takes place in the USA, Canada, the European Union countries, Australia, China, and Japan. According to a report published by the

International Federation of the movement for organic agriculture, agricultural producers in more than 130 countries around the world, along with the traditional system of farming, are mastering the methods of organic production [8].

Ukraine is also no exception, but is at the initial stage of development, that is, the first organic agricultural organizations certified by foreign and domestic companies appear.

As international practice confirms, for the effective functioning of organic markets and the development of organic agriculture, the guarantee system, which includes certain standards. well inspection as as certification institutions, plays an extremely important role. This system compliance with the organic standards of the entire process of agricultural production and processing of agricultural raw materials to the level of the final product, including its packaging and labeling.

MATERIALS AND METHODS

The informational basis of the study consists of domestic and international laws and regulations in the field of organic agriculture, materials and reports of the International Federation of Organic Agricultural Movement (IFOAM).

The methodological basis of the study is the assumption mutual determinism of economic processes, is implemented in the synthesis of analytical achievements of various areas of economic research. On this basis, applied methods and approaches of classical economic theory, institutional theory, theory values and consumer behavior regarding the certification of organic production as a factor improving the competitiveness in agriculture, particular in a systematic approach, a method of analysis and synthesis, abstract-logical, computationallyconstructive and experimental.

RESULTS AND DISCUSSIONS

Certification is one of the main and most capacious components of the organic guarantee system. After all, the consumer requires high-quality and safe food, and it is organic standards that establish the requirements for the production of such food, and inspection and certification ensure compliance with relevant standards.

From the Latin language, the word "done "certification" is translated as correctly". The roots of its occurrence go back to the times of ancient Greece, despite the fact that, at first glance, it seems that certification has appeared only recently. As a systemic phenomenon, certification appeared much later in Germany, where in 1920 the German Institute of Standards approved the mark of compliance with its DIN standards [1]. Today, the modern world is very difficult to imagine without certification, since certification is the process of confirming the compliance of services and goods with quality and safety requirements.

The absence in Ukraine of a corresponding legal framework and national certification system for organic production is a barrier in the development of the domestic market for organic products. This significantly limits the realization of the legal rights of consumers and manufacturers of such products. Since August 2018, the Law of Ukraine "On the basic principles and requirements for organic production, handling and labeling of organic products" came into force in Ukraine. "The law defines the basic principles requirements for organic production, circulation and labeling of organic products, the basis for the legal regulation of organic production, the circulation of organic products and the functioning of the market for organic, the legal framework for the activities of the central executive bodies, the subjects of the organic products market and the direction of state policy in these areas".

Specialists from the organic sector express the hope that with the adoption of the law, the state will see a revitalization and strengthening of the development of the organic sector, and, equally important, the existence of such a phenomenon as "pseudoorganic" will become impossible.

Organic products imported from other countries and produced in accordance with their legislation, which is confirmed by the relevant certificate and the inscriptions "organic", "biodynamic", "biological", "ecological", with the words "bio", etc., should translated into Ukrainian language denoted by the inscription "organic product". However, it should be noted that as long as Ukraine has not developed the relevant bydomestic producers undergo procedure of organic certification of their production according to the standards of other countries, which are mentioned above.

In the absence of national standards, compliance with the provisions of Council Regulation (EC) No 834/2007 regarding organic production and labeling of organic products is common in Ukraine (Fig. 1), where provision 31 says: "...in order to ensure that the production of organic products is in compliance with EU regulations on organic production, the activities that are

carried out by operators at all stages of the production, preparation and sale of organic products should be checked within the control system that is established and operates in accordance with the rules" [6].

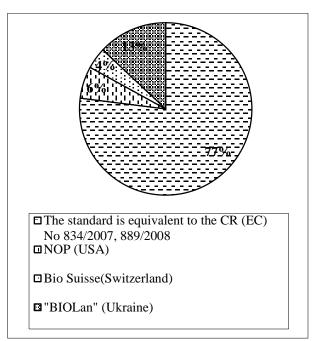


Fig. 1. Structure of market operators organic agricultural products by type of certificates Source: Calculated by the author based on the data of of Ministry of Agrarian Policy and Food of Ukraine, Control body.

Council Regulation (EC) No 834/2007 [6] and Commission Regulation (EC) No 889/2008 "Detailed Organic Production, Labeling and Control Rules for Implementing Council Regulation (EC) No 834/2007 on Organic Production and Organic Product Labeling regulatory framework in EU organic production" [5]. They determine the methods of production, inspection and certification of organic farms, processing plants, importers and traders, as well as the system of supervision at the European level. EU member states can decide themselves which type of control system to implement, since there are three basic models in the European Union (although different models are used in different parts of the world, especially where farmers have small plots of land and work in cooperatives or associations).

The main specificity of certification of organic production is strict and continuous monitoring of all stages of organic production

from field to table. That is, not the final product is certified, but the whole process of organic production. In world practice, the warranty system of control has been widely used, which consists of two components, namely [12]:

1) inspection – on-site scheduled inspection of an agricultural enterprise for compliance of its activities with the requirements of organic production standards;

2) certification process – assessment and verification of inspection documents, fulfillment of the requirements of the previous year and adoption of a certification decision.

The certification system promotes consumer confidence in organic production and organic products. It provides organic agro-production with a specific definition and makes it easier for organic products to enter the market [10, p. 31]. Not only state bodies, but also private ones have the right to carry out certification. For example: in Europe, there are three types of control systems (Fig. 2).

According to the first model of the control system, the state accredits and supervises private control bodies. This is the most common control system in organic farming. This type of control is implemented in the following countries: Austria. Belgium, Bulgaria, Cyprus, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Portugal, Romania, Slovenia, Sweden and the United Kingdom of Great Britain and Northern Ireland. In this system, the authorized body (the relevant ministry within the government as a rule, the Ministry of Agriculture) delegates the task of controlling one or more controlling authorities (primarily private) that it authorizes and oversees [13].

According to the second model of the controlling system, the state acts as a certification body. An authorized body (government) delegates its controlling functions to one or more controlling authorities (primarily government agencies). This approach is used in Denmark, Estonia, Finland, Lithuania and the Netherlands [13]. According to the third (last) model of the control system, inspections and certification are carried out by private controlling authorities. The state accredits the official supervisory authority for scheduled (announced) and selective (unannounced) inspections of direct operators (producers, processors, traders). They can also carry out financial inspections aimed at providing

subsidies for organic farming (inspections at the request of the agency, paying subsidies). This approach works in countries such as the Czech Republic, Luxemburg, Malta, Poland, Slovakia and Spain [3].

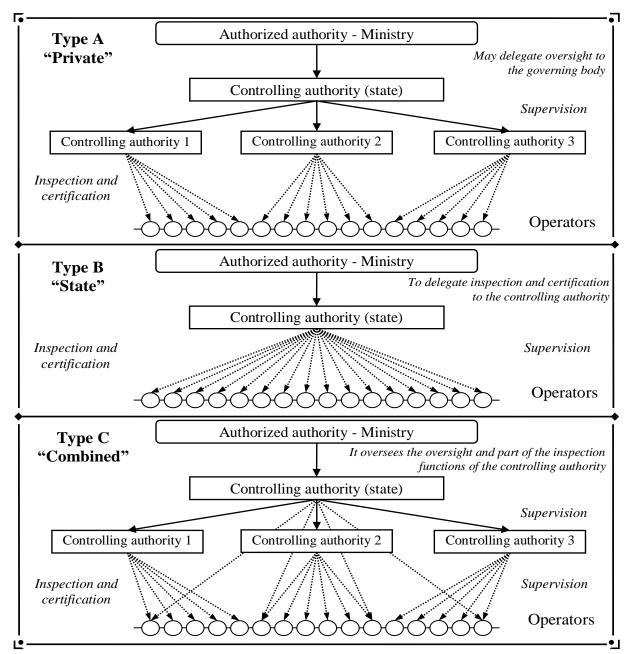


Fig. 2. Types of control systems of organic agricultural in EU countries Source: author's elaboration.

Thus, in the first and second systems, private controlling bodies are part of the official control system in accordance with Council Regulation (EC) No 882/2004. They should have the same experience and qualifications as the state supervisory bodies involved in the official inspection.

All private regulatory authorities must be accredited in accordance with EU general requirements for bodies operating in product or service certification systems (European Standard EN 45011 / ISO 65). The linkage of the controlling system of organic agriculture with the requirements of official inspections is

part of the current European legislation on the general, sector. In regulatory authorities should be impartial in carrying out inspections and approved by the authorized supervisory authorities of EU member states. The controlling bodies of the organic sector also work in third countries that do not have their own organic legislation (or in countries where such legislation is not harmonized with the relevant legislation of the European Union) when manufacturers want to export their products to EU countries. This method works so far in Ukraine for exporters or those who plan to export their products to EU member states (or to other countries) [9; 11; 15].

The status of "organic" receives products that have passed the appropriate certification procedure and received confirmation from an accredited body, only in this case, these products can be exported. Certification organizations are subject to accreditation by the International Federation of the Organic Agriculture Movement (IFOAM) compliance with a number of regulations, namely: the general objectives requirements of organic standards (COROS) of the IFOAM standard for an organic production and processing system; approved accreditation requirements for certification bodies controlling organic production and processing processes. The accreditation process is provided by the International Organic Accreditation Service (IOAS) on the principles of non-engagement but not on a commercial basis [16, p. 22-28].

In the domestic market for certification services. there are thirteen accredited competent certification bodies that certify in different areas and standards, in accordance with the requirements of the countries whose products are planned to be supplied to the market.

Due to the fact that Ukraine does not have state standards for certification of organic agricultural production, domestic producers of organic products certify products according to foreign or private standards (Table 1). Ukraine has already developed private standards for organic agricultural production and the labeling of agricultural products and

foodstuffs "BIOLan" and LLC "Organic Standard", which is included in the list of regulatory bodies recognized by the European Commission, and is the first Ukrainian organic certification body to certify production Ukraine according to EU standards

Table 1. Standards governing the certification

procedure or	ganic production in Ukraine
Name	Characteristic
EU Organic	Recognized in EU countries and are
	obligatory for entering these markets. Agreed
	with Council Regulation (EC) No 834/2007
	and Comision Regulation (EC) No 889/2008.
NOP	Developed by the US Department of
(National	Agriculture, which is responsible for
Organic	monitoring compliance with these
Program)	requirements for importers and exporters of
	relevant products.
JAS	Requirements are developed by the Japanese
	Ministry of Agriculture, Forestry and
	Fisheries (MAFF), which regulate the rules
	for domestic and foreign producers wishing
	to enter organic markets in Japan.
Bio Suisse	The requirements are designed to qualify for
	the labeling of products with the BIO
	SUISSE Knospe logo, which is necessary for
	the sale of organic products in Switzerland.
Naturland	Trade standards, which are used in Germany
	for the examination procedure and obtaining
	a quality certificate that meets the
	requirements developed by the Association of
	Organic Agriculture Naturland.
Demeter	Necessary for realization on the territory of
	Germany when marking products with a
	prefix "bio". Compliance monitoring is
	carried out at the Demeter Enterprise
	Association with the participation of EU bio-
IZD A V	control.
KRAV	Standards are developed on the basis of basic
	IFOAM standards and modified according to Swedish conditions by KRAV. The
	Swedish conditions by KRAV. The modernization consists of a wider scope of
	certification, which includes restaurants,
	catering establishments, fishing, etc.
BIOLan	Oriented to use within Ukraine by producers
DIOLAII	and processors of organic products.
	Developed by domestic and foreign spialists
	in the framework of the Ukrainian-Swiss
	project to promote and ensure the
	development of the market of organic
	products in Ukraine. The basis is Council of
	Europe Regulation No. 2092/91 and the
	standards of the Association of Swiss
	Organizations of Organic Producers.
	11 d d d f Grante 1 Todacers.

Source: formed by the authors on the basis of data [2; 7; 11; 17].

"The Codex Alimentarius, or Food Codex, has become a global reference point consumers, producers and processors of food products, national food control authorities and

international food The Codex trade. Alimentarius System provides all countries with a unique opportunity to participate, with the entire international together community, in the development harmonization of food standards and in ensuring their implementation on a global scale. It also allows them to play a role in the development of rules and regulations methods governing hygienic of food processing and recommendations regarding compliance with these standards. This brochure was first published in 1999 in order to foster a broader understanding of the constantly evolving food code and the activities carried out by Codex the Alimentarius Commission, the body responsible for compiling a compendium of standards. technical norms guidelines and recommendations that together form Codex Alimentarius" [4].

The development of domestic certification bodies is a promising step towards the development of organic agriculture, because when applying the requirements to the production process in accordance with the Codex Alimentarius, an appropriate organization should function in the state to ensure control over compliance with these requirements during the certification procedure. If it is impossible to ensure an adequate level of compliance with certification authorities or their absence, importers can use the services of foreign organizations with appropriate accreditation.

The need to form a domestic system of certification institutions is now due to the high cost of services provided by representative offices of foreign certification bodies, with no state support for Ukrainian agricultural producers, leading to an increase in their costs and a reduction in export opportunities. For the full functioning of certification institutes in Ukraine, we consider it important to legislatively consolidate a mixed (public-private) certification organization system. On the one hand, this will require strict control over the activities of private certification bodies, but on the other hand, it will allow to avoid state monopolism and bureaucracy.

Significant importance is also in providing the

necessary conditions that would create a system of Ukrainian private (non-state) certification bodies that can compete with foreign companies that operate in Ukraine. The main characteristic of a non-state certification body should be its authority and level of recognition in the international community. After all, the possibility of its equivalence to national standards in other countries depends on this [9].

Ukraine has already begun the formation of a national certification system. A working group consisting of specialists from the Swiss-Ukrainian project "EcoFinLan" and the Association "BIOLan of Ukraine" developed the standards "BIOLan". They are based on the Basic Standards of the International Federation of Organic Agriculture (IFOAM) Council Decree (EEC) No. 834/2007, as well as Standards BIO SUISSE (Association of Swiss Organizations of Organic Producers). However, for the formation of a certification system for organic products, it is necessary to create a special body that would issue licenses for the certification of organic producers to both state and non-state structures. We believe that such a body, of course, should be public, because the responsibility that will lie is indisputable.

Revealing the essence of the activity of the accrediting body, we will additionally note the need to ensure equal access to it by both state and private certification institutions. After all, the creation of advantages for one of the parties and additional obstacles for the other will deny the existence of one of the main principles of market relations – freedom of competition and diversity of ownership.

Proceeding from this, for governmental structures there is a task to create a special state body, whose competence would be to accredit certification institutions, control their activities, create national standards for the recognition of organic products, coordinate the activities of public organizations and, conduct a unified state information policy in this area. For the efficient operation of the organic market in Ukraine, we offer the following structural and functional organic certification scheme in Ukraine (Fig. 3).

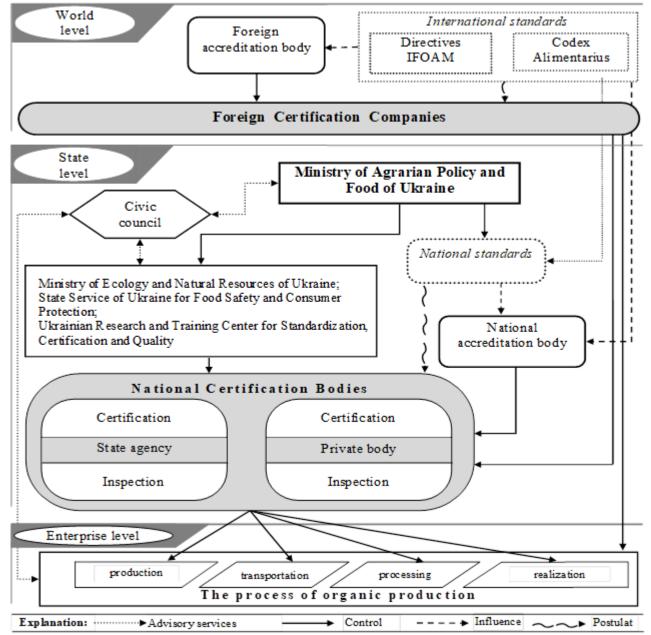


Fig. 3. Structural and functional scheme certification of organic agriculture in Ukraine Source: author's elaboration

We believe that this scheme is primarily intended to make certification of organic enterprises more affordable (cheaper than foreign) and to stimulate the development of organic agriculture in Ukraine. In the formation and further development of the scope for the provision of certification services to producers of agricultural organic products, it is important to pay attention to the mechanism for ensuring the protection of domestic producers through the use of economic and legal instruments at the national level.

In this case, it is necessary to focus on the regulatory methods of protecting the own manufacturer, such may be the establishment of additional certification procedures, examinations (the domestic market), as well as the signing and ratification of international treaties, and the harmonization of international legislation concerning Ukrainian manufacturers.

CONCLUSIONS

In general, given the pace of industry

development and the increased demand for organic products, it is necessary to establish a national certification system to increase the level of confidence in organic products and ensure a high level of competition in the market. However, the formation of a national certification system is impossible without taking into account international experience in this field, taking into account the possibility of exporting Ukrainian organic products.

Development of the national national accreditation and marking systems and their registration at the international level will allow to position organic products in front of the consumer, to create on it by organizing educational activities and conducting a largescale information campaign (for example, social advertising), to promote international partnership in the field of environmental certification and marking, and this, in turn, will contribute to increasing the export potential of organic products.

REFERENCES

[1]Badgley, C.; Moghtader, J.; Quintero, E.; Zakern, E.; Chappell, M.; Avilés-Vazquez, K., Samulon, A., Perfecto, I., 2006, Organic Agriculture and the Global Food Supply. In: Renewable Agriculture and Food Systems, 22 (2):86-108.

[2]Baier, A., Ahramijian, L., 2016 Organic Certification of Farms and Businesses Producing Agricultural Products. Washington: ATTRA, p. 1–8.

[3]Chudovska, V.A., Shkuratov, O.I., Kyporenko, V.V., 2016, Ekoloho-ekonomichnyj mekhanizm rozvytku orhanichnoho sil's'koho hospodarstva: teoriia i praktyka [Ecological-economic mechanism for the development of organic agriculture: theory and practice]. Kyiv: DIA, p. 25–87.

[4]Codex Alimentarius, 1999, Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL-32). Rome: Secretariat of the Joint FAO, p. 5-40.

[5]Comision Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control (Official Journal of the European Union, L 250 of 18.09.2008).

[6]Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No. 2092/91. (Official Journal of the European Union, L 189 of 20.07.2007).

[7]Dangour, A.D. et al., 2009, Nutritional quality of

organic foods: a systematic review. The American Journal of Clinical Nutrition 92(1):203-210.

[8]Hranovska, V.H., 2017, Mekhanizmy stymuliuvannia rozvytku pidpryiemstv orhanichnoho sektoru: adaptatsiia svitovoho dosvidu [Mechanisms for stimulating the development of enterprises in the organic sector: adaptation of world experience]. Economy and society, 9:384-390.

[9]Jeločnik M., Ion R., Jovanović M., Popescu C., 2015, Has organic farming potential for development? Comparative Study in Romania and Serbia. Procedia Economics and Finance, 22:268-276.

[10]Kyporenko V.V., 2014, Formuvannja systemy sertyfikaciji orhaničnoho sil's'koho hospodarstva v Ukrajini [Formation of the system of certification of organic agriculture in Ukraine] AgroSvit, 24: 28-34.

[11]National Organic Program (2016), U.S Department of Agriculture, http:// www.ams.usda.gov/ (12.09.2017– access date).

[12]O'Doherty Jensen K., Denver S., Zanoli R., 2011, Actual and potential development of consumer demand on the organic food market in Europe. NJAS – Wageningen Journal of Life Sciences 58(3-4): 79-84.

[13]Schmid, O., 2007, Development of Standards for Organic Farming. In: Lockeretz, William (Ed.) Organic Farming. An International History. CAB International, Wallingford, UK, chapter 8, p. 152-174.

[14]Shkuratov, O., Hreshchuk, H., Lobanova, O., 2018, Forecast scenarios of development of the internal consumer market of organic products in Ukraine. Scientific Papers: Series Management, Economic Engineering in Agriculture and Rural Development, 18 (4):303-310.

[15]Skrodzka, V., 2017, Organic agricultural products in Europe and USA, Management, 21(2): 151-164.

[16]Willer, H., Lernoud, J., 2018, The World of Organic Agriculture. Statistics and Emerging trends 2018. FiBL&IFOAM Organic International. Bonn: Medienhaus Plump, p. 11–332.

[17]Zinovchuk, N.V., Chudovska, V.A., 2013 Suchasni chynnyky rozvytku orhanichnoho sil's'koho hospodarstva v Ukraini [Modern factors in the development of organic agriculture in Ukraine]. Visnyk Zhytomyrs'koho natsional'noho ahroekolohichnoho universytetu, 1-2(37):299-306.