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ASPECTS OF REMOTE CERTIFICATION OF ORGANIC PRODUCTION

Tuleuova Makpal Zharassovna

t.makpal@mail.ru

Master student, group MCS-12, department "Standardization, certification and metrology"

ENU named after L.N. Gumilyov, Nur-Sultan, Kazakhstan

Supervisor – F.R. Ermakhanova

According to the legislation of the Republic of Kazakhstan, organic products are agricultural products, aquaculture and fishery products, products from wild plants and products of their processing, including food products, produced in accordance with the requirements of the Law on Organic Production of the Republic of Kazakhstan.

The regulation of organic production in practice originates from private standards set by the farmers themselves [1].

Food production can be certified, including seed transporters, farmers, food processing companies, retailers and restaurants.

Requirements vary from country to country and typically include a set of production standards for growing, storage, processing, packaging and shipping, which include:

- elimination of the use of synthetic chemicals such as fertilizers, pesticides, antibiotics, food additives, as well as irradiation and the use of sewage sludge;
- exclusion of genetically modified seeds;
- the use of agricultural land, which for a number of years, mainly for three years or more, has been free from prohibited chemicals;
- for livestock, observing special requirements for feed, keeping and breeding;
- maintaining detailed written records and control of production and sales;

- maintaining strict physical separation of organic products from non-certified products;
- undergo periodic on-site inspections.

The ability to conduct remote certification of organic production allows the process of conformity confirmation, as a control over the fulfillment of the requirements for organic production, and to show the results of audits.

Organic production is one of several trends that are evident in today's food market. These trends include growing consumer demand for convenience foods, a wider range and variety of products in the local market, and products that are perceived to be natural or minimally processed [1]. There is also growing interest in functional foods: foods with perceived health benefits beyond their nutritional value. Finally, a problem of great importance in the food sector is the use of genetically modified organisms (GMOs). These trends interact in different ways with the organic food and organic production phenomenon.

According to the legislation of the Republic of Kazakhstan, organic products are agricultural products, aquaculture and fishing products, products from wild plants and products of their processing, including food products, produced in accordance with the requirements of the Law on Organic Production of the Republic of Kazakhstan. Some experts believe that ecologically safe products should be understood as products grown in a safe area without additional use of mineral fertilizers, pesticides and other technogenic impacts.

It is worth noting that compliance with all standards is monitored by independent bodies, and only registered manufacturers who operate in accordance with environmental production requirements and are entitled to use the distinctive environmental label should be considered. Such production is regularly visited by representatives for the purpose of inspection and certification, which guarantees the safety of these products [2].

The regulation of organic production in world practice originates from private standards set by the farmers themselves. Organic farming is a well-defined farming method. The beginning of this concept was laid in the first half of the 20th century, namely in 1924 with the lectures of Rudolf Steiner. By establishing the basic principles of organic agriculture, producers and consumers have thus reacted to the negative aspects of traditional industrialized intensive agriculture. As a result, as an alternative to the widespread introduction into agricultural practice of synthetic mineral fertilizers and pesticides (in the 1920s and 1930s), increased specialization and intensification (in the 1960s) in the world since the mid-80s of the last century, the beginning of organic farming and animal husbandry are widely cultivated [3].

Individual associations, especially farmers' associations such as Bioland, Soil Association or BioSuisse, developed and implemented their own voluntary standards, which then became the foundation for the legislative framework that began to emerge in the field of organic agriculture. ... The first international rules "Basic Standards", harmonized by the International Federation of Organic Agriculture Movements (IFOAM), appeared in 1983 [2]. These Baseline Standards have summarized the minimum requirements for organic farming and provided the basis for writing more detailed organic farming standards. It should be noted that before that, there were several organic farming methods in the world, which developed mainly in the UK, France and German-speaking countries.

Since 1991, after the adoption by the EU countries of the law on organic production, there has been a kind of harmonization of these methods. From this time on we can talk about a unified and regulated definition of organic agriculture. Today, only the biodynamic method of farming and its regulation is different. It is the highest standard with its own certification and trademark "Demeter". It takes into account spiritual aspects that correspond to the claims of Rudolf Steiner's anthropology. Since 1999, there has also been a definition of organic agriculture in the Codex Alimentarius (Basic Principles for the Production, Processing, Labeling and Marketing of Organic Foods). The Basic Principles for the Production, Processing, Labeling and Marketing of Organic Foods were adopted at the 23rd Session of the Codex Alimentarius Commission in 1999 and subsequently revised.

Organic certification addresses the growing global demand for organic food. It is dedicated to quality assurance and fraud prevention and trade development. Although such certification was not necessary in the early days of the organic movement, when small-scale farmers sold their produce directly at farmers' markets, as the popularity of organic grew, more and more consumers are buying organic food through traditional channels such as supermarkets. Thus, consumers must rely on third party regulatory certification. Для производителей органических продуктов сертификация определяет поставщиков продуктов, утвержденных для использования в сертифицированных операциях. Для потребителей «сертифицированные органические продукты» служат гарантией продукта, аналогично «обезжиренному», «100% цельной пшенице» или «без искусственных консервантов».

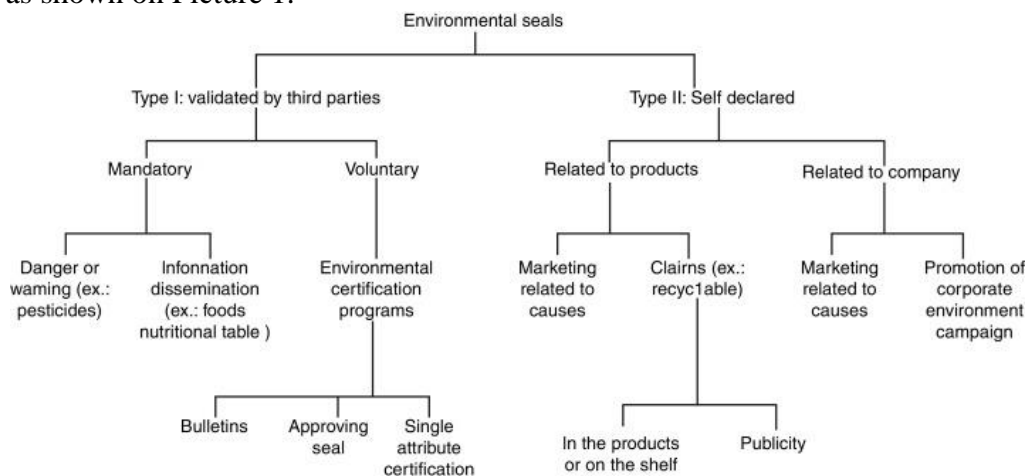
The certification is mainly aimed at regulating and facilitating the sale of organic products to consumers. Individual certification bodies have their own service marks that can act as branding for consumers - a certification body can promote high consumer recognition of its logo as a marketing advantage for manufacturers.

Organic certification is the process of certifying producers of organic food and other organic agricultural products. In general, any business directly related to food production can be certified, including seed suppliers, farmers, food processors, retailers and restaurants. A lesser known counterpart is certification for organic textiles (or organic apparel), which includes certification for textile products made from organically grown fibers.

Requirements vary from country to country (List of Countries Regulated for Organic Agriculture) and generally include a set of production standards for growing, storage, processing, packaging and shipping that include:

- preventing the use of synthetic chemicals (eg fertilizers, pesticides, antibiotics, food additives), irradiation and the use of sewage sludge;
- avoidance of genetically modified seeds;
- using agricultural land that has been free of banned chemicals for a number of years (often three or more);
- for livestock, observing special requirements for feed, keeping and breeding;
- maintaining a detailed written record of production and sales (audit trail);
- maintaining strict physical separation of organic products from non-certified products;
- undergo periodic on-site inspections [4,5].

In some countries, certification is controlled by the government and commercial use of the term "organic" is legally restricted. Certified organic growers are also subject to the same agricultural regulations, food safety regulations and other government regulations that apply to non-certified growers. Certified organic products are not necessarily pesticide-free as some pesticides are permitted as shown on Picture 1.



Picture 1 – Certification of organic products.

Regulatory requirements are separately imposed on products and raw materials of plant growing, animal husbandry and for obtaining food products in the process of their processing. The general rules for the production of organic products of plant origin include:

1. Using of the methods that optimize the biological activity of soils, provide a balanced supply of nutrients to plants, preserving land and other natural resources necessary for the production of organic products;
2. Introduction of soil-protective technologies for growing agricultural crops, which prevent the emergence of erosion or other degradation processes in the soil;
3. Maintaining plant resistance through preventive measures, selection of appropriate species and varieties resistant to pests and diseases, appropriate crop rotations, mechanical, physical and biological methods of protection;
4. Increasing the population of beneficial insects, microorganisms and natural parasites for biological control of plant pests and diseases;
5. Using of microbiological, plant or animal materials as fertilizers that are biodegradable;
6. Using only certified organic seeds and planting material;
7. Fertilizers and soil improving substances may be used only if their use is confirmed by permits. In this case, it is prohibited to use mineral nitrogen fertilizers.

Thus, the scientific foundations of organic farming, laid by the founders of the greening of agriculture, world and domestic practice, should be optimally reflected in the regulatory and technical and technological documents developed by the government.

Within the framework of the Eurasian Economic Commission, a draft decision of the Council of the Eurasian Economic Commission "On temporary measures for the certification of mass-produced products in a difficult epidemiological situation associated with the spread of a new coronavirus infection" by product certification bodies, procedures for analyzing the state of production, preparation of a certification audit is carried out in accordance with the requirements: IAF MD 4 – The use by accredited CBs of computerized auditing techniques ("CMAF") for certification of CM and NCA RI 03-07.34 "SM. Accreditation process. Remote assessment".

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