

**ҚОРАҚАЛПОҒИСТОНДА
ФАН ВА ТАЪЛИМ**

**ҚАРАҚАЛПАҚСТАНДА
ИЛИМ ҲӘМ ТӘЛИМ**

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PRINCIPLES AND METHODS OF ORGANIZATION OF AGROCLUSTERS

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Summary: *Based on the analysis of the need to organize the activities of agricultural clusters, the article defines its principles and methods.*

Keywords: *cluster, agrocluster, management, cluster management, competitiveness, global competitiveness, specialization, integration, food security, agriculture*

The efficiency of agroclusters is inextricably linked with the economic activity of small farms, peasant farms, agricultural enterprises and organizations that are part of it. At the same time, improvement of the socio-economic condition of the regions where agroclusters are established will be achieved. By organizing the activities of agroclusters in the regions, it will be possible to ensure national food security by providing the population with cheap and high-quality food products, by ensuring the employment of the population, strengthening their income base. In particular, in most countries, by using a cluster approach in the development of agriculture, the competitiveness of the products produced by agroclusters is being increased at the national and global level. Also, according to the analysis of the world practice of agricultural development, it was determined that the more agroclusters are established in the country, the higher the global level of competitiveness of agriculture in those countries compared to other countries. This situation today requires any country to approach the agricultural sector based on a cluster approach in order to achieve sustainable development of agriculture, including national food security.

Stages of development of scientific-theoretical views on the organization and management of agroclusters, increasing the efficiency of using innovative projects in the management of agroclusters and factors affecting it, priorities for improving the methodological foundations of agrocluster management, far abroad R. Claudio, R.G. Cooper, M. Delgado, D. Doloreux, I. Laure, G. It is reflected in the scientific research of economists like Linden.

According to the analysis of the world practice of the organization of agroclusters in agriculture, the effective solution of socio-economic problems in rural areas has been reflected in many scientific studies. In particular, positive trends such as ensuring the socio-economic and ecological stability of rural areas, moving agriculture to the path of innovative development, strengthening the implementation of scientific achievements in practice, creating new jobs, strengthening the population's income base, and ensuring national food security are agroclusters. its activity was manifested in the practice of the countries where it was established. Another important aspect of the cluster approach in the development of agriculture allows to dramatically increase the efficiency of production and processing of products.

At this point, it is worth saying that in our country, by clustering the form of economic management of economic entities engaged in agricultural activities, it is possible to solve various existing problems in the field. Including:

First of all, most of the agrarian entities engaged in the cultivation of fruits and vegetables in the agriculture of our country are in the form of small farms, and a unified system for the requirements for the quality of the products grown and processed by them has not yet been formed. According to the analysis of the global practice of agrocluster development, the activities of economic entities engaged in small-scale agricultural activities in one geographical area are

systematically summarized into a single agrocluster. As a result, the stability of the supply chain in their activity is ensured, and production efficiency increases. In this, together with product production, their quality management capabilities will expand;

and secondly, the lack of warehouses that allow for long-term storage of agricultural products during the productive season of agriculture, especially when harvesting is in full swing. Because of this, a significant part of the harvest will be taken to the markets for sale, and there is a possibility that the price of fruits and vegetables will drop sharply. A certain part of them becomes unfit for consumption due to the lack of proper storage conditions. As a result, agricultural entities may lose part of their income. By organizing the activities of specialized agroclusters in the regions, sufficient development of the infrastructure of the sector will be achieved through the construction of large warehouses that allow long-term storage of agricultural products. This allows to increase the level of capitalization of the agrocluster, together with the reduction of the economic damage in the amount of income that the agricultural entities can receive;

thirdly, more than half of the population of our country lives in rural areas. At the same time, the problem of unemployment in rural areas is relatively high, and the level of wages is relatively low.

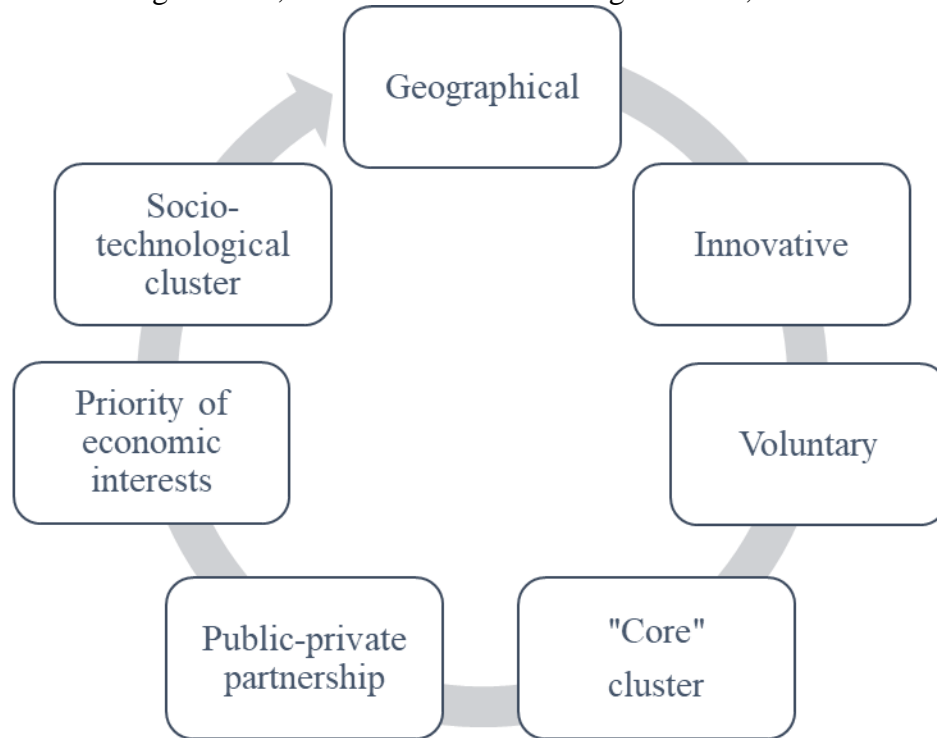
The above-mentioned cases are the existing socio-economic problems in the agricultural development of our country, and they reflect the need to develop the activity of agroclusters in the territories of the republic. Also, in the economic literature, management of agrocluster activities is distinguished from other economic entities engaged in agricultural activities by the following characteristics:

- focus on expanding the participation of the group of agricultural entities included in the agrocluster in the general foreign market;
- the activity of agrocluster is aimed at effective use of the potential of agricultural development in the area where it is located;
- expanding the participation of agricultural entities, including other types of enterprises and organizations, in the development of agrocluster activities by using the privileges created by the state in the management of the agrocluster;
- formation of a stable internal supply chain between agricultural entities that are members of the agrocluster.

According to the analysis of world practice, the agroclusters established in the regions of Louisiana, Oklahoma, and Washington states of the USA are the largest agroclusters in the world. In particular, the state of California is known worldwide for its wine production cluster. The United States is characterized by the management practices aimed at the production of high-tech products in the development of agroclusters. Similar agrocluster management practices are typical for EU countries such as Great Britain, Germany, France, Italy, Netherlands, Switzerland, Denmark, and Bulgaria. Also, in recent years, China, Japan, Singapore and other South-East Asian countries have implemented reforms aimed at transitioning to the practice of the USA and European countries in the management of agroclusters.

According to the analysis, the organization of agroclusters allows effective use of the agricultural development potential in the country. Taking into account the features of socio-economic development of our country, it was concluded that priority should be given to the activity of agroclusters in increasing the efficiency of using the agricultural development potential. In the economic literature, it is important to know the principles of its organization when choosing the methods of effective management of agroclusters. The principles of organizing the activity of

agroclusters in agriculture, shown in Figure 1, differ from each



other.

Figure 1. Principles of organization of agroclusters

Most countries make extensive use of the geographical principle when organizing the activities of agroclusters. This principle is characterized by the fact that it is aimed at increasing the efficiency of using the agricultural development potential of the region. Based on this principle, the organization of agroclusters appears as a component of regional policy. Also, the geographical principle is formed on the basis of scientific theories aimed at the development of regional clusters. In organizing and managing the activities of this type of clusters, priority is given to the following: technological development of production processes; increase the innovative activity of the regional winter economy; elimination of related problems related to transportation, storage and packaging of produced products through the development of infrastructure, including logistics services.

The innovative principle in the organization of agroclusters is explained by the growing development of the fifth generation innovative management model in the world's innovative development. At the same time, the practice of management of agricultural entities that are part of the agrocluster is characterized by specialization in innovative management, establishment of cooperation between them in terms of mutual transfer and adoption of innovations. This principle is based on the achievement of competitive advantage by prioritizing innovative activity in the activity of agroclusters. Innovations are also widely used in making management decisions in agroclusters organized on the basis of innovation. Agroclusters organized on the basis of this principle are common in the practice of developed and rapidly developing countries.

At this point, it is appropriate to pay attention to the data of the global innovation index of the International Intellectual Property Organization. According to the analysis, these countries, which have management practices aimed at the production of high-tech products in the development of agroclusters, occupy a leading position in the world in the adoption and transmission of innovations in various sectors of the national economy, including agriculture. In particular, in the "Global

Innovation Index-2021" evaluation system, countries such as the USA, Hong Kong (China), Israel, and Singapore are countries that actively participate in the adoption of innovations in various sectors of the economy, and their transfer at the national and international levels (see Table 1). This situation indicates that the activity of agrocluster in these countries is formed based on the innovative principle.

Table 1

The world's leading countries in the absorption and transfer of innovations

Countries	Global innovation index - 2020			Global innovation index – 2021			The place in the world in terms of innovative activity	
	Adoption of innovations	Transfer of innovations	Total	Adoption of innovations	Transfer of innovations	Total	2020	2021
USA	3	6	9	6	7	13	2	1
Hong Kong (China)	7	5	12	7	4	11	1	2
Israel	6	2	8	6	4	10	3	3
Singapore	5	1	6	6	4	10	7	4
China	3	5	8	3	6	9	5	5
Republic of Korea	3	2	5	5	4	9	10	6
Luxembourg	6	2	8	6	2	8	4	7
Switzerland	2	4	6	2	4	6	9	8
Japan	3	3	6	2	4	6	8	9

Voluntariness is another principle of organizing the activities of agroclusters. This principle is manifested in the formation of high-level integration associations, deep cooperation between agricultural entities in the activity of agrocluster. It is envisaged that agricultural entities voluntarily join agrocluster activities in order to achieve high economic efficiency.

The "Core" cluster principle is also called "Central" cluster in some economic studies. In this case, an agrocluster is formed by a firm (enterprise, organization) engaged in agricultural activities, which has a high potential in agriculture and has a strong competitive index compared to other agricultural entities, by uniting weaker agricultural entities into one center. The economic interests of the central (core) enterprise in the management of the activity of the agrocluster organized on the basis of this principle are characterized by priority over other structural participants.

The principle of public-private partnership is one of the principles that is widely used today not only in the agrocluster, but also in various sectors of the economy. This principle is reflected in the creation of appropriate conditions by the state for the development of agrocluster activities. In this, it is required to introduce incentives for the development of activities of small, medium and large agricultural entities that are part of the agrocluster, including joining the activities of the agrocluster. At the same time, in recent years, the state has prioritized measures such as financial support of agroclusters, including the introduction of tax incentives, attracting foreign investments under state guarantees, and allocating subsidies. These benefits are widely used to improve the efficiency of agrocluster management.

The principle of the priority of economic interests is manifested in the organization of the production and sale of products with high added value for domestic and foreign consumer markets among the participants of the agrocluster. In order to achieve this goal, management aimed at the formation of an integrated system will be established among the participants of the agrocluster on the basis of strictly defined obligations on the cultivation, production and processing of agricultural products.

The socio-technological cluster principle is widely used in the organization of modern agrocluster activities. This principle creates a sufficient basis for the development of innovative management in agrocluster activities. In this, priority is given to the mechanism of introduction of scientific achievements to the activity of agrocluster.

The socio-technological principle of the organization of agroclusters allows to reduce the cost of products, as a result of the mutual integration of science and educational services in the social sphere with the real sector of the economy. This makes it possible to solve priority tasks, such as providing the population with cheap and high-quality food products, ensuring national food security, and saturating the domestic consumer market, which are part of the state social policy. For this reason, this principle is evaluated as a socio-technological principle in the economic literature.

At this point, it is worth noting that reforms aimed at the development of smart agriculture are being implemented in our country today. Taking into account this situation, it was concluded that the effectiveness of the reforms implemented by using socio-technological and innovative agrocluster principles in the organization of agroclusters in our country will be achieved.

Based on the need to organize agrocluster activities and the study of its principles, the following scientific conclusions were drawn on the specific features of its management:

- the efficiency of using the country's agricultural development potential will increase through the organization of agrocluster activities;
- the management of agrocluster activities will be directed to the production of competitive products;
- in increasing the efficiency of management of agrocluster activities, they are based on socio-technological and innovative principles of organizing their activities;
- making management decisions on the development of agrocluster activities should be of equal interest to all its participants;
- mutual cooperation relations between the agricultural entities that are part of the agrocluster should fully correspond to the interests of the single integrated association;
- increasing the level of global competitiveness will be achieved by taking appropriate measures for the full use of privileges and opportunities created by the state in the management of agrocluster activities.

In general, in the following years, the socio-economic problems, which have been waiting for their solution for many years, will be effectively solved by developing the activities of agroclusters in the development of our country's agriculture. Together with this, it will be possible to take a place among the world's leading agro-industrial countries due to the full use of the agricultural development potential of our country.

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Rezyume: *Maqolada qishloq xo'jaligi klasterlari faoliyatini tashkil etish zaruriyatini tahlil qilish asosida uning tamoyillari va usullari belgilab berilgan.*

Резюме: *На основе анализа необходимости организации деятельности агрокластеров в статье определены ее принципы и методы.*

Kalit so'zlar: *klaster, agroklaster, menejment, klaster boshqaruvi, raqobatbardoshlik, global raqobatbardoshlik, ixtisoslashuv, integratsiya, oziq-ovqat xavfsizligi, qishloq xo'jaligi*

Ключевые слова: *кластер, агрокластер, менеджмент, кластерное управление, конкурентоспособность, глобальная конкурентоспособность, специализация, интеграция, продовольственная безопасность, сельское хозяйство.*