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ISSUES OF AGRICULTURAL CLUSTER`S ORGANIZATION: FOREIGN EXPERIENCE

Abstract: In the article have been presented theoretical frames of the agricultural cluster. By author were investigated the foreign experience gained over the last ten years of the development of cluster systems. Besides this, the paper reviews several problems with developed support system and further development cluster system. The purpose of this research is to investigate the existing constraints and opportunities to improve the availability and accessibility of clusters.

Key words: agricultural cluster, foreign experience, development of cluster systems, agro-industrial cluster, management.

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Introduction

Today, with the aim of uninterrupted supply of food to the population of our country, special attention is paid to increasing the volume and variety of production, as well as increasing the incomes and living standards of the rural population. In particular, the Strategy of Action on the five priority directions and a number of resolutions and decrees have been adopted for the development of the Republic of Uzbekistan in 2017-2021 [1]. A number of systematic work is being carried out in the country to increase fruits and vegetables, melons, potatoes and grapes, to carry out timely agricultural activities, to produce high quality export-oriented products. Clusterization already covers more than 50% of the economies of the leading countries of the world. Clustering is seen as a new vector of development of the world-systems of capitalism. In the "Declaration on the Strengthening of Economic Cooperation in Europe" (1997) and the "Action Plan", which details it, the formation of clusters is declared as one of the most priority areas for the development of European cooperation. This problem was the subject of discussion at the First World Congress in Paris (January 2001), initiated by the Organization for Cooperation and Development (OECD). The first large-scale cluster development programs appeared in the USA in the 1970-80s, in Denmark in the 1989-90s, in Austria, Great Britain, Japan - in the first half of the 90s, in Finland and France - in 1995. In recent years, more and more researchers and related institutes, such as policy makers, legislatures, business leaders, academics, economic development practitioners and development agencies have paid substantial attentions to industry cluster.

Theoretical frames

In the agricultural sector, the fruit and vegetable sector plays an important role, with its annual supply of goods and exports. More dynamic and sustainable development of the system is directly dependent on its competitiveness and state of modernization. Modernization, in turn, will create a promising competitive model of the fruit and vegetable complex, strengthen the interaction of various economic entities involved in the production, processing and sale of fruit and vegetable products, its optimal social composition and the organization of agricultural activities in line

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with market principles. formation. In particular, it is important to create agro-clusters in the fruit and vegetable sector of the country in the context of economic modernization. This is because the establishment of agro-clusters for the fruit and vegetable sector of agriculture is a new institutional structure. It is important not only to organize them, but also to carry out their activities effectively. Today, theoretical and methodological aspects of agro-clusters are studied in many countries. In particular, it is necessary to study the theoretical and methodological aspects of the establishment of effective agro-clusters in the fruit and vegetable sector in the country, considering the fact that such structures are unique in different periods of economic development [2].

First of all, it is necessary to theoretical analysis of the concept of cluster. As we know, the term cluster (when translated from the English word "cluster") is defined as an independent unit that combines, clusters, group meanings and, to some extent, identifies several identical elements. Prior to the management cluster, cluster concepts were first used in mathematics and in the natural sciences. In the 1970s, Swedish economists in the economy, K.C. Fredriksson and L. Lindmarkets have used this term to identify businesses in a confined space. In the 1980s of the 20th century M.Kh. The term cluster by Porter is included as an economic category. In his view, the cluster is a geographically intersectional association of companies and institutions operating in a particular area [3].

S.J. Ergashxodjaeva, K.S.Kyvyakin researched clusters in textile [6], when problems of capacity were investigated by Tursunov B.O. [7-9].

Essence of Agroclaster A.A. Nastin is well-grounded - agroclaster is a geographical location, interconnected and complementary to different property owners - family farms, farmers' cooperatives to simultaneously and collaboratively deal with production and environmental protection. business entities, social and scientific organizations, educational institutions and advisory services. In the scientific literature you can find many more tariffs on agroclaster. To summarize all of these, the following is the definition of agroclaster in the fruit and vegetable sector: "Agricultural agro-cluster is the preparation of land for agricultural production and the preparation and processing of agricultural produce at low costs, without compromising the quality. Integration of storage and sales processes into a single chain and utilizing high-tech innovation economic entities engaged in improving the competitiveness of their horses in the domestic and foreign markets. " In our view, this definition of clusters in the fruit-and-vegetable sector helps to better explain their essence and function. Agro-clusters in this sector begin with the process of preparing land for fruit and vegetable planting, which means that the harvest can be effectively and efficiently delivered to consumers, and the resulting benefits. In other words, a whole complex process is brought together. At present, systemic management activities are important in establishing and enhancing the effectiveness of agro-clusters in the field of fruit and vegetable production [4].

Foreign experience

In recent years, interest in clusters has sharply increased in Uzbekistan. Numerous examples of successful clusters are known in developed countries - Germany, USA, Japan and in developing countries of Latin America, Asia, Africa. So, for example, in the USA, where scientists began to study the principles of development of regional economies earlier than others, and M. Porter was a pioneer-developer of the cluster model, industrial clusters became very popular. The states of Arizona, California, Florida, Minnesota and others led this process and adopted relevant programs, hundreds of cities and territories developed their cluster strategies. A vivid example of a cluster is "Silicon Valley". In the states, commissions are formed to initiate the creation of clusters. Analytical work is carried out by scientific centers and universities. The commission distributes the shares of participants, helps to overcome various kinds of difficulties. The initial capital is allocated by the state, then the funds of private companies are attracted. [1]

The agro-industrial cluster for taking place as a viable, self-sufficient, successful and effective structure, the following basic conditions are necessary:

• Initiative - initiative and influential people from among entrepreneurs, government structures, educational institutions and scientific organizations, able to rally, interest and in practice prove the usefulness of clusters both for their members and for their authority, intelligence, organizational abilities and knowledge. region

• Innovations - new technologies in the organization of agricultural production and processing, marketing, management, financing, which can open up new opportunities in the competition;

• Information - through the interaction of the parent organization with participating organizations, new information is generated, which becomes the driving force of business activity. A single information space is being formed.

• Investments - participation in new investment projects. The experience of developed countries indicates that clusters attract much more investment than individual companies.

• Integration - the production and sale of components, equipment, tools, technologies, know-how and other intangible assets created by order of the head organization of an entrepreneurial network are intended for the manufacture of competitive products

and cannot be sold on the free market for wide consumers.

• Interest - provides the basic condition for the life of an entrepreneurial or social structure, which implies the presence of interest in the participants of cluster associations and their receipt of certain economic benefits.

Initially, a unified approach to intercompany cooperation was developed in Denmark in 1989-1990. At the first stages, industrial complexes were investigated in four sectors: agriculture, textile production, production of office equipment, and environmental protection products. Then, the mechanisms of knowledge and technology transfer in three sectors were analyzed: electromedical equipment, furniture, and pharmaceuticals. B It is known that in Denmark the agro-industrial complex in terms of production exceeds all other sectors of the economy combined and is the key from the standpoint of the consumer market and investment potential. A special role is played by the "milk vertical" from milk

processing to suppliers of technology and equipment. The Danish Business Development Council, which is responsible to the government for developing the concept of clustering, has initiated a number of new developments in this area. The studies included the Ministry of Business and Industry, the Ministry of Research, the Ministry of Education, the Ministry of Labor, etc. In 1992, 40% of all firms in the country participated in clusters, which provided 60% of exports. In 1997, it was noted in the annual report that 513 analysts from firms, organizations, institutes, and ministries took part in the studies, which were combined into 35 working groups specializing in specific sectors. They issued 1522 proposals, of which 66 have already been implemented. Changes were required in the legislation, administrative structures, budget allocations of ministries. The work carried out over a number of years has brought Denmark to the world leaders in clustering the economy. Today, there are 29 leading clusters.
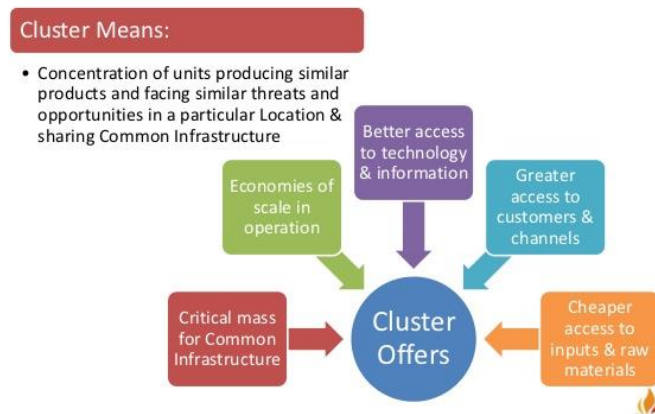

Fig. 1. Theoretical mean of agro cluster.[13]
*Source:*https://www.slideshare.net/lokanathanin/agri-infrastructure-cluster-development-lok-dec-2011

The Austrian economy gained high growth rates, where cross-border clusters with Germany, Italy, Switzerland, Hungary began to operate, and relations with France and Great Britain intensified. Austria has developed its own version of economic policy, where the cluster approach has taken an important place. The key factor was the policy of stimulating the development of ties between research institutes and the industrial sector, the reduction of regulatory barriers in innovative programs, the specialization of clusters and the formation of centers of competitiveness. [5,6]

In America, corn productions are mainly concentrated in the Midwest. At the same time, it is the biggest corn industrial area in the world. Since

1940s, the Midwest of America has become the main areas producing corns. Now the productive areas include about 15 states, from Minnesota to Texas and from Colorado to North Carolina. The planting areas and gross production there are both about 80% of the whole country. There are 5 states in which the productions are nearly 2/3 of the whole country. The corn industry impacts on animal husbandry. 2/3 of American pigs feeding and 1/4 of meet cattle are in the corn cluster. All these advance economic status and agricultural competitive strength of this corn industrial area in the global world. Meanwhile, soybean, grape and cotton all show cluster trend in America, especially the typical wine clusters in California. California accounts for about 90% of all

US wine production (OVI 2006).The California wine cluster centered around the Sonoma, Santa Clara and Napa Valley and the University of California at Davis (Andrea Migone & Michael Howlett, 2010). This is a cluster with both vertical and horizontal links among its actors. It includes more than 680 commercial wineries and thousands of independent wine grape growers. They are at the core of the process in California and upon them hinges a broad set of companies and institutions, including suppliers of grape stock, irrigation and harvesting equipments, barrels, and labels; specialized public relations and advertising firms; and quantities of wine publications aimed at consumer and trader, which provide the winemakers with services and goods in both the upward (viticulture) and downward (winemaking) stages of wine production. A lot of local institutions, such as the world famous viticulture and enology program at the University of California, Davis, the Wine Institute, special committees of the California state senate and assembly, are all involved in this cluster（figure 1）(Machael E. Porter, 1998). Moreover, this wine cluster also connects with three other industry clusters: the agriculture, food and catering, and wine country tourism (Machael E. Porter, 2000) [7,8]

American agricultural cluster has become more and more mature after decades of development. Its maturity benefits from two main aspects: on one hand, America has formed agricultural cluster centering on processing or sales enterprises. This cluster possesses high efficient organizational system which integrated with producing, supplying and marketing. Agro-processing industries, business and agricultural

cooperative constitute the body of the cluster. Food processing is the biggest one among manufacturing industry, and agro-processing is the dragon-head of agricultural cluster. On the other hand, the system of law and statute insisting on agriculture and rural socialized service system are growing to perfection. American agricultural policies aim at increasing peasants' income. In last century, the government issued a series of agricultural industrial measures, including insisting the link of production policy, insisting agricultural foreign trade policy and agricultural insurance, etc. The implementations of the policies are specifically through a variety of measures, for instance, stabilizing prices of agro-product, expanding financial expenditure on agriculture, and increasing subsidies for farmers. [9,10]

Experts put forward two main models, within the framework of which cluster policy is implemented in various countries - liberal and conducting. Obviously, there may exist a third model of cluster policy, which would be a combination of the first and second models. We will call this model combined. At the same time, some researchers propose to call this model of cluster policy reflexive. It seems that the term "combined" cluster policy is simpler and more logical, stemming from its essence. Therefore, we prefer the term we offer. Thus, cluster policy can be classified into three types: liberal, conducting and combined. Logically, this classification implies the need to consider agrarian clusters in the formed conditions of three possible models of cluster policy: liberal (USA), conducting (Denmark), combined (Germany). [11,12]
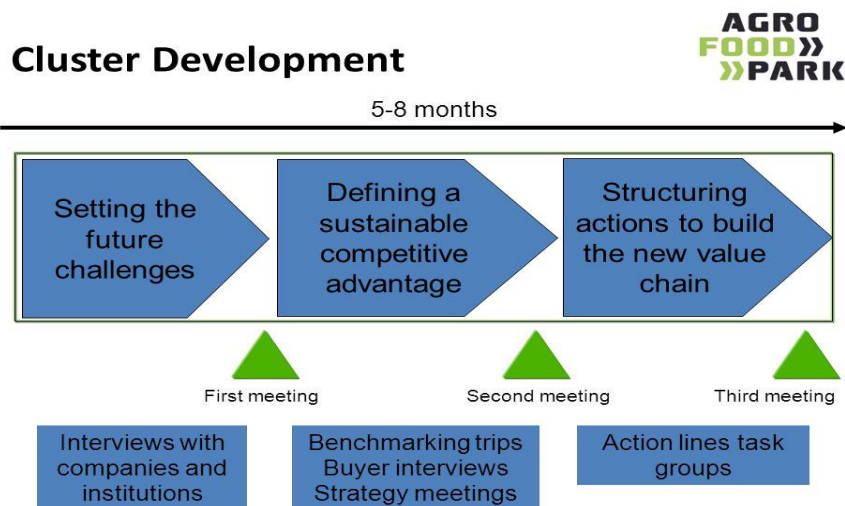

Fig.2. Cluster development model. [14]
Source: https://slideplayer.com/slide/1695332

Naturally, questions arise. How effective is clustering? And how can you evaluate this effectiveness? As one of the indicators of clustering

efficiency, we offer indexes and a rating of global competitiveness (Table 1). The global competitiveness rating indicates that clustering was

most effectively carried out in the countries of Northern Europe (Denmark - 5th place, Finland - 6th, Norway - 14th, Sweden - 4). In general, these countries form a kind of cluster of the most competitive countries in the world. Considering that

An analysis of the data in Table 1 allows us to draw the following conclusions: use, as the guidelines given in the table, the criteria for determining specific criteria for identifying clusters in relation to certain real conditions; to study the clustering of agriculture in Denmark as one of the countries that has achieved significant success in ensuring the high international competitiveness of the agricultural sector.

Conclusion

In general, a study of the formation of clusters in agrarian foreign countries allows us to draw a number of conclusions:

- Denmark has most successfully implemented country since the beginning of the 90s. XX century cluster policy, incl. in the agricultural sector, and has reached a high level of international competitiveness of agriculture, ensuring the flow of significant foreign exchange earnings. Therefore, as one of the objects of in-

Denmark is a country with highly developed agriculture (2/3 of agricultural products of this country are exported), we will take Danish agriculture as one of the objects of in-depth study of clustering.[13,14]

depth research, the macro cluster of Danish agriculture was chosen, so Uzbekistan has a potential for macro clusters like Denmark and should obtain this experience and implement ;

- agrarian clusters in the economies of the developed countries of the world (USA, Denmark, Germany) are integrated formations that have a specialized multifunctional orientation, as a main direction, they produce a certain type of agricultural production and, at the same time, related types of products and services. Uzbekistan has some certain type of agricultural production that can specialize for cluster system. This leads to a certain diversification, including agriculture, and increasing its competitiveness. ;
- innovation clusters are the most effective form of increasing competitiveness; therefore, the formation of innovation clusters should be provided for in the system of agricultural clusters in a region. But in Uzbekistan innovation clusters play insignificant role in economy.

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