

# ECONOMIC GEOGRAPHICAL ASPECTS OF IMPLEMENTATION OF CLUSTERS IN AGRICULTURE IN THE REPUBLIC OF UZBEKISTAN (TASHKENT REGION AS AN EXAMPLE)

**Zulhumar Abdalova**

Associate professor, PhD

Department of Geography and its Teaching Methodology

Tashkent State Pedagogical University named after Nizami

**Imongali Islomov**

PhD. senior teacher of the Department of Geography and its Teaching Methodology,

Tashkent State Pedagogical University named after Nizami,

**Firdavs Berdikulov**

Researcher of Uzbek- Finland Pedagogical Institute

DOI: [https://doi.org/10.63001/tbs.2024.v19.i02.S.I\(1\).pp22-28](https://doi.org/10.63001/tbs.2024.v19.i02.S.I(1).pp22-28)

## KEYWORDS

*clusters, agroclusters, concentration, localization, specialization, concentration, combination, specialization, innovative activity, competitiveness, food security, logistics infrastructure.*

Received on:

25-07-2024

Accepted on:

09-11-2024

## ABSTRACT

In this article, the role and importance of clusters in the development and improvement of the structure of regional agricultural sectors, the principles, forms and factors affecting the geographical location of agro-industrial clusters have been revealed, and its territorial-specialization structure has been analyzed for the Tashkent region, and its main problems and directions have been indicated.

## INTRODUCTION

The issue of improving the regional structure of the national economy and eliminating the socio-economic disparity between regions is of urgent importance at the moment. At this point, the attraction of innovative technologies, the formation of a competitive environment, the establishment of clusters that ensure the interconnection of networks and complexes, and are the "growth points" of the regions and the national economy. it is important to achieve.

For the first time, the phrase "cluster" was used in the 80s of the XX century by M. Introduced by Porter, "cluster" (in English means collection, group) is a geographical group of firms, companies and organizations that are interconnected and complement each other in order to create additional value" [1]. The concept of clusters at a glance is territorial- similar to production complexes (XlChM), however, regional complexes were managed on the basis of the principles of strict restrictions

under the rule of the planned economy, in contrast, clusters increased production efficiency, increased income, formed an environment of competition among partners and organized production taking into account the market mechanism differs, "this is a new, universal theory, by applying it to any economic situation, it is possible to prevent the emergence of economic problems and thereby minimize risks"[2].

The economic geographical aspects of clusters are manifested as a form of territorial organization of production in the conditions of a market economy and as a lever for socio-economic development of regions. A new economic geographic approach, A. Marshal, P. Krugman and E. Venables' theory of creating new competitive models in the effective and efficient use of the available resources of the region for the purpose of obtaining high income, based on the idea of "effective and economical use of large-scale territorial areas and existing resources, deepening the specialization and geographical localization of production"[3]

.Agro-industry clusters will lead to the harmonious development of the cities and settlements directly adjacent to these regions, along with the productive and efficient use of the socio-economic potential, opportunities and resources of the regions. Construction of industrial enterprises in rural areas, creation of jobs, increase of employment of the population and creation of new modern jobs will end the reduction of regional socio-economic disparity between rural and urban areas.

It can be said without exaggeration that land areas, their composition, reserve areas are of great importance in the geographical location of agroclusters, at the same time, transport highways, types, and logistics infrastructure cannot be ignored as they play an important role in economic life.

Large cities that integrate industry, services, science, and qualified personnel, and surrounding areas specializing in the production of agricultural products, especially suitable for the location of agroclusters.

**The main part.** In recent years, the clusters that have been tested in international experiments are the introduction of our republic into the agrarian sector, the storage, transportation,

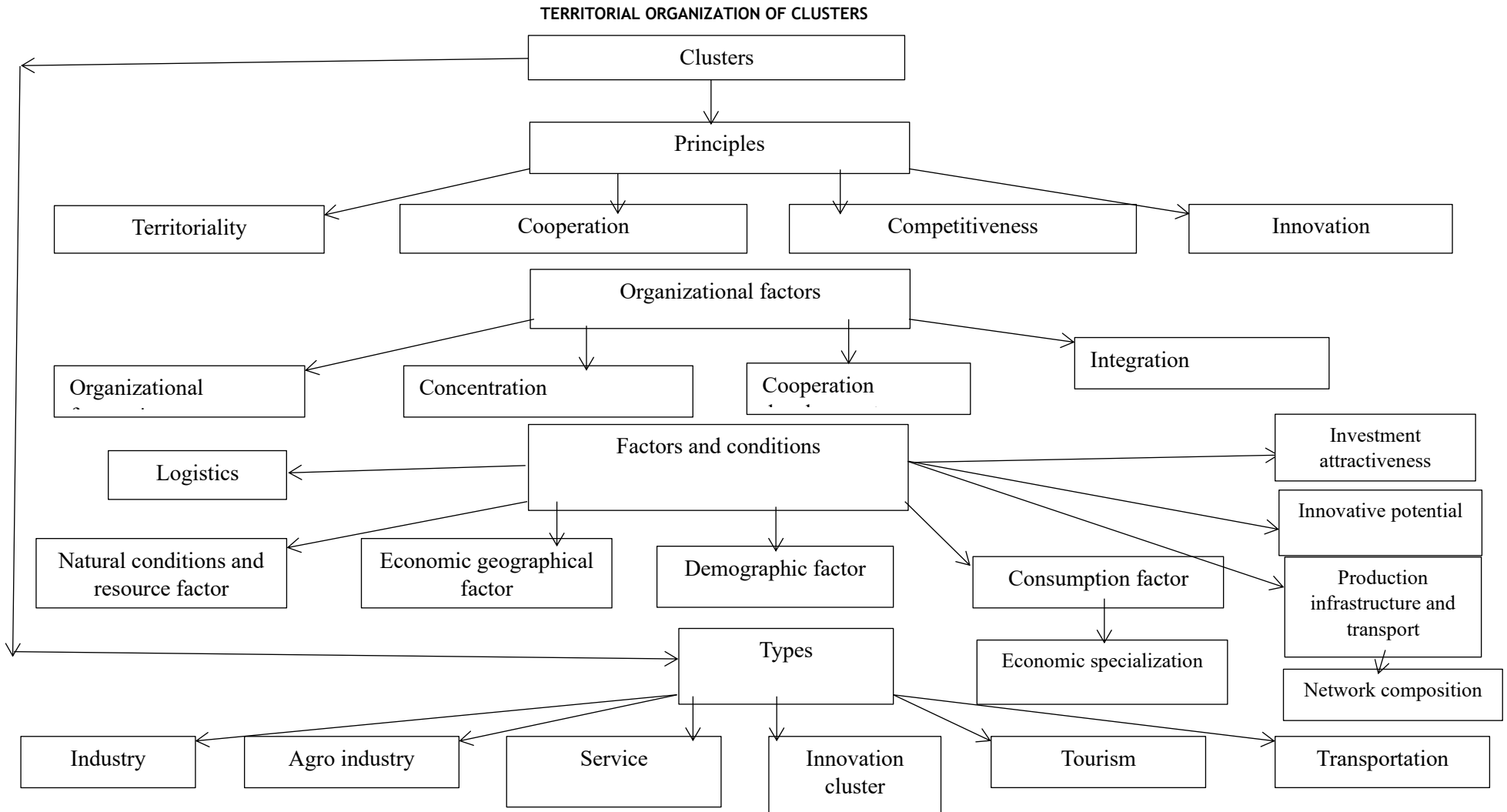
processing of agricultural products, the formation of integration and cooperation relations between the fields of agriculture, industry, transport and trade, food security, increasing the export potential, employment of the population. , plays an important role in terms of quality of life, innovative activity and production of competitive goods.

Territorial organization of agro-industry clusters takes place under the influence of certain conditions, principles and factors. Territorial organization forms of production localization, specialization, concentration, combination affect the location and development of clusters.

It is carried out under the influence of economic geographical principles, forms and factors in the territorial organization and development of clusters and determines their geographical concentration and specialization of industries.

Geographical localization of enterprises included in the cluster system leads to rapid growth of regional production by processing local raw materials and resources and producing export-oriented and competitive products.

Picture 1.



Territorial concentration of clusters occurs when enterprises, firms, organizations with different forms of ownership and belonging to different interconnected sectors can effectively and efficiently use the resources of the region, engineering and transport infrastructure, labor resources, innovations and other factors. The geographical concentration of clusters affects the efficiency and specialization of production.

The specialization of regional clusters in different directions is the result of the geographical division of labor, the specialization of partners in different types of activities and the use of knowledge, experience and innovations in order to achieve their common economic benefits also play an important role in increasing the competitiveness of the region. At the same time, "currently, the possibilities of inter-sectoral specialization in the application of innovations and increasing competitiveness are high" [3]. The specialization of each partner enterprise and organization in a certain direction and the connections around organic production affect the increase in the production volume of clusters.

Territorial location of clusters is affected by certain natural, socio-economic factors and conditions, which include economic geographical location, raw materials, skilled labor resources, availability of specialized scientific and educational institutions, infrastructure, and transport, etc. These indicators determine the competitiveness of the region and the possibility of attracting investments.

Clustering, as a form of social production, plays an important role in improving the regional composition of the national economy and eliminating the economic and social disparity of regions, increasing competitiveness between regions and the growth of regions of all sizes.

Development of agriculture is one of the priority areas of the republic's economic policy, providing the population with food products, increasing the standard of living and well-being of the population, economical use of natural resources and environmental protection are among the current issues. It ensures sustainable development of the agrarian sector and the role of clusters in the organization of cross-border integration structure is of great importance. Clusters play the role of a lever in applying innovations and increasing competitiveness in agriculture.

The application of clusters as a form of production organization to the agricultural sector was based on a number of legal, regulatory and programmatic documents. In the Strategy of Actions on the five priority areas of development of the Republic of Uzbekistan, attention was paid to the development of clusters along with technopolis, technoparks.

In response to the tasks imposed by the decision of the President of the Republic of Uzbekistan dated May 19, 2017 "On measures to create a modern cotton-textile cluster in the Bukhara region" No. Based on the decision PQ-3279[5] "On measures to create a cluster of modern cotton-textile cluster in Syrdarya region" limited liability "Vek cluster" was established, and also clusters were introduced in cotton-textile, fruit-vegetable, seed-growing and other directions. .

In the greeting of the President of the Republic of Uzbekistan to the agricultural workers of Uzbekistan on December 7, 2019, the achievements in this regard were summarized and "...we have decided to transfer cotton cultivation to the full 100% cluster method from next year. At the same time, we will consistently continue the work of organizing clusters of grain, fruit and vegetable, poultry, livestock, fishery and cocoon breeding" [6]. Clusters are characterized by the characteristics of agro-industrial production as a form of territorial organization:

- geographical localization of production due to interdependence of enterprises;
- regional concentration of production, science, innovation, workforce;
- harmony of vertical and horizontal connections between agriculture, science, industry, management organizations and enterprises;
- joint use of common production infrastructure, transport highways, land areas;
- formation of a competitive environment;

- establishment of stable long-term business relations between organizations;

- high increase in productivity of agricultural products as a result of applying modern innovative technologies to agricultural production;

- on the basis of cooperation, creating a continuous chain cycle from planting, cultivation, processing, production of finished products and exportation;

- updating the material and technical base of agricultural production with modern equipment and infrastructural facilities.

It is known that the agrarian sector needs to develop clusters in cooperation with other sectors in the production of food products for the population.

Agro-industrial clusters are geographically united groups of agricultural, industrial and trade enterprises located in a certain area, with a single infrastructure for the cultivation, processing, production and repair of various agricultural products, sales, transport and engineering infrastructure. In our republic, agroclusters have been established in cotton-textile, fruit-vegetable, seed-growing, grain, meat-dairy and other areas.

Territorial organization of clusters is carried out taking into account the natural and socio-economic characteristics of places. Especially land, water, agro-climatic resources, economic specialization, structure of industries, production infrastructure, demographic situation, urbanization and similar factors. Currently, the relevance of clusters is that the introduced agroclusters, while using their natural and economic potential, have a positive effect on the development of rural areas, and secondly, they have a positive impact on the socio-economic development of residential areas.

Currently, 465 clusters have been introduced in the Republic of Uzbekistan, the total land covered by them is 2,210,385, including 282,004 to clusters, and 1,930,975 to farms, including 51 clusters operating in Tashkent region, the total allocated land area is 12,640, 0, of which 8682.9 ha belong to clusters and 3957.8 ha to farms [7]. (Table 1.)

Table 1.  
Territorial structure of clusters in Tashkent region (2022.)\*

Cluster name	Total land area (ha)	Including land area(s) belonging to clusters	Including land area belonging to farmers (ha)	In which district it is located	Number of farms	Specialization
“Medtorg invest“	171	82	8	Parkent district	4	Processing and export of fruits and vegetables
F/X “Sardorbek Sarkor“	151	120	31	Parkent district	11	Deep processing of fruits and vegetables
OOO “Soft tEkstilluks“	270	140	130	Parkent district	22	Production and sale of light industrial products
OOO “Bostanlik potato growing center“	1 735		1735	Bustanlik district	-	Cultivation of root crops and their seeds rich in starch and insulin
OOO “Yevro fudtrayd“	171	112,49	0,49	Zangota district	7	Production of food-fruit-vegetable preserves
OOO “Khumoyn farm“	517	494	23	Zangota district	25	Deep processing of fruits and vegetables
OOO “Davri agro“	531	431	100	Zangota district	20	Cultivation of cereals and legumes, including seed production
“Tamarakhonim Ziyonur“	231	218,7	12,3	Zangota district	16	Processing and export of fruits and vegetables
F/X “Alisher faiz kindness“	864	661,5	202,5	Toshkent district	57	Processing and export of fruits and vegetables
OOO “Labor agrofirma“	564	526,5	37,5	Tashkent district	37	Production of alcohol products
OOO “Sardorcom“	2 878	1 965	913	Akxangaran district	201	Wholesale of fruits and vegetables
OOO “Berad agro“	683	80	603	Yangiyul district	9	Export of dried fruits from Uzbekistan
OOO “Fruit season grup“	833	811	22	Kibray district	22	Food and beverage production
OOO “New Tashkent canned food“	2 467	2 452	15	Kibray district	246	Food products - processing and sale of fruits, vegetables
OOO “Kibray export Kamron“	288	288	0	Kibray district	26	Fruit and vegetable wholesale
OOO “Nero bars“	286	241	45	Kibray district	15	Auxiliary fields of agricultural crop cultivation
<b>Total</b>	<b>12640</b>	<b>8682,19</b>	<b>3957,81</b>			

Note: table <https://www.agro.uz/ru/agroklasterlar-va-kooperatsiyalar/#1640552815940-9650693f-36d1> compiled on the basis of data

The Tashkent region has a special place in the khududiy structure of the Republic's agriculture, and in recent years, The Tashkent region has experienced a slight decrease in agriculture in the country's agrarian sector, while the region has recorded a steady increase in the cultivation of agricultural products, leading along with the Andijan, Samarkand regions. In 2000, the proportion of gross product value of the province in the agricultural economy of the Republic was 13.2%, in 2010 11.8% and in 2021 9.8%.

The development of Agriculture of the Tashkent region has its own regional character, the natural-geographical conditions of the region, the traditional qualification of labor resources, the level of water supply, the demand for food of the population of the capital city affect the development of agricultural production. The economy of the region is 22.3% of the value of gross production products. The population of working age in the region is 1323.5 thousand people, those who are engaged in the economy-1206.7 thousand people (in 2000 these figures were 1291.1 and 989.8 thousand people).

Currently, clusters have been introduced in the region in cotton farming, grain farming, fruit growing, and other areas. The technological chain of cotton cultivation and its deep processing, clusters involving the cultivation, processing of products, spinning, production and export of finished products are operating, the total number of which is 51. (Table 1).

Regional agroclusters directly identified areas of specialization based on the geographical division of labor of khudud, natural-climatic conditions and land-water resource potential.

Currently, 8 cotton clusters are operating in Tashkent region, these are located in districts specializing in cotton in Bekabad, Akkurgan, Quichirchik and Boka districts, and the cotton grown by the clusters located here has the highest indicators in terms of gross product. For example, "Ark Bekabad" MSNJ HK in Bekobod, "Ark Boka" MSNJ HK in Boka district, "AVS Akkok Agro Cluster" LLC in Akkokon district, and "TSt Cluster" LLC located in the lower district can be cited as examples. The development of livestock, poultry complexes in order to ensure the feed base of livestock in its turn is envisaged, with the participation of mature modern innovation technologies, the management of grain production in these territories, carrying out such tasks as sales, sorting, storage, production of finished products and introduction to the domestic and foreign market. Currently, there are 14 wheat-based clusters operating in the region-the highest grain-based rates are "BEKABOD RICE cluster" UK in Bekabad district, "SANTA GROUP AGRO" LLC in Boka district, "TSt CLUSTER" LLC in Quichirchik have higher grain-growing rates of clusters. Clusters in the direction of agriculture are well established in khudud, which is used in agriculture and where there are lalmi lands.

The result of the study of the composition of the khududi-specialization of clusters by Tashkent region, showed that suburban agriculture is characterized by the fact that along with natural-agro-climatic conditions in the direction of specialization, the consumption factor is important, as well as the proximity of khudud to the capital, Transportation, Logistics, the presence of infrastructural iconiates has influenced the specialization of clusters in the agricultural direction. Cotton clusters have been introduced in high-lying, medium-sized districts around the capital, but relatively low in proportion to sabzovot fruit clusters.

According to statistical data, in terms of pahta yield, "TSt Cluster" LLC (40.0 ts/ha) in the lower district was recorded, while in terms of grading, the highest yield in the region corresponds to the cluster farm "ZERNOFF" LLC in the upper district, with 41.6 cents of grain grown from each hectare of land. (Table 2).

In the analysis of the geography of clusters in the Tashkent region, it can be noted that a significant swing of this economic type is located in suburban districts. There are 11 clusters operating in this khudud, of which there are 4 in Qibray District, 4 in Zangiota District, 2 in Toshkent District, 1 in Yangiyul district. (Table 2) the direction of specialization of these clusters is mainly due to the agricultural network, and most food products constitute the production of canned fruits and vegetables, the processing of fruits and vegetables and the export of dried fruits from Uzbekistan. Consequently, the organization of grain, poultry, livestock, fisheries and sawmills clusters is slow, taking into account the specific natural conditions, Land-Water Resources and agri-climatic features of the region.

**Table 2.**  
**Tashkent region for the production of cotton and grain clusters (2022)**

Note: the table is compiled on the basis of data from the Department of Agriculture of the Tashkent region

№	Name of the district	Name of cluster	Ton	Productivity		Names of Districts	Name of cluster	Ton	Productivity
				T/r					
Grain cluster					Cotton cluster				
1	Bekobod	"BEKABOD RICE CLUSTER" UK	37002	28,4	1	Bekobod	"APK Bekobod" LCC XK	44 456	36,4
2	Boka	"SANTA GROUP AGRO" LCC	37404	37,8	2	Bo'ka	"APK Boka" LCC XK	44 501	36,5
3	Qibray	"SANTA GROUP AGRO" LCC	1875	51,5	3	Piskent	"Real Agro Cotton" LCC	23 893	30,6
4	Oqqorgon	"ADZ OQQO'RG'ON AGRO CLASSTER" LCC	29540	49,7	4	Yuqorichirchiq	"Real Agro Cotton" LCC	14 973	37,4
5	Quyichirchiq	"TST CLUSTER" LCC	38245	32,5	5	O'rtachirchiq	"Real Agro Cotton" LCC	22 294	31,8
6	Yuqori Chirchiq	"YEVEYDAY" LCC	22122	38,1	6	Oqqorgon	"ABC Oqqorgon Agro Cluster" LCC	35 448	31,4
7	Orta Chirchiq	"ZERNOFF" LCC	31620	41,6	7	Quyichirchiq	"TST Cluster" LCC	45 857	40,0
8	Piskent	"MIRZAOBOD PARRANDA ASL" LCC	24237	34,4	8	Chinoz	"APK Chinoz" UK	22 761	36,7
9	Chinoz	"CHINOZ OLTIN DON AGRO KLASTER" LCC	21333	43,0		<b>Tashkent region total</b>		<b>254 183</b>	<b>35,2</b>
10	Ohangaron	"AL BASIR PARRANDA" LCC	10168	27,2					
11	Zangiota	"MELEK AGRO DON" LCC	2446	56,3					
12	Toshkent	"MELEK AGRO DON" LCC	3760	61,0					
13	Yangiyol	"NURLI DIYOR AGRO" LCC	23171	35,4					
14	Bostonliq	"AGROVER" LCC	1747	30,6					

		Tashkent region total	284670	40,5					
--	--	-----------------------	--------	------	--	--	--	--	--

Results. Analysis of the specialization direction of clusters has shown that the introduction of clusters by livestock and its types is low, both in the province and in suburban agriculture. The need for the urban population to supply food, milk-meat, eggs and other products, and the supply of food and light industry with raw materials, the organization of clusters of this type is an urgent issue.

The godly Organization of livestock clusters can be determined by applying the SWOT-method of external and internal factors, development potential, socio-economic situation in the production of development strategies. Through this assessment, the strengths, weaknesses, opportunities and risks that influence

Table 3.

**SWOT analysis on the organization and development of clusters specializing in the direction of dairy-meat cattle breeding around the city of Tashkent**

Strengths	Weakness
Agro-climatic conditions, water-land resources, the convenience of a geographical and transport place, the confluence of the capital with the city of Tashkent, the large concentration of the population, the consumption factor for dairy and meat products, the specialization of Agriculture in agricultural sectors, the formation of enterprises of the food industry, the provision of Transport Highways, the availability of labor resources.	Limited land areas, low irrigated areas, lack of fodder base, outdated livestock material and technical base, lack of vehicles for the transportation of products, slow involvement of modern technologies in the focus on selection and breeding cattle, problems in the supply of electroenergy and heat resources, low Organization of modern livestock complexes, lack of qualified labor resources in the field, low, poor investment in the organization of modern processing and storage enterprises, lack of natural pastures, automation and mechanization of the industry, low intersectivity of livestock, lack of financial resources for the development of the network.
Opportunities	Risks
Use of geographical and natural opportunities, agricultural potential, high scientific, scientific, scientific, entrepreneurial, investment potential of the city, proximity of enterprises to the Isthmus markets, cooperation between agrarian and scientific research in the organization of livestock production, the presence of the agglomeration factor.	Problems in the design and planning of settlements, environmental pollution and shrinkage of Natural Pastures, High Cost of fodder products, shrinkage of pasture and irrigated areas due to the growth of the city, the cost of produced livestock products higher than the cost of products of this kind in other regions, a decrease in competitiveness..

Note: SWOT - from English "Strengths" - strengths, strengths; "Weaknesses" - weaknesses, factors; "opportunities" - opportunities; "Treats" - denotes risk.

✓ SWOT, taking into account the results of the analysis, makes it possible to develop scientific proposals and recommendations for the organization and development of clusters in the dairy-meat direction in the Tashkent City economy.

✓ In suburban agriculture, it is possible to introduce clusters on the types of dairy-meat, meat, production of products, processing, deep processing, and timurju trade direction;

✓ Taking into account the composition of the land fund, the supply of irrigated, Tulip, pasture, irrigated crop with fodder in the introduction of livestock clusters around the city of Tashkent;

✓ On the basis of the formation of a livestock feed base, it is advisable to establish specialized clusters in the direction of processing dairy and meat products in the territories of the Middle-lying, upper-lying and New-lying districts of farms specializing in cotton-growing, on the basis of the formation of a livestock feed base;

✓ taking into account the scarcity of land space in zangiota, Qibray and The Tashkent district adjacent to the capital city, the industrial potential of the city and the consumption factor, the possibility of deep processing of dairy and meat products and the placement and development of clusters specializing in wholesale trade is somewhat better.

✓ taking into account the scarcity of land space in zangiota, Qibray and The Tashkent district adjacent to the capital city, the industrial potential of the city and the consumption factor, the possibility of deep processing of dairy and meat products and the placement and development of clusters specializing in wholesale trade is somewhat better.

the organization and development of the hood, livestock clusters are revealed. As mentioned above, there have been several problems in the development of dairy-meat livestock in the rural area of the city of Tashkent, determining the rates of decline in the development of dairy-meat livestock, in the cultivation of products of this type, which are perishable to the inhabitants of the city and have a low chance of Transportation. As an example, a SWOT analysis was developed around the city on the organization and development of clusters specializing in the field of Dairy-Meat Livestock and processing and sale of raw materials in agriculture.(Table 3)

✓ in the studied development of clusters in the direction of deep processing of dairy products, the food industry requires the modernization of production funds, the renewal of specialized product carrier vehicles, the complex mechanization and automation of production and the provision of skilled labor.

✓ in the studied development of clusters in the direction of deep processing of dairy products, the food industry requires the modernization of production funds, the renewal of specialized product carrier vehicles, the complex mechanization and automation of production and the provision of skilled labor.

✓ it is advisable to place deep-processing clusters of dairy-meat products in several districts or regions with a high production capacity of large and raw materials, for example, geographically close, between natural pastures Ohangaron, Parkent, Bostonian districts and suburban districts, clusters of the same kind can be organized godly.

**REFERENCES**

- Porter, M. (2006) Konkurencija, Vil'jams, Moscow, p. 20 (in Russian). Ibid., p. 25
- Egorova L.A. The concept of management of the industrial component of the agro-industrial complex of the country, the region and its enterprises: dis. ... candidate of Economic Sciences. - Kislodovsk, 2005. - p. 26.3.
- Islankina Ekaterina Alekseevna "Cluster approach in economics: Conceptual foundations, history and modernity".; <https://www.hse.ru/data/2015/06/05/1097350627>
- At the presidency of the Republic of Uzbekistan in 2017, 19 medals of the "Bukhara region of the modern cotton-Tokimachilik cluster of Yaratish measures" were awarded PK-2978.
- Resolution of the President of the Republic of Uzbekistan dated September 15, 2017 "Syrdarya region of the modern cotton-Tokimachilik cluster of Yaratish cluster of measures taken" PK-3279.
- <https://kun.uz/95712817>.