Theoretical and methodological aspects of increasing the competitiveness of agricultural clusters in Uzbekistan

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Abstract— This article highlights the issues of increasing competitiveness in the cluster system of Uzbekistan. According to the author, the use of the cluster method is of great importance to existing regions where interconnected businesses play a significant role in strengthening the economic independence of the regions. This approach allows identifying economically priority sectors and projects. At the end of the article the author presents the scientific conclusions and recommendations.

Index Terms—farms, cluster, competitiveness, industrial clusters, foreign clusters, potential clustering.

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1 Introduction

The level of competitiveness of a country is determined by the competitiveness of regional economies. As M. Enright [13] rightly notes, national competitive advantages are created at the regional level. Competitive regions attract investment and innovative technologies, create conditions for the economic development of the whole country.

The concept of the cluster represents a new point of view on the development of national and regional economies and is considered one of the most significant factors of the region's competitiveness at the present stage.

Many scientists conclude that the national economy of the countries that occupy the top lines of competitiveness ratings, in fact, consists of regional economies. [14] In recent decades, interest in the formation of technological (innovative) clusters has increased, since the cluster structure of the economy is in better harmony with the very nature of competition and the sources of achieving competitive advantages. Cluster members do not directly compete with each other because they serve different industries. It should be noted that public and private investments aimed at improving the conditions for the functioning of the cluster benefit almost all economic entities. The advantages of creating technological (innovative) clusters are obvious from the point of view of ensuring and increasing the competitiveness of the national economy in the future, since the most important criterion for the formation of a cluster is the degree of its influence on the efficiency of production as a whole.

According to Harvard Business School, in the US economy more than 32% of employment is provided by clusters; in the Swedish economy, 39% of the working population is employed in clusters. The level of labor productivity and wages in clusters is significantly higher than the national average. In the near future, to accelerate the industrial and innovative development of the economy of the republic, it is necessary to ensure that industry growth rates are higher than GDP growth, which can be achieved through the development of

innovative clusters. [15]

Using world experience, the formation of a competitive NIS structure is possible in the republic on the basis of the development of innovative intersectoral industrial (IMPK) and territorial clusters (ITC), the main task of which is to generate innovations and commercialize their results. In this case, it is possible to invest in innovative projects, the integrated development of modern scientific and innovative, investment, financial, industrial and social infrastructure, which in the form of integrated cluster structures can be developed within the framework of the NIS of the republic.

2 LITERATURE REVIEW

The issues of social and economic development and prospects of the agricultural sector, including the livestock sector, have been studied by many foreign scientists. In particular, I. Bright [1], R. Jochimsen [2], K.R. McConnell [3], Y. Schumpeter [4], K. Lewis [5] and others conducted theoretical research. In their research, the conceptual approach is mainly based on the socioeconomic development of the agricultural economy, including the livestock sector.

Scientists from the Commonwealth of Independent States: V.N. Afanasev [6], A.P. Zinchenko [7], M.V. Braslavets [8], P.K. Kundius, I.N. Chuev, V.V. Kovalev, Bashkatov [9], AI Gozulov [10], Yu.E Gaabe [11], A. Ivashchenko [12] and others in their research have paid special attention to improving the statistical methodology and database of the livestock sector.

Economic development of agriculture have been investigated by economists T.Shodiev, B.B. Berkinov, D.N. Saidova, B.T. Salimov and others. Some scientists researched issues of textile clusters and development in Uzbekistan as well as N.Q.Yuldoshev [8], Ergashxodjaeva Sh.J. [24], K.S.Kyvyakin [24;25], B.O.Tursunov [21;22;23;26;30;31] and many other scientists.

However, these studies do not have a comprehensive theoretical and methodological aspects of increasing the competitiveness of agricultural clusters in Uzbekistan. These aspects served as the basis for choosing the theme of this paper, defining its goals and objectives.

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3 REVIEW OF FOREIGN PRACTICE

Industrial clusters is a group of geographically localized interconnected companies, united in a production chain, within which the final product and value added are created. Developed clusters have specialized supplier bases, a more extensive array of related industries, a wider scale of supporting industries, and deep ties with consumers. [16]

The cluster approach is an integral part of the theory of the spatial organization of production. The cluster phenomenon is becoming a key component of the economic development of countries and regions. In the USA, Great Britain, France, Germany and other developed countries, more than half of the industrial output is produced and exported through clusters. [17]

Studies conducted abroad show that clusters stimulate a significant increase in productivity and innovation. Companies win by having the opportunity to share positive experiences and reduce costs using the same services and suppliers. In the economies of many countries, clusters play a significant role. There are over 2,000 clusters in India, of which 388 are industrial and 1,657 are artisan associations. Clusters supply over 60% of the country's export products, and some large clusters produce up to 90% of certain types of products manufactured in the country (clothing, jewelry and leather products).

In China, at the beginning of the 21st century, a quarter of the 404 administrative cities in the Pearl River Delta formed 100 industry clusters. In the province of Zhenyang, there were about 300 clusters, which in terms of capacity were among the ten leaders in their sector. Moreover, clusters existed in parallel with free economic zones. 6 More often than not, the coordinating function of the activities of enterprises belonging to the cluster is performed by the leading company, around which the cluster is being built.

In France during 1997-1999 It was developed and approved 99 projects of regional development programs, united by a system of production clusters. In the course of this activity, 4.3 thousand enterprises formed a certain network system, concentrating about 30 of the largest companies. [19]

The experience of China is most interesting for Uzbekistan. Each Chinese cluster has its own history, but after analyzing many of them, the common elements that lead to the formation of clusters were identified. [18]

Production or business experience in specific industries. Many clusters (for example, in the shoe and textile industries) arose in sectors of the economy in which considerable experience had already been gained in the implementation of production and business (including representatives of the Chinese diaspora abroad).

Foreign direct investment and the diaspora. The cluster economy in China is mainly driven by overseas Chinese and foreign companies.

Support for industry associations and other intermediary organizations. An increasingly important role in China's clusters is played by industry associations. For example, in Wenzhou in 1991, shoe companies formed an industry shoe industry association. Now it has 1,138 members and it has 28

branches.

The association plays a large role in supporting clusters, namely, it connects local authorities and companies, introduces new technologies and helps improve the quality of shoes, helps companies enter and expand their presence in the local and foreign markets by providing marketing and branding services, providing information support, promotion trade, training, etc.[19;20]

5 ANALYSIS OF THE STAGES OF THE CREATION OF LLC TST AGROCLASTER IN THE KUYICHIRCHIK DISTRICT OF THE AGRICULTURAL COMPLEX

As additional measures to increase the competitiveness of enterprises and the development of industrial cooperation in Uzbekistan, we can recommend:

- -Expansion of the number of free economic zones (SEZ) with appropriate infrastructure;
- Studying the possibilities of developing cooperative ties and creating clusters in the sectors of the economy of Uzbekistan:
 - Development of personnel potential of cluster industries;
 - -Decrease in the level of state intervention in agriculture.

Table 1. Possibilities of developing cooperative ties and creating clusters in the sectors of the economy

Industry	Sources of raw materials (for tourism - objects of tourist ser- vices)	Opportunities for import substitution	Export opportunities	Opportunities to participate in interna- tional clusters
Textile industry	Mostly local raw materials (cotton, silk)	Wide oppor- tunities	Very broad opportunities (experience of many developing countries with their own raw materials base)	Wide potential (while removing barriers to participation in the international division of labor)
Meat and dairy industry	Mostly local raw materials (developed livestock)	Wide oppor- tunities	Medium opportunities (no signifi- cant compar- ative ad- vantages)	There are potential opportunities (while removing barriers to participation in the international division of labor)

Fruit and vegetable industry	Mostly local raw materials (fruits and vegetables)	Wide oppor- tunities	Good oppor- tunities (cli- matic condi- tions give comparative advantages in the produc- tion of fruits and vegeta- bles)	Wide potential (while removing barriers to participation in the international division of labor)
Building Materials Industry	Mostly local raw materials (there are rich reserves of inert materi- als and hy- drocarbons, a relatively developed chemical industry	Wide oppor- tunities	Medium capacity (high trans- portation costs)	Weak poten- tial
Furniture industry	Mostly im- ported raw materials	Wide oppor- tunities	Low oppor- tunities (no comparative advantage)	Weak poten- tial
Tourism	The presence of a large number of cultural mon- uments (cul- tural tour- ism), natural sites (ecolog- ical tourism)	Wide oppor- tunities	Wide opportunities	Wide potential opportunities (while removing barriers to participation in the international division of labor and the development of tourism infrastructure)

Our analysis showed that at this stage, the state needs to concentrate on creating favorable conditions for the formation and development of clusters:

- removal of barriers in legislation, especially tax, to deepen specialization, development of industrial cooperation and enlargement of production;
- Removing barriers to access of local producers to local raw materials;
- liberalization of the foreign trade regime and improvement of conditions for the participation of enterprises of Uzbekistan in the international division of labor;
- liberalization of the banking system and improving the conditions for the development of financial

markets;

- reduction of the tax burden on the economy, primarily taxes on revenue and labor;

- improvement of the research financing system.

One of the main benefits of a cluster approach to the development of regional economies is to strengthen the role of economic factors and reduce the role of administrative factors. The role of regional administrations is only at an early stage. The application of the cluster method is of great importance, especially for those regions where related businesses exist. Clusters play a major role in strengthening the economic independence of the regions. This approach allows identifying economically priority sectors and projects.

Further deepening of structural reforms and direct investment in the development of agricultural cluster production, introduction of effective methods of cultivation of raw cotton, cereals and other products, organization of deep processing and deep processing of high value added products, and, therefore, efficiency in the agricultural sector. of the Cabinet of Ministers of the Republic of Uzbekistan from December 1, 2018 of No. 974 "Modern agriculture in Lower Chirchik district of Tashkent region Decree "On measures for establishing a cluster of industrial goods." [32]

Agro-industrial clusters on the production, deep processing of cotton, grain and other agricultural products, as well as livestock and fishery complexes through attracting foreign direct investment, funds of international financial institutions, credit lines of foreign banks and commercial banks. organized.

The Cabinet of Ministers of Uzbekistan adopted a resolution on measures on creation of modern agro-industrial clusters in Lower Chirchik district of Tashkent region. According to the document, Tashkent Cotton Textile cluster (TST cluster LLC) will be created in the form of a limited liability company with foreign investment. The initial capital of TST cluster LLC is formed by contributions from Paraglide limited (UK) and Petromaruz Capital (Pm Capital). The cost of the TST cluster is \$ 225.8 million, and the cluster is being created on 35,400 hectares. In 2019-2023, 10 manufacturing plants will be set up here for the production of cotton, grain, textile, livestock and fisheries complexes, horticulture, biogas and viticulture. The project will be financed due to \$ 185 million in foreign loans and \$ 40.8 million in foreign direct investments.

In accordance with the Resolution of the Cabinet of Ministers No. 974 as of December 1, 2018, the list of "TST cluster" LLC and its agricultural enterprises includes:

- 1. Agricultural enterprises producing raw cotton, cereals and other agricultural products.
- 2. Enterprises for the processing of raw cotton and its preparation.
- 3. Textile complex for deep processing of cotton fiber, ready textile and sewing products.
- 4. Horticulture (processing and storage of fruits and vegetables).
 - 5. Oil and fat enterprises.
 - 6. Fish breeding and processing complex.
 - 7. Enterprises for deep processing of grain crops.
- 8. Livestock Complex (milk and meat production and processing).
- 9. Enterprises for the production of biogas and biogumus from the waste of the livestock complex.
 - 10. Enterprises for growing vegetables and greens (modern

greenhouse complex).

Table 2 Information on the cotton raw material of 2019 in «TST Agro cluster» LLC, Lower Chirchik district, Tashkent region

the in	ne of ndica- ors	Contract plan, tons	One day		From the be- ginning of the season	
	l raw ton	27 000	80 tons	0,30 %	29 595 tons	109, 61 %

As can be seen from the table-2 above, the raw cotton produced since the beginning of the season has exceeded the contractual plan.

Equipment, special vehicles, agricultural machinery, spare parts and accessories, logistical resources, raw materials, plants and plants imported by TST Cluster LLC and agribusinesses according to the lists, formed in accordance with the established procedure for their production needs. Exemption from customs duties (except customs duties).

Table 3. Expected benefits from ongoing investment pro-

jects				
Directions	Jobs to be created	Annual tax revenue, bln. Soum	Increa se in produc tivity, t / ha	Industrial and consumer goods
Cotton growing	3 200	12,0	20,0 → 25,7	8 million pm fabrics, 3 mil- lion. finished knitwear
Gardening	1 400	10,4	→ 45,0	36.5 thousand tons of flour and 50 thousand tons of feed
Rice	600	2,6	$17.7 \rightarrow 40.0$	9,000 tons of rice, 2,460 tons of feed
Cultiva- tion of soy	50	0,3	50,0	3,000 tons of soybeans
Fishing	450	1,3	13,9 → 43,2	10,000 tons, of which:
Livestock	400	2,8		- 5,000 tons of live fish;
Gardening	250	0,6		820 tons of canned food;
Green- house	150	0,4		670 tons of semi-finished products and preserves;
Agro- service services	350	2,3		
Total	6 850	32,7		

Source: From the general database of projects implemented by «TCT cluster» LLC

Table 3 below shows the expected impact of investment projects: job creation in 2019-2023, productivity growth, output of industrial and consumer goods. The main area of efficiency is cotton, with 3,200 jobs created and annual tax revenues of \$ 12 billion. soums, the increase in productivity by 25.7 centners / ha, and the output of industrial and consumer goods - 8 mln. pm fabrics, 3 million. pieces for ready-made knitwear.

6 CONCLUSIONS / RECOMMENDATIONS

The main directions of creation and development of agricultural agroclimates in Uzbekistan should include the leading position of the processing enterprise, the quality of agricultural products in the raw sector, the innovative nature of the joint activities of the participants, and the internal competitiveness of agricultural clusters.

- The cluster should include farms and dehkan farms suppliers of agricultural raw materials, which provide the activities of the leading companies. At present TST agroclaster is engaged in large farms and farms.
- It should be formed on the basis of scientifically-based and technologically feasible integrated solutions, as well as investment of profitable investments. Currently, the TST agroclaster program for 2019-2023 will be formed by contributions from Paraglide Limited (UK) and Petromaruz Capital (Pm Capital).
- The goal of agroclaster should be innovative, to create a business environment, including integrated government mechanisms or government structures to ensure state regulation, technology, human resources and social conditions, cluster stability and long-term development opportunities. support through direct participation.

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