



## THE IMPACT OF THE ORGANIZATION OF A COTTON-TEXTILE CLUSTER ON THE SOCIO-ECONOMIC DEVELOPMENT OF THE REGIONS

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### ABSTRACT

This article analyzes the effectiveness of the organization of cotton-textile clusters compared to traditional cotton-growing, the efficiency of cluster organization in the regions, the contribution to the economy of the district on the basis of the IMPLAN model. Also, based on the forecasts of EMSI, the number of jobs that the cluster system can create in a district and its impact on the socio-economy of the population were studied and scientific and practical recommendations for production were given.

### INTRODUCTION

As a result of reforms in the agricultural sector in Uzbekistan, different types of ownership and entrepreneurship are entered. While the state and community-based management system has operated in the form of private, mixed, and other forms of entrepreneurship based on the peasant, farmer, joint-stock company, and other forms, not all of them have adapted to agrarian reforms in cotton and grain growing. As a result, from 2018, the cluster system in the cotton industry has entered the country in the form of a new system.

Agriculture is one of the most important sectors in the development of the country. In this regard, the sector has been a regular focus of the Government. The Address of the President of the Republic of Uzbekistan Sh. Mirziyoyev to the Oliy Majlis on the most important priorities for 2019 also states that "... reform of the agricultural management system, introduction of advanced technologies for rational use of land and water resources, food security is our duty. Next year, it was decided to establish 48 cotton-textile clusters in order to increase cluster cotton production to at least 52% [1].

Sufficient work is being done by the state on the basis of foreign experience in the development of the cotton and textile cluster sector and the creation of adequate conditions for them. At the same time, cotton and textile enterprises are gradually carrying out work. However, what is the effectiveness of the work done by them, how well the enterprises of cotton and textile clusters have correctly identified their priorities, and what can be achieved in the field of cotton, processing, and export of their products to foreign markets? What is the impact of enterprises on the economy and social life of the regions? - The questions remain open. One of the most pressing issues in the country today is to increase the positive effects of these issues, the scope of which is expanding across the country, through a scientific and practical approach.

**Key words.** Cluster, economic cluster, cotton-textile production cluster system, IMPLAN model, forecasts of EMSI

## DATA AND METHODS

This article is based on the available data of the cotton-textile cluster established in Narpay district of Samarkand region of the Republic of Uzbekistan. We used research materials, scientific works of national and foreign researchers, as well as the Ministry of Agriculture, the Ministry of Economy, the State Statistics Committee and government websites ([www.press-service.uz](http://www.press-service.uz), [www.agro.uz](http://www.agro.uz)). During the analysis, we use quantitative and qualitative methods, Excel. All scientific conclusions are based on research results.

## MAIN RESULTS AND DISCUSSION

The organization of clusters in agriculture and the determination of its legal status is one of the promising areas of research [2]. The word "Cluster" means - to gather forces; to gather, centralize, group. There are a number of ideas in the economic works of literature about the "cluster" method, from which, according to M. Porter, its value is determined by the fact that the cluster includes the production process. It is a factory in new conditions, where scientific developments are practically turned into products at the same time. Clusters centralize suppliers, service providers, and research institutes in a region in a single industry [3]. Also, from the point of view of O.V.Ibraeva, the cluster identifies and activates the interaction between the producer and the scientific community [4]. The existence of an innovation cluster in the region provides an opportunity to participate in various projects of enterprises, universities, research institutes. According to Sh.N.Ruzinazarov, the cluster is a broader organizational and legal form of innovative entrepreneurship, a type of innovative activity aimed at the ultimate goal and result, which includes an integrated process of production of goods and services, taking into account the specifics of each industry [5].

Agricultural Entrepreneurship Cluster is a commercial organization with a civil-legal status, an organizational and legal form of innovative activity for the sale of export-oriented products in a particular area on the basis of foreign economic agreements of the appropriate legal form. Another important issue is that the expected result cannot be achieved without the legal support of business and education cooperation in agriculture [5]. The literature pays special attention to the issue of public-private partnerships in agriculture. Public and private partnerships are extremely important in agriculture and are equally beneficial and beneficial for the state and the entrepreneur. Today, the most important issue is that the state is also directly interested in the production of competitive agricultural products. It is also necessary to ensure food security, further expand the participation of agricultural businesses in the domestic and foreign markets. In addition, it requires a special legal procedure for storage, processing, and shipment of agricultural products for sale. To this end, it is necessary to build modern warehouses, storage facilities, as well as solve many social problems in the village. It is no exaggeration to say that public-private partnerships will be the most optimal model of action.

Public-private partnership is a joint activity of public and private businesses aimed at comprehensive modernization of the industry in order to produce competitive agricultural and food products, ensure sustainable development in rural areas, and ensure food security. Public-private partnership in agriculture combines science, education, management, and provides access to all land, labor, financial information, and innovation resources in technical, technological, organizational areas.

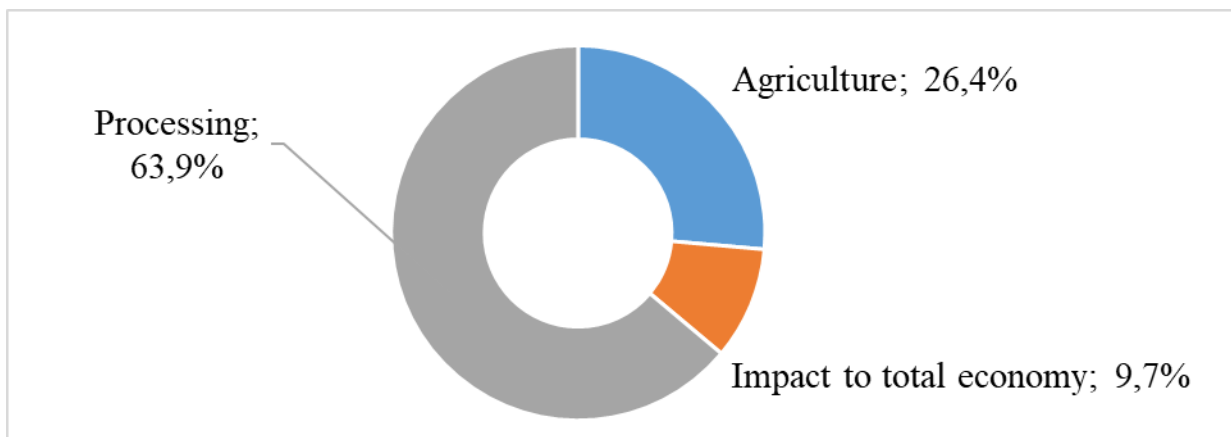
An economic cluster is interconnected organizations (companies, corporations, universities, banks, etc.) grouped in a particular region: suppliers of products, components, and specialized services; infrastructure; research institutes; are universities and other organizations that complement each other and increase the competitive advantages of individual companies and the cluster as a whole.

The cluster has the characteristics of mutual competition of its participants, the cooperation of participants, the formation of unique competencies of the region, the formation of the concentration of enterprises and organizations in a particular region.

Clusters are a form of interaction between organizations and social groups within a common value chain. Clusters should be separated from holdings, professional associations, techno-parks, and districts, regional innovation systems, regional production complexes, and industrial agglomerations.

“Maroqand-Sifat LLC” Cotton-textile Cluster in Narpay district of Samarkand region was established in accordance with the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated January 25, 2018 "On measures to introduce modern forms of organization of cotton and textile production", including 1,400 ha of cluster area and 9,317 ha of land under contract with 222 farmers. In the “Maroqand-Sifat LLC” Cotton-textile Cluster, the yield of 31.8 thousand tons of raw cotton in 2019 increased by 29.7 centner/ha compared to 2018 (20.9 c/ha).

Along with farming and other components of the system, the agricultural cluster also plays an important role in the overall economic performance of the district. The IMPLAN (Economic Efficiency Analysis for Planning) model is used to measure the direct economic impact of an agricultural cluster on the economic outcomes of a cotton-textile cluster.



**Figure 1. IMPLAN model of the impact of the cotton-textile cluster system on the regional economy [7]**

As shown in Figure 1, if we calculate the data for 2018 in this model, the agricultural cluster will contribute 260103.3 mln. UzS or about 11.4% of the district production (the value of the regional output of the district in 2018 amounted to 2271.4 billion UzS). The highest of the three segments measured in the model is accounted for by the manufacturing sector, which accounts for 63.9 percent of industrial production, followed by agriculture with a share of 26.4 percent in the manufacturing sector (70,221.7 mln. UzS), the additional effect on the overall economy will not be less than 9.7%. We know the value of cotton growing in agriculture, of which 260103.3 mln. UzS. It is calculated that it can contribute more than UZS. This is 3.8 times more than the district's cotton crop in 2018.

In addition to revenue growth, it was studied how many additional jobs the creation of the cluster system would create in the district. Employment forecasts developed by EMSI are used to determine this [8]. These calculations provide for the determination of the number of possible jobs in future conditions if a cluster system is introduced. According to the EMSI forecast, the establishment of a cluster system in agriculture, which

previously had a coefficient of 1 in the number of employees, will become a coefficient of 0.45, and the Cotton-Textile Cluster will create additional jobs in the following quantities: in processing - a coefficient of 0.18. in other sectors - a factor of 0.29, in the trade and supply system - a factor of 0.08 (Figure 2).

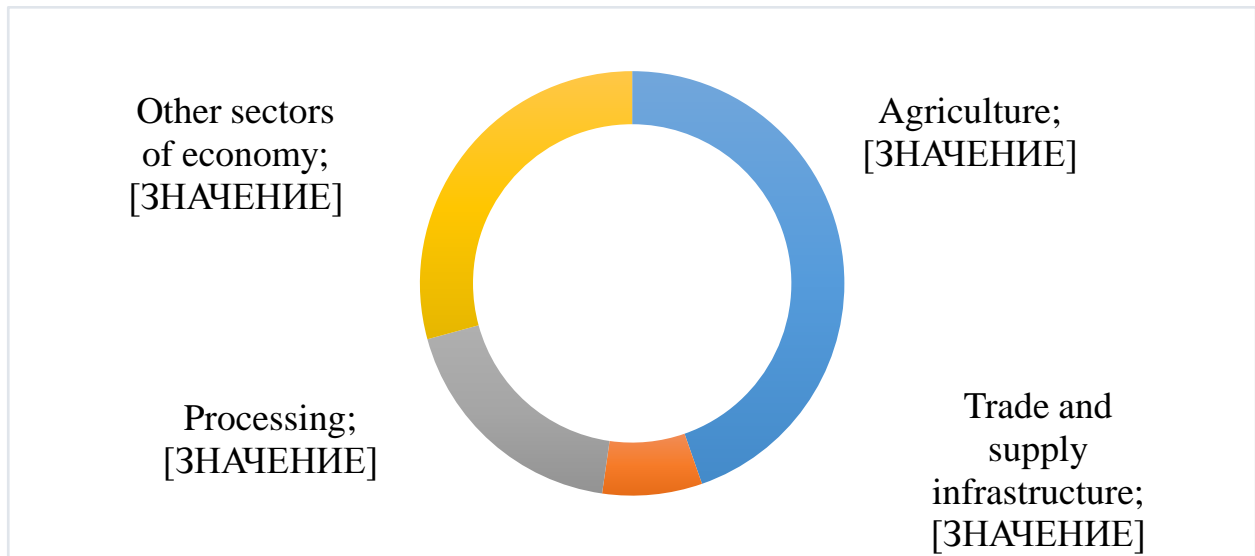


Figure 2. EMSI forecast of additional jobs creation by the cotton-textile cluster system

Based on the EMSI forecast, we calculated how many additional jobs the Narpay cotton-textile cluster could create in the district (Table 1).

Table 1. Analysis of the forecast of additional jobs created in the system of the cotton-textile cluster of Narpay district on the basis of EMSI forecasts

№	Sectors of Economy	2018	Coefficient	Jobs are created	New additional jobs
1.	Agriculture	5427	0,45	5427	0
2.	Trade and supply infrastructure	x	0,08	923	923
3.	Processing	x	0,18	2248	2248
4.	Other sectors of economy	x	0,29	3553	3553
	Total	x	1	12151	6724

\*Source: the data of the Statistics Department of Narpay district

Analysis of Table 1 shows that, based on the EMSI forecast, a total of 6724 additional jobs can be created in the cotton-textile cluster system of Narpay district, including 2248 jobs in the processing industry, 923 jobs in the trade and supply infrastructure system, 3553 jobs in other sectors of the economy. Even if one job is considered to represent one family, with an average of 5 people in a family, economic calculations show that 33,618 people will be socially protected as a result of the jobs created.

## CONCLUSIONS

Taking into account the above comments, the following proposals were developed:

1. In the organization of the cluster system, the mutual interests of all entities in corporate governance must be preserved;
2. Interference of local state authorities in agriculture should not be allowed. It is enough for them to organize the first meeting in the form of a seminar only for the Investor and farm managers;
3. Allowing the cluster system to operate on the basis of a business plan developed by the Investor;

4. Due to the low efficiency of agricultural production, it is necessary to take into account the nature of the sector in the redistribution of income in the cluster system.

5. It is necessary to provide the cluster system with qualified personnel, for which it is important to transform one of the abolished professional colleges into a professional college specializing in the system of the cotton-textile cluster, to organize training of highly educated personnel.

6. Further improvement of the legal framework of the cotton-textile cluster system.

7. Introduction of new modern advanced technologies in cotton growing. To do this, it is important to take into account that the time has come to modernize the cotton industry through the accelerated involvement of modern technology.

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