

The current state and level of development of the production forces of cotton and textile clusters

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Abstract. The article summarizes scientific and theoretical views on the characteristics and features of the formation of cotton cluster systems, briefly highlights the history of their appearance in Uzbekistan, the significance and consequences of clustering of the domestic cotton and textile industry, highlights the advantages and problems of introducing cotton and textile clusters into the agricultural production of Uzbekistan.

1 Introduction

Intensive demographic growth of the world's population has led to a maximum increase in demand for consumer products, especially for essential products. In countries with a prosperous investment background and sufficient economic potential, light industry is becoming a driver of economic growth and the main source of satisfying the rapidly growing demand of the end consumer. According to the Global Cotton Outlook international assessment system, "... the volume of production of raw materials for the textile industry for the next 10 years (until 2031) will increase in 2020 from 25.4 million. tons to 29.8 million tons, and sales volume will increase from 10.1 million tons to 11.3 million tons." In this regard, in countries with a high potential for the development of the textile industry, further improvement is required on the basis of the development of progressive and integration forms of changes in the organizational and managerial structure of enterprises in the industry [2].

A number of scientific studies are being carried out in the world to improve the functional efficiency of the processes of managing the activities of textile industry enterprises and managing integrated clusters with a single goal based on the sequence of production processes, increasing the efficiency of management based on the use of internal capabilities of enterprises, improving the mechanisms for managing the activities of enterprises that are part of the cluster, creating a value chain in the production of textile products, ready for consumption, to increase the competitiveness of clusters due to the competitive advantages of the industry. Today, one of the priorities is the introduction of effective models and management mechanisms in operating at full capacity, conducting scientific research to increase the volume of exports of textile products in the structure of general industrial products, increasing the volume of import-substituting products.

In our country, much attention is paid to the development of clusters of the cotton and textile industry as one of the most important areas of structural transformation and diversification of the national economy, increasing the economic potential of enterprises by

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fully forming a value chain in the industry, providing employment, increasing incomes and quality of life of the population.

In this regard, the Strategy for the Further Development of the New Uzbekistan for 2022-2026 defines important tasks "To deepen structural changes, increase competitiveness through modernization and diversification of the leading sectors of the national economy." Ensuring the effective implementation of these tasks entails the organization and improvement of the cluster management system, which are formed on the basis of horizontal and vertical integration of the activities of textile enterprises. The successful implementation of the set tasks necessitates an increase in the volume and quality of products, the competitiveness of enterprises and export potential due to the modernization of management processes at textile industry enterprises through the development of measures aimed at improving the mechanisms and models of management of textile industry enterprises [8, 9].

2 Methods

The article uses methods of scientific abstraction, structural analysis and synthesis, comparison, methods of statistical data processing, vertical and horizontal analysis.

3 Result of research

Practice has shown that the production and sale of finished products, unlike raw materials, significantly increase the competitiveness of the national economy, which, first of all, occurs due to the growth of added value, an increase in the number of employed and the number of operating economic entities. In this regard, the economy should be viewed through the prism of clusters, as they allow to strengthen the competitive advantages of industries, territories and the economy as a whole [7, 2].

Clusters have a long history of development. In the XIX century, the English economist A. Marshall was one of the first to develop the theory of local production, according to which geographically close enterprises, combining production efforts, can achieve a synergistic effect based on the possibility of significant cost reduction due to favorable conditions for access to raw materials, the availability of convenient placement of personnel potential and the relationship between participants [6, 3].

The term "cluster" became widely used by economists in the 80s of the last century. For the first time, the definition of a cluster was introduced by the American economist M. Porter, according to which a cluster is a group of neighboring interconnected companies and related organizations operating in a certain area and characterized by common activities and mutually complementary" [6, 4].

Porter in his writings revealed the phenomenon of clusters, justifying their key role in national, state and local competitiveness. The introduction of cluster systems, according to Porter, invariably entails an increase in employment, labor and entrepreneurial potential, requiring for this a certain amount of capital investment, attracting innovation and staff training [6, 1]. Porter has developed a rhombus of competitive advantages, according to which the level of competitiveness of a cluster is determined by four factors (Fig. 1).

The first of the factors means the need to create conditions for production, including, first of all, the availability of sufficient financial resources, a favorable legal environment for development, the availability of highly qualified labor, etc. The second emphasizes the importance of strategic plans for the development of clusters and the presence of market competition. The third implies the need to develop the domestic market and local demand for manufactured products. And, finally, the fourth factor contributing to the growth of the cluster's competitiveness is the presence of related industries and enterprises that will reduce

material costs, which, accordingly, will lead to a decrease in the price level and an increase in demand.

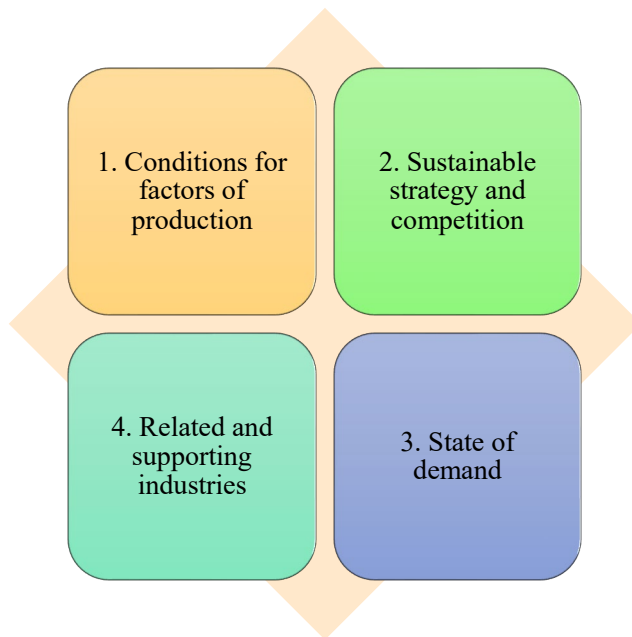


Fig. 1. The rhombus of M. Porter's competitive advantages [6].

Modern authors single out the presence of a leading enterprise that determines the cluster strategy, the territorial localization of enterprises participating in the cluster, the presence of stable long-term links between them, a unified management system, quality control, attracting innovation, etc. as characteristic features of clusters [1]. Other authors in their works emphasize the importance of clusters in economic and social development at the regional level [3, 4].

The formation of cluster systems in the Republic of Uzbekistan began in 2017. Fruit and vegetable, cotton-textile and grain clusters have received special development. In 2018, the total number of clusters was 47, in 2019 - 117, in 2020 - 420, in 2021 - 440 [8,10].

Due to centuries-old traditions and climatic conditions, cotton and textile clusters have received the greatest development in Uzbekistan, thanks to which we can talk about the organization of a single production cycle, starting with the cultivation of raw cotton, ending with the production of final textile products with high added value. The introduction of cotton and textile clusters in Uzbekistan is of great importance from the point of view of the growth of the private sector, accompanied by a decrease in state participation in the agricultural sector of the republic. In addition, the organization of cluster systems implies the use of the most effective methods of growing raw cotton, its deep waste-free processing, increasing productivity and employment in the agricultural sector, as well as attracting direct investment resources, including foreign ones, which is designed to significantly increase the competitiveness of the national economy.

The most important advantage of the introduction of cotton and textile clusters is the possibility of independent conclusion by the cluster organizers of direct contracts for the cultivation and supply of raw cotton with farms, the sale of over-planned manufactured products under direct contracts or through exchange trading, the introduction of waste-free production, as well as the possibility of independent pricing for intermediate or finished products [9].

The first cotton-textile cluster in Uzbekistan was created as an experiment in September 2017 with the participation of British companies in the Syrdarya region - the Century cluster joint venture. Currently, this cluster successfully carries out its production activities, introducing scientifically sound methods of growing raw materials, using resource-saving technologies, exporting finished products with high added value and attracting large volumes of foreign investment.

It is no secret to anyone that before Uzbekistan established its national independence, the republic was a raw material appendage, providing only raw cotton to other republics. At the stage of independence, the share of cotton fiber processing was almost seven percent, before the introduction of cluster systems, the above indicator increased to thirty-seven percent. To date, the processing of cotton fiber has reached one hundred percent, which made it possible to significantly increase the level of exports and the added value of the cotton and textile industry, as the following figures clearly testify: it is known that the sale of one kilogram of cotton fiber to foreign countries will bring the state one and a half US dollars, one kilogram of yarn - 2.5-3 US dollars, if from one kilogram of cotton fiber to foreign countries, if a kilogram of yarn is woven, then its cost will be 5-7 US dollars, and, finally, the finished textile product will enrich the country by 15-20 US dollars of added value [8, 7].

In 2020, the Association of Cotton and Textile Clusters was established in Uzbekistan, whose main functions are to solve problems arising in the activities of clusters. From year to year, the number of cotton and textile clusters in the republic is constantly growing, thanks to state support and the introduction of innovative agricultural technologies, cotton yields are increasing and the quality of textile products is improving.

The positive results of the introduction of cotton-textile clusters (Fig. 2.) predetermined the effective development of cotton-textile clusters in Uzbekistan.

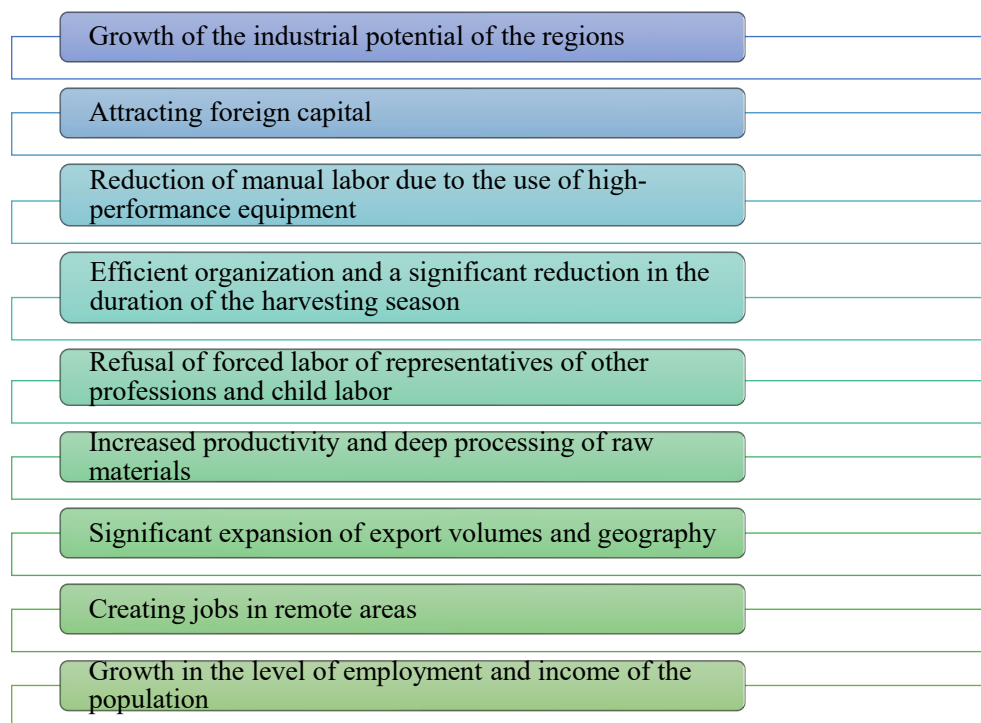


Fig. 2. Results of the introduction of cotton-textile clusters in Uzbekistan
Compiled by the author

4 Analysis

Thanks to the development of cotton-textile cluster systems, textile, domestic sewing and knitting products have now received wide recognition and are supplied to more than 70 foreign countries, the volume of annual exports in the sphere in 2022 has almost tripled compared to 2018, exceeding significantly exceeding import indicators (Fig. 3).

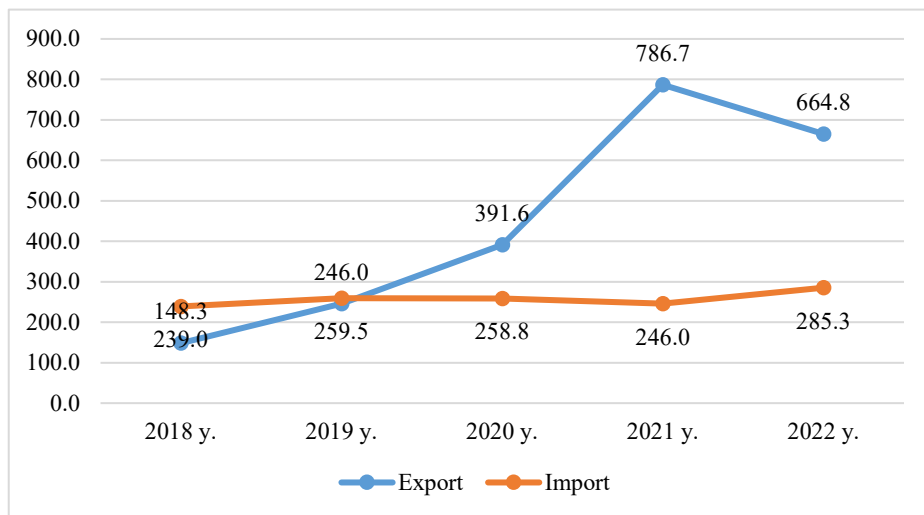


Fig. 3. Export and import of cotton and textile products in Uzbekistan, million US dollars
 Source: [9]

The share of textile exports in 2021-2022 increased significantly, the share of imports, on the contrary, tended to decline (Fig. 4), which allows us to conclude that the textile industry of the republic is export-oriented.

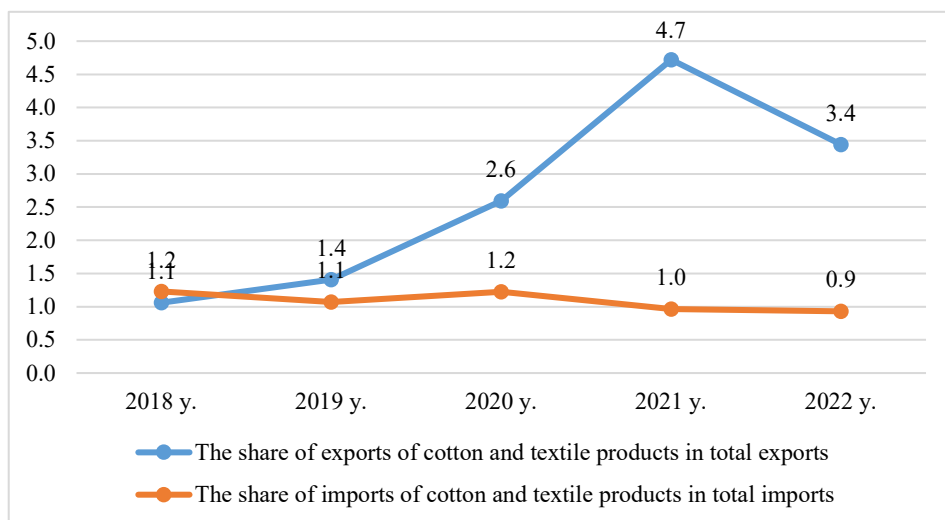


Fig. 4. The share of exports and imports of cotton and textile products in similar indicators in the republic, 2018-2022
 Source: [9]

The volume of products produced by cotton and textile clusters during the period of implementation of cluster systems has increased by about 40 times, reaching almost 5 million tons per year by the end of 2022. Cotton yields also tended to increase from 26 c/ha in 2018 to almost 37 c/ha in 2022 (Fig. 5).

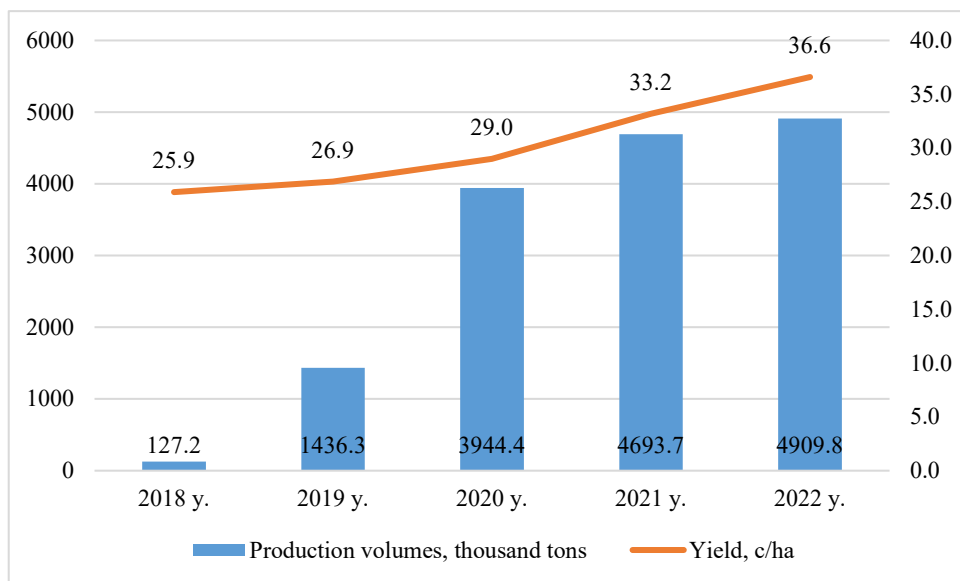


Fig. 5. Production volumes of cotton and textile clusters of Uzbekistan and yield in 2018-2022, thousand tons
 Source: [9]

The introduction of cotton-textile cluster systems allowed to significantly increase the number of jobs, which contributed to an increase in the level of employment and income of the population, primarily living in remote corners of the republic (Fig. 6).

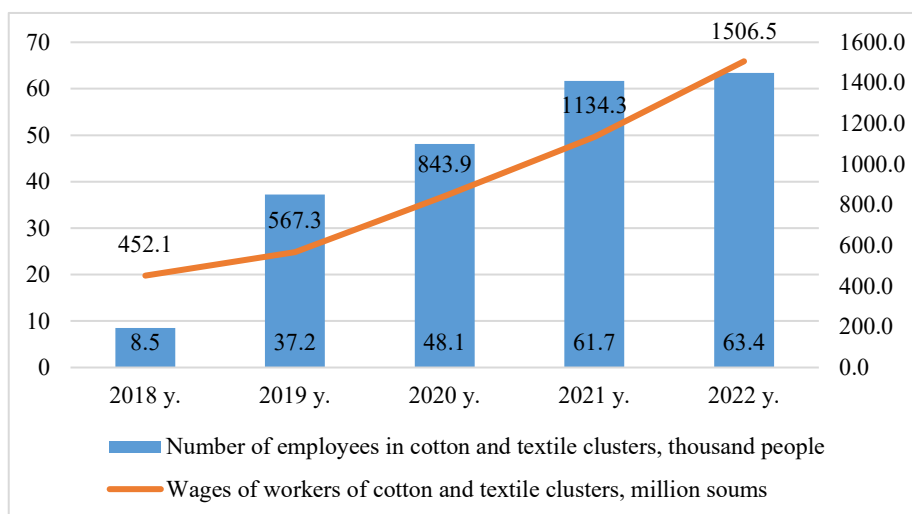


Fig. 6. The number and wages of workers of cotton and textile clusters in Uzbekistan in 2018-2022
 Source: [9]

5 Conclusions

Thus, the study allowed us to conclude that the introduction of cluster systems in the cotton and textile industry of Uzbekistan had a predominantly positive result - an increase in production volumes and an increase in cotton yields, a significant improvement in the quality of textile products, an increase in the volume of attracted investment resources and the introduction of innovative technologies into the agricultural sector, an increase in employment and income of the population, integration and harmonization of industry with the agricultural sector, which in general led to a significant increase in the level of competitiveness of the national economy. However, there are a number of problems that create obstacles in the development of cotton and textile clusters, including legal and organizational ones (insufficiently developed regulatory framework for cluster activities, relationships between clusters and farms, etc.). But in general, cluster systems, due to the rational allocation of productive forces and a significant increase in added value in the agricultural sector, have shown their effectiveness and expediency.

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