

Increasing the economic efficiency of the cotton complex in a market economy

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Abstract. Uzbekistan has a fairly high economic potential for the development of agricultural production, the formation of the necessary food resources and the development of a raw material base for the processing industry. In recent years, despite the favorable situation in the world textile market, the development of the country's cotton complex is characterized by instability and decline, market transformations in the cotton complex have led to disintegration and a significant imbalance in its functioning. The development of monopoly structures in the field of sales of the industry's products is accompanied by distortions in the pricing system. The intra-industry disunity of the enterprises of the cotton complex does not allow rational use of the existing opportunities for the dynamic development of raw cotton production, its deep processing and increasing the efficiency of the cotton complex. Currently, only a tenth of the produced cotton fiber is processed in the republic, and the rest is exported outside the country.

1 Relevance of the research topic

The monopoly position of enterprises in the cotton processing industry, especially in the field of trade and purchasing services, has led to the infringement of the interests of cotton producers and the unprofitability of a significant part of cotton-growing farms. The measures taken by the republican and regional authorities to stabilize and develop the cotton complex are not systematic and do not give effective results. The decrease in purchase prices for raw cotton due to the situation on the cotton market does little to stimulate an increase in its production volumes. The sphere of its deep processing and production of finished products is developing cyclically and unsustainably.

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Cotton growing is characterized by such an unresolved problem as a low degree of integration and cooperation of peasant farms with other participants in the cotton and textile market, which makes it necessary to use new approaches to the effective functioning of the cotton complex. This, in particular, concerns the problems of ensuring the sustainable development of its raw material base, deep processing of cotton, improving the interaction between enterprises for the production, processing and marketing of cotton products, increasing their competitiveness, and implementing effective measures of state support and regulation.

Despite the presence of favorable economic conditions for cheap raw materials, labor and the growing needs of the world and regional markets for relevant products (yarn, cotton fabrics), the economic mechanism for the functioning of the industry is not aimed at achieving sustainable final results, developing cooperation and integration processes in the industry, which leads to significant losses of the state budget and losses of cotton producers and, in general, low efficiency and competitiveness of the cotton complex.

In this regard, fundamentally new strategic directions are needed for the development and increase in the efficiency of the cotton complex based on cooperation, integration and clustering, the development of effective management mechanisms, and the improvement of organizational and economic relations in the production process, deep processing and sale of cotton complex products.

The problem of increasing the economic efficiency of the cotton complex is complex and multifaceted, which necessitates a comprehensive study of the organizational and economic issues of the dynamic development of its raw material base, improving the economic foundations and mechanisms for intersectoral interaction between enterprises of the cotton complex, implementing measures for its state regulation and support, which determined the choice of the research topic, its relevance and national economic significance.

Despite a significant number of publications on the problem under consideration, many of its aspects in the market conditions remain the subject of heated discussions and need to be further developed. Most scientific works are limited to studies of the problems of improving the efficiency of individual related industries and economic entities of the agro-industrial complex, the issues of the impact of institutional changes on the formation of an effective system for the production, processing and marketing of agricultural products as a single organizational, economic and technological process for the production of the final product are poorly disclosed. Further research is needed on the mechanisms for integrating rural producers with processing and service enterprises, the implementation of effective measures of state regulation of the agro-industrial complex in order to increase the efficiency and competitiveness of the agricultural sector and its most important industries.

The aim of the study is to develop scientific and methodological aspects and practical recommendations for improving the efficiency of the agricultural sector based on the improvement of intersectoral economic relations and the development of integration agro-formations in the cotton complex.

In accordance with the purpose of the study, the following tasks are defined:

- research of theoretical and methodological foundations for increasing the efficiency and competitiveness of the agricultural sector;
- justification of cluster principles for organizing integrated structures in the industry;
- analysis of structural transformations;
- development trends and intersectoral contradictions in the cotton complex;
- substantiation of the prospects for the development of the industry and the development of mechanisms and forms of cooperation;
- integration and clustering in the production system;
- processing and sale of cotton products;

- development of proposals for improving the state regulation of the cotton complex.

The subject of the research is the organizational and economic mechanisms for increasing the efficiency of the cotton complex based on the development of cooperation, integration and clustering.

The object of the study is the peasant (farm) cotton-growing farms and cotton-processing enterprises of the cotton-growing regions of the country.

The theoretical and methodological basis of the study was the works of domestic and foreign authors, the results of scientific developments of scientific institutions and universities on improving the efficiency of the agro-industrial complex, cooperation and integration of agro-industrial production, the development of market relations, the formation of a mixed economy, the organization of the work of enterprises of various forms of ownership and management, peasant (farming) households.

2 Scientific novelty of the research

In the course of the research, results were obtained that determine the scientific novelty of the work and are the subject of protection.

1. The theoretical and methodological foundations for increasing the efficiency and competitiveness of the cotton complex in market conditions have been expanded.
2. Theoretically substantiates the need to create vertically integrated industries in the cotton complex through the application of cluster principles for organizing the development of the industry.
3. The tendencies of development of the branches of the cotton complex, the contradictions in their economic relations, which hinder its progressive and effective functioning, are revealed.
4. Trends in the development of the world cotton market are revealed, a feature of which in the countries of Central Asia is the transition from the export of cotton fiber to the organization of integrated cotton-textile complexes for its deep processing.
5. The prospects for the development of cotton growing are substantiated, taking into account the conjuncture of the cotton market.
6. The principles, forms and models of functioning of integrated structures in cotton growing are substantiated, the factors influencing the activation of these processes are systematized.
7. Organizational and economic mechanisms for the organization and functioning of the cotton-textile cluster in the country have been developed.
8. Practical recommendations have been developed to improve the economic mechanism of state regulation and target indicators for the development of the cotton complex have been calculated, taking into account the organization of the cotton-textile cluster.

3 The practical significance of the study

The scientific provisions and recommendations formulated in the work make it possible at a higher scientific and practical level to solve the problems of improving the efficiency of the functioning of enterprises in the system of production, processing and marketing of products, the development of mutually beneficial economic relations between enterprises of the cotton complex, connected by a single technological cycle from the production of raw cotton to finished products and activation of integration processes. Its practical significance lies in the methodological substantiation of the development of integration processes in cotton growing, the development of models, recommendations intended for direct use in the development and management of the industry. The recommendations arising from the

results of the study can be used in the development and implementation of government programs to improve the efficiency and competitiveness of the cotton complex.

4 Results and analysis of the study

Thanks to the development of cotton-textile cluster systems, textile, domestic sewing and knitwear 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, significantly exceeding imports (Fig. 1).

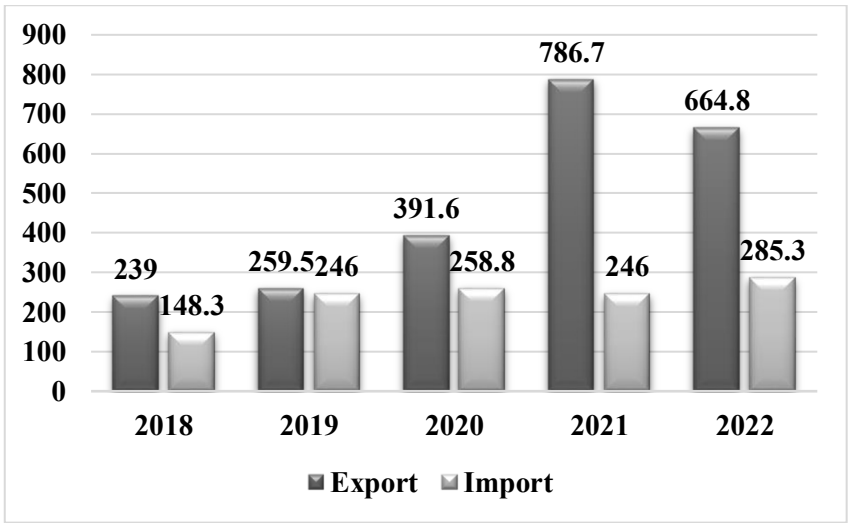


Fig. 1. Export and import of cotton textile products in Uzbekistan, US\$ million. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

Share of exports of textile products in 2021-2022. increased significantly, the share of imports, on the contrary, tended to decline (Fig. 2), which allows us to conclude that the textile industry of the republic is export-oriented.

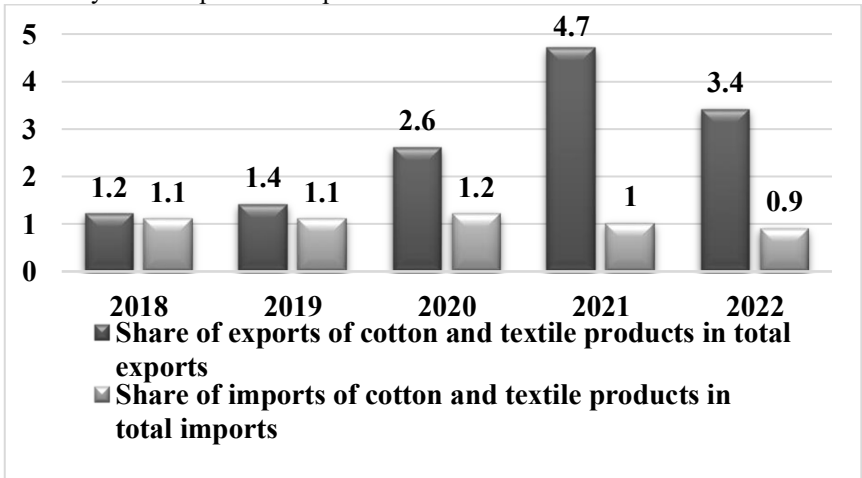


Fig. 2. Share of exports and imports of cotton and textile products in similar indicators for the republic, 2018-2022. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

The volumes of products produced by cotton-textile clusters during the period of implementation of cluster systems increased by about 40 times, reaching almost 5 million tons per year by the end of 2022. Cost indicators of production volumes also had a significant upward trend - in 2022 Compared to 2018, there was an almost thirty-fold increase, exceeding UZS 25 billion at the end of the study period (Fig. 3.5).

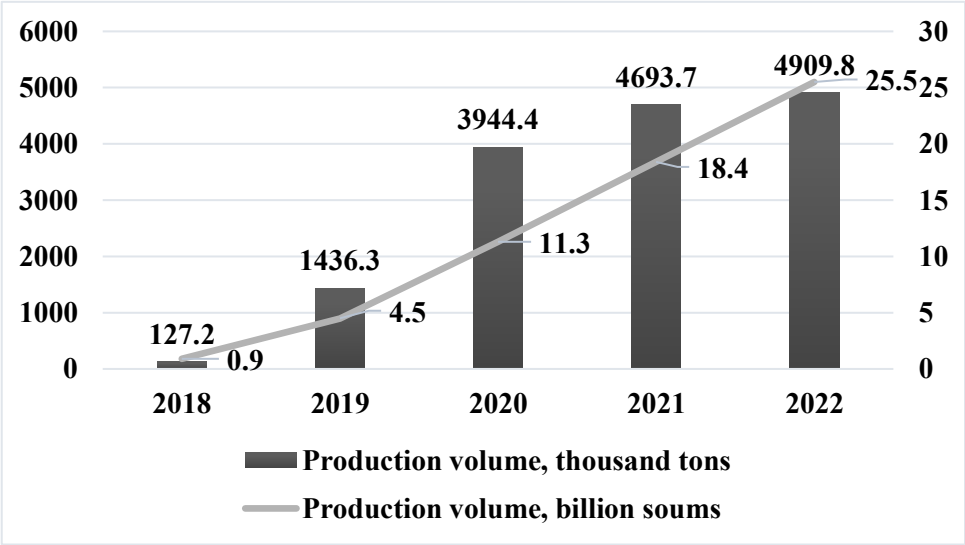


Fig. 3. Production volumes by cotton-textile clusters of Uzbekistan in 2018-2022. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

Cotton yields also trended upward from 26 q/ha in 2018 to nearly 37 q/ha in 2022 (Figure 4).

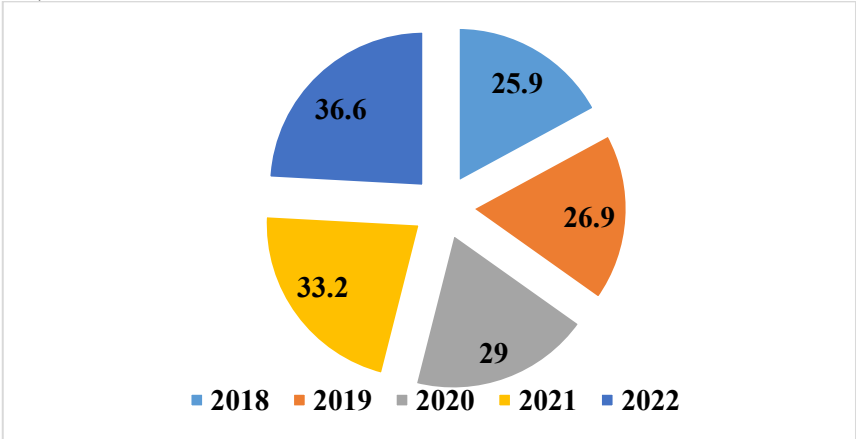


Fig. 4. Yield of cotton-textile clusters in Uzbekistan in 2018-2022, c/ha. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

The introduction of cotton-textile cluster systems made it possible to significantly increase the number of jobs and wages, which contributed to an increase in the level of employment and incomes of the population, primarily those living in remote corners of the republic. In 2022, compared to 2018, the number of jobs increased by more than 7.5 times, exceeding 63,000, the wage fund for this period of time increased by almost 3.5 times, amounting to 1.5 trillion sum. (Fig. 5).

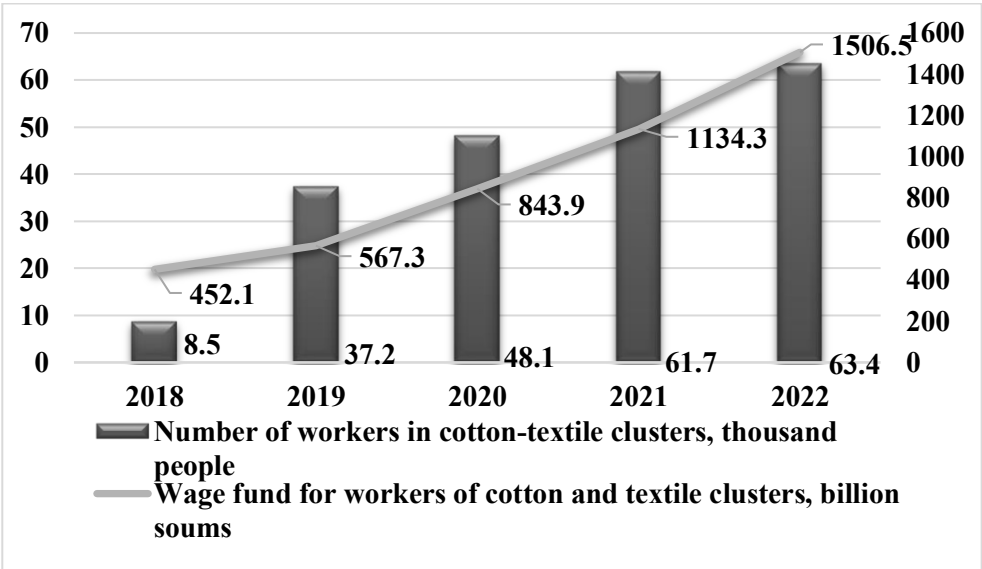


Fig. 5. Number and wage fund of workers in cotton-textile clusters in Uzbekistan in 2018-2022. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

The average salary of workers in cotton and textile clusters has increased significantly and in 2022 amounted to almost 2.4 million soums (Fig. 6).

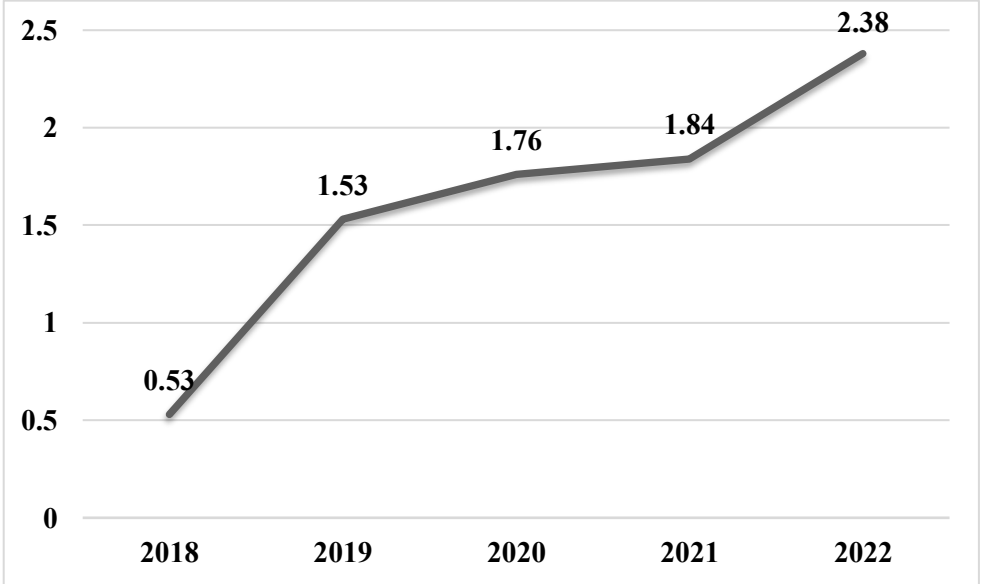


Fig. 6. Average salary of one employee of the cotton and textile cluster in Uzbekistan in 2018-2022, million soums. Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan <https://stat.uz/ru/>

Let us analyze the interregional localization of cotton-textile clusters in the Republic of Uzbekistan, for which we calculate the localization coefficient (L_c) of cotton-textile clusters, which characterizes the level of development of the region and the importance of

clustering for the regional economy. It is calculated as the ratio of the share of production of cotton-textile clusters in the production structure of the region to the share of cotton-textile clusters in the country:

$$L_c = (V_r / P_r) : (V_c / P_c),$$

where V_r - the volume of production of cotton-textile clusters in the region;

P_r - all industrial production in the region;

V_c - the volume of production of cotton-textile clusters in the country;

P_c - all industrial production of the country [21].

5 Conclusion

Under the conditions of the predominance of the small-peasant structure of agricultural production, the development of cooperation and agro-industrial integration activates the processes of attracting industrial and financial capital, the formation of medium and large-scale commodity production. The development of cooperation and integration processes in agro-industrial production contributes to the solution of the following main tasks:

- improvement of organizational and economic relations in the process of production, transportation, storage, processing and sale of agricultural products;
- intensification and industrialization of production to increase the competitiveness of manufactured products;
- creating effective production, economic and social conditions for participants in integrated structures;
- ensuring an effective management system;
- increasing labor productivity and, on this basis, increasing the efficiency of agricultural production.

Solving the problem of efficient organization of production, processing and marketing of agricultural products requires the development of integration of the branches of the agro-industrial complex based on a cluster approach to the organization of production. A cluster is a network of interacting enterprises with each other within a single value chain. The use of a cluster approach to organizing production helps to ensure economic, technological, and organizational unity of the process of production, processing and marketing of agricultural products, and intersectoral redistribution of final income. The creation of an agro-industrial cluster will help increase the financial and economic stability of its enterprises and, most importantly, which is especially important in the conditions of Uzbekistan, will allow mobilizing investment resources and channeling them for the development of technical re-equipment and modernization of agricultural production, which is the weakest link in the cluster.

In the context of globalization and integration of world economies, the ability of national economies to make the most of their natural climatic, territorial, and resource advantages is becoming increasingly important so that the products and services produced can successfully compete with foreign counterparts and be in demand on the world market, thereby ensuring high living standards of the local population. As a result of the implementation of unreasonable and ill-conceived methods of reforming the economy, Kyrgyzstan has turned into an agrarian republic with its inherent technical and technological backwardness, raw material orientation, poor development of processing agro-service structures, cooperation and integration in agro-industrial complexes. However, despite this and unstable development, the agricultural sector is the most important sector of the national economy, which plays a special role in employment and ensuring an appropriate standard of living for the population.

The growth of the raw material base of cotton growing in recent years has contributed to the development of the cotton processing industry, mainly in the direction of the growth of

ginneries for the primary cleaning of raw cotton and the production of cotton fiber. At the same time, the textile industry for the production of cotton yarn, fabrics and finished products was practically destroyed. Exports of cotton fiber to countries far and near abroad are growing, the level of its consumption and advanced processing at domestic enterprises is decreasing. Only 47% of cotton fiber is processed into cotton yarn and fabric. The industry's economy and the country's budget are suffering heavy losses. Integration ties in the cotton complex are poorly developed.

The weak link in the cotton complex is the underdevelopment of integration and agro-industrial formations. As a result of ill-considered and mass privatization, especially of processing enterprises and the sales sector, the previously functioning unified system of production, processing and sale of cotton complex products was completely destroyed. Market relations of the three main components of the cotton complex do not contribute to the stable and effective development of this industry. Due to their small size and lack of appropriate funds, the vast majority of cotton-growing farms do not have the opportunity to sell their products on favorable terms. In turn, the majority of cotton gin plants, due to the lack of necessary funds, underutilize their capacities and do not have real opportunities to establish close ties with cotton-growing farms for the purchase of raw cotton. Intermediary trade and purchasing organizations play a dominant role in the cotton complex system. In practice, these structures, taking advantage of the lack of regulation of their activities by the relevant state bodies and lack of control, set low prices for cotton fiber, while receiving monopoly high profits.

The emerging unstable situation on the cotton market orients the world's main cotton producers to organize deep processing of raw cotton and produce finished products from cotton fabrics. The leading cotton-producing countries of Central Asia, Uzbekistan, Turkmenistan, Kazakhstan, are carrying out the practical implementation of state programs for the development of cotton growing, within which the development of cotton processing and textile enterprises, which ensure a higher level of internal processing of cotton fiber, is given priority.

The technological chain of the cotton-textile cluster at the first stage will include the production of raw cotton, its processing, the production of yarn from cotton fiber, and the production of cotton fabric. The creation of a cotton-textile cluster will allow reviving the domestic textile industry, attracting foreign investors and expanding the range of locally produced textile products.

The formation and development of integration ties, as well as the creation of agricultural clusters in the republic, is impossible without further development and improvement of the state regulation system: financial and credit policy should be aimed at enhancing the attraction of bank capital through the creation of an insurance system and the definition of legal guarantees for investors and preferential lending to large agricultural formations with in order to stimulate the development of cooperation and integration processes in the industry in the tax sphere, it is required to completely exempt cotton processing enterprises that will be part of the cluster from VAT, income and land taxes in foreign economic policy, it is necessary to actively pursue a policy of state protectionism by introducing export duties on exported products, in in particular, cotton fiber and import quotas for textiles, which does not contradict the agreements of the World Trade Organization. Land policy should be aimed at further improvement of land legislation, which creates the necessary regulatory framework for the consolidation of land use and attraction of investments, the development of cooperation processes and the integration of the industry in the legislative sphere, it is necessary to develop and adopt a Resolution of the Cabinet of Ministers -textile clusters" No. 733 dated December 4, 2021, aimed at improving the state regulation of economic relations in the cotton complex.

The implementation of the named set of measures will ensure the inflow of private (domestic and foreign) capital for the development of modern competitive production and integration processes in the country's cotton complex, and will significantly raise the level of organizational and economic development of the industry.

The Development Strategy of New Uzbekistan for 2022-2026 defines “deepening structural changes, increasing competitiveness through the modernization and diversification of the leading sectors of the national economy” as the most important tasks. 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 tasks set necessitates an increase in the volume and quality of products, the competitiveness of enterprises and export potential through 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.

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

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