

FORMS OF POTENTIAL OF COTTON-TEXTILE CLUSTERS IN SUSTAINABLE DEVELOPMENT OF THE REGION

Ismailov Temur Pulatovich

Chairman of the Supervisory Board of GGT LLC, researcher

e-mail: temur_i_p@mail.ru

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ABSTRACT

This article discusses the content and existing forms of the potential of cotton-textile clusters in the sustainable development of the region. Also, conclusions are drawn on the effective use of the forms of potential of cotton-textile clusters.

Economic development is achieved through the effective use of regional opportunities, increasing labor productivity and resource efficiency, and ensuring the competitiveness of industries in the international market. Clusters are one of the effective instruments for achieving goals [1]. The development of clusters serves to develop various areas. In particular, during the period of innovative development of the economy of Uzbekistan, the formation of clusters in the country is becoming an indispensable mechanism for implementing a new national industrial and scientific and technical policy [2]. A developed form of clusters in this regard is the potential of cotton-textile clusters. These clusters are manifested in various forms in the sustainable development of the region. Cotton-textile clusters play an important role in ensuring the economic stability and social well-being of the region.

Their potential consists of several main aspects:

- stimulating economic growth. Clusters unite the cotton growing and textile industries in the region, turning the production chain into an integrated system. This leads to an efficient allocation of resources, an increase in production volumes and an improvement in the quality of products. As a result, a significant contribution is made to the growth of gross domestic product.
- increasing jobs and employment. Cotton-textile clusters expand the opportunities for creating new jobs, especially in rural areas and for young people. They help strengthen social stability in these regions and reduce poverty.
- strengthening export potential. Clusters increase the export potential of the region by producing products with high added value. This ensures competitiveness in foreign markets and increases foreign exchange earnings.
- innovations and technological development. Cotton-textile clusters create a platform for the introduction of innovations and the application of modern technologies. This increases production efficiency and reduces environmental impact.
- socio-economic development. The economic results obtained through the cluster system allow improving the social infrastructure of the region, developing education and health

services. This is considered an important factor for sustainable development. This potential includes not only economic, but also social and environmental aspects. In this regard, the main aspects of this potential are reflected in the following:

1) Economic potential:

- value chain management and value creation. The cotton-textile cluster includes the entire process from cotton production to processing into yarn, fabric, ready-made garments, and even industrial goods. At each stage of the process, added value is created and contributes to the regional economy. Instead of exporting cotton only as a raw material, converting it into yarn or ready-made garments generates more income and creates more jobs.

- increasing employment and promoting entrepreneurship. The cluster will create many jobs: from farmers working in cotton fields to specialists working in factories, designers, marketers, logistics workers, and retail workers. It will create opportunities for the development of small and medium-sized businesses (small workshops working with yarn, garment tailors, and accessory manufacturers).

- expanding export potential. By producing high-quality textile products and clothing, it is possible to increase exports and increase foreign exchange earnings. This strengthens the region's foreign economic relations.

- attracting investments. Studies show that clusters tend to attract domestic and foreign investments for the development of modern technologies, new production capacities and infrastructure.

- strengthening regional economic stability. The cotton and textile industry often becomes the main economic pillar of the region, which helps to diversify the economy and reduce dependence on a single product.

2) Social potential:

- reducing unemployment and ensuring youth employment. Clusters create many job opportunities, especially in rural areas, for young people.

- developing local personnel training and knowledge industries. The cluster requires qualified specialists to apply modern technologies, quality control and develop design. This stimulates the development of the education system and scientific and research activities.

- preservation and development of local traditions and crafts. Often, cotton-textile clusters can combine local craft techniques (weaving and embroidery) with modern production. This helps to preserve cultural heritage.

- improvement of quality of life. New jobs, more income, developed infrastructure (roads, schools and hospitals) will increase the overall standard of living for the population of the region.

3) Ecological potential:

- introduction of "green" technologies and improvement of ecological systems. The use of new technologies in sustainable cotton farming (organic cotton farming and water-saving irrigation) and textile production (low-waste technologies, safe use of chemicals and clean energy) will reduce the environmental impact. The introduction of water conservation and purification systems and the use of renewable energy sources are required.

- waste reduction and recycling. It is based on the creation of systems for processing waste (fabric residues) in the textile industry and the utilization or recycling of cotton stalks and other agricultural waste.

- rational use of natural resources. This is manifested in the application of scientific approaches to maintaining soil fertility in cotton cultivation and the rational use of water resources.

In conclusion, cotton-textile clusters have significant potential in the economic, social and environmental spheres for the sustainable development of the region. Through their development, the region can increase its competitiveness and implement large-scale positive changes. The potential of cotton-textile clusters for the sustainable development of the region is manifested in economic, social, technological and integration directions. They are an important tool for making the region competitive, increasing social well-being and ensuring environmental sustainability. These clusters serve as the main drivers for the development of the regional economy. Because they allow for the full use of raw materials, ensure the production of high value-added products, create jobs, increase exports, and activate the innovative and technological potential of the region. Therefore, cotton-textile clusters are an important instrument for the sustainable economic, social, and ecological development of the region.

References:

1. Sodiqov A.M., Begimova D.K. Assessment of the clustering potential of regional economic sectors. // Science and innovative development, 2022, 4. - 83 p.
2. Mahkamov O. Innovation clusters: science and business cooperation. // Economics and education, 2020, №4, - 20 p.