Institutional Foundations for the Creation of a Light Industry Cluster in Azerbaijan

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***Abstract*—The article examines the scope and depth of systemic problems in the Azerbaijani light industry. The importance of light industry for the national economy of Azerbaijan and the need to create light industry clusters and use adequate methods and mechanisms for these enterprises to ensure sustainable competitive advantage for many years are identified. Taking into account the global division of labor, the situation of light industry enterprises that best meet the requirements of the market in terms of volume and range of products is determined.**

Keywords—agriculture, chemical industry, scientific research institutions, light industry, innovations

I. INTRODUCTION

Light industry produces consumer goods (clothes, shoes, bags, etc.) and fabrics, furs, leather and other products from various types of plant and animal raw materials and their artificial substitutes. By developing light industry in a country, it is also possible to develop agriculture. The main feature of this industry is that it cannot develop without relying on local products. Therefore, countries that want to develop light industry also develop agriculture in parallel. When we pay attention to the subdivisions of light industry, we see that the creation of a cluster in this area can help not only increase exports in the country, but also reduce imports.

II. MATERIALS AND METHODS

Light industry is a sector that requires less investment. Unlike heavy industry, light industry can be developed with less investment. This is made possible by the characteristics of the sector. Light industry carries out both the processing of primary raw materials and the production of finished products. The funds invested here return quickly, the range of products produced can be easily changed as a result of a small investment, and the production costs for the industry are low.

The second great advantage of this sector is the development of light industries, the most favorable way to increase product production, strengthen entrepreneurial activity, and create new and numerous entrepreneurial entities. Because the products produced by the light industry sector are intended to meet daily needs, therefore, it is not difficult to launch these industrial enterprises.

There are wide opportunities for the creation of light industry clusters in Azerbaijan. First of all, raw materials for all areas of light industry are available in our country. This means that when light industry clusters are created in our country, the cost of their products will be low. On the other hand, the demand for light industry goods is high and there are wide opportunities for the sale of these products both in our country and abroad.

Another important factor for the development of light industry in our country is the availability of qualified personnel. Historically, our country has had light industry enterprises, and this sector has become a traditional one for us. Especially in the field of cotton growing, during the Soviet Union, there were complex enterprises in the republic that included the technological process from the primary processing of cotton to the production of finished products. Although there were more than 50 small cotton ginning enterprises during this period, the largest of them existed only in Baku, Ganja and Mingachevir. Historically, light industry in Azerbaijan was represented by a mahud factory in Ganja, several cotton ginning factories (Yevlax, Ganja, Ujar, Salyan, Barda), silk factories in Sheki and Khankendi, a hosiery and knitting factory in Baku, a weaving factory in Mingachevir, pile yarn, upper knitting and sewing factories in Sumgayit, a carpet factory and sewing factory in Ganja, shoe, sewing, and haberdashery factories in Baku, a cocooning factory in Ordubad, underknitting, sewing and carpet factories in Nakhchivan, and sewing factories in other cities. It had a 79% share in silk fabric production and a 10% share in cotton production among the countries of the former USSR.

Recent statistics show that the number of enterprises engaged in the textile industry in Azerbaijan is 12 state-owned, 90 non-state, the number of enterprises engaged in clothing production is 3 state-owned, 159 non-state, the number of enterprises engaged in leather and leather products and footwear production is 33 in the non-state sector and none in the state sector. During 2000-2023, enterprises engaged in the production of cotton yarn, cotton wool, cotton fabrics, cotton bed linen, hosiery products, industrial and professional sets, outerwear and footwear operated in the country. [1]

Since light industry depends on raw materials of plant and animal origin and their artificial substitutes, the development of light industry also creates an opportunity to develop agriculture. When this branch of industry develops, the demand for wool and leather production in animal husbandry will increase, and for cotton and cocoon production in crop production. It can also stimulate the development of some areas of the chemical industry, since there is a need for artificial substitutes.

One of the main factors preventing large-scale agricultural production in the country is the small number of light industry enterprises. Since most rural farms do not have the opportunity to export their products, which are raw materials for light industry, they reduce the production of these types of products. This is observed in both livestock and crop production. Due to the lack of development of light industry,

the income of the population in rural areas decreases, and the employment level decreases.

The main problem of light industry is the timely modernization of equipment, technological innovation, and the organization of production through digitalization and automation. World experience shows that in developed countries the average equipment renewal rate is 15-17% per year, that is, the equipment wear period is less than 10 years [6]. In developing countries, the renewal rate is 3-4% per year. The low level of equipment renewal affects the reduction of production capacity. On the other hand, equipment renewal contributes to the development of local mechanical engineering, thereby helping to increase the pace of economic development of the country. The purpose of renewal is to reduce costs, increase the profitability and competitiveness of industrial enterprises.

The creation of light industry clusters in the country will contribute to the sustainable development of agriculture and will be an important step towards reducing our dependence on imports. In general, the activities of light industry enterprises are based on several concepts:

• products of light industry enterprises are durable goods;

• the use of consumer goods is seasonal;

• light industry goods are subject to moral, not physical, obsolescence, which determines the need for rapid renewal of the product range;

• a commodity producer who must provide the end user with a high-quality product is willing to pay a higher price in order not to lose his reputation;

• the end user is interested in the uniqueness of the product, which reduces serial production and requires a greater variety of products;

• the range of light industry products is wide;

• when switching from one series to another, as a rule, renewal or modernization of production is not required;

• due to the increase in the cost of raw materials, it is possible to replace natural fibers with artificial fibers, which has a negligible impact on the price of the product;

A. "Italian model"

The creation of light industry clusters in the country can strengthen the potential of the digital economy with strong industrial and corporate structures. This can lead to changes in every sector of the market: the development of competitive structures, consumer preferences, purchasing habits, marketing and advertising [3]. The dynamic development of light industry also leads to positive results in other areas such as agriculture, mechanical engineering, and the chemical industry (production of raw materials, dyes, textile auxiliaries).

Although there is potential for the creation of light industry clusters in the country, progress in this area is not observed. The development of agriculture makes the application of cluster experience inevitable, especially in economic regions. The Italian model of cluster creation for light industry may be suitable. This industrial cluster consists of a large number of small firms that come together in various associations to increase their competitiveness. The model is applied to products with a low technological level that are highly differentiated and in demand. Despite the low information capacity, clusters in Italy provide 30% of export volume and 43% of employment in the country. [2]

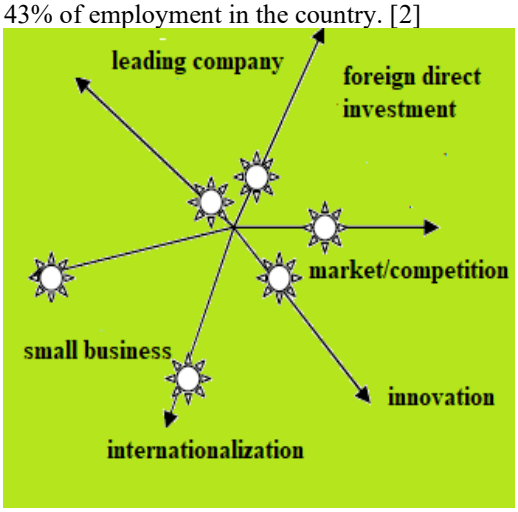

Figure 1. "Italian model"

B. SWOT analysis

SWOT analysis of the creation of light industry clusters in Azerbaijan shows that cluster creation is possible.

Strengths	Weaknesses	Opportunities	Threats
The presence of potential and historical traditions for the development of agricultural areas that can be raw materials for light industry	Lack of qualified labor force capable of working with modern technologies in the industrial cluster	Availability of opportunities for opening light industry enterprises in the liberated regions	The ability of manufactured products to compete with imported products
The presence of a workforce that can work in agriculture	Relocation of areas capable of producing artificial products in the chemical industry to rural areas	Availability of opportunities for attracting foreign investors	The ability of manufactured products to export (to compete in world markets)
The presence of potential for locating a light industry cluster close to agricultural areas	Lack of a legislative framework that applies incentives to increase the attractiveness of creating light industry clusters	Opportunities for implementing innovations	Short-term renewal of production equipment - production of products that are in line with the ever-changing fashion

Table 1. SWOT analysis of the creation of light industry clusters in Azerbaijan

The creation of clusters in the economic regions of the country will play an important role in solving important issues such as proximity to raw material sources, creation of new jobs, and increase in local production. It will also contribute to the development of agriculture, chemistry, and the revival of the regions, as well as development through the attraction of innovations.

CONCLUSION

In order to use light industry equipment based on modern technologies in our country, it is important to attract large-scale investments to this sector. Therefore, strong state support, domestic and foreign investments are needed for the establishment and development of light industry in the liberated territories. After gaining a reputation in the domestic market for manufactured products, the attractiveness of this sector may increase for both domestic and foreign investors. Another way to attract local and foreign investors is to offer them certain tax and customs benefits. Certain benefits should be given to foreign companies for the purpose of bringing certain equipment for production purposes in the areas where they invest, or they should be completely exempted from customs duties. Most importantly, a healthy competitive environment should be created for the development of light industry, both in the Karabakh zone and in other economic regions.

It is proposed to establish a synthesized industrial cluster based on the following principles:

• Self-organization in the Central Aran economic region in accordance with the cluster architecture in terms of structure and functionality;

• To achieve an increase in the scale of production and the competitiveness of all enterprises in the cluster by attracting local and foreign investors;

• Integration through balanced development by combining products in value chains and eliminating market barriers for cluster members;

• Accelerate innovation by creating scientific research institutions to simultaneously reduce the time and costs for the creation and application of new products and technologies.

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