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Stages of Production Based on Cotton-Textile Clusters in the Regions and Issues of Their Development

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Abstract: The agro-industrial complex occupies a crucial place in the process of raising the level of the population and improving the economy as a whole of Uzbekistan. Most legal frameworks have moved forward, privatization realized; but establishing fully integrated stages of production is still a challenge especially in cotton-textile clusters. Available literature focuses on clustering and financing mechanisms, while there are no effective approaches to agro-industrial integration optimizing at the regional level for all phases of a process. The purpose of this study is to study the development and functioning of cotton-textile clusters in Kashkadarya region and to provide recommendations to improve the efficiency of activity in all links of the chain. Main processing of cotton remains relatively established but secondary and tertiary stages of yarn and fabric and garment production lag behind, preventing the full, productive socio-economic benefits of cotton production from being realized. This could involve utilizing know-how to scale up model farms, better processing capacities and eventually public-private partnerships. Study offers a systematic guide for improving the integration of agribusinesses, filling stage-level gaps in cotton clusters, with comparative analysis and regional cases as evidence. The implementation of these measures will lead to significant growth in the production of high value-added products and the essential increase in incomes of the population in the regions and socio-economic development of the country, as well as the growth of competitiveness of the agro-industrial sector of Uzbekistan within the framework of the global market.

Citation: Normurolovich S. S. Stages of Production Based on Cotton-Textile Clusters in the Regions and Issues of Their Development. American Journal of Economics and Business Management 2025, 8(12), 6101-6106.

Received: 19th Sep 2025

Revised: 10th Okt 2025

Accepted: 23th Nov 2025

Published: 10th Dec 2025



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Keywords: Agropromyshlennyy Complex, Creativity, Selskohozyaystvennoe Proizvodstvo, Region, Konkurentosposobnost, Proizvodstvo.

1. Introduction

The development of the agro-industrial complex is one of the main factors in raising the standard of living of the population. Therefore, the President and the Government of the Republic of Uzbekistan have been paying constant attention to the development of the country's agro-industrial complex. As a result, during the years of independence, the necessary legal framework for operating a market economy has been created and is being constantly improved [1]. As a result of the policy pursued, the non-state sector in the agricultural sector has rapidly developed. Production in agriculture has been organized mainly in the form of partnerships, farmer and peasant farms, the structure of production has changed based on market demands and state needs. The livestock sector has been privatized. The issues of the level of processing of crops grown in the country and how much to sell to whom are being positively resolved based on the interests of the country. Thus, the issues of developing the sectors included in the agro-industrial complex as

proportionately as possible and harmonizing their economic interests are becoming more and more pressing. The development of market relations requires in-depth study of many economic issues, which are relatively new to us, such as marketing, management, economic security, finance and taxation, inflation, the fight against monopoly and the development of competition, bankruptcy, stock exchange, and contractual relations [2].

Today, the agro-industrial complex of the Republic of Uzbekistan pays great attention to the development of sectors that produce fixed assets. The sectors of the agro-industrial complex of the republic, especially agriculture, cannot develop without new equipment, tools, and technologies. The main directions for increasing the competitiveness of these sectors are mechanization, chemicalization, and automation of production processes.

Literature Review

The introduction of new market mechanisms in the agro-industrial sector, increasing the competitiveness of local products, has been studied by foreign and domestic scientists. In their scientific works and reports, they have outlined the issues of clustering, optimization of the agro-cluster system, their views, and scientific opinions. In particular, innovative specialized banks, public-private partnerships, corporate venture funds. Innovative specialized banks are financial institutions that develop and introduce short-, medium- and long-term loans for the creation and implementation of innovations at any stage. The purpose of providing a set of criteria for granting a loan. Documents submitted by the enterprise, including a calculation of the profitability of the project, on the basis of which a positive decision can be made by the innovative bank. This innovative bank not only provides loans, but also opens deposits for legal entities and individuals. That is, accumulate funds. In this case, the state must be a guarantor for risks. There are sources that indicate that innovative banks may encounter agro-industrial clusters when offering targeted loans for innovative activities. E.M. Akhmetshin, K.A. Barmuta, Z.M. Yakovenko, L.I. Zadorozhnaya, D.S. Mironov, E.N. Klochko, D.V. Zavyalov, T.P. Maksimova, N.E. Bondarenko [3,4,5].

In the context of the lack of budget funds for the development of regional agro-industry, it is necessary to use new sources based on clusters, combining public and private forces. It is necessary to increase entrepreneurial activity in the form of public-private partnerships. I.S. Abdullaev, P.A. Gurbanov, R.A. Aleshko, Y.Yu. Finogenov, Siberian J [6].

This mechanism of development of the agro-industrial complex involves interaction between the state and the private sector, when the private partner participates not only in the design, financing, construction of the facility, but also in its subsequent operation, the benefits of the state partner have been studied by scientists E.M. Akhmetshin, E.P. Kolpak, E.A. Sulimova, V.S. Kireev, E.A. Samarina, N.Z. Solodilova [7].

The pace of implementation of public-private partnership projects in agriculture in the country remains relatively slow. However, positive experiences with such initiatives, which some regions have already achieved, indicate the promising potential of this financing source. The main concerns for private investors include the high risk associated with projects involving the creation of agro-industrial clusters, insufficient personnel training. Another possible problem is the reluctance of the public sector to cooperate with representatives of private business in some cases K. Barmuta, N. Tuguz [8].

The widespread use of corporate venture funds in project financing The development of the agro-industrial cluster is still insufficiently theoretical and methodological work on this issue. In other words, there is a need for theoretical foundations and practical tests of corporate venture financing M.K. Barcho, O.V. Otto, H.A. Hajiyev, V.O. Samusenkov, L.N. Korshunova, N.O. Vikhrova, N.N. Nikulin [9].

The above and other sources provide a detailed description of the needs and problems of developing the region's competitiveness as a factor in introducing new market

mechanisms into the agro-industrial sector and increasing the competitiveness of local products.

2. Materials and Methods

The study used a systematic approach at different levels of analysis for the development and functioning of agro-industrial clusters from the perspective of its reformation as a unified entity, paying particular attention cotton-textile clusters in the Kashkadarya region. It used qualitative and quantitative approaches to examine the structural and functional characteristics of cluster composition. Data sources included official state statistics, legislative and regulatory documents of the Republic of Uzbekistan and science works of domestic and foreign scientists. Comparative analysis, grouping and abstraction were used to identify patterns and gaps in the stages of agro-industrial integration. This leads to the evaluation of practical processes in the cotton growing and processing stages, supported by observation and inductive logic. The study object was regional agro-industrial clusters, focused on the cycles of primary, secondary, and tertiary processing. The method was to evaluate the existing integration process, identify gaps lacking efficiency in general and come up with concrete recommendations. With theoretical insights combined with empirical data, the study provided a balanced perspective of the economic, technological and organizational factor set, which influence cluster emergence and evolution. Also that it is approaches that embrace public-private partnerships and inventive financing as key elements in improving competitiveness. This methodological framework allowed to develop relatively specific recommendations on enhancing all stages of the cotton-textile production that would benefit the regional socio-economic development and the national agro-industrial sector of Uzbekistan as a whole.

3. Results and Discussion

Agro-industrial integration is the generalization of production and labor through the unification (addition) of the economic, scientific and technical, technological and other economic capabilities of the agricultural and industrial sectors. The development of raw material production and its processing in a coordinated manner is carried out through cooperation (direct contracting and on the basis of contracts), as well as combination (organizational unification of enterprises that produce and process raw materials). Integration processes develop most consistently, mainly in the form of an agro-industrial enterprise [10].

It laid the foundation for the integral integration of all stages of production to obtain final products, including management, planning, common funds, centralization of material and technical supplies, the creation of enterprises, auxiliary service institutions, and others.

The development of agro-industrial integration, on the one hand, means the entry of other sectors, primarily industry, into the agricultural sector, and on the other hand, the increasing integration of agricultural production with the general national economy. According to inter-sectoral balance calculations, currently agriculture uses more than half of the products of the main sectors of industry [11].

The integration of agro-industrial complex with other branches of industry and the national economy, regardless of the degree to which it occurs, represents an objective process - integration. As a result of integration, agro-industrial enterprises that combine agricultural and industrial activities on the basis of a common technological process into a single economic complex, agro-industrial associations, which are a set of territorial, organizational and technologically united enterprises that include all stages of product production, processing and production of finished products, and an agro-industrial complex on the scale of the national economy of the country, are formed[12].

The first agro-industrial enterprises and agro-industrial associations, which were the products of agro-industrial integration in Uzbekistan, appeared in the 60s of the 20th century in the fields of cotton growing, karakul breeding, and horticulture ("state farm plant", "collective farm plant"). From the second half of the 90s, agro-firms began to be formed. Agro-industrial integration is the essence of agro-industrial production, and agro-industrial enterprises, agro-industrial associations, and agro-industrial complexes are the formalization of this process in various forms. The development of agro-industrial integration in agro-industrial integration serves to ensure the highest labor productivity and sharply reduce costs, relying on new achievements in science and technology.

The stages of agro-industrial integration (AI) in all its forms (its individual elements) play an important role in the socio-economic development of the country. Also, the agro-industrial complex plays a worthy role in the socio-economic development of the Surkhandarya region, which is considered an agricultural region. The level of development of ASI largely depends on the activities of ASI, which has formed in the region and is going through various stages of development. For example, in cotton cultivation, the desired result cannot be achieved without the primary processing process (i.e., the production of cotton fiber from the gross cotton crop), but the primary processing of cotton is an important economic factor for the production of final products from the gross cotton crop. Similarly, the poorly formed (or not fully formed) stages of ASI, such as the production of fabrics from fibers in cotton farming, the production of clothing from fabrics, or the production of alcoholic beverages through secondary processing in viticulture, etc., are special production processes, and their full development is equally important as the formation of ASM. Therefore, each stage (integration element) involved in the formation of ASI is considered an important economic factor.

An analysis of the regional ASMs shows that their development status is going through different stages. For example, let's take the cotton agro-industrial complex (PASM), its stages:

- cotton cultivation and harvesting;
- storing the cotton harvest in cotton stations;
- its primary processing (i.e., separating cotton fiber from the gross cotton crop);
- secondary processing (production of yarn and fabric from cotton fiber);
- tertiary processing (production of clothing and other knitted goods from finished fabrics) [13].

He process associated with cotton cultivation and processing recorded in the PASM theoretically constitutes its fully developed form.

ASM, DASM and UASM are the core sectors of the Kashkadarya regional ASM, and their development and improvement require the development of all stages of the ASI and the existing gaps in it. For this, we believe that the following should be implemented:

In the PASM, despite the fact that the ASI in cotton growing, which is considered the leading (core) sector of the regional economy, is somewhat well-formed, some of its stages are not well developed and improved. In particular, the "Secondary Processing" and "Tertiary Processing" cycles (processes) of this ASI should be developed in most districts of the region. This will improve this ASI in the VASM and enter its final stage. This will allow the income from the grown cotton to be significant, the size of the income to be significant and the socio-economic development of the region to be further accelerated [14].

It is necessary to develop all elements of the ASI form in the DASM and the regional ASM in the same way. It is necessary to increase the number of farms specializing in the cultivation of wheat, rice, and barley in the irrigated zone, develop elevator farms in all areas of the region specializing in grain production, taking into account the population and their needs, and organize the production of flour products and rice based on the needs of the population[15].

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The efficiency of the agro-industrial complex and the full implementation of its tasks largely depend on the level of development of its third sector. The agro-industrial complex includes sectors and services that prepare, primary and deep process agricultural products, deliver finished and final products to consumers. The role and importance of the third sector of the agro-industrial complex in the economy of the Republic of Uzbekistan is incomparable. Their work throughout the year prevents the destruction of agricultural products and further improves their quality.

It provides jobs for a large part of the working-age population. The Republic of Uzbekistan has a relatively well-developed processing industry. In particular, the food and light industries have developed strongly. At the same time, there are many issues in the agro-industrial complex that are awaiting solutions. The most important of them is the full use of existing capacities created in the sectors included in the sector. As is known, the level of utilization of existing capacities in some sectors requires an increase. This, in turn, creates very big problems.

The development of the agro-industrial complex is one of the priority areas of the economic policy of the Republic of Uzbekistan. A lot of work is being done in this regard. The organization of deep processing of one of the main products - cotton, is of particular economic and social importance.

4. Conclusion

The paper emphasizes that most of the progress to be reached in the legal frameworks and primary stages of production in the agro-industrial complex are concentrated and executed with notable achievements, while major gaps remain in the second and third quarters of the cotton-textile clusters both in terms of processing. The results show that in the literature, these stages are not fully integrated and do not add more socio-economic value to the region, which confirms the need to build comprehensive policies to strengthen cluster efficiency. This research works as a basis for substantial implications – improved full-cycle processing has the power of enhancing competitiveness, producing more income and catalysing regional development by better resource conversion and higher job creation. Moreover, public-private partnerships and innovative financing mechanisms present persistencies for sustainable growth. In subsequent studies, we therefore recommend to: provide empirical evidence for the integration models put forth, assess the efficiency of cluster-focused funding instruments, and (investigate digital technologies for producing optimized processes. These kind of studies will gives more information on attainability of sustainable and international excellence of agro-industrial systems in Uzbekistan.

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