



PROSPECTS FOR DEVELOPING FOOD EXPORTS IN UZBEKISTAN THROUGH AGROCLUSTERS

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Abstract

This article examines the prospects for developing food exports in Uzbekistan through the effective formation and expansion of agro-industrial clusters. In the context of globalization and increasing international competition, the diversification of export-oriented agricultural production has become one of the strategic priorities of Uzbekistan’s economic policy. The study analyzes the role of agroclusters in increasing production efficiency, improving product quality, ensuring compliance with international standards, and expanding access to foreign markets.

Keywords: Food exports, agro-industrial clusters, export potential, agricultural modernization, value chain integration, export competitiveness, agro-processing industry, international food markets.

Introduction

The development of food exports represents one of the most significant priorities of contemporary economic policy in Uzbekistan. In recent years, comprehensive reforms have been implemented to modernize agriculture, improve production efficiency, and expand the country’s presence in international food markets. In particular, at the meeting held on November 28, 2024, President Shavkat Mirziyoyev highlighted the need to increase the production, processing, and export of horticultural products, emphasizing their strategic role in enhancing export capacity and ensuring the rational use of agricultural resources. Under these conditions, agriculture serves not only as a guarantor of food security, but also as an important driver of export growth and regional economic development¹. Under conditions of global economic transformation, rising competition in international agri-food markets, and growing requirements for product quality and safety, Uzbekistan faces the urgent task of improving the competitiveness of its food products. In this regard, the cluster approach is gaining special significance as an effective organizational and economic mechanism for integrating agricultural production, processing, storage, transportation, and export activities.

¹Official website of the President of the Republic of Uzbekistan. Measures on increasing exports of horticultural products identified. – Tashkent, 28.11.2024. https://president.uz/uz/lists/view/7736?utm_source.



The analysis of international and national practice indicates that the successful development of export-oriented agriculture is increasingly associated with the cluster model of organization. In the case of Uzbekistan, agro-industrial clusters create favorable conditions for the integration of production, processing, logistics, and export activities within a unified value chain. This approach makes it possible to increase the share of processed food products in total agricultural exports, improve product quality, and strengthen competitiveness in external markets. As emphasized by Uzbek scholars in the book *Cotton-Textile Cluster – Locomotive of Economic Development*, cluster-based agricultural development contributes not only to higher productivity and technological modernization, but also to the expansion of export opportunities and the creation of sustainable market linkages between farmers, processors, and exporters. Therefore, the agrocluster model should be considered one of the key institutional mechanisms for the long-term growth of food exports in Uzbekistan.

Analysis and results

In the context of ongoing agricultural reforms, Uzbekistan has significantly expanded the use of agro-industrial clusters in cotton-textile production, horticulture, grain cultivation, and livestock-related activities. The cluster model has improved vertical integration between agricultural producers, processors, storage facilities, transport services, and export channels. Nevertheless, the export performance of agroclusters, particularly in the food sector, still remains below its full economic potential. The main limiting factors include insufficient agro-logistics infrastructure, inadequate cold chain facilities for fruits and vegetables, limited processing capacity, and the slow adoption of internationally recognized certification and traceability systems.

These constraints reduce the share of high value-added processed food products in total agricultural exports and weaken the competitiveness of Uzbek products in demanding foreign markets. According to Uzbek scholars, the cluster system in Uzbekistan was introduced not merely to raise agricultural output, but to establish a continuous chain from production to processing and export, thereby supporting the transition from raw commodity exports to value-added export-oriented growth. For this reason, the assessment of Uzbekistan's agrocluster performance should be complemented by a comparative analysis of successful international cluster models, particularly those operating in Turkey, Spain, and the Netherlands, where integrated agro-industrial systems have achieved higher export efficiency and stronger market positioning.



Table 1. Key Directions for Increasing the Export Potential of Fruit and Vegetable Products in Uzbekistan²

No	Strategic direction	Main measures	Expected result
1.	Improvement of agricultural practices and productivity	Introduction of precision farming, drip irrigation, greenhouse technologies, quality control, crop diversification	Increase in yields, improvement in product quality, year-round supply
2.	Infrastructure development	Development of cold storage, refrigerated transport, logistics hubs, and transport networks	Reduction of post-harvest losses, preservation of quality, faster export delivery
3.	Market research and market access	Identification of target markets, conclusion of export agreements, promotion through exhibitions and trade fairs	Expansion of export geography and increased competitiveness in foreign markets
4.	Value-added processing	Development of juice, dried fruit, and canned food production; certification and packaging improvements	Higher export value and diversification of export products
5.	Financial and institutional support	Subsidies, grants, training programs, research funding, and public-private partnerships	Strengthening export capacity and improving long-term sector sustainability

The table demonstrates that enhancing the export potential of fruit and vegetable products in Uzbekistan requires an integrated strategy combining technological modernization in agriculture, infrastructure improvement, market diversification, development of value-added processing, and stronger financial and institutional support mechanisms. The effective implementation of these measures can significantly increase the international competitiveness of Uzbek agricultural products and ensure sustainable export growth in the long term.

²Compiled by the authors based on from Mirxosilov U, Ashurmetova A. – Increase the export potential of Uzbekistan’s fruit and vegetable network. Tashkent - 2024, p. 194-195.



Table 2. Distribution of agricultural output across farms and cluster organizations %³

Indicators	2018	2019	2020	2021	2022	2023 Q3
Total – All categories of farms	100.0	100.0	100.0	100.0	100.0	100.0
Total – farms	26.0	27.9	28.2	29.3	31.4	27.4
Total – dekhkan and subsidiary farms	71.2	68.3	67.4	65.5	61.7	67.1
Total – organizations engaged in agricultural activities	2.8	3.8	4.4	5.2	6.9	5.5
Crop production – farms	45.3	49.2	52.0	53.1	55.3	49.9
Crop production – dekhkan and subsidiary farms	52.2	46.8	42.3	40.0	35.7	43.4
Crop production – organizations engaged in agricultural activities	2.5	4.0	5.7	6.9	9.0	6.7
Livestock products – farms	4.6	5.1	4.9	5.3	6.1	6.1
Livestock products – dekhkan and subsidiary farms	92.3	91.2	92.0	91.1	89.3	89.5
Livestock products – organizations engaged in agricultural activities	3.1	3.7	3.1	3.6	4.6	4.4

As shown in Table 1, the structure of agricultural production in Uzbekistan has gradually shifted over the period 2018–2023. The share of dekhkan and subsidiary farms in crop production has decreased, while farms and organizations engaged in agricultural activities have increased their contribution, particularly in crop production. In livestock production, dekhkan and subsidiary farms remain dominant, with minor increases in farm and organizational contributions. This trend indicates gradual modernization and diversification in the agricultural sector.

³Compiled by the authors based on from Ochilov I. - *Improvement of financial analysis of cluster activities*. Tashkent - 2024, pp. 4-5. https://www.bio-conferences.org/articles/bioconf/pdf/2024/59/bioconf_sdea2024_06007.pdf.

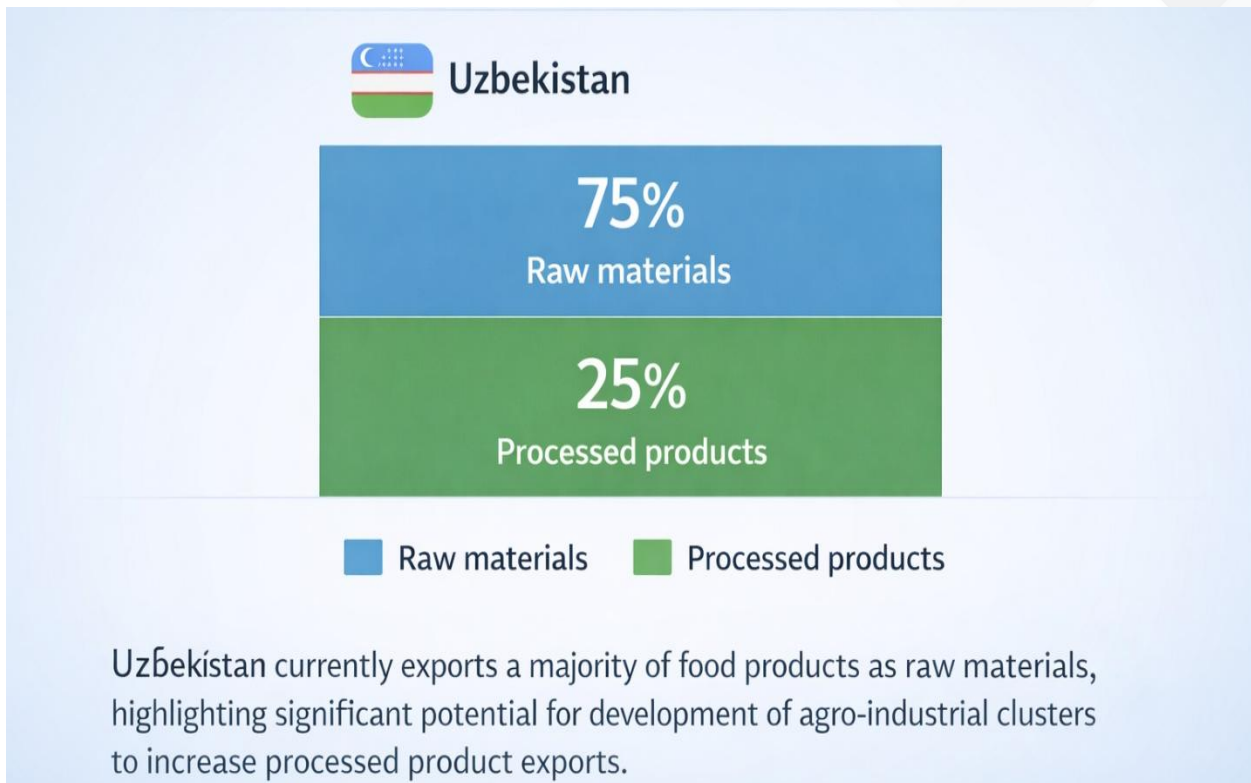


Figure 1. Share of raw materials vs. processed products in food exports of Uzbekistan (2024)⁴.

The figure illustrates the composition of Uzbekistan's food exports in 2024, highlighting the high share of raw materials (75%) compared to processed products (25%). The data suggest that although Uzbekistan has significant agricultural production, the value-added processing segment remains underdeveloped, indicating an important area for development through agro-industrial clusters. Increasing processed product exports can enhance foreign exchange earnings, competitiveness, and integration into global value chains.

This structure reflects the current state of Uzbekistan's exports. However, in the future, with the development of clusters, the share of "Textiles" and "Dried Fruits" is expected to increase. Analysis shows that optimizing logistics costs can further increase export volumes. As logistics specialist K. Li noted, "In modern clusters, the logistics chain must be digitized, which guarantees the safe delivery of products and reduces costs".

⁴Compiled by the authors based on from Ochilov I., Mirxosilov U. - Analysis of agricultural products export development through agrocluster. Tashkent - 2026, p. 273.

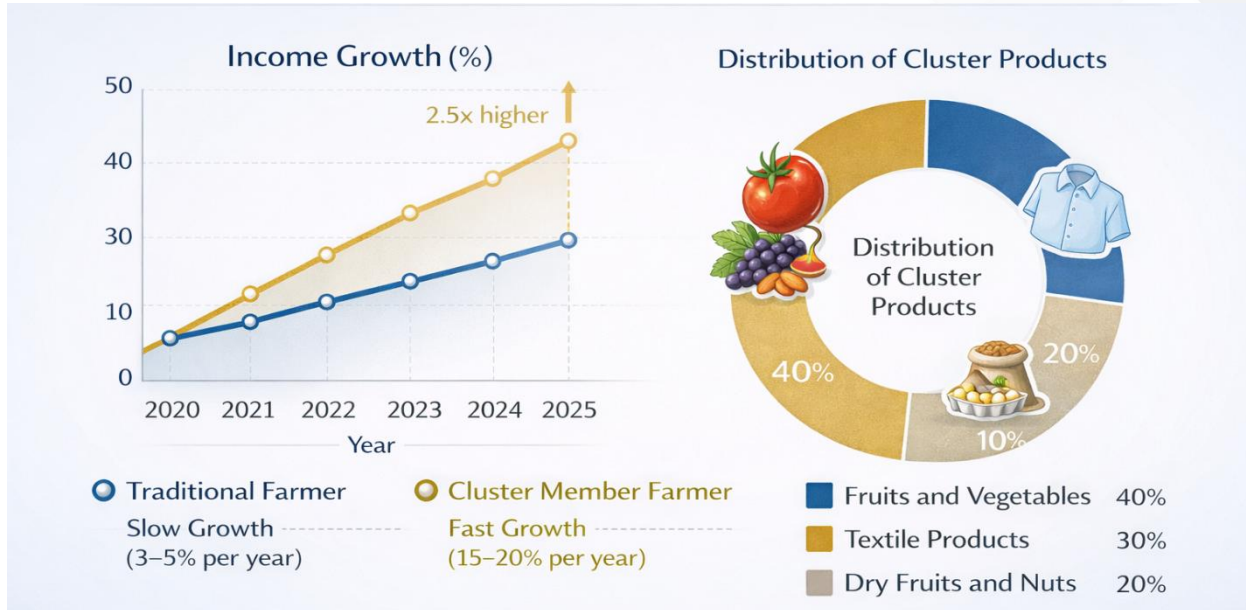


Figure 2. Growth dynamics of farmers' income in Uzbekistan after the introduction of agroclusters (2020–2025)⁵.

The photo illustrates the income growth of farmers participating in agro-industrial clusters compared to traditional farmers in Uzbekistan between 2020 and 2025. Cluster member farmers experience faster income growth (15–20% per year), while traditional farmers grow at a slower rate (3–5% per year). This demonstrates the positive effect of agroclusters on farmer income, efficiency, and export-oriented production, confirming the role of clusters in increasing value-added and competitiveness in Uzbekistan's agricultural sector.

There are a number of problems in the development of agro-clusters in Uzbekistan. Firstly, most of the existing clusters are clusters only in name, and in practice they are limited to the production and sale of raw materials. Processing capacities are insufficient or outdated. Secondly, there is the issue of export certification. Many clusters produce products that do not comply with international standards (Global GAP, HACCP, ISO).

Thirdly, the issue of personnel. Cluster managers lack specialists with deep knowledge of modern marketing, international trade rules and logistics. Fourth, financing. The need for long-term and preferential loans is high, but the demands of the banking system are sometimes burdensome for clusters.

The following strategic proposals have been developed to enhance the prospects for developing food exports in Uzbekistan through agro-industrial clusters:

⁵Compiled by the authors based on from Ochilov I., Mirxosilov U. - Analysis of agricultural products export development through agrocluster. Tashkent - 2026, p. 274.



1. Modernization of agro-processing infrastructure. It is necessary to modernize agro-processing enterprises within agro-industrial clusters through the introduction of advanced technologies, energy-efficient equipment, and automated production lines. In this regard, the state may provide customs and tax incentives for the import of modern processing technologies. This will contribute to increasing the production of high value-added food products, improving product quality, and strengthening the export competitiveness of Uzbekistan's agri-food sector.
2. Establishment of regional certification and quality control centers. One of the priority directions is the creation of internationally accredited laboratories and certification centers in major agricultural regions. Such institutions should ensure compliance with international standards, including Global G.A.P., HACCP, and ISO 22000. The development of regional certification infrastructure will reduce transaction costs for producers, accelerate export procedures, and improve access to foreign markets.
3. Development of human capital and cluster management competencies. Specialized training programs should be introduced for cluster managers, agribusiness specialists, and export coordinators. These programs should be based on international best practices, particularly the experience of countries such as Turkey, Israel, and the Netherlands in the field of export-oriented agrocluster development. In addition to theoretical knowledge, practical training should focus on supply chain management, export marketing, certification procedures, and digital trade solutions.
4. Digitalization of agrocluster management and export coordination. An integrated digital platform should be established to connect agro-industrial clusters, farmers, processors, logistics providers, and exporters within a unified information system. This platform should provide real-time information on agricultural raw material prices, export market requirements, logistics services, customs procedures, and international buyer databases. The digitalization of cluster activities will increase transparency, reduce coordination costs, and enhance the efficiency of export-oriented value chains.

Conclusion

In conclusion, the development of food exports in Uzbekistan through agro-industrial clusters represents one of the most promising strategic directions for increasing the competitiveness of the national agricultural sector in international markets. The study has shown that agroclusters create favorable conditions for the integration of production, processing, storage, logistics, and export activities within a unified value chain, thereby enhancing efficiency and reducing transaction costs. The analysis confirms that the cluster model contributes significantly to increasing the share of processed food products in total agricultural exports, improving product quality, and expanding access to foreign markets. In particular, agroclusters stimulate the adoption of modern technologies, facilitate compliance with international certification standards, and strengthen the institutional and organizational capacity of export-oriented agricultural enterprises. At the same time, the research reveals that several systemic challenges remain, including insufficient processing capacity, limited certification infrastructure, weak digital coordination, and a shortage of highly qualified cluster management specialists.



In this context, the successful expansion of food exports in Uzbekistan requires a comprehensive policy approach aimed at modernizing agro-processing facilities, developing regional certification centers, improving managerial competencies, and accelerating the digital transformation of agrocluster operations.

Therefore, agro-industrial clusters should be regarded not merely as an organizational form of agricultural production, but as an effective economic mechanism for ensuring export-oriented growth, increasing value added, and strengthening Uzbekistan's position in the global food market.

REFERENCES

1. President of the Republic of Uzbekistan. "On measures to increase the production, processing and export of horticultural products." – Tashkent, 2024. – Official website of the President of the Republic of Uzbekistan.
2. S.Normurodov, I.Ziyadullayev, S.Xoliqov, O'.Abdullayev, H.Dilmurodov - The role of agriculture in Uzbekistan's food economy. Tashkent – 2025, pp. 1-10.
3. Ochilov I.S. Accounting and efficiency analysis of agroclusters: Monograph. Tashkent – 2024.
4. Ochilov I.S. Improvement of financial analysis of cluster activities. BIO Web of Conferences, 2024. Scopus. pp. 1-8.
5. Ismoilova G. - Ways to develop agro-industrial clusters in the chain of processing agricultural products, Tashkent – 2022, pp 69–83.
6. Ergashev R. (2022). Development of Fruit Clusters in Uzbekistan. American Journal of Economics and Business Management, 5(10).
7. Ochilov I., Mirxosilov U. - Analysis of agricultural products export development through agrocluster. Tashkent - 2026, p. 270-276.
8. Mirxosilov U, Ashurmetova A. – Increase the export potential of Uzbekistan's fruit and vegetable network. Tashkent - 2024, p. 193-196.
9. Ochilov I. - Improvement of financial analysis of cluster activities. Tashkent - 2024, pp. 1-8.