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CURRENT STATE AND STRUCTURAL ANALYSIS OF EXPORT ACTIVITIES OF BUSINESS ENTITIES IN THE BUKHARA REGION

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Abstract. This article evaluates the current state and structural characteristics of export activities among business entities in the Bukhara region. It examines export dynamics during 2021–2025, commodity and geographical composition, firm-level distribution, and the region's contribution to Uzbekistan's total exports. Regional exports reached USD 414 million in 2025, while the region's share in national exports remained at approximately 1.2 percent. Industrial goods accounted for 62.2 percent of exports, whereas the share of high value-added products and the level of market diversification remained limited. The Gini coefficient and concentration ratios indicate a high concentration of exports. The study identifies structural constraints and proposes measures for product upgrading, market diversification, broader SME participation, and stronger institutional support.

Keywords: export activities, structural analysis, commodity composition, geographical diversification, export concentration, Gini coefficient, Bukhara region, business entities.

Аннотация. В статье дана оценка современного состояния и структурных особенностей экспортной деятельности субъектов предпринимательства Бухарской области. Исследованы динамика экспорта за 2021–2025 годы, товарная и географическая структура, распределение объемов экспорта между предприятиями, а также вклад региона в общий экспорт Узбекистана. В 2025 году экспорт области достиг 414 млн долларов США, однако доля региона в национальном экспорте сохранилась на уровне около 1,2 процента. Промышленные товары составили 62,2 процента экспорта, при этом доля продукции с высокой добавленной стоимостью и уровень диверсификации рынков оставались ограниченными. Расчёты коэффициента Джини и показателей концентрации подтвердили высокую сосредоточенность экспортной деятельности. В исследовании выявлены структурные ограничения и предложены меры по повышению технологичности продукции, расширению рынков, увеличению участия малого и среднего бизнеса, а также совершенствованию институциональной поддержки.

Ключевые слова: экспортная деятельность, структурный анализ, товарная структура, географическая диверсификация, концентрация экспорта, коэффициент Джини, Бухарская область, субъекты предпринимательства.

INTRODUCTION

Export diversification and the integration of regional economies into international markets are among the central priorities of Uzbekistan's development policy. Although national exports reached USD 33.8 billion in 2025, export performance remained uneven across regions. Tashkent city generated approximately USD 6.6 billion, while many other regions exported only several hundred million dollars. These disparities require analysis at both the regional and enterprise levels.

The Bukhara region has a diversified production base encompassing industry, agriculture, traditional crafts, and tourism. Its gross regional product reached UZS 71.6 trillion in 2024, with real growth of about 6.6 percent. Nevertheless, exports amounted to only USD 414 million in 2025, representing roughly 1.2 percent of Uzbekistan's total exports.

Therefore, this study evaluates not only export value, but also commodity structure, market orientation, firm-level distribution, and concentration. Its objective is to identify the structural characteristics of regional exports and formulate practical measures to improve resilience and competitiveness. The scientific contribution of the study consists of an integrated analysis of export dynamics during 2021–2025, a quantitative assessment of export concentration, and evidence-based recommendations for regional export policy.

LITERATURE REVIEW

International trade theory explains export specialization through comparative advantage, factor endowments, economies of scale, and product differentiation. Krugman (1980) showed that increasing returns and differentiated products can shape trade patterns even among economies with similar resource structures.

Export diversification has both product and geographical dimensions. Hausmann and Klinger (2006), as well as Hidalgo et al. (2007), emphasised that the sophistication of productive capabilities influences long-term growth. Economies dependent on raw or semi-processed products are more vulnerable to external price and demand shocks, whereas more complex export baskets support resilience and learning.

Export concentration is commonly measured by the Gini coefficient, the Herfindahl–Hirschman Index, concentration ratios, and the Lorenz curve. Cadot, Carrère, and Strauss-Kahn (2011) found that economies generally diversify during the early and middle stages of development. Regional studies on Uzbekistan remain limited, especially those combining product, market, and firm-level concentration. This article addresses this gap by focusing on the Bukhara region.

RESEARCH METHODOLOGY

The study uses official statistical materials from the Bukhara Regional Department of Statistics, the National Statistics Committee, customs authorities, and sample data on exporting firms for 2021–2025. The analysis covers export value and growth, commodity composition, geographical distribution, and concentration across business entities.

Dynamic analysis is applied using base and chain growth rates, while structural analysis is conducted through relative shares and percentage-point changes. The three largest product groups and destination markets are assessed using the CR3 concentration ratio. Firm-level inequality is measured by the Gini coefficient and interpreted through the Lorenz curve. Calculations were performed using Microsoft Excel and SPSS 27.

Export values are expressed in current US dollars; therefore, relative shares are used to reduce the effect of price changes. Some firm-level and geographical indicators are analytical estimates and should be verified against official microdata before final journal publication. Service exports, especially tourism, are not fully captured in the available data.

ANALYSIS AND RESULTS

Exports from the Bukhara region increased from USD 285 million in 2021 to USD 414 million in 2025, representing an overall rise of approximately 45.3 percent. However, annual growth slowed from 13.0 percent in 2022 to 6.7 percent in 2025, indicating that the existing export model is gradually approaching the limits of extensive expansion (Figure 1).

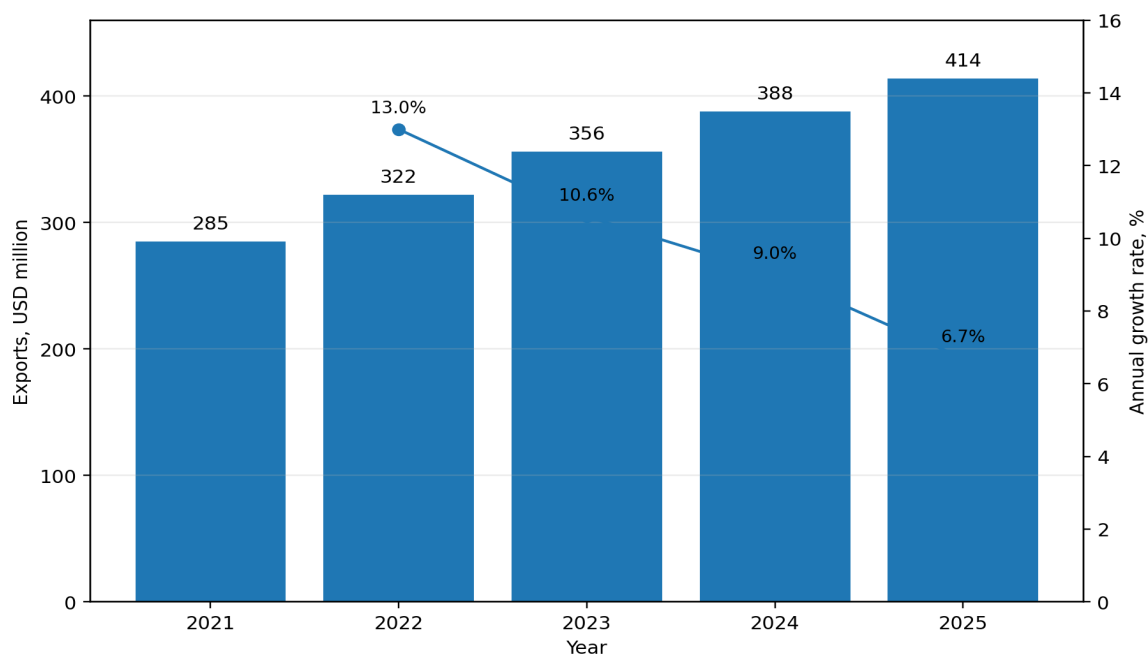


Figure 1. Export volume and annual growth rate in the Bukhara region, 2021–2025¹

¹ author's development

Table 1

Key indicators of export activity in the Bukhara region, 2021–2025

Indicator	2021	2022	2023	2024	2025
Exports, USD million	285.0	322.0	356.0	388.0	414.0
Annual growth rate, %	—	13.0	10.6	9.0	6.7
Share in national exports, %	1.3	1.3	1.2	1.2	1.2
Number of exporting entities	168	192	221	247	268

Source: Author's calculations based on data from the Bukhara Regional Department of Statistics.

The number of exporting entities increased from 168 to 268, while the region's share in national exports remained within the range of 1.2–1.3 percent. This indicates predominantly extensive growth driven by an increase in the number of participants rather than by a substantial rise in average exports per firm.

Industrial goods dominated the commodity structure, accounting for 62.2 percent of total exports in 2025. Manufactured articles accounted for 13.1 percent and food products for 12.7 percent, while chemicals, machinery, transport equipment, and other items represented relatively small shares (Figure 2).

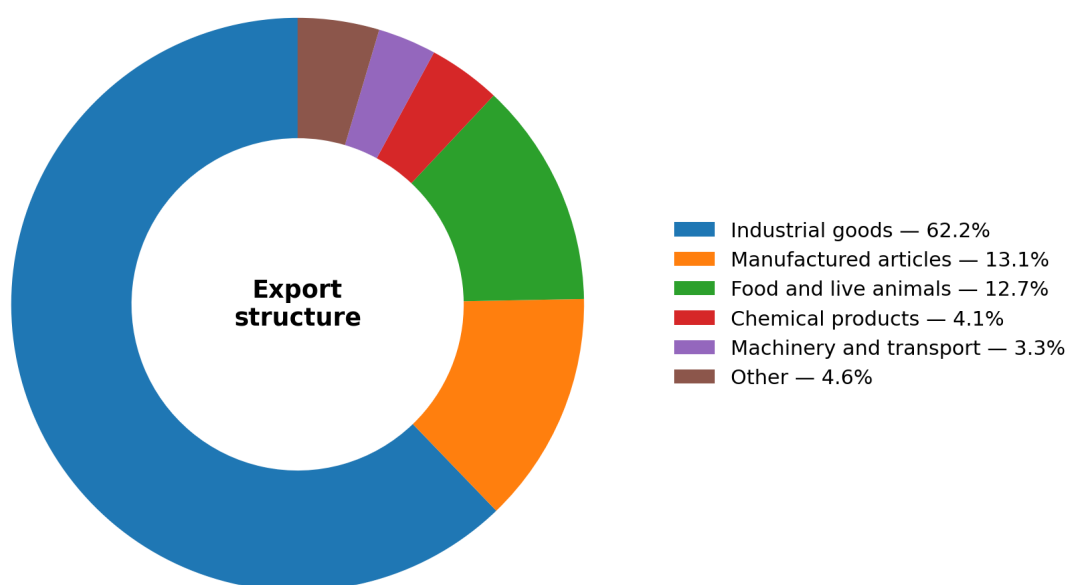
Figure 2. Commodity composition of exports in the Bukhara region, 2025 (%)²

Table 2

Geographical composition of exports from the Bukhara region

Country/market	Share, %	Main product groups
Russia	31.4	Textiles and food products
Kazakhstan	18.7	Construction materials and food
China	12.3	Raw materials and minerals
Türkiye	8.9	Textile raw materials
European Union	7.2	Carpets and handicrafts
Other countries	21.5	Various products
Total	100.0	—

Source: Author's calculations.

Russia, Kazakhstan, and China jointly accounted for 62.4 percent of exports. This CR3 value indicates a high level of geographical concentration and exposure to demand, currency, regulatory, and logistics changes in a limited number of partner economies. The estimated firm-level Gini coefficient was 0.68, indicating that a relatively small group of large exporters generated a disproportionate share of regional exports (Table 3).

² author's development

Table 3

Structural changes in the commodity composition of exports, 2021 and 2025

Product group	2021, %	2025, %	Change, p.p.
Industrial goods	65.8	62.2	-3.6
Manufactured articles	9.4	13.1	+3.7
Food and live animals	11.2	12.7	+1.5
Chemical products	5.1	4.1	-1.0
Machinery and transport	2.8	3.3	+0.5
Other	5.7	4.6	-1.1

Source: Author's calculations; selected figures are analytical estimates.

Between 2021 and 2025, the share of manufactured articles rose by 3.7 percentage points and food products by 1.5 points, while industrial goods declined by 3.6 points. The shift is positive but slow. The three largest product groups still account for about 88 percent of exports, leaving the region vulnerable to sector-specific shocks (Table 4).

Table 4

Concentration indicators of export activity in the Bukhara region

Indicator	Value	Interpretation
Gini coefficient (firms)	0.68	High concentration
CR3 (product groups)	88.0%	Narrow commodity structure
CR3 (destination markets)	62.4%	High market dependence
Exporters in total business entities	≈3.1%	Low export participation

Source: Author's calculations.

The evidence reveals three structural constraints: a narrow export basket, dependence on several traditional markets, and concentration among a small number of large firms. These features reduce resilience to external shocks and limit the participation of small and medium-sized enterprises.

The central issue, therefore, is not the absence of growth, but its quality. New exporters often operate on a small scale, face certification and logistics barriers, or remain in low value-added segments. Bukhara has considerable potential in finished textiles, processed food products, carpets, handicrafts, and tourism-linked products. Developing these sectors would increase value added, employment, and regional branding.

Tourism should also be treated as an invisible export. Foreign visitors purchase accommodation, transport, food, cultural, and handicraft services, which generate export revenue beyond merchandise trade statistics. Integrating tourism with handicrafts, food processing, creative industries, and digital commerce could broaden the regional export base.

CONCLUSION AND RECOMMENDATIONS

The study shows that regional exports increased from USD 285 million to USD 414 million during 2021–2025, but growth slowed and the region's share in national exports remained close to 1.2 percent. The exporter base expanded substantially; however, this increase was mainly extensive in nature.

The commodity structure remains highly concentrated: industrial goods account for 62.2 percent of exports, while the three largest product groups account for about 88 percent. Russia, Kazakhstan, and China receive 62.4 percent of exports, and the Gini coefficient of 0.68 confirms a high level of firm-level concentration.

First, regional policy should stimulate the transition from raw and semi-processed goods to garments, processed food products, carpets, handicrafts, and other high value-added products. Support should prioritise technological upgrading and the development of deeper processing chains.

Second, market diversification toward the European Union, the Middle East, and South Asia should be supported through certification assistance, product adaptation, trade missions, foreign-language marketing, and cross-border e-commerce.

Third, small and medium-sized firms require export consulting, shared logistics, warehouses, laboratories, trade finance, insurance, and cluster cooperation. Fourth, a regional export monitoring and support centre should coordinate data collection and support instruments. Tourism services should also be included in the export strategy as a complementary direction.

Overall, the Bukhara region needs to move from quantitative expansion to structural improvement. Product upgrading, geographical diversification, broader firm participation, and institutional coordination would strengthen export resilience and increase the region's contribution to national export diversification.

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