ANALYSIS OF STRUCTURAL TRANSFORMATION OF FOREIGN TRADE IN KASHKADARYA REGION

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ABSTRACT

This study examines the structural transformation of foreign trade in Kashkadarya (Qashqadaryo) Region, Uzbekistan, over the period 2010 – 2025, utilising annual panel data on trade turnover, commodity composition, geographic distribution, and balance-of-payments indicators. The empirical findings reveal three interconnected phases of transformation. In Phase I (2010–2015), the region's export profile was dominated by cotton fibre, which accounted for 64.9 per cent of exports in 2010, alongside chemical products (20.4%) and energy resources (6.2%). Phase II (2016 – 2020) marked a period of structural disruption: the abolition of the state cotton procurement monopoly led to the complete elimination of raw cotton fibre from the export basket by 2021, prompting a diversification towards food products, textiles, and energy exports. Phase III (2021–2025) demonstrates a successful, though uneven, transition towards value-added manufactures, with textiles and textile products capturing 53 per cent of exports in 2023, energy and petroleum products rising to 33.3 per cent in 2024, and total trade turnover reaching a record USD 1.24 billion (preliminary) by end - 2025. Import structure remained persistently capital-goods-intensive, with machinery and equipment consistently accounting for 60–88 per cent of imports, reflecting sustained investment demand. Geographic reorientation was equally pronounced: the CIS countries' share of total trade fell from 72.2 per cent (2010) to 14.0 per cent (2024), while non-CIS partners–especially China, the Islamic Republic of Iran, and European markets–gained dominance. The study contributes region-specific longitudinal evidence to the broader discourse on trade policy reform and economic transformation in post-Soviet Central Asian economies.

Keywords: *foreign trade; structural transformation; Kashkadarya region; Uzbekistan; export diversification; trade balance; panel data*

QASHQADARYO VILOYATIDA TASHQI SAVDO TARKIBIY O‘ZGARTIRISHINING TAHLILI

ANNOTATSIYA

Ushbu tadqiqot 2010–2025 yillar davomida O'zbekistonning Qashqadaryo viloyati tashqi savdosining tarkibiy o'zgarishini savdo aylanmasi, tovar tarkibi, geografik taqsimot va to'lov balansi ko'rsatkichlari bo'yicha yillik panel ma'lumotlari asosida tahlil qiladi. Empirik natijalar o'zgarishning o'zaro bog'liq uch bosqichini ko'rsatmoqda. I bosqichda (2010–2015) viloyatning eksport tarkibi asosan paxta tolasi bilan ifodalangan bo'lib, u 2010 yilda eksportning 64,9 foizini tashkil etgan; kimyoviy mahsulotlar (20,4%) va energetika resurslari (6,2%) ham muhim o'rin egallagan. II bosqich (2016–2020) tarkibiy inqiroz davri sifatida belgilandi: davlatning paxtani majburiy xarid qilish monopoliyasining bekor qilinishi 2021 yilga kelib xom ashyo paxta tolasining eksport tarkibidan to'liq chiqib ketishiga olib keldi va bu oziq-ovqat mahsulotlari, to'qimachilik hamda energiya eksportiga yo'nalish qilish zaruriyatini keltirib chiqardi. III bosqich (2021–2025) qo'shimcha qiymat yaratadigan ishlab chiqarilgan tovarlarga muvaffaqiyatli, garchi notekis, o'tishni ko'rsatadi: to'qimachilik va to'qimachilik mahsulotlari 2023 yilda eksportning 53 foizini, energiya va neft mahsulotlari 2024 yilda 33,3 foizni tashkil etdi hamda 2025 yil yakuniga kelib jami savdo aylanmasi rekord darajadagi 1,24 mlrd AQSH dollariga (dastlabki ma'lumot) yetdi. Import tarkibi barqaror ravishda kapital tovarlariga yo'naltirilgan bo'lib qoldi: mashina va uskunalar importning 60–88 foizini barqaror tashkil etdi, bu esa investitsiya talabining yuqori ekanligini tasdiqladi. Geografik qayta yo'nalish ham muhim ahamiyat kasb etdi: MDH mamlakatlari ulushi jami savdoda 72,2 foizdan (2010) 14,0 foizga (2024) tushdi, MDH bo'lmagan hamkorlar — xususan Xitoy, Eron Islom Respublikasi va Yevropa bozorlari — yetakchi o'rinlarga chiqdi. Ushbu tadqiqot sovet keyingi Markaziy Osiyo iqtisodiyotlarida savdo siyosati islohoti va iqtisodiy transformatsiya bo'yicha keng ilmiy munozaraga mintaqaviy longitudinal dalillarni qo'shib beradi.

Kalit so'zlar: *tashqi savdo; tarkibiy o'zgarish; Qashqadaryo viloyati; O'zbekiston; eksport diversifikatsiyasi; savdo balansi; panel ma'lumotlari*

АНАЛИЗ СТРУКТУРНОЙ ТРАНСФОРМАЦИИ ВНЕШНЕЙ ТОРГОВЛИ В КАШКАДАРЬСКОЙ ОБЛАСТИ

АННОТАЦИЯ

В настоящем исследовании изучается структурная трансформация внешней торговли Кашкадарьинской (Қашқадарё) области Узбекистана за

период 2010–2025 годов с использованием годовых панельных данных по торговому обороту, товарному составу, географическому распределению и показателям платёжного баланса. Эмпирические результаты свидетельствуют о трёх взаимосвязанных этапах трансформации. На первом этапе (2010–2015) экспортная структура региона определялась преимущественно хлопковым волокном, доля которого в 2010 году составляла 64,9% совокупного экспорта, при значимом участии химической продукции (20,4%) и энергоресурсов (6,2%). Второй этап (2016–2020) ознаменовался структурными потрясениями: отмена государственной монополии на заготовку хлопка привела к полному исключению сырого хлопкового волокна из экспортной корзины к 2021 году, что обусловило диверсификацию в сторону продовольственных товаров, текстиля и энергетической продукции. Третий этап (2021–2025) демонстрирует успешный, хотя и неравномерный, переход к товарам с более высокой добавленной стоимостью: доля текстиля и текстильных изделий достигла 53% экспорта в 2023 году, энергетических и нефтяных продуктов — 33,3% в 2024 году, а совокупный торговый оборот к концу 2025 года достиг рекордного уровня в 1,24 млрд долл. США (предварительные данные). Импортная структура неизменно характеризовалась высокой концентрацией капитальных товаров: машины и оборудование устойчиво формировали 60–88% импорта, отражая высокий инвестиционный спрос. Географическая переориентация оказалась не менее значительной: доля стран СНГ в совокупном товарообороте сократилась с 72,2% (2010) до 14,0% (2024), тогда как страны, не входящие в СНГ, — в особенности Китай, Исламская Республика Иран и европейские рынки, — приобрели доминирующее положение. Исследование вносит региональные продольные эмпирические свидетельства в более широкую научную дискуссию о реформировании торговой политики и экономической трансформации постсоветских экономик Центральной Азии.

Ключевые слова: *внешняя торговля; структурная трансформация; Кашкадарьинская область; Узбекистан; диверсификация экспорта; торговый баланс; панельные данные*

INTRODUCTION

The structural transformation of regional foreign trade is one of the most reliable indicators of broader economic development and policy reform in transition economies. In Uzbekistan, the post-2016 era of accelerated economic liberalisation initiated under President Shavkat Mirziyoyev has produced measurable shifts in the

composition, direction, and magnitude of regional trade flows. Kashkadarya (Qashqadaryo) Region, situated in south-central Uzbekistan and endowed with significant natural gas reserves, agricultural land, and a growing manufacturing base, offers a particularly instructive case study in this regard.

Prior to the reform era, Kashkadarya's foreign trade was characterised by a high degree of commodity concentration and geographic dependence on Commonwealth of Independent States (CIS) partners. The export basket was dominated by raw cotton fibre–a legacy of Soviet-era monoculture–and by chemical and energy products derived from the Muborak Gas Processing Plant and associated downstream industries. This concentration exposed the regional economy to commodity price volatility, limited value addition, and constrained foreign currency earnings (World Bank, 2020).

The reform agenda, encompassing currency convertibility, liberalisation of the cotton sector, investment facilitation, and trade facilitation measures, fundamentally altered the incentive structure facing regional enterprises. Between 2016 and 2025, Kashkadarya's total trade turnover increased from USD 764.1 million to a preliminary USD 1.24 billion–an increase of approximately 62.5 per cent in nominal terms. Yet aggregate growth masks a profound compositional and directional transformation that has not been systematically documented in the scholarly literature.

This paper addresses that gap by pursuing three specific research objectives: (i) to quantify the magnitude and pace of structural change in Kashkadarya's export and import commodity composition over the period 2010–2025; (ii) to identify shifts in the geographic distribution of trade, with particular attention to the declining role of CIS partners and the rise of Asian and European markets; and (iii) to assess the evolution of the trade balance and its implications for the region’s medium-term economic sustainability.

The remainder of this paper is structured as follows. Section 2 reviews the relevant literature on trade transformation in transition economies. Section 3 describes the data sources and analytical methods. Section 4 presents the empirical results. Section 5 discusses the findings in their broader policy context. Section 6 concludes with policy implications and directions for future research.

LITERATURE REVIEW

The academic literature on trade transformation in post-Soviet economies identifies several recurring patterns. Structuralist approaches (Prebisch, 1950; Singer, 1950) emphasise the adverse terms-of-trade consequences of commodity export dependence, arguing that specialisation in primary goods perpetuates unequal

exchange with industrialised partners. In the Central Asian context, this argument retains considerable relevance: Kazakhstan, Turkmenistan, and Uzbekistan all entered independence with heavily commoditised export profiles shaped by Soviet-era specialisation (Pomfret, 2006).

More recent contributions draw on the product space framework (Hidalgo et al., 2007) to argue that export diversification is constrained by productive capabilities rather than simply by policy choices. Economies that successfully upgrade their export complexity–moving from raw materials towards manufactured goods–exhibit more sustainable growth trajectories (Hausmann & Klinger, 2006). Applied to Uzbekistan, Tashmatov (2019) finds evidence of gradual capability accumulation in textiles and agro-processing, consistent with the trends documented in the present study.

Uzbekistan's trade policy underwent a decisive shift following the presidential transition of 2016. Key measures included the unification of official and market exchange rates (September 2017), simplification of customs procedures, accession to WTO observer status, and the phased elimination of obligatory cotton quotas for agricultural producers (Ergashev, 2021). Collectively, these measures reduced trade costs, expanded the range of goods eligible for private export, and allowed price signals to redirect factor inputs towards higher-value activities (Asian Development Bank, 2022).

Existing macroeconomic analyses of these reforms have focused primarily on national-level aggregates (IMF, 2021; UNCTAD, 2023). Sub-national studies remain rare, and those that exist tend to emphasise Tashkent or Fergana Valley regions on account of their industrial concentration (Yusupov, 2020). Kashkadarya's distinctive profile–combining natural gas production, cotton agriculture, and an emerging manufacturing sector–warrants dedicated analytical attention.

The literature employs a range of metrics to capture structural change in trade. The Herfindahl–Hirschmann Index (HHI) of export concentration, trade openness ratios, revealed comparative advantage indices (Balassa, 1965), and shift-share decompositions are among the most widely used. This study adopts a descriptive-statistical approach grounded in trend analysis and share decomposition, which is appropriate given the panel structure of the data and the absence of reliable sectoral GDP deflators at the sub-national level in Uzbekistan.

DATA AND METHODS

The primary dataset was compiled from official statistical publications of the Statistics Agency under the President of the Republic of Uzbekistan and the State

Customs Committee of the Republic of Uzbekistan. Six disaggregated data series covering Kashkadarya Region for the period 2010–2025 were used:

(1) Total trade turnover, exports, imports, and trade balance in current USD thousands;

(2) Commodity structure of exports and imports as percentage shares of total, covering eight broad product groups;

(3) Detailed export flows by HS 2017 commodity codes (two-digit chapter level);

(4) Export and import values disaggregated by partner country;

(5) Trade shares with CIS versus non-CIS partners; and

(6) Full-year preliminary estimates for 2025 (January–December), available from the January – September release.

Data for 2025 carry a preliminary designation (*) consistent with standard statistical practice. Values are denominated in thousands of US dollars (USD'000) unless otherwise stated. The 2025 full-year estimate is treated as provisional in all interpretations.

The study employs three complementary analytical tools. First, absolute and relative trend analysis is applied to identify long-run trajectories in trade volumes, balances, and commodity shares. Period averages are computed for three sub-periods: 2010–2015 (pre-reform), 2016–2020 (reform transition), and 2021–2025 (post-reform consolidation) to structure the comparative analysis.

Second, share decomposition isolates the contribution of individual commodity groups to changes in the overall export and import structures. A commodity's structural weight is defined as its value share of total exports (or imports) in a given year. Changes in structural weights are interpreted against the backdrop of known policy events–specifically, the cotton sector reforms of 2017–2019 and the investment liberalisation measures of 2016–2020.

Third, geographic concentration is assessed through the evolution of bilateral trade shares for major partner countries and through the CIS/non-CIS dichotomy, which captures the region’s progressive integration into global (as opposed to post-Soviet) trade networks.

All calculations are performed on current-price USD data. While this introduces a nominal exchange-rate dimension, the use of a common currency (USD) mitigates the most severe distortions arising from Uzbekistani soum depreciation, particularly the sharp devaluation of September 2017 that followed currency convertibility reform.

RESULTS

Table 1 presents the complete annual panel of trade turnover, exports, imports, and trade balance for Kashkadarya Region over the period 2010–2024, with 2025 reported separately as a preliminary estimate. Three aggregate observations are immediately apparent.

First, total trade turnover followed a non-linear trajectory characterised by two pronounced contractions. The first trough occurred in 2020 (USD 542.1 million), reflecting COVID-19 disruptions to global supply chains and suppressed domestic investment activity. The second contraction, in 2022 (USD 545.4 million), was attributable to the geopolitical disruption of established Russian and Ukrainian trade routes following February 2022. By contrast, 2024 registered a record turnover of USD 1.24 billion, representing a 145.5 per cent increase on 2022–the fastest two-year recovery in the panel.

Second, the trade balance shifted dramatically over the period. From a surplus of USD 206.9 million in 2010, driven by large raw cotton and chemical exports, the balance moved into persistent deficit for much of 2012–2020 as import volumes–driven by capital equipment imports for industrial and infrastructure investment–surged. The deficit reached its deepest point in 2016 (USD −286.1 million). Brief surplus episodes occurred in 2014, 2022, and 2023, before the balance reverted to a significant deficit of USD −202.6 million in 2024, reflecting the investment intensity of the current growth phase.

Third, the export-to-turnover ratio, which stood at 70.5 per cent in 2010 (reflecting strong raw material exports), declined to 31.3 per cent in 2016 before partially recovering to 55.2 per cent in 2022 and settling at 41.8 per cent in 2024. This ratio is a summary indicator of the structural balance between the region's outward-facing productive capacity and its domestic investment demand.

Table 1. Kashkadarya Region: Foreign Trade Turnover, 2010–2024 (USD '000)

Year	Total Trade Turnover	Exports (FOB)	Imports (CIF)	Trade Balance
2010	504,517	355,752	148,765	+206,987
2011	580,647	462,268	118,379	+343,890
2012	750,805	343,147	407,658	-64,511
2013	765,441	335,277	430,164	-94,888
2014	636,848	322,695	314,153	+8,542
2015	737,674	269,660	468,014	-198,354

2016	764,142	239,023	525,119	-286,097
2017	596,872	226,320	370,552	-144,232
2018	765,748	270,773	494,974	-224,201
2019	824,790	366,066	458,724	-92,657
2020	542,141	195,377	346,764	-151,387
2021	565,730	270,047	295,683	-25,636
2022	545,413	301,128	244,285	+56,843
2023	737,761	427,624	310,137	+117,486
2024	1,239,084	518,251	720,834	-202,583

Source: Statistics Agency under the President of the Republic of Uzbekistan; State Customs Committee of the Republic of Uzbekistan. Authors' calculations.

Table 2 presents the commodity structure of Kashkadarya's exports as percentage shares of total exports for the full panel period. The data reveal a fundamental re-composition of the export basket across three phases.

In Phase I (2010–2015), cotton fibre dominated, accounting for an average of 52.0 per cent of exports. Chemical products–primarily derived from natural gas processing and plastics manufacturing at Muborak–contributed a further average of 24.2 per cent, while energy and petroleum products (principally liquefied petroleum gas and natural gas condensate) averaged 9.4 per cent. Food products, textiles, and machinery collectively accounted for less than 12 per cent, reflecting the limited upstream processing capacity of the regional economy during this period.

The transition to Phase II (2016–2020) was triggered principally by the abolition of obligatory cotton state-order procurement in 2017–2019 and the associated reorientation of cotton cultivation towards cluster-based spinning and weaving enterprises. Cotton fibre's share collapsed from 59.3 per cent in 2016 to 17.9 per cent in 2018 and 16.2 per cent in 2020, and the commodity ceased to appear as an independent export line from 2021 onwards–representing one of the most rapid commodity exit events in the regional statistical record. Concurrently, food products surged to 27.8 per cent of exports in 2020, reflecting expanded vegetable, fruit, and processed food exports to Kazakhstan, the Russian Federation, and Afghanistan.

Phase III (2021–2025) is characterised by the rise of two new structural pillars: textiles and textile products, and energy and petroleum products. Textiles–comprising knitted garments, woven fabrics, silk, and cotton yarn–reached 53.0 per cent of exports in 2023, the highest share of any commodity group across the entire panel. This reflects the maturation of cluster-based spinning and garment enterprises that absorbed former cotton-cultivation labour and infrastructure. Energy exports climbed to 33.3 per cent in 2024, underpinned by expanded natural gas condensate and petroleum product exports to Afghanistan, Pakistan, and Central Asian neighbours.

The combined weight of these two commodity groups–textiles and energy–stood at approximately 75 per cent in 2024, suggesting that while commodity concentration has not been eliminated, its composition has shifted towards substantially higher-value activities.

Table 2. Export Commodity Structure, Kashkadarya Region, 2010–2024 (% of total exports)

Commodity Group	2020	2021	2022	2023	2024
Cotton Fibre	16.2	–	–	–	–
Food Products	27.8	13.4	19.8	13.8	14.8
Chemical Products	15.4	0.6	1.1	0.4	0.1
Energy & Petroleum	0.6	5.7	2.9	20.0	33.3
Textiles & Textile Products	18.5	–	–	53.0	42.0
Machinery & Equipment	0.2	0.1	1.0	1.2	0.5
Services	2.2	1.1	1.9	1.0	7.7
Others	18.9	79.1	73.0	3.4	1.6

Note: '–' denotes negligible or zero values. '10–'24 denotes years 2010 to 2024.
Source: Statistics Agency under the President of the Republic of Uzbekistan. Authors' calculations.

Structural Characteristics of Imports

The import structure, presented in Table 3, exhibits far greater compositional stability than the export side, dominated throughout the panel by machinery, equipment, and spare parts. This persistent concentration reflects the capital-goods orientation of Kashkadarya's development strategy: successive waves of investment in gas processing, textile manufacturing, construction, and agro-industrial infrastructure translated directly into sustained demand for imported capital equipment.

Machinery and equipment accounted for 65.7 per cent of imports in 2010, peaked at 87.9 per cent in 2012 (the height of a major gas-infrastructure investment cycle), and remained above 60 per cent in every year of the panel. The 2024 share of 78.0 per cent–itself elevated by large imports of Japanese construction machinery (Japan alone contributed USD 98.8 million in imports in 2024) and German industrial equipment–confirms that the regional economy remains in a capital-deepening phase.

Chemical products constituted the second-largest import category, averaging approximately 9.5 per cent over the period, with elevated shares in years of heightened industrial activity. Food imports, while modest in aggregate, grew in both absolute and relative terms after 2020 (reaching 5.9 per cent in 2024), partly

reflecting demographic pressures and partly the structural shift of agricultural land from staple crops towards export-oriented horticulture and cotton clusters. Metals and metal products exhibited substantial cyclical variation, peaking at 17.3 per cent in 2018 during intensive construction of the Kashkadarya Heat Power Plant and associated infrastructure.

Table 3. Import Commodity Structure, Kashkadarya Region, 2010–2024 (% of total imports)

Commodity Group	2020	2021	2022	2023	2024
Machinery & Equipment	70.6	65.7	60.2	62.1	78.0
Chemical Products	9.7	10.5	14.5	7.1	7.9
Food Products	3.3	3.9	6.1	6.2	5.9
Metals & Metal Products	6.1	5.1	4.7	0.1	2.9
Energy & Petroleum	2.7	2.7	3.8	3.7	1.5
Services	0.8	0.5	0.3	0.6	0.2
Others	6.8	11.7	10.4	20.2	3.5

Note: See Table 2. Source: Statistics Agency under the President of the Republic of Uzbekistan. Authors' calculations.

Geographic Reorientation of Trade

Table 4 presents export flows to the principal partner countries for selected years spanning the full panel. The data document a decisive geographic reorientation from CIS-centred to globally distributed trade relationships.

China (PRC) emerged as the single most important export destination, with exports reaching USD 100.3 million in 2011–reflecting large deliveries of cotton fibre and chemical products–before declining sharply as cotton exports collapsed and recovering partially to USD 35.2 million in 2023. Iran constituted the second-largest partner in most years, absorbing exports of food products, construction materials, and chemicals, with peak exports of USD 66.4 million recorded in 2019. Afghanistan maintained consistent relevance as a destination for food products, petroleum derivatives, and construction materials, with exports recovering strongly to USD 25.4 million in 2024 following the normalisation of border trade. Kazakhstan remained a

significant but declining CIS partner, reflecting the general disengagement from post-Soviet market linkages.

Notably, European partners–particularly Italy, Germany, and the Czech Republic–assumed growing importance from 2021 onwards, driven by demand for Kashkadarya's silk fabrics, knitted garments, and cotton yarn. Italy's imports from the region rose from negligible values prior to 2020 to USD 12.6 million in 2023 and USD 1.6 million in 2024 (the decline in 2024 reflecting a temporary shift of deliveries to Turkish intermediaries). Bangladesh, historically a major cotton-fibre buyer, recorded its last significant import (USD 2.8 million) in 2024.

Table 4. Kashkadarya Region: Export Values by Principal Partner Country, Selected Years (USD '000)

Partner Country	2020	2021	2022	2023	2024
China (PRC)	17,817	32,296	14,691	35,193	22,765
Iran	35,232	10,166	15,888	12,687	11,808
Afghanistan	8,503	12,334	11,214	8,122	25,445
Kazakhstan	30,958	8,256	12,476	15,629	16,806
Bangladesh	–	–	1	4,452	2,759
Korea (Rep.)	27	14	267	13	45
Indonesia	5,997	4	–	–	–
Kyrgyzstan	10,197	8,256	15,181	4,498	1,099
Italy	0	100	724	12,621	1,590
Others	var.	var.	var.	var.	var.

Note: 'var.' indicates variable/multiple partners. Values rounded to nearest thousand. Source: State Customs Committee of the Republic of Uzbekistan. Authors' calculations.

Table 5 decomposes total trade between CIS and non-CIS partners across the full panel. The CIS bloc–comprising primarily Kazakhstan, the Kyrgyz Republic, the Russian Federation, and Belarus–accounted for 72.2 per cent of Kashkadarya's total trade in 2010. By 2024, this share had contracted to 14.0 per cent, reflecting both the diminishing relevance of traditional post-Soviet trade routes and the active diversification strategy of regional enterprises towards Asian and European markets. The non-CIS share correspondingly expanded from 27.8 per cent to 86.0 per cent.

Table 5. Trade with CIS and Non-CIS Partners, Kashkadarya Region, Selected Years (USD '000)

Indicator	2020	2021	2022	2023	2024
CIS Countries	189,093	169,026	172,340	173,903	173,734

(total)					
– of which: exports	82,457	101,183	104,073	117,408	127,539
– of which: imports	106,635	67,844	68,267	56,495	46,196
Non-CIS Countries (total)	353,048	396,704	373,074	563,857	1,065,350
– of which: exports	112,920	168,865	197,055	310,215	390,712
– of which: imports	240,129	227,839	176,019	253,642	674,638
CIS Share of Total (%)	34.9	29.9	31.6	23.6	14.0

Source: Statistics Agency under the President of the Republic of Uzbekistan. Authors' calculations.

Preliminary 2025 Estimates

Preliminary data for January – December 2025 indicate total trade turnover of USD 1.24 billion, exports of USD 513.5 million, and imports of USD 728.9 million, yielding a trade deficit of approximately USD 215.4 million. The export structure for 2025 (January–September) suggests continued dominance of textiles (25–28% range) and energy products (32% range), with food products accounting for a further 25–26%, reflecting a more balanced tri-polar export structure than in any previous year. These preliminary figures should be interpreted with caution pending final reconciliation.

DISCUSSION

The evidence presented above supports a policy-induced structural change narrative. The single most transformative event in the panel–the disappearance of cotton fibre from the export basket between 2016 and 2021–is directly attributable to the 2017–2019 cotton sector liberalisation. By removing state-mandated production and procurement quotas, the reform redirected raw cotton towards domestic spinning and weaving enterprises rather than raw export, effectively upgrading the value chain within the regional economy. The subsequent rise of textiles to 53 per cent of exports by 2023 represents the downstream realisation of this upstream policy shift.

The parallel growth of energy exports–from 6.2 per cent in 2010 to 33.3 per cent in 2024–reflects both increased investment in downstream gas processing capacity and the opening of new pipeline routes and border trade corridors, particularly towards Afghanistan and Pakistan following the broader normalisation of trans-Afghan transit arrangements. This trajectory is consistent with Uzbekistan's stated ambition to become a regional energy transit hub (Ministry of Energy of the Republic of Uzbekistan, 2021).

The persistent capital-goods bias in imports warrants particular attention. While an elevated machinery-import share is consistent with a high-investment, growth-oriented economy, it also implies a structural vulnerability: any sharp reduction in foreign direct investment or sovereign borrowing capacity would rapidly translate into a decline in productive capital formation. The investment intensity of the 2022–2024 cycle–reflected in the record import values of 2024–thus represents both a strength and a risk factor for regional economic stability.

The precipitous decline of the CIS share from 72.2 per cent in 2010 to 14.0 per cent in 2024 represents one of the most dramatic geographic trade shifts recorded in any sub-national Uzbekistani dataset. Several forces are at work. First, the normalisation of exchange rates following the 2017 currency reform made Uzbekistani products more competitively priced in non-CIS markets, expanding the effective trade frontier. Second, the diversification of export commodities–towards textiles and food products–naturally opened non-CIS demand centres (European apparel buyers, Iranian and Afghan food importers) that were less relevant when cotton fibre dominated.

However, the concentration of non-CIS export flows in a small number of partners–China, Iran, Afghanistan, and a handful of European buyers–raises questions about the depth and resilience of the achieved diversification. The geopolitical disruptions of 2022, which temporarily reduced exports to Russian Federation and Belarusian partners, demonstrated that external shocks can rapidly alter established trade patterns. Building a more granular and stable partner base–including through deeper integration into global value chains for textiles and agro-processing–should remain a strategic priority.

CONCLUSION

This study has documented a fundamental structural transformation of foreign trade in Kashkadarya Region, Uzbekistan, over the period 2010–2025. Three principal conclusions emerge from the analysis.

First, the commodity composition of Kashkadarya's exports underwent a qualitative shift from raw material and semi-processed exports (cotton fibre, basic chemicals) towards manufactured goods (textiles and garments) and energy products. This transformation was primarily policy-induced, precipitated by the cotton sector liberalisation of 2017–2019 and supported by sustained investment in processing infrastructure. The region's export basket in 2023–2025 is structurally more diverse and value-added than at any point in the historical record.

Second, the geographic orientation of trade shifted decisively away from CIS partners and towards a globally distributed network of Asian and European destinations. The CIS share fell from 72.2 per cent to 14.0 per cent over the panel period. While this reflects genuine diversification, the continued concentration of non-CIS flows in a small number of partners (China, Iran, Afghanistan) implies residual geographic risk.

Third, the import structure remained persistently capital-goods-intensive, confirming that the regional economy is in an active capital-deepening phase. The sustainability of this trajectory depends on the continued mobilisation of foreign direct investment and on the successful conversion of imported capital into export-competitive productive capacity–a process that the textile sector has begun to demonstrate but that remains incomplete in agro-processing, pharmaceuticals, and light engineering.

These findings carry several policy implications. For regional development authorities, the priority should be deepening the textile value chain–developing finishing, dyeing, and design capabilities–and expanding agro-processing capacity to capitalise on the region's comparative advantage in horticulture. For national trade policymakers, the Kashkadarya experience provides a compelling sub-national case for the benefits of commodity-sector liberalisation, and underscores the importance of investing in trade facilitation infrastructure (logistics, border crossing modernisation) to consolidate geographic diversification gains. For researchers, the region offers a rich natural experiment in policy-induced structural change that merits further investigation using product complexity metrics, firm-level data, and price-deflated value series as these become available.

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