



# Policy Brief

**Cross-Country Connectivity to Boost Trade in  
the Central Asia Regional Economic  
Cooperation Region**

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## Introduction

In the ever-expanding landscape of global trade, the pivotal role of the transportation sector cannot be overstated. Nowhere is this more apparent than in the Central Asian Regional and Economic Cooperation (CAREC) region where many countries find themselves landlocked, heavily dependent on road and rail networks for their economic vitality. However, the challenge they face lies in the elevated trade costs incurred due to transit fees and border requirements. As goods traverse this region, the efficiency of their transport becomes crucial for economic integration and competitiveness.

Within the CAREC countries, notable discrepancies exist in both outbound and inbound border clearance costs and times at different border crossing points (BCPs). Furthermore, cargo movement speed fluctuates across the corridor network due to differences in infrastructure quality and traffic conditions. How do these disparities in terms of border clearance time and travel speed collectively influence transport connectivity between regional countries? Subsequently, how does the varying transport connectivity impact the trade of various products within the region? To address such questions, it is essential to analyze transport connectivity comprehensively, identify bottlenecks, and understand their ramifications on regional trade.

## Overview of regional trade

In 2022, the combined exports of CAREC countries reached US\$3,519.77 billion, with US\$103.60 billion attributed to regional exports, accounting for 2.94% of the total. Substantial heterogeneity exists in both the total exports of individual member countries and their contributions to the CAREC region. China emerges as a dominant player in regional trade, with its exports totaling US\$58.5 billion, constituting over 56% of the entire CAREC region's exports. Notably, this figure represents only 1.74% of China's total global exports. In contrast, Afghanistan exhibits the lowest total exports and a minimal regional share. Mongolia and Turkmenistan, conversely, heavily rely on regional trade, with over 80% of their exports remaining within CAREC.

**Table 1: Regional trade – country wise shares**

Country	Total exports (billion US\$)	Regional exports (billion US\$)	Regional share (%)
Afghanistan	0.77	0.23	30.38
Azerbaijan	22.21	0.93	4.19
People's Republic of China	3368.22	58.54	1.74
Georgia	4.24	1.39	32.68
Kazakhstan	59.82	16.55	27.67
Kyrgyz Republic	1.66	0.68	40.74
Mongolia	9.24	7.64	82.69
Pakistan	28.68	4.11	14.33
Tajikistan	1.47	0.63	42.58
Turkmenistan	9.39	7.63	81.27
Uzbekistan	14.08	5.28	37.47
Total	3519.77	103.60	2.94

Notes: Author's calculations based on trade data from Direction of Trade database of the International Monetary Fund for 2022. Regional shares are calculated in percentage terms as  $100 \times (\text{Regional exports}/\text{Total exports})$ .

A significant portion of this regional trade is comprised of intermediate goods, fostering economic interdependence, collaboration, specialization, and the leveraging of regional strengths. This interconnectedness is driving participation in the global value chain, ultimately contributing to a more integrated and resilient regional economy.

## Regional transport connectivity

Back in 2007, CAREC member countries laid the foundation for economic growth through enhanced trade and transport by introducing the CAREC Transport and Trade Facilitation Strategy. This strategy centered around six priority corridors, focusing on infrastructure investments and trade facilitation. In 2008, the Asian Development Bank introduced the Corridors Performance Measurement and Monitoring (CPMM) methodology to provide an evidence-based evaluation of corridor performance, identifying delays and costs while addressing regional cooperation issues. Since 2010, CPMM data for various trade facilitation indicators have consistently been collected and maintained across the network of six CAREC corridors.

The CPMM database provides annual values for various indicators of trade facilitation. However, the value for a specific year can be influenced by time-specific factors, such as the recent spread of the COVID-19 pandemic. Therefore, when considering the average value over the period from 2010 to 2022, it becomes evident that the average border clearance time is notably high for Pakistan and Afghanistan. Conversely, countries such as China, Georgia, and Kazakhstan require relatively less time for outbound and inbound border clearance. Analyzing the outbound and inbound border clearance costs, it reveals significant variations. In terms of outbound border clearance, China and Pakistan have relatively higher costs. Conversely, Turkmenistan and Mongolia exhibit substantially higher inbound costs, with figures reaching US\$258 and US\$253, respectively. Moreover, Pakistan and Kazakhstan demonstrate higher outbound costs compared to their inbound costs, with Pakistan's outbound cost exceeding its inbound cost by US\$22, and Kazakhstan's by US\$157, suggesting potential export-related bureaucratic hurdles. In terms of average travel speed along the corridor, China stands out with the highest speed among regional countries, with Uzbekistan and Kazakhstan also leading the pack. However, Tajikistan lags behind with an average travel speed of approximately 20 kilometers per hour, while Pakistan, Afghanistan, and Georgia record even lower speeds of around 13 kilometers per hour.

A recent publication by the CAREC Institute<sup>1</sup> formulates Segmental Transport Comparative Efficiency (STCE) framework as a novel approach to analyze connectivity among the CAREC countries in terms of relative efficiency. Extended upon the time–cost–distance (TCD) method of the United Nations Economic and Social Commission for Asia and the Pacific, the STCE approach compares the actual time spent to the benchmark values for all segments of transportation between a country pair. The efficiency of bilateral transportation time and cost hinges on factors such as geographic distance, transport quality, and border clearance procedures. An analysis of transport connectivity between country pairs from 2010 to 2012 reveals a diverse landscape. Some country-pairs demonstrate remarkable efficiency, characterized by minimal delays, efficient border clearance, and robust infrastructure that facilitates smooth trade and transportation. In contrast, certain country-pairs face unique challenges, ranging from extended border clearance processes to inadequate infrastructure, hindering the smooth flow of goods. For instance, the trade route from Kazakhstan to Turkmenistan exemplifies high comparative efficiency, while the route from Pakistan to Tajikistan signifies a poorly

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<sup>1</sup> Masood, A, (2024). Trade and Transport Connectivity in the Central Asia Regional Economic Cooperation Region. Visiting Fellow Program, CAREC Institute. URL: [https://www.carecinstitute.org/wp-content/uploads/2024/02/CI\\_VFP\\_Trade-and-Transport-Connectivity-in-Central-Asia-Regional-Economic-Cooperation-Region-for-publication.pdf](https://www.carecinstitute.org/wp-content/uploads/2024/02/CI_VFP_Trade-and-Transport-Connectivity-in-Central-Asia-Regional-Economic-Cooperation-Region-for-publication.pdf) (Accessed on February 14, 2024).

connected scenario. Routes from Uzbekistan to Georgia and the Kyrgyz Republic to Mongolia represent moderately connected pairs. Pakistan and Afghanistan, in general, exhibit relatively poor connectivity with other regional countries, primarily due to extended border clearance procedures. In the case of China, despite its relatively higher border clearance costs, partly attributable to the recent COVID-19 pandemic, the average travel speed along the corridor surpasses that of other regional countries. As an overall outcome, China stands out for its efficient connectivity.

Efforts to streamline border clearance procedures are paramount, especially at BCPs with high time and cost. In this context, trade digitization takes center stage. Trade facilitation policies should strategically target segments along bilateral transportation routes that exhibit lower efficiency. Trade facilitation encompasses a broad spectrum of policies aimed at simplifying, digitizing, and harmonizing customs procedures to minimize international border transaction costs. Therefore, it plays a crucial role in connecting remote areas to economic hubs, underscoring the pivotal role of trade facilitation in strengthening regional integration. A recent report from the United Nations' biennial Global Survey on Digital and Sustainable Trade Facilitation underscores that the CAREC region boasts an average trade facilitation implementation rate of 67%. Leading the charge in the region is China, with an impressive 91% implementation rate, followed by Azerbaijan at 86% and Georgia at 83%. However, Tajikistan and Afghanistan lag behind, with implementation rates of 51% and 42%, respectively. Specific measures that demand attention include advance tariff rulings, border control delegation, electronic refunds, and SPS certificate digitization.

### Transport cost and value addition

Another facet of regional trade lies in the realm of raw materials, which constitute 12% of the exports in the entire CAREC region. However, a different narrative unfolds when considering the region without China. In the CAREC region, excluding China, raw materials account for over 40% of the region's exports. Notably, Mongolia, Afghanistan, and Azerbaijan heavily rely on raw material exports. To break free from the low-value export trap, effective value chain management becomes pivotal. Facilitating the movement of raw materials and intermediate goods across the region plays a transformative role.

**Table 2: Regional trade – product category wise shares**

Categories	CAREC region		CAREC without China	
	Exports (Billion US\$)	Share (%)	Exports (Billion US\$)	Share (%)
Capital goods	21.40	21.74	1.59	5.61
Consumer goods	38.91	39.52	5.66	20.03
Intermediate goods	25.90	26.31	9.49	33.61
Raw materials	12.23	12.42	11.51	40.75

Notes: Authors calculations based on the Comtrade data for 2022.

To illuminate the connection between trade costs and the commercial value of trade goods, a deep dive into the value chain is required. The textile sector serves as a pertinent example in this context. Textiles encompass a diverse sector with an extensive value-added chain that encompasses various steps, starting from the ginning of raw cotton and the production of yarn and fabrics to the creation of finished apparel. According to regional trade data from the 2022 Comtrade database, raw cotton and its fibers amount to US\$157 million, yarn to US\$459 million, and finished textile products including fabrics to US\$269 million. The analysis highlights that transport costs account for an average of 2.57% of the commercial value of raw cotton, a percentage that drops to 1.42% for the trade of yarn. Similarly, the impact of transport costs on fabrics is nearly one-fifth compared to that of raw cotton. The processing of raw materials elevates their commercial value, resulting in reduced

transportation costs as a proportion of the traded commodity's unit value. This revelation underscores the potential for significant benefits derived from prioritizing the value-added processing of raw materials within the region before exportation.

### Policy recommendations

1. There is a pressing need to improve transport infrastructure, especially concerning enhancing travel speed within the CAREC region's corridor network. This involves widening road corridors to reduce congestion and increase speed, ultimately promising significant long-term economic benefits. Moreover, enhancing transportation infrastructure not only streamlines border clearance procedures but also strengthens regional trade, connecting CAREC with neighboring regions such as South Asia, the Middle East, the Mediterranean, and Europe.
2. Efforts to streamline border clearance procedures are paramount, especially at BCPs with high time and cost. When scrutinizing individual BCPs, it becomes evident that some BCPs suffer from significant inefficiencies, both in terms of time and cost for border clearance. Among these, BCPs with an average border clearance time exceeding 10 hours include Alashankou, Chaman, Dostyk, Gisht Kuprik, Horgos, Karasu (PRC), Kuryk, Peshawar, Shirkhan Bandar, Spin Buldak, Termez, Torghondi, Torkham, and Turkmenbashi. Others, such as Istaravshan, Khorgos, Nau, Takeshikent, Zamiin-Uud, and Zhibek Zholy, while having an average border clearance time of less than 10 hours, bear a cost of border clearance exceeding US\$200. Digitizing border clearance procedures can reduce time and cost required at the BCPs across the corridor network.
3. Furthermore, transport costs as a percentage of the commercial value are particularly high in the case of raw materials. For example, the transport cost averages 2.57% of the commercial value of raw cotton, while it is only 1.42% for the trade of yarn. Similarly, the impact of transport costs on fabrics is almost one-fifth higher compared to that of raw cotton. This underscores the potential for considerable benefits by prioritizing the value-added processing of raw materials within the region before they are exported. In particular, exports of Mongolia, Afghanistan, and Azerbaijan have mostly comprised raw materials. Therefore, prioritizing value addition should constitute a central pillar of the trade policy for these economies.