ADB

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TA 9630: Assessing Economic Corridor Development Potential Among Kazakhstan, Uzbekistan, and Tajikistan

Inception Report on Prefeasibility Studies for Shymkent-Tashkent-Khujand Economic Corridor Development

Prepared by:
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For Asian Development Bank

Asian Development Bank

ABBREVIATIONS

ABBAT	-	Association of International Automobile Carriers of the Republic of Tajikistan
ABEC	-	Almaty-Bishkek Economic Corridor
ADB	-	Asian Development Bank
AHP	-	analytical hierarchy process
AIFC	-	Astana International Financial Center
AIRCUZ	-	Association of International Road Carriers of Uzbekistan
APTA	-	Association of Private Tourism Agencies
ASEAN	-	Association of Southeast Asian Nations
BAU	-	business as usual
BCP	-	border crossing point
BECZ	-	border-gate economic cooperation zone
BIS	-	business induced scenario
CAGR	-	compound annual growth rate
CAREC	-	Central Asia Region Economic Cooperation
CFCFA	-	CAREC Federation of Carriers and Forwarders Associations
CIS	-	Commonwealth of Independent States
CMR	-	carriage of merchandise by road
CPMM	-	corridor performance measurement and monitoring
EAEU	-	Eurasian European Union
ECD	-	economic corridor development
ECOTA	-	economic cooperation organization trade agreement
EIRR	-	equity internal rate of return
EIS	-	electronic information system
ESI	-	export similarity index
EU	-	European Union
EZ	-	economic zone
FAO	-	Food and Agriculture Organization
FDI	-	foreign direct investment
FGD	-	focus group discussion
FIEZ	-	free industrial and economic zone
FTA	-	free trade agreement
GDP	-	gross domestic product
GEO	-	Georgia
GOST	-	government standard
GVA	-	gross value added
HS	-	harmonized system
HSN	-	harmonized system of nomenclature
ICBC	-	international center for border cooperation
ICIC	-	international center for industrial cooperation
ICT	-	information and communications technology
ICTEC	-	international center for trade and economic cooperation
IND	-	India
IPPC	-	international plant protection convention
IRR	-	internal rate of return
ITC	-	international trade center
JSC	-	joint stock company
KAZ	-	Kazakhstan
KLC	-	Khujand Logistics Center
KPI	-	key performance indicators
LPG	-	liquified petroleum gas
MCEZ	-	Mong Cai border gate economic zone

MDP	-	master development plan
MEAA	-	manufacturing enabler availability assessment
MICE	-	meetings, incentives, conventions and exhibitions
MNCs	-	multinational companies
MOM	-	minutes of meetings
OD	-	origin-destination
OIE	-	World Organization for Animal Health
OPEX	-	operational expenditure
PAK	-	Pakistan
PPC	-	Provincial People’s Council
PPP	-	public-private partnership
PRC	-	People's Republic of China
RCA	-	revealed comparative advantage
RCI	-	regional cooperation and integration
SCO	-	Shanghai Cooperation Organization
SES	-	sanitary epidemiological service
SEZ	-	special economic zone
SFEZ	-	Sughd Free Economic Zone
SGL	-	super green lane
SIN	-	Singapore
SME	-	subject matter expert
SMEs	-	small and medium enterprises
SPS	-	sanitary and phytosanitary
STKEC	-	Shymkent-Tashkent-Khujand Economic Corridor
TA	-	technical assistance
TAJ	-	Tajikistan
TC	-	trade complementarity
TCTF	-	transport connectivity and trade facilitation
TEN-T	-	Trans-European Transport Network
TEU	-	twenty-foot equivalent
TIR	-	Transports Internationaux Routiers
TITR	-	Trans-Caspian International Route
TLC	-	trade and logistics center
TNEC	-	transnational economic corridor
TOR	-	terms of reference
TRACECA	-	Transport Corridor Europe-Caucasus-Asia
TWG	-	technical working group
UN	-	United Nations
UN/CEFACT	-	United Nations Centre for Trade Facilitation and Electronic Business
UNCTAD	-	United Nations Conference on Trade and Development
UNECE	-	United Nations Economic Commission for Europe
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
US	-	United States
UZB	-	Uzbekistan
VAT	-	value added tax
WTO	-	World Trade Organization

In this report, "$" refers to US dollars.

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I. INTRODUCTION

1. The Shymkent-Tashkent-Khujand Economic Corridor (STKEC) is an initiative supported by the Asian Development Bank (ADB). It covers the Shymkent city (in Kazakhstan), Tashkent city (in Uzbekistan), and Khujand city (in Tajikistan) and their surrounding oblasts of Turkestan, Tashkent, and Sughd. The STKEC aims to realize the potential for increasing cross-border economic cooperation and integration and fostering economic growth through promoting spatial economic development among Kazakhstan, Uzbekistan, and Tajikistan. In October 2018, ADB approved $0.8 million technical assistance (TA) to assess the economic corridor development (ECD) potential in the STKEC region. In 2020, a road map for STKEC development was formulated and supported by the three governments, and a report assessed trade potential along the STKEC. The road map identified six focus areas for STKEC development: (i) improvement of road and railway transport connectivity; (ii) modernization of border crossing points and border management; (iii) development of horticulture value chains; (iv) modernization of sanitary and phytosanitary measures and development of food quality certification services; (v) development of regional tourism; and (vi) development of special economic zones and industrial zones. It also proposed institutional set-up, and possible future projects for STKEC development.

2. Stakeholders in Kazakhstan, Uzbekistan and Tajikistan have expressed increasing interest and commitment for the STKEC through active participation in the TA activities and providing constructive suggestions. These include applying a project-focused approach to achieve tangible results relatively quickly; and sharing of ECD-related best practices from other countries and regions for the three countries to strengthen their understanding and institutional capacity for ECD planning, designing and implementation, particularly for cross-border ECD. They also expressed keen interest in launching STKEC initiatives as early as possible.

3. The coronavirus disease 2019 (COVID-19) pandemic caused a temporary setback to regional economic integration in Central Asia. Nonetheless, the governments of the three countries remain committed to deepening mutual economic integration in the medium- to long-term. They intend to implement joint projects in transport, energy, tourism, and other sectors. In 2021, Kazakhstan and Uzbekistan announced plans to expand bilateral merchandise trade to $10 billion in the next five years. Similarly, Tajikistan and Uzbekistan aim to expand bilateral merchandise trade to $1 billion in the medium-term. The three countries are also keen to collaborate for increasing their goods and services exports to other countries by adopting industrialization to produce higher value-added products and facilitating transit trade. They are all anticipating the STKEC to play an important role in facilitating post-COVID-19 recovery and growth. Under this context, they have requested ADB to continue supporting the STKEC with three major activities in the immediate future (a) carrying out prefeasibility studies for priority projects identified in the STKEC road map, (b) supporting the institutional set-up for the STKEC, and (c) furthering capacity building, knowledge sharing and cross learning of best practices of ECDs from other countries within and outside the region.

4. In 2021, ADB mobilized an additional $1 million in TA resources to continue as second phase of the TA, to help the three countries implement the road map, and carry out the three activities mentioned above, particularly conducting prefeasibility studies on the establishment of (i) an International Center for Industrial Cooperation (ICIC) between Kazakhstan and Uzbekistan, and (ii) a Trade and Logistics Center (TLC) in Sughd oblast of Tajikistan as requested by the governments of Kazakhstan and Uzbekistan (on ICIC), and the government of Tajikistan (on TLC).

5. In November 2021, consulting firm—PricewaterhouseCoopers Pvt Ltd (PwC) India and associated firms in Central Asia (the consulting firm) was engaged through competitive bidding process to conduct the two prefeasibility studies and related capacity building activities. The composition of the PwC consultants is presented below. The scope of the two studies is in Appendix 1.

International and National Experts from PwC

Expert	Position
International	
a. Khong Kie Ee (SIN)	Regional Cooperation and Integration Specialist and Team Leader
b. Mohammad Athar (IND)	Engagement Partner and Economic Corridor Specialist
c. Manish Sharma (IND)	Trade and Logistics Specialist
d. Giorgi Tskhakaia (GEO)	Border Management and Trade Facilitation Specialist
e. Junaid Ahmed (PAK)	Trade Economist
f. Nino Chkheidze (GEO)	Transport Specialist
g. Shubhojeet Chakravarty (IND)	Finance and Investment Specialist
h. Ujjwal Singh (IND)	Manager, PwC (Support Staff)
National	
i. Arman Nurkin (KAZ)	Co Engagement Partner and CAREC Region Leader
j. Timur Yeginzhanov (KAZ)	Quality Control and Compliance Specialist
k. Alimzhan Amir (KAZ)	Manager, PwC (Support Staff)
l. Nazym Janburshina (KAZ)	Senior Associate, PwC (Support Staff)
m. Myrza Sokurov (KAZ)	National Expert - Kazakhstan
n. Shokirov Siyovush (TAJ)	National Expert – Tajikistan
o. Ziyodullo Parpiev (UZB)	National Expert - Uzbekistan

Country-based National Consultants Directly Engaged by ADB

Expert	Position
a. Sergey Solodovnik	Regional Cooperation and Integration Expert for Kazakhstan
b. Ahmad Rahmanov	Regional Cooperation and Integration Expert for Uzbekistan
c. Darya Parfyonova	Regional Cooperation and Integration Expert for Tajikistan

II. INITIAL CONSULTATIONS WITH STKEC MEMBER COUNTRIES

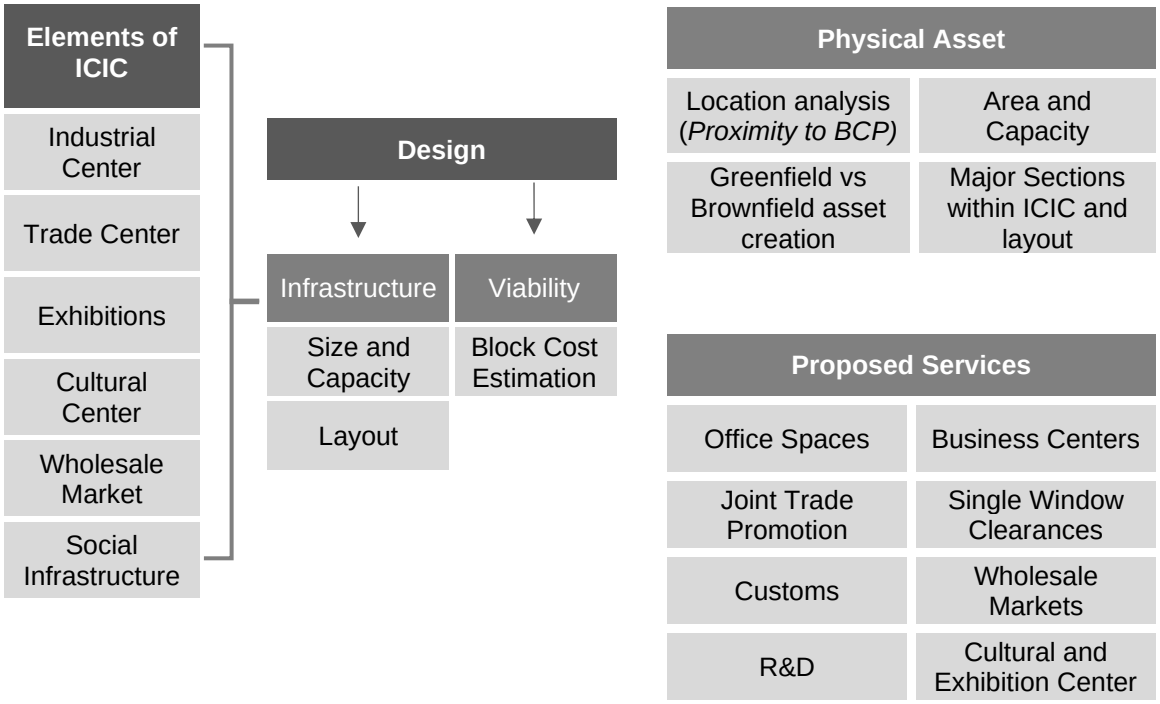
6. From 8-16 December 2021, the consultant team held a series of virtual inception workshops with multi-stakeholders in Kazakhstan, Uzbekistan, and Tajikistan and consulted on the scope, methodologies, and timelines of the two studies. Additional bilateral consultation meetings with government agencies in the three countries were undertaken virtually from February to April 2022[1] which focused on seeking feedback, guidance, and support from the three countries on specific issues and needs on the two studies. Relevant government agencies of the three countries (e.g., ministry of transport, customs authority, ministry of transport, ministry of agriculture, statistics authority, administration of the three cities and oblasts) and private sector agencies participated in the consultations. For the inception workshops held in December 2021, senior officials from the three countries including Vice Minister of Trade and Integration of Kazakhstan Mr. Kairat Torebayev, Deputy Minister of Economic Development and Trade of Tajikistan Mr. Abdurahmon Abdurahmonzoda, and Head of Department for Development of Transport Corridor and CAREC Transport Sector Focal Point for Uzbekistan Mr. Abdulla Khashimov delivered welcome remarks; and Country Director for ADB Resident Missions in Kazakhstan and Tajikistan Mr. Nariman Mannapbekov and Ms. Shanny Campbell, and Deputy Country Director Mr. Enrico Pinali for ADB Resident Mission in Uzbekistan delivered opening remarks. The lists of country participants in the inception workshops and additional bilateral consultation meetings are in Appendices 2 and 3.

A. Highlights of the Consultations

7. The consulting firm presented the proposed scope, methodologies, and timelines for the two studies (Figures 1 and 2). The key objectives include improving trade and supporting institutions, integrating small and medium-sized enterprises (SMEs) in the larger value chain, creating sectoral focus and job opportunities, attracting FDIs, and developing world class infrastructure, among others. The ICIC is likely to include physical assets such as an Industrial center especially for the high potential industries, modern border crossing point (BCP) for movements of people, vehicles and goods backed with other related facilities such as trade and logistics center, wholesale market, exhibition center, etc. The TLC is likely to include physical assets such as physical building, transportation assets such as containers and parking facilities, the trade center, and logistics services which comprise of consolidation and de-consolidation of cargo and transport facilities.

[1] The meeting with Ministry of Investment and Foreign Trade of Uzbekistan was held physically in Tashkent on 28 March 2022.

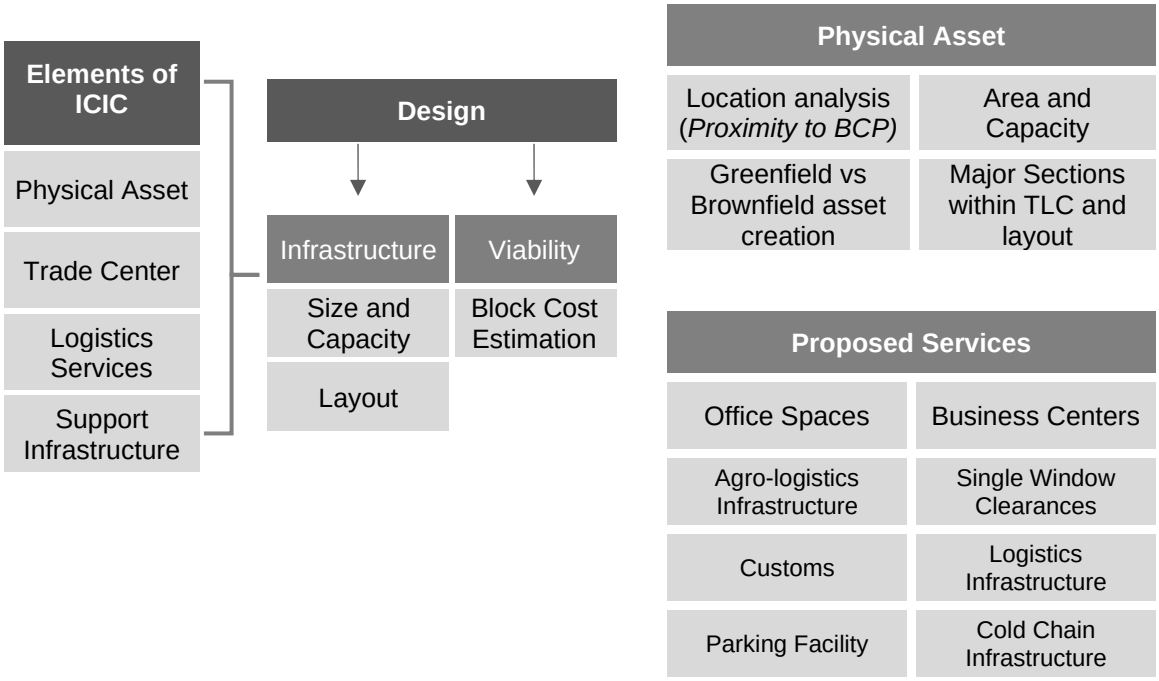
Figure 1: Elements of ICIC (Illustrative)



Objectives
• Identify the most suitable location between Kazakh and Uzbek border which can facilitate trade
• Sector and Product level identification for provisioning for adequate facilities
• Map relevant physical infrastructure elements for further area assessment of institution's capacity
• Conduct financial feasibility, prepare an institutional framework and set out policy recommendations for active inclusion of the private sector

Source: Study team analysis

Figure 2: Elements of TLC (Illustrative)



Objectives
• Identify the most suitable location on Tajikistan border areas which can facilitate trade
• Sector and product level identification for provisioning for adequate facilities
• Map relevant physical infrastructure elements for further area assessment of institution's capacity
• Conduct financial feasibility, prepare an institutional framework, and set out policy recommendations for active inclusion of the private sector

Source: Study team analysis

8. During the consultations, participants from the three countries voiced general support of ADB's engagement of the consulting firm and agreed that the two centers are important components for the STKEC development, which can also serve as gateways in spurring economic integration among the three countries. It was highlighted that the proposed ICIC and TLC are specific projects in implementing the road map for STKEC development. They are well aligned with the national development strategies and development needs of Kazakhstan, Uzbekistan, and Tajikistan and will strengthen economic interaction and integration of the STKEC region. The two centers will increase trade including cross-border trade, and transit trade in and through the region, incentivizing industrial development and cooperation among the STKEC countries, and increasing competitiveness of the region.

B. International Center for Industrial Cooperation (ICIC)

9. Kazakhstan and Uzbekistan have seen increased growth of bilateral trade for the past 20 years. As mentioned above, the two countries attach great importance to economic and trade cooperation with a target of increasing bilateral trade to $10 billion in five years. Priority sectors include machineries, pharmaceuticals, construction materials, agriculture, and hi-tech industries. To meet this objective, infrastructure gaps need to be bridged, which includes expanding and modernizing BCPs, creating special facilities at the border area to infuse the production, processing and increasing of export capacity of both countries. The establishment

of cooperation centers at border area becomes important to realize trade potential through serving as large transport and logistics hubs for both countries and for Central Asia, facilitating large transit trade through the region.

10. Participants from Kazakhstan and Uzbekistan supported the establishment of the ICIC at the border between Turkestan and Tashkent oblasts. The concept of ICIC was endorsed by the Presidents of both countries in December 2021. The ICIC is expected to increase bilateral trade and generate employment through strengthening industrial cooperation between the two countries. This is reflected in the revision of the title from "International Center for Trade and Economic Cooperation" (ICTEC) to "International Center for Industrial Cooperation" (ICIC). By using locally produced materials and producing finished goods at the border area, it would overcome some of the inherent challenges such as cross-border restrictions due to the coronavirus disease (COVID-19) pandemic and promote value-added exports to mitigate volatilities in global value chains.

11. While both Kazakhstan and Uzbekistan governments are committed to strengthening economic cooperation to increase trade, some differences in the country contexts and economic systems (e.g., regulatory and legislative framework, production conditions, investment and taxation regimes) need to be taken into consideration. For example, Kazakhstan is a member of the World Trade Organization (WTO), and the Eurasian Economic Union (EAEU) while Uzbekistan is not. The implications of these and other factors on both countries need to be weighed carefully when designing the ICIC, to ensure mutual benefits for both countries. It is thus beneficial to draw lessons and experiences of successful examples of similar centers such as the International Center for Border Cooperation (ICBC) at the Khorgos border between Kazakhstan and the People's Republic of China (PRC). Participants also expressed interest in learning how Georgia attracted financing for modernizing the highways between Poti and Tbilisi, which could suggest ideas on public-private partnership financing.

12. The location of the ICIC is a matter of prime importance but decision is still pending at the Uzbek side. The Kazakhstan government has conducted a study in 2018 and proposed the site of the ICIC to be located at Zhibek Zholy, where the adjacent Uzbek BCP is Ghist Kuprik. The planned site is 400 hectares, with 200 hectares allocated to each country. The location is chosen because the BCP pair facilitates high passenger and vehicle traffic, and the nearby densely populated settlement would provide requested labor. The ICIC is projected to serve cross-border traffic of 35,000 people and 5,000 vehicles in both directions on daily basis. While the Kazakhstan government is in favor of this location, the Uzbekistan's Ministry of Investment and Foreign Trade is yet to conclude its decision as of March 2022.

13. In addition, Uzbek representatives suggested that the aim of the STKEC is not just to increase production in core sectors such as agricultural or cement industry, but to also focus on high value-added production. Agricultural exports accounted for only 7[2]% of all exports from Uzbekistan. The Government of Uzbekistan aims to transition from high energy and cargo consuming sectors to sustainable sectors with energy efficiency. Sectors such as agriculture and mining are heavily dependent on energy and water, thus not sustainable in the long term. In this regard there is a need to identify priorities to experiment with high value-added manufacturing such as high-tech instruments in Uzbekistan.

14. All participants acknowledged the significance of logistics centers for facilitating trade. Such logistics centers could be closer to border territories of both countries with simplified procedure to for fast move of goods across borders. This will make the exports more competitive because the current time and cost of shipment is unfavorable due to the land-locked nature of the countries and cumbersome or unharmonized procedures among them. By organizing logistical functions such as consolidation and break-bulk as well as temperature-

[2] Edible vegetables as well as edible fruits and nuts accounted for the 7% of agriculture exports from Uzbekistan.

controlled storage and cross-docking, the logistics centers may store agricultural produce and manage commodities from export-oriented industries.

15. The role of digitalization in improving transport connectivity is highlighted by the participants. One instance is the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) package of standards and tools for multimodal data transport and document exchange might be a useful tool to adopt under STKEC. The UN/CEFACT reference data model system could be used to simplify processes for customs authorities and the carriers, leading to reduced time and cost for goods delivery. The Governments of Kazakhstan and Uzbekistan have undertaken various initiatives to implement National Single Window. However, either of the governments have not fully migrated to the system. Moreover, real-time data sharing is not implemented across borders between the two countries. If implemented, it would significantly reduce the time spent by traders in documentation and obtaining permits.

16. On investment attraction, Kazakh Ministry of Trade and Integration is working to attract investments for the creation of a master development plan (MDP) which shall serve as a general plan with technical and economical parameters. The Ministry shall take inputs from the provisional assessment of the project conducted by the consulting firm to complete the technical proposal for MDP.

C. Trade and Logistics Center (TLC)

17. Participants from Tajikistan supported the development of the TLC in Sughd oblast considering the increasing trade in recent years resulting from favorable developments of Tajikistan's trade relations with neighboring countries, particularly Uzbekistan. The TLC and the STKEC initiative are timely activities in support of the fourth National Development Strategy announced at the beginning of 2021, to accelerate industrialization, to increase capacity, improve economic ties and range of export commodities. Tajikistan is at the cross-roads of Central Asia. The modernization of trade and logistics services in Sughd oblast will significantly contribute to Tajikistan's improved trade relations with neighboring Uzbekistan and Kazakhstan, and beyond.

18. It was highlighted that Tajikistan has been improving policy environment for trade in recent years. These include the launch of National Single Window, and application of a trade portal with step-by-step instructions to facilitate trade. There are also large potential of transit and intraregional trade with other countries and regions. Priority sectors include agriculture/horticulture processing, textile, construction materials. The TLC could boost the development of a network of entrepreneurs on agriculture and other products, technological advancement based on public private partnership (PPP) financing.

19. Participants noted the rapid development and industrialization process in Khujand city in recent years, which provide favorable conditions for developing the TLC. The industrial production of the city is $100 million, with industries at an average annual growth rate of 8% to 9%. The industries are also increasing foreign trade base—from January to November 2021 the corporations in Khujand had traded with over 42 countries with foreign trade value reached $192 million. Multinational corporations from major Central Asian and European countries are working in Khujand. More than 80% of the services sector in Khujand is concentrated in financial and business services and tourism. Participants suggested that the establishment of the TLC should take into consideration the existing trade and logistics facilities in the Sughd oblast, and the trade development trend, to decide whether to expand existing trade and logistics facilities into a full-fledge trade and logistic center, or to build a new one. Improved transport networks are also important aspects for the TLC development. Options for housing the TLC include the Sughd Free Economic Zone (SFEZ) and the Khujand Logistics Center (KLC).

20. The SFEZ was formed under the government decree 202227 in May 2008. SFEZ covers 320 hectares of land with 30 operators inside the zone. All taxes are waived in the zone

except income and social benefits tax where the amount is deducted from the staff salaries. The SFEZ has a special status where the enterprises benefit from corporate tax exemptions, and the import and export of ready products is exempted from customs duty.

21. The KLC was established in March 1998. The formation of the logistics center has legal basis under the Resolution of the Government of the Republic of Tajikistan No. 123 dated 26 March 1997. The center is located in the north-eastern industrial zone in Khujand and has a total area of 2.64 hectares (ha). More than 20 enterprises are working on this site within proximity. The area of KLC is expandable up to 4 to 5 hectares (ha) towards the north of the center. This location is 62 kilometers (km) from the nearest international BCP Fotehobod, situated at the Tajik-Uzbek border where the adjacent Uzbek border-crossing point is Oybek. The logistics center is designed to provide integrated transport and logistics services including 1,700 square meters (m^2) of storage capacity and can accommodate up to 40 trucks in the parking space. The KLC is currently operational. To increase its capacity, investment in road network with asphalt surface, cold chain facilities as well as packaging equipment are desired.

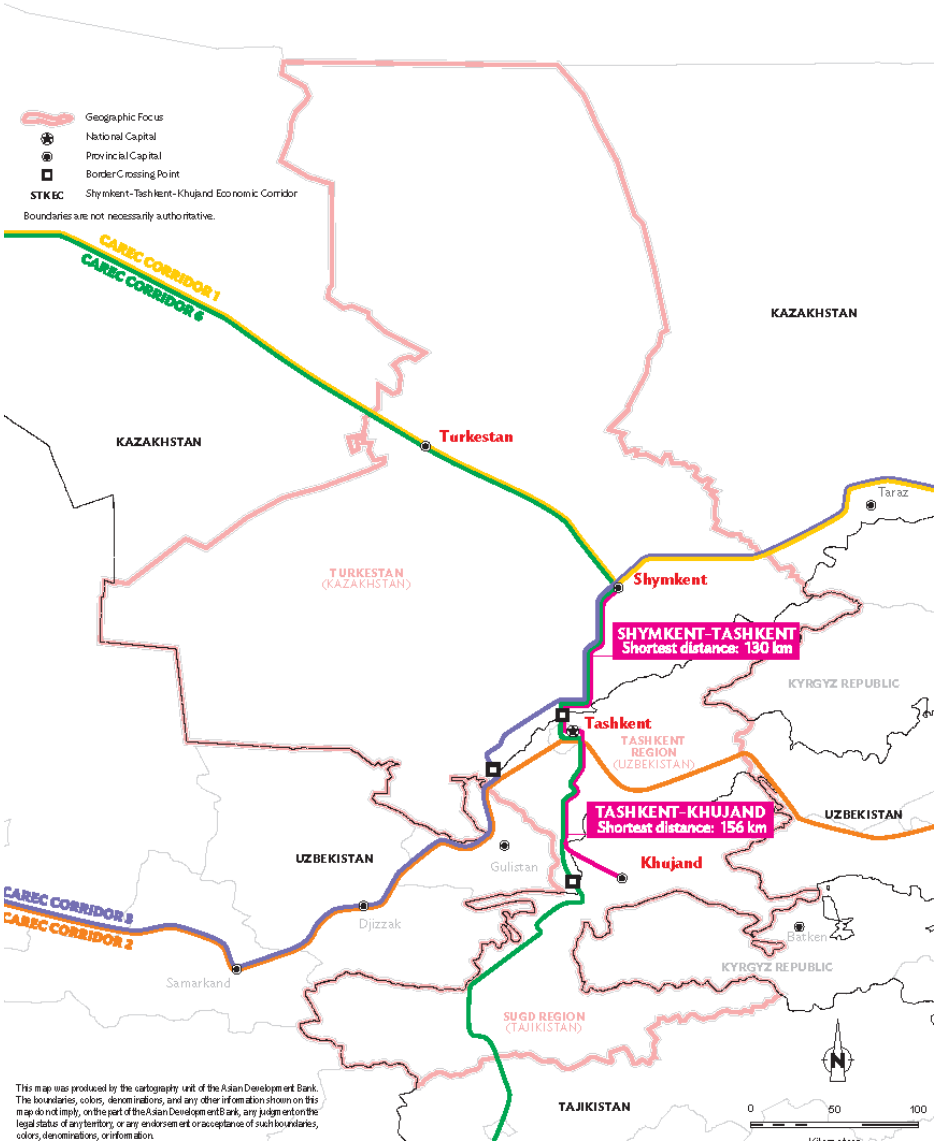
D. Shymkent-Tashkent-Khujand Economic Corridor (STKEC) Development

22. Participants agreed on the close interlinkages between the ICIC, the TLC, and the overall STKEC development. While the prefeasibility studies focus on ICIC and TLC, other important aspects of the STKEC should not be ignored. One key issue highlighted by all participants is that the STKEC and the ICIC and TLC should benefit Central Asia and beyond, in addition to the STKEC countries. The linkage of STKEC to other countries and regions should also be considered, particularly the Fergana Valley region (e.g., the Jalalabad and Osh), as well as the Kyrgyz Republic given its close economic ties with the STKEC countries.

23. Participants highlighted the importance of improved transport and logistics networks for the STKEC development. Kazakhstan has plans to establish 24 wholesale distribution centers as well as five cross-border trade and economic hubs that will adopt international standards and best practices to facilitate cross-border cargo flows. Tajikistan adopted new measures to improve trade including single window and trade portal. Uzbekistan plans to construct a new route between Samarkand and Tashkent which will extend to Kazakhstan, as well as new railway branch to link Kyzylorda region with western industrial zones of Uzbekistan. All the three countries are piloting digital Transport Internationaux Routiers (TIR) in the STKEC region to facilitate cross-border movement of goods (through reduced time and cost) for improved trade—a paperless measure which is particularly important in promoting trade mitigating the COVID-19 inflicted restrictions. Private sector participants highlighted the concerns of significant delays of cargos at some BCPs (e.g., Konysbaeva) and hope to improve the border crossing through cooperation under the STKEC.

24. Participants also discussed issues in some key sectors including agriculture and tourism, which are priority sectors identified in the road map for STKEC development. Agriculture production particularly agriculture value chain development holds great potential for the STKEC development, since the STKEC region is close to the Fergana Valley—an area rich in agriculture in Central Asia. Agriculture products account for a large portion of Tajikistan's foreign trade, and Sughd oblast is a major region for agriculture/horticulture production. Also, agricultural products are imported during off-season in the STKEC countries, such as apples from Poland and Belarus to Kazakhstan where prices are significantly higher during the harvest season. Thus, development of cold chain infrastructure and logistics facilities would benefit the sector. Participants from Uzbekistan however cautioned that while agricultural products are key export commodity, it only accounts for less than 7% of the total exports from Uzbekistan. Thus, to gain greater margin of agriculture exports, high value-added products which are water saving with high yields through technological innovation are most desired. Figure 3 represents the proposed geographic focus of STKEC development.

Figure 3: Geographic Focus of STKEC Development



Source: ADB, "A Road Map for Shykment-Tashkent-Khujand Economic Corridor Development", January 2021

25. Tourism has suffered significantly due to the restrictions imposed by countries on cross-border movement of people to mitigate the COVID-19 pandemic. Nonetheless, Central Asia including the STKEC region remains an attractive tourist destination. Preparation for post-COVID-19 tourism recovery can start now, which includes simplifying procedures (including creating green channels for tourists), increasing tourism duration, and building/upgrading tourism facilities. Participants expressed interest in learning of good tourism promotion programs and identified Georgia's tourism promotion as an interesting case study. By adopting open-sky policy, Tbilisi attracted two to three times more tourists than Tashkent. Uzbekistan and Georgia are working towards an agreement to develop two to three flights per week between Tashkent and Tbilisi. ICIC and TLC could attract business travelers who come to STKEC for procurement or business meetings. The concept of Meetings, Incentives, Conventions and Exhibitions (MICE) can be advocated as signature business tourism. As such, facilities such as hotels, convention centers and exhibition halls will form a key component to attract business travelers.

E. Government Commitment and Support

26. The ADB team thanked the participants for sharing ideas and guiding the two studies. It was highlighted that the two centers will not only benefit the STKEC countries, but also Central Asia and beyond giving the increasingly interlinked economic relations in the region. The STKEC can also be extended to the Kyrgyz Republic. The Kyrgyz Republic is already participating in some of the knowledge sharing activities under the STKEC. Country ownership and government commitment and support will be key to ensure smooth implementation of STKEC development activities and coordination of policy reforms among the three countries. Institutionalizing the STKEC framework will be a specific step for this purpose.

27. To guide the conduct of the two prefeasibility studies, including facilitating data and information collection for the studies, the project team emphasized the need for formation of a regional inter-ministerial steering committee to oversee the STKEC development, as suggested in the road map for STKEC development. This is the apex body that makes strategic decision. A Technical Working Group on Transport Connectivity and Trade Facilitation (TWG-TCTF) is suggested to be formed that comprises members from relevant governance agencies in the three countries and possibly private sector representatives. The likely establishment of the TWG-TCTF will be followed by the establishment of the STKEC Steering Committee when the Memorandum of Understanding on the STKEC development is jointly signed by Kazakhstan, Uzbekistan, and Tajikistan at a later stage.

III. RATIONALE AND GOVERNMENT VISION OF ICIC AND TLC

28. The rationale and government vision for the ICIC and TLC have been derived from multiple activities including the experience of the implementation of the first phase of the TA, consultations with multi-stakeholders of the three countries between December 2021 and April 2022, initial literature review and assessment of the impact of the recent events in and out of the region.

29. The rationale includes analysis on regional trade, transport connectivity, BCP and border management, horticulture value chain, sanitary and phytosanitary (SPS) and food quality certification, regional tourism, and special economic zones (SEZs) development in the three countries; as well as the recent activities undertaken by the three countries to improve trade and economic cooperation.

A. Regional Trade Relations

30. The STKEC region is strategically located in Central Asia hosting 15% of the total population of the region. The region is rich in natural resources and has great potential in developing trade ties and broader economic cooperation among themselves and with other countries around the world. In particular, the trade volume between the three countries have expanded rapidly in the past five years, including a sharp rebound in 2021, despite the impact of the coronavirus diseases (COVID-19) largely in 2020.

31. Tajikistan and Kazakhstan's bilateral trade volume reached $1,178.8 million in 2021 which is 30% higher than the trade of $909.8 million in 2020. Tajikistan's imports accounted for $818.5 million in 2021 which was up by 8% from 2020. Tajikistan's exports accounted for $360.1 million in 2021, showing strong growth of more than two times from the level in 2020. Main commodities Kazakhstan imported from Tajikistan were oil products, wheat, inorganic chemicals, metals, vegetable oils, flour, food residuals and processed foods. In the reverse direction, Tajikistan exported ores and concentrates, edible fruits and nuts, vegetables and beverages.

32. Tajikistan and Uzbekistan's bilateral trade volume amounted to $453 million in 2021, up 41.1% from $321 million in 2020. Tajikistan's imports accounted for $326.7 million in 2021, up 36.7% in 2020. Tajikistan's exports accounted for $126.7 million in 2021, showing strong growth of 53.7% from the level in 2020. Tajikistan's main imports from Uzbekistan were natural gas, food residuals, mineral fertilizers, oil products and metals. In the reverse direction, Tajikistan exported electricity, cement, ferrous metals (fittings), cotton, and aluminum.

33. Kazakhstan and Uzbekistan's bilateral trade volume reached $3,900.5 million in 2021 which was 33.79% higher than the trade of $2,915.5 million in 2020. Kazakhstan's imports accounted for $1,056.4 million in 2021, up by 35.41% from 2020. Kazakhstan's exports accounted for $2,844.1 million in 2021, up by 33.32% from 2020. Main commodities Kazakhstan imported from Uzbekistan were passenger sedans, polyethylene, fresh cherries, grapes, tomatoes and building bricks. In the reverse direction, Kazakhstan exported wheat, wheat flour, telecommunication equipment, aluminum, iron (semi-processed and finished products) and zinc ores.

34. The ICIC is envisaged as an important initiative under the STKEC which aims to increase bilateral trade and generate employment through strengthening industrial cooperation between Kazakhstan and Uzbekistan. The ICIC can facilitate value-added manufacturing and processing to realize higher value migration in global value chains. Instead of exporting raw materials (minerals and energy in Kazakhstan and agricultural produce and industrial raw materials in Uzbekistan), these commodities can be redirected to the ICIC where conversion occurs to transform raw materials into semi-finished or finished products. In addition, the transit trade through STKEC is significantly higher than the bilateral trade. Using STKEC's strategic location, the ICIC can expand the role of Kazakhstan and Uzbekistan in

connecting Central Asia with other regions such as Ural, Siberia, the Far East, and South Asia. The ICIC will also help the STKEC countries to penetrate more deeply into the Eurasian Economic Union markets.

35. Further, in view of the rapid trade volume growth between Tajikistan and Uzbekistan, the Sughd oblast in Tajikistan has benefited immensely. The TLC could tap on the current network of entrepreneurs in the Sughd oblast and reinforce the momentum. It will also promote Tajikistan's industrialization process, facilitate its economic ties with other countries, and expand the range of export commodities, as well as boosting its transit role taking advantage of its strategic location at the cross-roads of Central Asia. The modernization of trade and logistics services through the TLC in Sughd oblast will significantly contribute to Tajikistan's improved trade relations with neighboring Uzbekistan and Kazakhstan, and beyond.

36. Uzbekistan has concluded bilateral trade agreements with Kazakhstan and Tajikistan. Each of the three countries has also concluded bilateral trade agreement with the Russian Federation and Ukraine. Other notable bilateral agreements are mainly concluded with neighbor countries (e.g., Kyrgyz Republic) and nearby nations in the Caucasus. Kazakhstan, Tajikistan and Uzbekistan are also signatories in multilateral trade agreements such as the Commonwealth of Independent States Free Trade Area and Economic Cooperation Organization Trade Agreement (Tables 1 and 2).

Table 1: Bilateral Free Trade Agreements by STKEC Countries

Agreement	Year	Agreement	Year
Kazakhstan–Russia	(1993)*	Azerbaijan-Kazakhstan	(1997)*
Russia–Uzbekistan	(1993)	Kyrgyz Republic–Uzbekistan	(1998)
Tajikistan-Russia	(1993)	Tajikistan–Belarus	(1998)*
Tajikistan-Armenia	(1994)*	Georgia–Kazakhstan	(1999)
Kyrgyz Republic–Kazakhstan	(1995)	Armenia–Kazakhstan	(2001)
Georgia–Uzbekistan	(1995)*	Ukraine–Tajikistan	(2002)
Uzbekistan–Moldova	(1995)*	Kyrgyz Republic–Tajikistan	(2006)*
Tajikistan–Uzbekistan	(1996)*	Uzbekistan-Ukraine	(2006)
Azerbaijan–Uzbekistan	(1996)*	Ukraine–Kazakhstan	(2008)
Uzbekistan–Kazakhstan	(1997)*		

Note: The information's taken from World Trade Organization and Asian Development Bank. The trade agreements are tabulated in descending order of the year of entry into force.
*Not notified to the WTO

Table 2: Regional Trade Agreements Involving STKEC Countries

Agreement	Type	Signatories
Eurasian Economic Union (EAEU 2015)	Customs Union	Armenia, Belarus, Russian Federation, Kazakhstan, Kyrgyz Republic
Commonwealth of Independent States Free Trade Area (CIS 2012)	FTA	Armenia, Belarus, Russian Federation, Kazakhstan, Kyrgyz Republic, Moldova Republic, Tajikistan, Uzbekistan
Economic Cooperation Organization Trade Agreement (ECOTA 2008)	FTA	Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan, Turkey, Turkmenistan, Uzbekistan

Note: World Trade Organization database; FTA database of the Asian Development Bank; and World Trade Organization PTA database. The trade agreements are tabulated in descending order of the year of initial entry into force.

37. The national authorities such as the statistics agency in the three countries do not capture transit trade nor informal trade officially. Notwithstanding, the transit trade is significant as the STKEC serves key east-west and north-south cargo flows. Agricultural products from Tajikistan and Uzbekistan enter Kazakhstan via the Turkestan oblast, where Shymkent serves

as a consolidation and deconsolidation center, where the goods are distributed to the north of Kazakhstan and the Russian Federation. Wheat moves from Kazakhstan to Tashkent oblast by rail and onwards to Afghanistan or other parts of Central Asia. It is estimated that the total annual formal transit trade through the region ranges between $20.5 billion to $25.5 billion before the COVID-19 pandemic, which was 60 to 75 times larger than the officially recorded intraregional trade.[3]

38. One reason for informal trade not fully reflected in the official trade statistics is the close heritage and porous borders that allow such informal trade flowing through the border. When estimating such values, a common approach is to compare the export of one country (e.g., Kazakhstan) and the import of another country (e.g., Uzbekistan) for the same commodity and assess if there is a substantial difference and determine the underlying causes. However, it must be highlighted that there is a fundamental flaw in this estimation because exports are usually calculated on Free on Board (FOB) prices where imports are valued at Customer Information File (CIF) prices. In essence, the CIF prices factored in transport and related border-crossing or documentation cost. Based on this approach, informal trade was hypothesized to occur in two modes due to noticeable differences between the export-import comparisons. The first was the re-export of PRC consumer goods (particularly garments and footwear) from Kazakhstan to Uzbekistan estimated to range between $0.5 billion to $1 billion. The other is the export of Tajik dried fruits to Russian Federation via Kyrgyz Republic after the latter's accession to be a member of the EAEU, which amounted to between $10 million to $20 million.[4]

39. The presence of EAEU encourages non-EAEU member countries (Tajikistan and Uzbekistan) to ship the exports and be cleared at EAEU member countries such as Kazakhstan (and later Kyrgyz Republic after its formal entry in 2015 where the customs borders are removed between member states), instead of the intended final destination which is Russian Federation, the biggest market for many of Tajik and Uzbek products especially for fruits and vegetables. This is because the value added tax (VAT) in Russian Federation is 20%, whereas this tax is rated at 12% in Kazakhstan and Kyrgyz Republic.[5] Thus, by clearing the commodities in Kazakhstan, the importer or consignee only pays 12%, instead of paying 20% VAT in the Russian Federation. This, however, means that the products are re-exported under Kazakhstan instead of the actual country of origin.

40. The informal trade has a significant implication on ICIC as it is planned to be developed across two countries with one of them a non EAEU member. As a transboundary center at the border between Kazakhstan and Uzbekistan, the tax concessions and trade facilitation are pertinent to attract investors and operators. Since only Kazakhstan is a EAEU member, treatment of the economic activities in the ICIC in Uzbek's territory needs further consideration. If the goods in ICIC could be produced without the need to pay 12% VAT and could be recognized as an economic activity within the EAEU, this will draw businesses that target the EAEU to the ICIC.

B. Transport Connectivity

41. Kazakhstan and Uzbekistan are well integrated with road and railways infrastructure, and both play an important role as a transit nation for the other country. Kazakhstan facilitates Uzbek shipments to Russia and the Caucasus, while Uzbekistan provides a passageway for Kazakh freight to move to Afghanistan and Tajikistan. Under the 'Nurly Zhol' program, Kazakhstan has been rapidly modernizing the transport infrastructure, BCPs and inland

[3] The estimates were based on "Assessing the Potential of Trade Along the Proposed Shymkent-Tashkent-Khujand Economic Corridor" published in January 2021, a technical assistance supported by ADB.

[4] The estimates were based on "Assessing the Potential of Trade Along the Proposed Shymkent-Tashkent-Khujand Economic Corridor" published in January 2021, a technical assistance supported by ADB.

[5] In early 2020, the Russian Federation lowered the VAT on fresh fruits such as watermelons, melons, grapes, figs, apples, pears, quinces, apricots, cherries, peaches (including nectarines), plums and lemons, etc. imported from Tajikistan and Uzbekistan) to 10%. VAT for dried fruits and other products remained at 20%.

terminals. Six lanes carriageway are being built along the 2,700 km long 'Western China to Western Europe' corridor which runs parallel to CAREC Corridor 1b.

42. In 2021, the total freight transported by road and railways between the two nations amounted to 22.174 million tons, a dip of 2.4% compared to 22.713 million tons in 2020. This was driven by the decrease of rail freight which dropped from 20.525 million tons in 2020 to 19.230 million tons in 2021 (-6.3%). On the other hand, road freight increased significantly from 21.879 million tons to 29.398 million tons in the same period (+34.4%). It must be noted that rail freight experienced a sharp increase in 2020, so the dip in 2021 was a reversion to mean. On the other hand, road freight suffered a large drop in 2020 due to the temporary closure of road BCPs, and 2021 was a year where the volume bounced from the 2020 lows (see Table 3).

Table 3: Freight Tonnage Sent on Railways between Kazakhstan and Uzbekistan
(Million tons)

Direction	2021	2020	% Change
Kazakhstan to Uzbekistan	7.665	9.637	-20.5%
Uzbekistan to Kazakhstan	1.742	1.071	63%
Transit	9.823	9.817	0.06%
Total	19.230	20.525	-6.3%

Source: Kazakhstan Ministry of Infrastructure Development

43. While Kazakh exports to Uzbekistan reduced, the Uzbek exports to Kazakhstan increased year-on-year. The decline in exports in 2021 was due to lower tonnage in the transportation of grains, scrap metals, oil products and coal. The increase of Uzbek exports to Kazakhstan was driven by the increased transportation of construction materials, chemicals and soda, as well as ferrous and non-ferrous metals. Transit alone is similar to the sum of import and export on railways, thus demonstrating the importance of transit trade. The increased transit in 2021 was due to higher volume of oil products, grains, chemicals and soda, mineral fertilizers and ferrous metals (see Table 4).

Table 4: Freight Tonnage Sent on Road between Kazakhstan and Uzbekistan
(Million tons)

Direction	2021	2020	% Change
Kazakhstan to Uzbekistan	0.501	0.286	75%
Uzbekistan to Kazakhstan	0.815	0.759	7%
Transit	1.623	1.143	42%
Total	2.939	2.188	34%

Source: Kazakhstan Ministry of Infrastructure Development

44. Road freight staged a strong comeback in 2021, after a decline in 2020. In particular, Kazakh exports to Uzbekistan and the Uzbek transit traffic across Kazakhstan showed a high double-digits growth. Commodities that moved in the direction from Kazakhstan to Uzbekistan consisted of wood and related products, rubber and related products, chemicals, apparatus and equipment. In the reverse direction, items such as consumer goods, fabrics and textiles are sent on trucks. There were 26 regular bus services between both countries, but these were suspended since 17 March 2020 due to the COVID-19 pandemic. These services were resumed on 16 March 2022. Uzbek transport operators shipped a variety of agricultural products and textiles to Russian Federation on trucks.

45. Tajikistan's freight transportation showed divergent growth patterns for road and railways transport. Road transport exhibited remarkable and consistent growth. At the pre-COVID period in 2019, 22.29 million tons of cargoes were transported on roads, rising to 25.65 million tons in 2020 and reaching 27.77 million tons in 2021. Railways moved 5.80 million tons of goods in 2019, rose to 6.31 million tons in 2020 and dropped to 4.63 million tons in 2021. Road transportation played a dominant role in Tajikistan due to the ease of organizing such transportation as well as flexibility to complete a point-to-point delivery. On the other hand,

railways transportation is limited by geographical reasons. There are three rail sections in Tajikistan (north, middle and south) and despite the fact, that in 2016 the central and southern lines were connected through the construction of the 40.7 km Yanvan-Yangi Bazzar rail section, the railroad infrastructure in Tajikistan still remains short and fragmented. Due to the inheritance from the Soviet times, the railway sections now cross into Kyrgyz Republic and Uzbekistan. The northern railway section which traverses through Kanibadam to Khujand to Spitamen is 164 km long. Unfortunately, reliance on road transportation leads to high transportation cost which diminishes the cost-competitiveness of Tajikistan's exports.

46. Transport connectivity will be a critical success factor for the ICIC and the TLC. From the above analysis, the core infrastructure is present. However, there could be local deficiency related to the last mile connectivity to the prospective sites of the two centers. The proposed site for ICIC by Kazakhstan is Zhibek Zholy, which lacks railway connectivity essential to move large volumes of goods cost-effectively. At the SFEZ, there is a missing 22 km linkage to the nearest railway station (Spitamen). Moving goods on trucks to the nearest railway station would be cumbersome and costly. These factors should be considered to ensure seamless connectivity to international markets.

C. Border Crossing Points (BCPs) and Border Management

47. At present, there are 11 BCPs between Kazakhstan and Uzbekistan: eight road BCPs (5 international and 3 bilateral). There are also 3 railroad BCPs. All the BCPs between Kazakhstan and Uzbekistan operate 24/7. Due to COVID-19 restrictions, strict border-crossing controls were instituted in March 2020 to contain the spread of the virus. Road BCPs were closed while rail BCPs continued to operate and facilitate the shipment of essential items then. Recently, both countries gradually removed all COVID-19 related restrictions. Uzbekistan lifted the controls on 16 March 2022, and Kazakhstan followed on 11 April 2022. Citizens from both countries as well as third-party nationals can cross the borders.

48. In general, a border-crossing operation involves completing the required procedures related to (i) border security, (ii) immigration, (iii) health and epidemiological check, (iv) phytosanitary and veterinary control, (v) transport control, and (vi) customs control. The actual procedure can vary slightly depending on the country and location. The steps are sequential, so the drivers have to complete one after the other in the correct sequence.

49. A driver can only move into the BCP if the border guard signals an approval. Otherwise, the driver has to wait with the vehicle outside the BCP. Likewise, the driver will only be released to exit from the BCP after completing all formalities. At times, the vehicle could be withheld if the customs ordered an examination of the items, which would require physical unloading of all items, and re-loading them back onto the trucks after the examination. This is usually ordered if there are grounds to suspect that the shipment contains prohibited items. This is assigned as a red corridor by customs and an estimated 2% to 3% of all shipments were assigned as such in Kazakhstan. Uzbek customs reported the proportion of shipments assigned to red, yellow and green channels as 24%, 47% and 29%.

50. Trucks that move under a TIR operation can enjoy the benefit of faster border-crossing provided the customs seals are not tampered with and the documents are valid. Kazakhstan, Tajikistan, and Uzbekistan have also implemented e-TIR to simplify the paperwork and expedite border-crossing.

51. The Kazakhstan Border Service under the National Security Committee shared that the regulations of Eurasian Economic Union have a bearing on customs practices and controls, however border service adhere to national laws and regulations. Tajikistan has 56 customs checkpoints and 37 are located at the border. After the goods have crossed the border, they must be presented to the customs authorities within 15 days for clearance. Tajik Customs shared that the time to release for import is within 15 hours, and for export within 6 hours, assuming compliance with all procedures. Tajikistan has an agreement with

Afghanistan, the Russian Federation and Uzbekistan to implement a "Green Corridor" concept, which is a simplified procedure for customs control between the relevant goods (commodities of agricultural products). As such, shippers and consignees can apply for pre-arrival declaration to expedite border-crossing and clearance.

52. The Corridor Performance Measurement and Monitoring (CPMM) conducted by ADB in the Central Asia Regional Economic Cooperation (CAREC) region suggests that the BCPs in Central Asia are mostly congested and it takes longer time to cross borders for the transporters. The reasons for delays are due to under-developed infrastructure, sub-optimal layout design, cumbersome controls procedures and unharmonized operations. Border-crossing times ranged between 2.4 hours to 11.3 hours at selected BCPs in the STKEC (Table 5). It is observed that border-crossing time at rail BCPs was more time-consuming than road BCPs, and that outbound traffic took longer than inbound traffic.

Table 5: Average Border Crossing Time at Selected BCPs, 2021

Inbound Traffic		Outbound Traffic	
Name of BCP	**Hours**	**Name of BCP**	**Hours**
Konysbaeva (KAZ)	5.1	Yallama (UZB)	6.8
Yallama (UZB)	3.4	Konysbaeva (KAZ)	5.9
Fotehobod (TAJ)	4.7	Oybek (UZB)	5.3
Oybek (UZB)	3.0	Fotehobod (TAJ)	2.4
Sarygash (KAZ)	4.0	Keles (UZB)	6.0
Keles	4.5	Sarygash (KAZ)	11.3

Source: ADB, Corridor Performance Measurement and Monitoring Annual Report 2021

53. Efficient BCP operation is critical to attract freight and passenger flows. This starts from the design of the BCP to ensure it can meet the projected volume, and the border-crossing procedures facilitate trade while satisfying the domestic visa, taxation, customs and standards regulations. The centers can refer to experiences of similar bilateral economic cooperation centers with successful outcomes such as trade centers, joint customs or border controls and free trade zones, and selectively apply them to the design and operation at the ICIC and TLC.

D. Horticulture Value Chains

54. While Tajikistan and Uzbekistan are net exporter of horticulture products, Kazakhstan is a net importer as it is not self-sufficient. The fruits and vegetables are produced in the south and transported to the northern regions of the country. Kazakhstan however is a transit country for cross-border shipments of horticulture products to the Russian Federation, the largest market for Central Asia agri-exporters in the organized and unorganized sectors. The Fergana Valley is an area that covers eastern Uzbekistan, southern Kyrgyz Republic and the northern part of Tajikistan which is especially fertile and regarded as a ‘food basket’ in the region. Thus, raw materials are plentiful and accessible for further value-added processing. This is one of the reasons why the participants, during the inception workshops, suggested future involvement of Kyrgyz Republic in the STKEC development, besides close ethnic and cultural ties (Table 6 for crop yields in STKEC and comparator countries).

Table 6: Selected Crop Yields in Kazakhstan, Tajikistan and Uzbekistan, and Comparator Countries, 2020

(tons per hectare)

Products	Apples	Apricots	Cherries	Grapes	Potatoes	Seed cotton	Tomatoes	Wheat
STKEC Countries								
Kazakhstan	7.3	5.3	1.0	6.5	20.7	2.6	26.1	1.2
Tajikistan	5.4	2.7	-	7.4	20.8	2.0	30.9	3.2
Uzbekistan	10.5	12.0	14.6	15.2	33.9	2.9	33.4	4.6
Comparator Countries								
Chile	50.1	9.4	6.4	13.8	29.2	-	69.5	6.0
PRC	21.2	3.4	4.2	19.3	18.5	9.1	58.4	5.7
Georgia	3.6	1.0	3.3	3.6	13.3	-	17.0	2.2
Jordan	27.9	14.5	7.9	17.2	37.3	-	64.9	2.0
Kyrgyzstan	5.0	3.3	4.4	1.9	17.4	3.3	20.5	2.5
Lebanon	16.6	9.0	7.7	8.8	27.7	-	45.4	3.4
Netherlands	35.5	-	14.9	10.0	42.7	-	486.6	8.6
Poland	23.4	3.2	5.0	3.6	34.8	-	84.5	5.2
Russian Federation	9.5	6.1	4.9	9.4	16.6	-	36.8	3.0
Turkey	25.2	6.3	8.8	10.5	35.1	4.9	72.6	3.0
United States of America	38.9	8.4	8.6	14.5	50.8	2.8	110.7	3.3

Source: Food and Agriculture Organization of the United Nations

55. Despite the favorable natural advantage, the region has not fulfilled its full potential. Comparing the latest crop yield of the three countries with other major international and regional exporting nations, it could be inferred that the improvements are possible. The relatively low crop yield is due to lack of water, weak research and extension, as well as presence of pests. A new concern is to increase crop yield, mineral fertilizers are a critical input. Yet the Russian invasion of Ukraine has created disruption. Collectively the Russian Federation and Ukraine export annually 28% of nitrogen and phosphorous-based fertilizers and the current shortage led to higher prices.

56. Due to similar weather and terrain, the agricultural products in the STKEC region tend to ripen in the similar timeframe. Early ripening may happen in Tajikistan as it is located in the southern part of the STKEC, but the difference may be only 2 to 4 weeks before the ripening happens in Uzbekistan and Kazakhstan. So, in general the harvest calendar which marks the production and sale of the agricultural products in the region is similar and lasts from June to October. During the peak harvest season between June and August, the supply chains are overloaded and the rate for transportation increases by 2 or 3 times. An ICIC facility can ease the pressure if the value-added cycle is included in it. For example, instead of exporting tomatoes to the countries such as the Russian Federation or Turkey and then importing its value-added products like ketchup or tomato pasta, it can be produced in the STKEC region in order to increase the value-add of the export commodities.

57. The production and distribution of machinery and equipment to support the agricultural sector is of particular interest to Tajikistan. Due to the increasing need for mechanization, the activities in the farmlands require the use of machineries to increase productivity. Thus, it is important not only to acquire assets such as tractors, but also optimize the supply chain of spare parts and accessories so that any downtime due to parts malfunction could be controlled within reasonable timeframe. The TLC could have a pivotal role in the distribution of such items.

E. SPS and Food Quality Certification Services

58. Central Asian Republics are heavily reliant on the government standard (GOST) commonly adopted in the Commonwealth Independent States (CIS) and are not entirely harmonized with the Codex Alimentarius Commission for Food Safety (CODEX), World Organization for Animal Health (OIE) and International Plant Protection Convention (IPPC) standards, which are more commonly adopted in Europe and other parts of the world. This is a principal challenge that constraints efforts to diversify from the reliance on traditional markets such as the Russian Federation.

59. Kazakhstan and Tajikistan are WTO members and therefore contracting parties to the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). Uzbekistan is in the midst of accession to WTO. All three countries are members of the CODEX and OIE and contracting parties to the IPPC and Food and Agriculture Organization of the United Nations. The Kazakhstan National Accreditation Center has accredited 1,557 companies and organizations in the country on food safety. The Tajikistan Agency of Standardization provides certification to traders, who can visit any of the five laboratories in Sughd oblast (one is in Khujand city that can offer international certification while the remaining four offers accreditation at national level). There is one terminal for food product testing located 10 km inland away from the Tajik-Uzbek border, and the average lead-time to receive certification is two working days. The Uzbekistan Agency for Standardization, Metrology and Certification is the authority that provides accreditation of conformity compliance. Modernizing the test laboratories and international accreditation would improve the perception of the exports of this region and enable the penetration to new markets.

60. There are pertinent legislation and institutional considerations. For instance, the border agencies have separate risk management systems which are not integrated with one another in Uzbekistan. Although the three countries have legislation on food safety, there are noticeable differences between their standards and regulations. As a EAEU member, Kazakhstan adheres to the EAEU SPS technical regulations while Tajikistan and Uzbekistan apply their national technical regulations. Tajik and Uzbek shippers that export to Kazakhstan will need to apply for a EAEU Conformity Certificate, on top of satisfying their national standards. During the meetings, it was learnt that not all the border agencies are integrated electronically and traders at times need to submit documents to different regulatory bodies to apply for certificates.

61. In general, the importers require a conformity certificate and a sanitary import permit to import food products. Food safety test certificates are required before the two above-mentioned documents could be issued. It is noteworthy to highlight that the three countries are moving towards digital issuance of electronic SPS certificate and conformity certificate, although paper-based document are still dominant. It is time-consuming to obtain the certificate, taking 3 days to one month in Kazakhstan. In Uzbekistan, it may take 14 days to issue one, and in Tajikistan, it is compulsory to test all perishable food products (average 3 days). At present, the certificates issued from the region are not well recognized and accepted internationally. In Uzbekistan, products from 15 countries are allowed to be imported without any need for certification.

62. In summary, there are important differences in the SPS among the three countries. Food quality certification need to be harmonized to facilitate trade of food related products in the STKEC region. The ICIC and TLC are ideal locations that offer harmonization opportunities, or certain waivers and exemptions that are not available outside the centers. One advantage of the ICIC is for Uzbekistan goods to be EAEU compliant so that the products can enter EAEU market under the preferential treatment.

F. Regional Tourism

63. The tourism sector in Central Asia is in a critical stage where the neighboring countries have tourists with different purposes such as transit (entry – departure), business related travel or leisure travel. The transit tourists need better border management facilities including introduction of green channel procedures. Such best practices are already implemented by most of the developed countries which can be benchmarked in modernizing the places of attractions, improving accessibility and developing amenities in Central Asia.

64. Analysis of tourist flows suggests that 50% of foreigners are buying combined tours, i.e., the tourists visit several countries in one trip. This is where the governments need to simplify the procedures so as to maximize the duration of average trips within the countries and cities and reducing the transit time and the time spent on BCPs. By increasing the time spent in the country, tourism revenues and income shall increase, thereby monetizing every day of the stay of tourists.

65. In Kazakhstan, Shymkent is the largest city (in population) after Almaty and Nur-Sultan. The Turkestan oblast has many tourists' attractions such as the Khoja Ahmed Yasawi Mausoleum, which is recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Center. There are four main types of attractions for tourists, namely historical and cultural places, resorts (e.g., Saryagash health resorts and sanatoriums), national parks and mountain ranges. Kazakhstan and Uzbekistan are also collaborating on 'pilgrimage tours' capitalizing on the presence of a network of historic and cultural attractions such the Mausoleum.

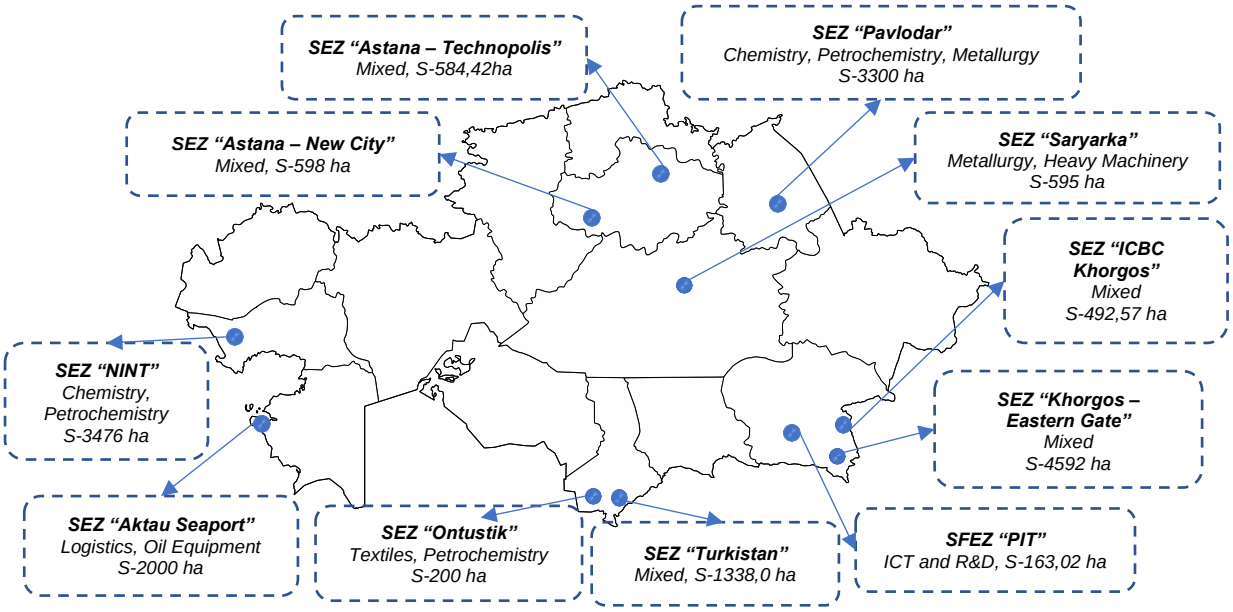
66. To boost the tourism sector, Kazakhstan established the International University of Tourism and Hospitality in Turkestan in 2018. The country recognized the importance of producing a skilled workforce and improve the level of services in the tourism industry. Thus, management programs and vocational training are available to upgrade the skill sets of the workforce.

67. Kazakhstan and Uzbekistan are keen to expand on the current 'combined tours' under the theme of the 'Great Silk Road' that includes visits covering Shymkent, Taraz, Tashkent, Bukhara and Samarkand. The ICIC could boost tourism in the STKEC region by building modern border crossing facilities and simplifying border crossing procedures. Plans were underway to simplify border-crossing, for instance, to allow the tourists to stay in the buses or coaches without the need to align and undergo immigration procedure during border-crossing.

G. Special Economic Zones (SEZs) and Industrial Zones (IZs)

68. Kazakhstan operates 13 SEZs across the country. The SEZs target six broad economic focus such agribusiness, petrochemicals, mining and metallurgy, engineering, infrastructure and trade (Figure 4 and Table 7).

Figure 4: Locations of SEZs in Kazakhstan.



Source: https://invest.gov.kz/doing-business-here/fez-and/
Note: The 13th SEZ is called 'Qyzyljar', decreed in 2019 and is not shown on this illustration

69. There are two SEZs located in Turkestan oblast—the Turkestan SEZ and the Ontustik SEZ. The Turkestan SEZ was approved under a government decree No. 693 issued on 29 October 2018, with tenure until 1 December 2043. It has a mixed use and an area of 3,014 hectares. The Ontustik SEZ was established through a government decree No. 1605 issued on 6 July 2005, with tenure until 1 July 2030. It has an area of 200 hectares and aims to develop the cotton processing, textile and clothing industry.

Table 7: Profiles of the SEZs in Kazakhstan

Name of SEZ	Area (ha)	Priority Activities	Location
SEZ "Astana - New City"	598	Mixed	Nur-Sultan
SEZ "Saryarka"	534.9	Metallurgy, heavy machinery	Karaganda region, Bukhar-Zhyrau district, aul Doskey
National Industria Petrochemical Technopark - SEZ	3,475.9	Petrochemical and chemical production	Republic of Kazakhstan Atyrau oblast.
SEZ "Seaport Aktau" (consists of six subzones and the coastal zone)	2,000	Logistics, oil equipment	Republic of Kazakhstan, Aktau
SEZ "Chemical Park Taraz"	505	Chemicals	Zhambyl Region,
SEZ "Khorgos - East Gate"	4,592	Mixed	Almaty
ICBC	492		
SEZ "Park of Innovative Technologies"	163.02	ICT and R & D	Almaty Medeu district md. Alatau
SEZ «Qyzyljar»	192	food processing, furniture, electronics and engineering products, medical equipment	City of Petropavlovsk
SEZ "Pavlodar"	3,300	Information technology, petrochemical productions, export-oriented products with high added value	Pavlodar
SEZ "Turkistan"	3,014	Mixed	Turkestan
SEZ "Оңтүстік" (Ontustik)	200	Textile and Petrochemistry	The territory of the SEZ "Ontustik"

Source: https://invest.gov.kz/doing-business-here/fez-and/

70. As of January 2022, Uzbekistan has 22 free economic zones (FEZs) offering export-oriented enterprises special benefits and infrastructure. Between 2008 and 2021, 539 investment projects were implemented in FEZs, which created 42,800 jobs and attracted 973.5 million USD in foreign investments. There are 12 FEZ in industrial sector, 6 FEZs in pharmaceutical sector, 2 FEZs in agricultural sector and 2 FTZs in touristic sector in Uzbekistan. Between 2017 and 2021, the government expanded the FEZ zones to "Bukhara-agro," "Gijduvan" and "Urgut." It will also plan to expand an agricultural FEZ in the Republic of Karakalpakstan ("Karakalpak-agro") and two FEZs for the textile industry in the Ferghana Valley ("Andijon-textile" and "Namangan-textile"). The enterprises located in FEZ enjoy a range of tax and customs incentives. The Tashkent region is home to the following FEZ : FEZ Angren specializing in manufacturing: FEZ Baliq Ishlab Chiqaruvchi, specializing in fish farming: FEZ Bustonlik Farm and FEZ Parkent Farm, specializing in pharmaceutical production. Also, the Charvak Free Touristic Zone (FTZ) operates in Tashkent region. The Navoi Free Industrial and Economic Zone (FIEZ) is a multimodal hub well-connected by road, railways and air and serve as a connecting point between the Republic of Korea and Europe, where Korean Air flies daily to this hub. Many of the SEZs are directed towards pharmaceuticals such as those located in Nukus and Andijan, highlighting the importance of this sector.

71. In Tajikistan, the SFEZ is the major SEZ in the Sughd oblast located in the southwestern part of Khujand and on the right bank of the Syrdarya River. In 2021, the total industrial production in SFEZ reached 295 million somoni, an increase of 60% compared to 2020. The export level reached 105 million somoni in 2021, which was approximately one-third of the industrial production. The SFEZ is strategically located along the Tashkent - Fotehobod - Khujand - Chanak - Dushanbe automobile road, which makes it accessible to connect to Tashkent and Dushanbe.

72. The SFEZ currently does not have a railways connection but there are plans to build a 22 km track connecting to the Spitamen- Istiklol rail network. By working with the Tajikistan Ministry of Economic Development, Ministry of Transport and the Committee on Investment Promotion, the SFEZ conducted a prefeasibility study on this railway linkage. SFEZ has also discussed the viability of this railways link with ADB. Due to the COVID-19 pandemic, the progress of the railway plan was stalled.

73. The SFEZ has been actively building intra-industrial ties with Uzbekistan to leverage on the local resources and companies to jointly promote exports overseas. Three industries that are particularly promising are agricultural products, light textile manufacturing and the production of construction materials.

74. The ICIC would be more attractive to investors and operators if granted a status equivalent to a SEZ**.** Noting that many of such entities are already in existence in Kazakhstan and Uzbekistan, the ICIC should differentiate itself from the other existing SEZs by offering features unique to the transboundary center, such as improving border-crossing procedures and bringing economies of scale through Kazakh-Uzbek joint research and development, investment and production. This necessitates identification of complementary strengths in industries to optimize the factors of production in each country. For the TLC, the SFEZ is closest to a SEZ entity and could be expanded to hosting the TLC, or a new TLC could be designed to complement the SFEZ. In both ICIC and TLC, it is pertinent that the new centers do not duplicate the functions of the existing entities but to offer unique advantages, so as to minimize cannibalizing the same market segment for investors and operators.

H. Recent Developments

75. In January 2022, violent protests erupted in Kazakhstan. The civil unrest was caused by a sudden increase of liquified petroleum gas price following the lifting of a government

enforced price cap. The protests started in the oil-producing city of Zhanaozen and quickly spread to other cities especially the nation's largest city of Almaty, which saw the demonstrations turning into violent riots. The riots were fast quelled, but resulted in the resignation of the government, declaration of state of emergency and disruption of public transportation and communication. The unrest underscores the need to foster more inclusive and equitable growth in Kazakhstan, particularly through faster development of less developed parts of the country (including border areas) such as the Turkestan oblast. The creation of ICIC can promote more inclusive and equitable growth in Turkestan oblast by creating more job opportunities in manufacturing, trade and tourism.

76. Another major event is the Russian invasion of Ukraine which started in February 2022 and still ongoing. The war has severe ramifications for the region including disruptions to international supply chains. As a result of international sanctions newly imposed on the Russian Federation, shippers become hesitant to trade with the Russian Federation, and transport operators are wary of transiting in Russian territories. Ukraine and the surrounding area in the Russian Federation became a conflict zone, prompting companies to seek alternative routes. The immediate impacts could be studied in two broad areas – regional trade, transport and transit. This has also pushed up the energy prices posing challenges of inflation due to high logistics cost. European transport operators such as Maersk, Hapag-Lloyd and DB Schenker have expressed their willingness not accepting nor dispatching goods from and to the Russian Federation. This would require diverting goods across alternative routes, implying multiple border-crossing points, which need to handle multimodal shipments and longer shipment time.

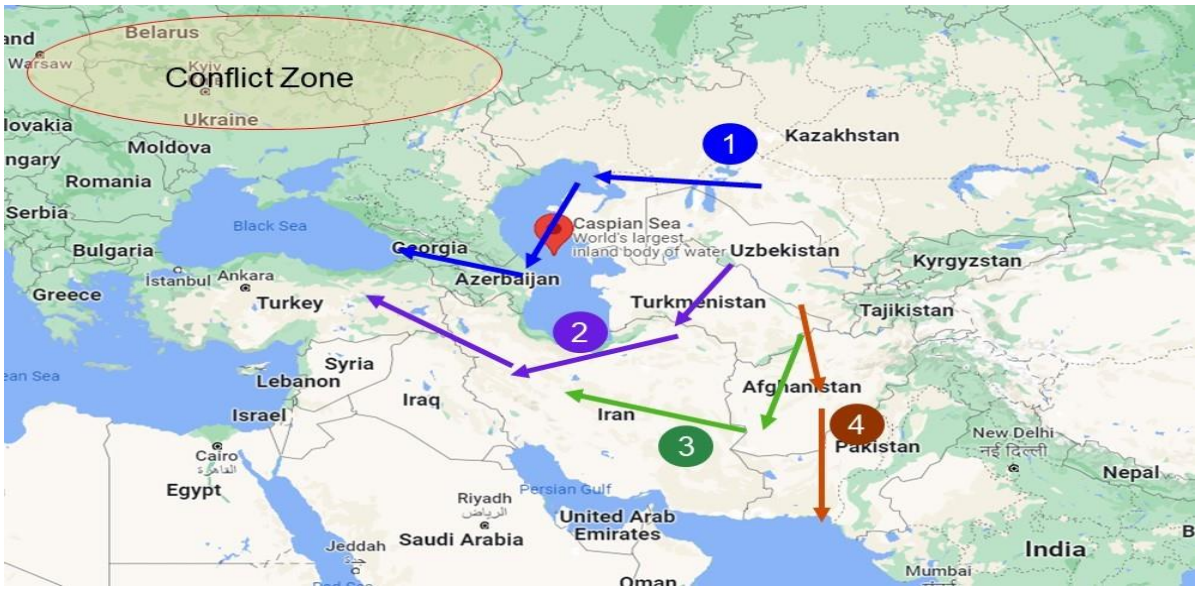
77. Kazakhstan may face a sharp decline in transit revenue. The country is a main beneficiary of the regular container freight train from PRC to Europe, crossing Kazakhstan, the Russian Federation, Belarus and Poland. Traffic in the PRC-Europe-PRC direction has grown rapidly, from 1,900 trips to 14,000 trips in 2021. It is estimated that the trade value of the 1.46 million containers shipped in 2021 using this train service to be between $75 billion to $82 billion. This represented approximately 10% of the total $828 billion trade volume between PRC and Europe in 2021. Being the nation to be the most impacted, Kazakhstan could also be the prime beneficiary. Due to the concern about transiting through Russian territory, new enquiries and interests in using the Trans-Caspian International Route (TITR) or the Middle Corridor have surged tremendously. It offers an alternative passageway connecting East Asia with Europe without entering the Russian Federation. A truck or train can move to Aktau or Kuryk seaport at the Caspian Sea, where vessels can ferry the vehicles and cargoes to Baku in Azerbaijan. From there, the journey continues to Poti or Batumi in the Black Sea and moves to the European seaports such as Chernomorsk in Ukraine, Varna in Bulgaria, Constanta in Romania or Samsun in Turkey. The truck or train can then continue further inland. Alternatively, journey can move overland, crossing Sarpi border point between Georgia and Turkey (see Figure 5).

Figure 5: Trans-Caspian International Route (TITR)

Source: Trans-Caspian International Route (TITR); https://middlecorridor.com/en

78. The Middle Corridor is attracting significant attention because there are no viable alternatives. The Middle Corridor is Route 1 on the map. Shippers can go via Route 2, crossing Turkmenistan-Iran-Turkey. However, Turkmenistan is a heavily regulated country, and the transit regime is relatively stricter. Turkmenistan has imposed a very strict trans-loading regulation and no foreign trucks are allowed to enter Turkmenistan since the COVID-19 started, and so all goods must be trans-loaded onto Turkmen registered trucks. Turkmenistan also required citizens from the neighbor Central Asian Republics to apply for visa when entering in normal times. Route 3 crosses Afghanistan, which is now controlled by Taliban. International sanctions on both Afghanistan and Iran create inconveniences for other countries, so in general, shippers avoid crossing them if possible. Route 4 has long-term potential, linking Central Asia and South Asia, but the need to transit Afghanistan and under-developed rail network is an impediment. Truck standards are also not harmonized between the countries (see Figure 6).

Figure 6: Alternative Transit Routes in the Region



Source: Study team analysis based on consultation with transport operators in the region

79. Another noteworthy development was the active discussions to integrate Central Asia and South Asia. In 2021, talks intensified between Afghanistan, Pakistan and Uzbekistan on

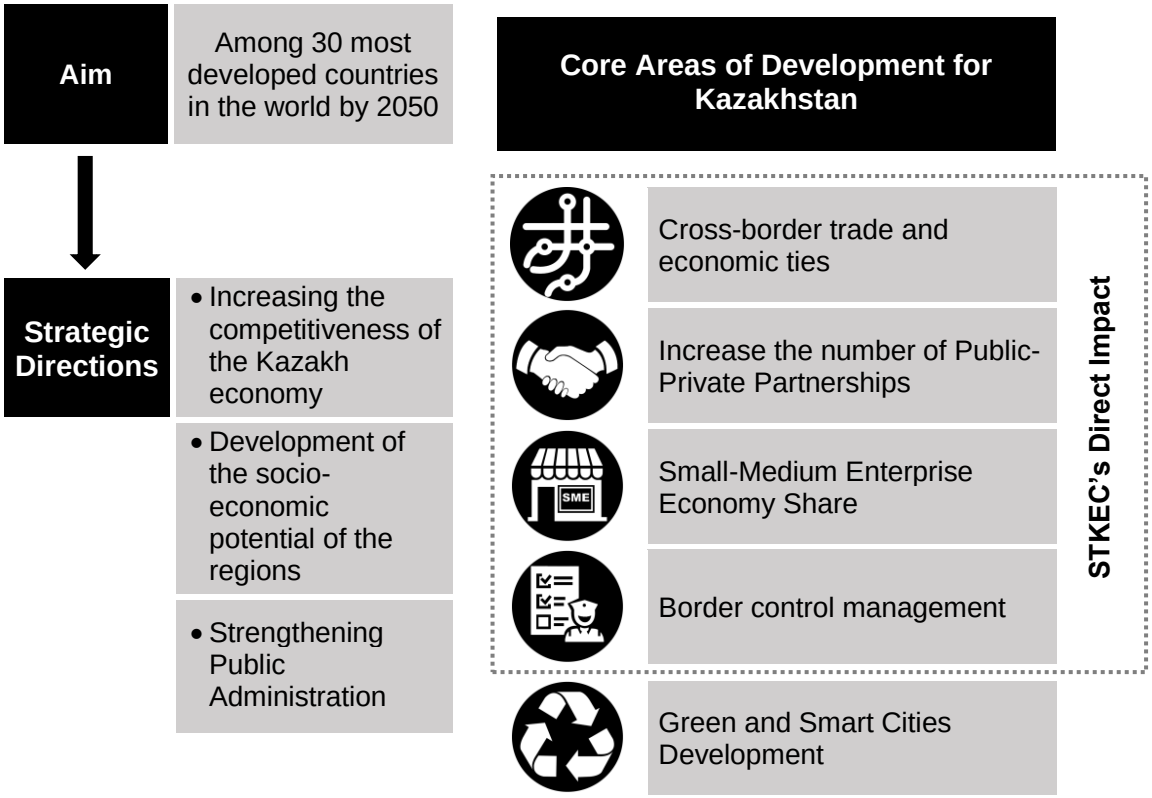
a trilateral railway corridor— Mazar-i-Sharif – Kabul – Peshawar Railway connecting Termez to Peshawar. This rail link will enable cost-effective mode of freight transportation between Central Asia and South Asia. Tajikistan also held talks with Afghanistan and Pakistan. However, since the Taliban took over Afghanistan in August 2021, this altered the geopolitical dynamics in the region. Tajikistan adopted a more cautious stance while Uzbekistan was more sympathetic and urged for international cooperation and assistance to enable a peaceful transition. A railways connection between Termez and Peshawar could in principle enable Central Asian shippers to integrate with international maritime trade lanes through Karachi. Nonetheless, such a complex project is expected to take time and massive investment.

80. In summary, the Russian invasion of Ukraine is likely to be the most important recent event that will create immediate barriers to trade, transport and transit, with longer term consequences. The physical impediment caused by the abandonment of the northern corridor resulted in a frantic search for alternative corridors. Drivers and vehicles face congestion at land BCPs. The economic repercussions are likely to worsen in the short-term as possible economic hardships reverberate across Central Asia. Lower trade volume declined remittance flows, and increased transaction costs in doing business are the immediate headwinds. Despite, there could be positive momentum for the Middle Corridor, and justification for STKEC to develop stronger supply chain resilience and trade diversification.

I. Country Update: Kazakhstan

81. The Government of Kazakhstan has developed a National Strategy until 2050 with an aim to become one of the 30 most developed economies of the world. To achieve this objective the government has formulated strategic direction and subsequently identified core areas of development, some of which are coherent with the development of STKEC (Figure 7).

Figure 7: Core Areas of Development for Kazakhstan



Develop nodes of financial and capital growth

Ensuring sustainable and balanced development of entrepreneurship

Increasing the socio-economic potential of regions through managed urbanization

Source: Study team analysis based on Development Strategy of Kazakhstan until 2050

82. Transboundary Hubs – Kazakhstan. The share of Kazakhstan in the Eurasian transit parts of the PRC and Europe exceeds other routes including the far east, where more than 33,000 container trains move from PRC to Europe from the Al Khorgos terminal. The experience in developing and operating transit hubs in cargos however shows that the country needs to create a single trade space and the country must accentuate the role of Central Asian countries in developing the system of transcontinental economic corridors. Kazakhstan is crossed by 11 international transport corridors, which create an important Trans-Eurasian trade route, they connect key economic centers as well as Central Asian countries with the global markets. With the creation of railroad BCP's at Khorgos and Dostyk as well the expansion of Aktau-Kuryk seaports, Kazakhstan has become a key part in the international trade between east and west. Transit through Kazakhstan sufficiently reduces the delivery time of goods traveling from Asia to Europe and back. With railway hubs in Khorgos and its dry ports, Kazakhstan has expanded its handling capacity volume in the Caspian region and has become one of the most powerful links for trade along the east-west corridor. The transit through Kazakhstan also reduced time of delivery from Asian manufacturers (such as PRC) to Europe to just 13 to 14 days. Kazakhstan now wants to expand its scope in service delivery via developing trade and logistics centers with key partners along key corridors.

83. The goal of the government is to expand the trade and transit potential of the country through the development of trade and production centers with the help of strategic partners on the key trade routes. It is also important to note the role of Kazakhstan and Uzbekistan in the growing Central-Asian economic corridor North-South that connects regions of Ural, Siberia and the Far East with the countries in Central Asia and South Asia.

84. Investments in Kazakhstan. Kazakhstan has all the economic pre-requisites to attract investments and potential for investing due to a totality of comparative advantages. With a GDP of $181.7 billion, trade turnover of $85 billion, an expansive network of roads and railways and serving as a member of major multilateral trade organizations, Kazakhstan is a favorable destination to attract investments in cross-border hub development.

85. The Government of Kazakhstan is already creating border trade and economic hubs which will become a single goods transportation network for the CIS and Central Asian countries. The Government, within the framework of EAEU is working on the establishment of a Functional Trading Network and establishment of 24 transboundary trade hubs which includes the International Center for Business Cooperation in Khorgos and Kuryk seaport to regulate the free flows along the south-north and east-west line. The Government has suggested development of trade and logistics services in line with the best international practices and develop production clusters to ensure development and cooperation linkages to the international market. These hubs will be interconnected by a single information system with a view to monitor and record the cargo flows and export and import data at these hubs. Development of transport infrastructure shall also reduce the economic cost for producers.

86. Kazakhstan has an economic and trade potential to attract investments. As part of EAEU, Kazakhstan is also actively working to establish a national commodity distribution

system and create 24 wholesale distribution centers as well as five cross-border trade and economic hubs. Those also include ICIC, Khorgos and Kuryk. The government proposes to use this ground to further develop the cluster of international trade, logistics services and industrial production in accordance with the best international practices and experiences. Those hubs will be connected by a single data transmission system to ensure a harmonized record of all trade processes in those hubs and along the way. Another important aspect is reducing costs in the economy for production. The first hub is Khorgos gateway, which is a single cross-border hub for trade, industrial, economic and tourism cooperation on the border between Kazakhstan and PRC. The infrastructural capacity includes various active facilities, including SEZ “Khorgos”, the Dry Port “Khorgos”, railroad station “Altynkol” as well as Industrial Zone “Khorgos” (Box 1). Furthermore, Kazakhstan is working to finalize the long-term strategy on the development of infrastructural objects and their integration into the single concept for the development of Khorgos Gateway, with the trade and industrial development orientation.

87. Kazakhstan also offers foreign investors a favorable term of cooperation including tax benefits, allocation of land parcels and the possibility to participate in PPP models with the government. The experience and knowledge from the Khorgos project clearly indicate that Kazakhstan needs to create a single trade and transport space and apply measures to increase the role of Central Asian countries in the system of interstate trade and economic corridors.

Box 1: Khorgos International Center for Border Cooperation between Kazakhstan and PRC

The Khorgos International Center for Border Cooperation (ICBC) was incorporated in 2005 as a border cooperation and economic zone between Kazakhstan and PRC. The main objective of the ICBC is to transform ICBC Khorgos into a model of economic partnership for the two countries.

The territory of the ICBC Khorgos is 608.56 hectares, located on the Kazakh – PRC border, on territory of Panfilovsky district of Almaty region. The total area with PRC is 343 hectares with 4 zones of 9.73 km^2 area that perform functions like custom clearances, logistics services, port operations and integrated services. The Kazakhstan part consists of 185 hectares area with 29 infrastructure development objectives including multifunctional trade and exhibition complex, transport and logistics center, commercial complexes, residential area, utilities infrastructure, etc. The ICBC Khorgos has been granted the status of a SEZ in Kazakhstan where the investors are exempted from multiple taxes and have other fiscal incentives. Citizens of PRC and Kazakhstan, as well as third countries, can enter or leave ICBC Khorgos without presenting a passport, pass ticket or other valid documents without applying for a visa for up to 30 days. The key outputs from ICBC's implementation include:

- **Output 1**: Essential trade related facilities and services are developed as part of Khorgos International Center master plan. The center has developed improved warehousing, logistics, and distribution facilities to accommodate increased goods trade, business incubation and demonstration facilities to support SMEs, improved customs and quarantine facilities, e-commerce services, and developed health care center to support cross-border medical tourism. The center has also improved the coordination of cross-border policies and regulations, to facilitate trade.
- **Output 2**: The ICBC Khorgos has also improved the border transport connectivity between Kazakhstan and PRC. The center has ensured development of transport linkages within the center and to the border, including construction and improvement of border access roads, BCPs, and the construction of a dedicated railway line from the integrated free trade area to the PRC–Kazakhstan BCP.
- **Output 3**: The ICBC Khorgos has provided support for SMEs by facilitating business development services to SMEs, including business networking and outreach support, market information, and financial and human resource management.

J. Country Update: Uzbekistan

88. The Government of Uzbekistan has envisaged six major national priorities which aim at promoting economic development. The government has identified major sectors of development including machinery, pharmaceuticals, construction materials, space exploration, science and technology, agro-processing industry, etc. The development of the STKEC corridor shall augment support for the implementation of the national development strategies (Figure 8).

Figure 8: Core Areas of Development for Uzbekistan

National Development Action Strategy		Core Areas of Development for Uzbekistan
Priority Areas		
1	Priority areas for improving the system of state and public construction	
2	Priority areas for ensuring the rule of law and further reforming the judicial system	
3	Priority areas of development of the social sphere	
4	Priority areas in the field of security, inter-ethnic harmony and religious tolerance	
5	Implementation of balanced, mutually beneficial and constructive foreign policy	
6	Priority areas of economic development and liberalization	
STKEC's Direct Impact		
		 Cross-border trade and economic ties
		 Modernization and intensive development of agriculture
		 Development and modernization of production, engineering, communications and social infrastructure of territories in order to create favorable conditions for industrial and other production facilities, extensive development of private entrepreneurship and improving the living conditions of the population
		 Border control management
		 Small-Medium Enterprise Economy Share
		 Expanding international cooperation
		 Institution of innovative industrial parks of small businesses in Tashkent

89. Estimates suggest that in the next 20 years if a country does not upgrade to a sustainable and value-added economy, the country will become less competitive and face widening gap with developed countries. An agrarian economy will not produce the breakthroughs to grow its economy in the new environment. Moreover, the pressing environmental problems in the country will not allow to prioritize agricultural sector as a locomotive of the economy and hence scientific-based high-tech products and industries are the priorities of the government. Uzbekistan is promoting other sectors over agriculture (agriculture is less than 7% of exports of Uzbekistan) and cement production. Moreover, the country might face freshwater shortages in the coming years. Given this situation and the expected high population growth (more than 800 people per square kilometer) in the next few years, Uzbekistan needs a strategic shift in industrialization approaches which is more sustainable in nature.

90. Uzbekistan aims to transit from energy consuming economy towards an energy efficient economy. Sectors such as agriculture and mining are heavily energy and water dependent, thus not sustainable in the long term. In this regard, Uzbekistan policy makers suggested the need to identify priorities to experiment with high value-added manufacturing such as high-tech instruments under the STKEC.

91. Uzbekistan faces unequal territorial development issues. For example, the Tashkent region has a concentration of around 11.2% of the country's gross domestic product (GDP), which may lead to potential social issues. Thus, there is an urgent need to develop other regions outside the nation's capital city, including border areas. Given the close cultural and historical ties between Uzbekistan, Kazakhstan and Tajikistan, the STKEC has an advantage of promoting closer economic ties among the three countries. The ICIC could serve as an effective platform to create international joint-venture companies between Uzbekistan and Kazakhstan to develop high value-added industries and manufacturing of high-tech products, such as the automobile industry, and renewable energy related products. The ICIC could attract investment of large international companies such as Apple, Tesla and Huawei to invest in high-tech products.

92. Given Uzbekistan's strategic location linking Kazakhstan and Tajikistan, Uzbekistan has great potential to become a regional transit hub for international goods crossing its territory. At present, Shymkent Tashkent and Khujand cities are linked by roads and by railway. The railway needs to be modernized and renovated to enable faster and more efficient transit. The STKEC can be expanded to include certain sections in the Kyrgyz such as Khujand-Andijan-Osh economic corridor, to link with PRC and its railway system, given that imports from PRC is realized via Kazakhstan and Kyrgyz Republic. For this purpose, the Uzbekistan Government has approved the road map for partnership between the local governments of Tashkent and Nur-Sultan till 2030, including for the development of a new road between Tashkent and Samarkand on the Kazak border as well as new railway branches to parts of Kazakhstan.

93. Uzbekistan's tourism potential is not yet fully realized. For example, compared to Georgia, which receives seven million tourists per year, Uzbekistan only receives two to three million tourists annually. This is far from its real touristic potential. The STKEC should consider bridging this gap through proactively promoting tourism destinations with tailor-made tourism programs, improving tourism infrastructures and tourism services, and improving border crossing facilities and procedures, to prolong the duration of tourists in Uzbekistan and in the STKEC region.

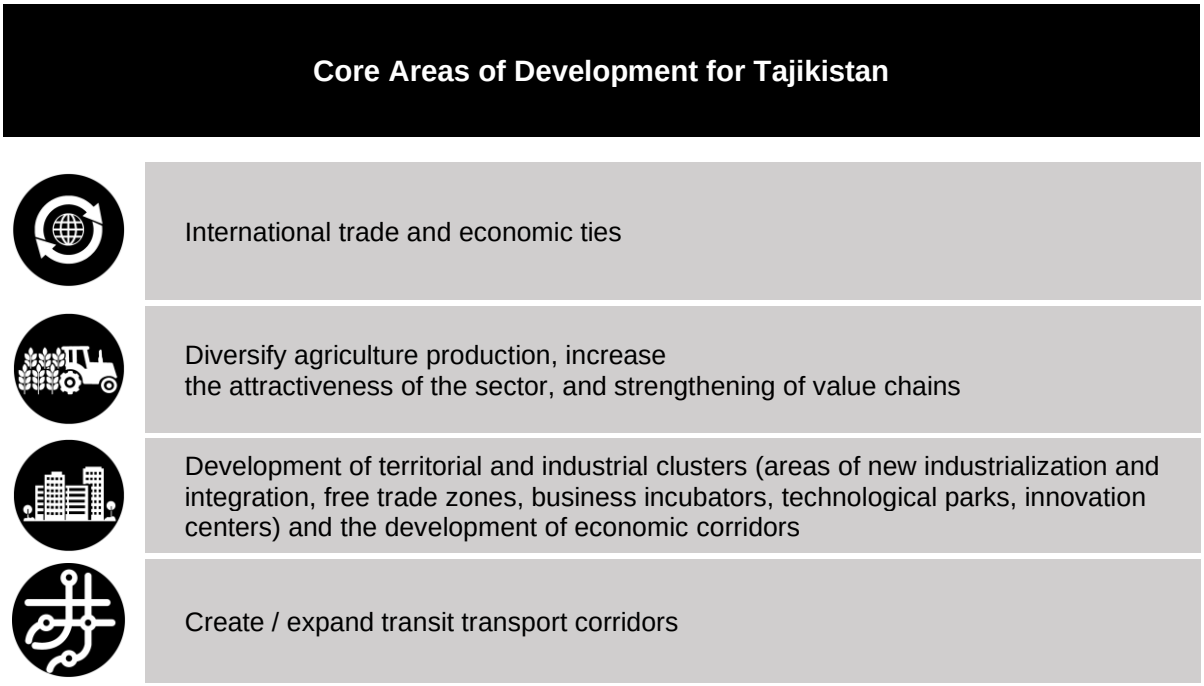
94. The Government of Uzbekistan from the past 30 years has been identifying the probable areas of development. The regulatory and legislative framework, the production conditions, investments and taxation and other issues are much different from countries in other regions (such as South Asia and Southeast Asia). Uzbekistan is not a member of WTO and EAEU, but at the same time its neighbor country Kazakhstan is a member of both organizations, while Tajikistan is a WTO member. As the ICIC will facilitate the production and trade of goods to other parts of Central Asia and world at large, a customized approach for Uzbekistan is thus necessary to ensure the operation of ICIC achieve intended results. Special emphasis must be placed on different standards and methods of operations within the STKEC countries while consolidating suggestions.

K. Country Update: Tajikistan

95. At the beginning of 2021, the President of Tajikistan announced the 4th National Development Strategy focusing on accelerating industrialization to increase capacity, economic ties and range of export commodities. Establishment of new logistics centers and expanding existing ones are proposed to support greater foreign trade. The STKEC is well aligned with the core directions of national priorities of Tajikistan (Figure 9). The STKEC and

TLC aim at developing international trade and economic ties, diversifying production and trade partners, providing support services to industrial clusters which include concepts such as integrated development and combining features such as free trade zones as well as business incubators, hi-tech parks, innovation centers, and expand transit trade in the region.

Figure 9: Core Areas of Development for Tajikistan



96. Tajikistan has adopted many measures to improve trade in the country. Tajikistan attained a total foreign trade turnover in 2020 amounting to $4.558 billion, which was 4.8% or $34 million more than in 2019. Tajikistan has trade relations with 108 countries, of which nine are in the CIS and most of the goods cross the STKEC.[6] Hence the development of STKEC is a priority for the country. In June 2021, the Presidents of Tajikistan and Uzbekistan committed to strengthening trade cooperation to further increase bilateral trade volumes from the existing level to $1 billion in the coming years. Measures include strengthening industrial and transport cooperation, in particular, developing border areas of Sughd oblast, to create employment and generate revenue for border populations in the oblast. There is also solid progress on the ground to facilitate cross-border trade mitigating the impacts from the pandemic, such as the piloting of the digital TIR operations between Tajikistan and Uzbekistan towards cross-border transport digitalization.

97. The city of Khujand has created favorable working environment for companies of all sizes across sectors from construction and transport to light industries and high-tech sectors. The government of Tajikistan continuously improves the legislation via holding regular stakeholder consultations with private sector participants such as businesses and investors to implement better mechanisms to support entrepreneurs and expand their financial and market access.

98. The TLC in Khujand can be instrumental in expanding the trade volume and provide greater opportunities for Tajikistan. The government plans to launch a series of initiatives to realize trade potential in Central Asia and the STKEC is a very timely initiative for this purpose. Tajikistan has been active in developing trade potential through industrialization and transport, piloting digital TIR. There are also great expectations that the STKEC would generate trade,

[6] Turkmenistan is an associate member. Ukraine is a CIS founding state but not a de jure member. Georgia withdrew in 2008.

investment and job opportunities for the Sughd oblast, which accounts for half of the national trade.

99. The TLC holds great potential for the STKEC development, in generating economic benefits for Tajikistan and neighboring countries. The development and improvement of trade and logistics services in Sughd oblast would generate economic activities including incentivizing industry development and private sector investment for increased trade in the STKEC region. According to ADB study, Sughd oblast accounts for half of Tajikistan's total trade, it also serves as import hub for Tajikistan. Thus, modernizing trade and logistics services in Sughd oblast will significantly contribute to Tajikistan's trade with neighboring Uzbekistan and Kazakhstan, and beyond.

Summary of Rationale for ICIC and TLC

100. Based on the above analyses and inputs received during the stakeholder consultations, the rationale for developing the ICIC as a key initiative under STKEC is articulated below:

i. The ICIC is expected to increase bilateral trade and generate employment through strengthening industrial cooperation between Kazakhstan and Uzbekistan.
ii. The ICIC serves as a pilot to strengthen cross-border cooperation with emphasis on industrialization, where production, processing, and packaging could be done in an integrated manner at a single zone. This is reflected in the revision of title from "International Center for Trade and Economic Cooperation" (ICTEC) to "International Center for Industrial Cooperation" (ICIC).
iii. By using locally produced materials and producing finished goods at the border area, it would overcome some of the inherent challenges such as cross-border restrictions due to COVID-19 pandemic and promote value-added exports to mitigate volatilities in global value chains. This is particularly strategic because the current congestion at seaports and the surge in ocean and air freight costs have disrupted global supply chains and deliveries, thus configuring a shorter local supply chain would be very helpful in facilitating faster lead-time and lower supply chain costs.
iv. The ICIC can expand the role of Kazakhstan and Uzbekistan in connecting Central Asia with other regions in Ural, Siberia, the Far East and South Asia. This is also particularly useful for the STKEC countries to penetrate more deeply into the EAEU markets.
v. The ICIC can overcome existing barriers to trade such as cumbersome border-crossings and unharmonized procedures, thus increasing the national economic and trade competitiveness.

101. On similar lines, the contributions of the TLC to STKEC development are seen as a critical enabler and the key benefits envisaged for Tajikistan's development are highlighted below:

i. The TLC will be a key enabler to infuse higher value-added production and processing leveraging on the local raw materials (e.g., horticulture products), while diversifying the reliance on concentrated export commodities that could be energy or water intensive.
ii. The TLC provides an opportunity to modernize the transport and logistics facilities in Tajikistan. It can boost the industrial capacity of Tajikistan and serve as a showcase to international investors and operators to attract greater foreign direct investment. modernize transport and logistics infrastructure in Tajikistan and in the STKEC region, which is lacking from the availability of such option to store, transport and collect goods.
iii. The TLC can attract and develop transit trade between the three countries where economic cooperation can result in synergistic gains. STKEC is in an area where each country depends on the neighbor to move goods to the final destination. By adopting aligned policies and harmonized procedures, transit of goods can become more

effective through implementation of the TLC. The STKEC stretches approximately 300 kilometers between Shymkent, Tashkent and Khujand, it crosses important sections of four CAREC corridors (1, 2, 3 and 6) where transit to Afghanistan, the Russian Federation and South Asia is available.

iv. The TLC will facilitate the achievement of import substitution of Tajikistan which will help reduce its reliance on trade partners. Countries such as Tajikistan have negative trade balance, and TLC can serve as a platform to perform value-added production, to realize possible partial or full self-sufficiency. For instance, the region has fertile lands that produce high quality agriculture products that could be processed into juices and beverage, which are now imported from Russia and Turkey.

IV. APPROACHES AND METHODOLOGIES

102. The chapter discusses the approaches and methodologies, including data analysis for pre-feasibility studies of the ICIC and the TLC. The proposed approaches and methodologies for the two centers are based on the terms of references provided by ADB. They may be adjusted during the study to reflect latest developments in the three countries as per guidance from the governments. An objective tree analysis will be carried out, as appropriate, to link the economic benefits of the ICIC and the TLC with the development objectives of the local governments of Turkestan, Tashkent and Sughd oblasts and the central governments of Kazakhstan, Uzbekistan and Tajikistan.

103. The study will include a background analysis, a report on pre-feasibility of the ICIC and on the TLC. The coverage of the three reports is detailed out in Appendix 1.

i. Background analysis. The module will cover as-is assessment of the region on topics such as trade, trade relations, logistics situation and investment climate. The output shall cover (a) review of the STKEC region and (b) lessons and best practices of cross-border trade and economic cooperation. The output from the module will serve as inputs for the other two modules to design the two centers.
ii. Prefeasibility study of ICIC. The module shall extend from module-1 and aims to lay the concept design for ICIC. The module will include demand assessment for manufacturing facilities in the region, sector shortlisting and forecasting, physical planning of the infrastructure asset, design considerations and capacity building for the facility. Different elements of the ICIC will be defined in the report followed by individual economic justification of the elements to be included as part of the ICIC. The project viability shall further be assessed by conducting a financial feasibility study for the project.
iii. Prefeasibility study of TLC. The TLC study aims to develop a concept design for the TLC facility, including shortlisting elements which can be a part of the facility such as trade center, commercial space, logistics center, ambient warehousing, skill development center, and packaging facility. The study team shall take inputs from relevant stakeholders, conduct trade analysis and assess cargo flows, customs and clearance procedures, etc. to build facilities which can augment trade facilitation.

A. Approaches for ICIC

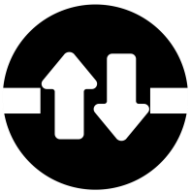
104. The general approaches to conduct the prefeasibility study of the ICIC include:

a. Review the development challenges in Kazakhstan and Uzbekistan to be addressed by ICIC,
b. Benchmark global best practices,
c. Identify the most suitable industries capturing higher value addition and aligned with available factors of production in Kazakhstan and Uzbekistan,
d. Demand projection to understand the capacity of the ICIC and its components,
e. Recommend the components of the ICIC based on economic justification of each component,
f. Assess the financial feasibility of the ICIC, including the identification of the most suitable project finance structure for the center, as well as
g. Identify an institutional structure and policy interventions which will help the center to operate efficiently and effectively.

105. The study team will review the development challenges in the two countries and build on the findings of the background analysis to identify the list of development challenges which can be addressed by the establishment of an ICIC. This will help identify and prioritize various components of the ICIC for development. Some of the elements which can be considered but not limited to in ICIC are: manufacturing zone, common utilities to support manufacturing such as common effluent treatment plant (CETP), power substation etc., BCP for cargo movement,

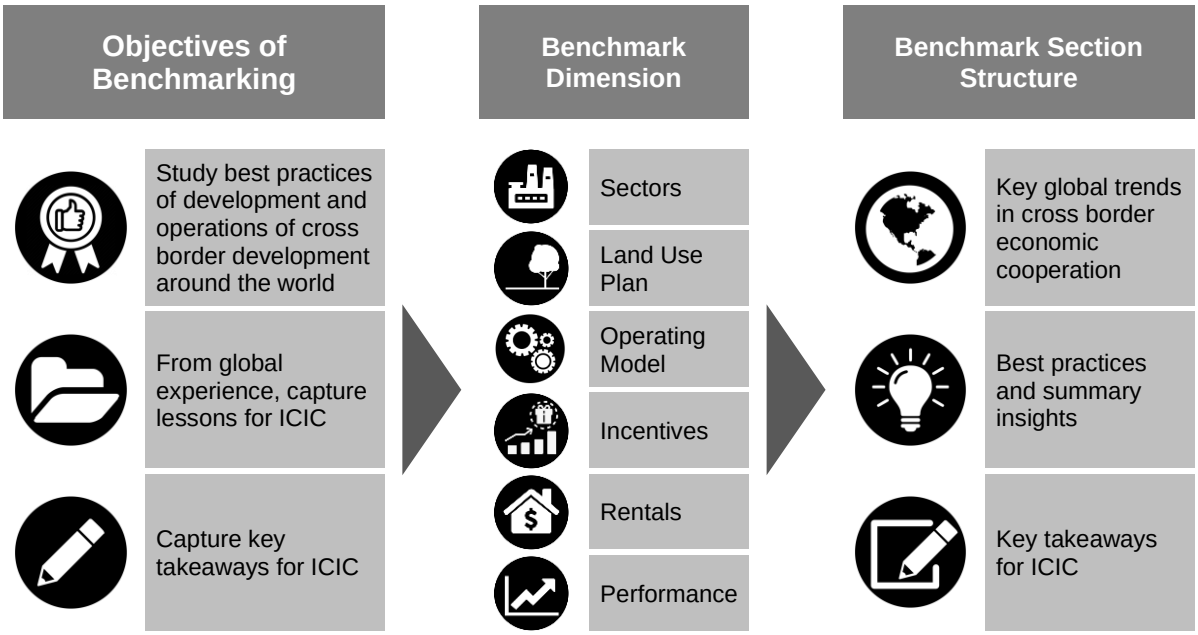
BCP for people movement, transport & logistic center, phytosanitary labs, customs zone, wholesale market, business center etc. Figure 10 represents multiple items to be reviewed for different components of ICIC.

Figure 10: Review of Various Components of ICIC

Components of ICI		Review Items
	**Cross Border Industrial Zone**	• Priority industries to be set up • Medium to long term growth prospect of the industries • Governments' vision related to the industries • Potential users and investment trends in the industries • Size and CAPEX for the development
	**Logistics Centre**	• Need for a logistics center within ICIC (demand supply review) • Additional features such as cold chain facilities • Governments' vision related to the center • Size and CAPEX for the development
	**Border Crossing Point**	• Facilities to reduce illegal movement and improve border crossing time • Size and CAPEX for the development
	**Wholesale Market & SPS Infrastructure**	• Risk associated with wholesale market inside ICIC • Governments' vision related to the market • Demand from the potential users

106. Benchmarking best practices in cross border development shall be undertaken by comparing successful industrial parks / economic zones / trade centers etc. in the developed and fast developing countries. The benchmarking will lead to identification of various development options which can be considered for ICIC based on extant development challenges. As ICIC shall be built on a shared economic gain basis, a model for operations should be built which offers coordinated gains and benefits to both countries while enhancing ease of doing business in the wider region. Figure 11 captures the details of the benchmarking to be conducted for multiple cross border cooperation development across the world

Figure 11:Benchmarking of Cross-border Development



107. The benchmarking effort uses the framework with four focal themes. regional trade cooperation, infrastructure, digital integration and trade architecture. Comparisons and performance levels will be made through desktop research and case-studies, supplemented by the trade statistics from the three countries to evaluate their relative standings (Figure 12).

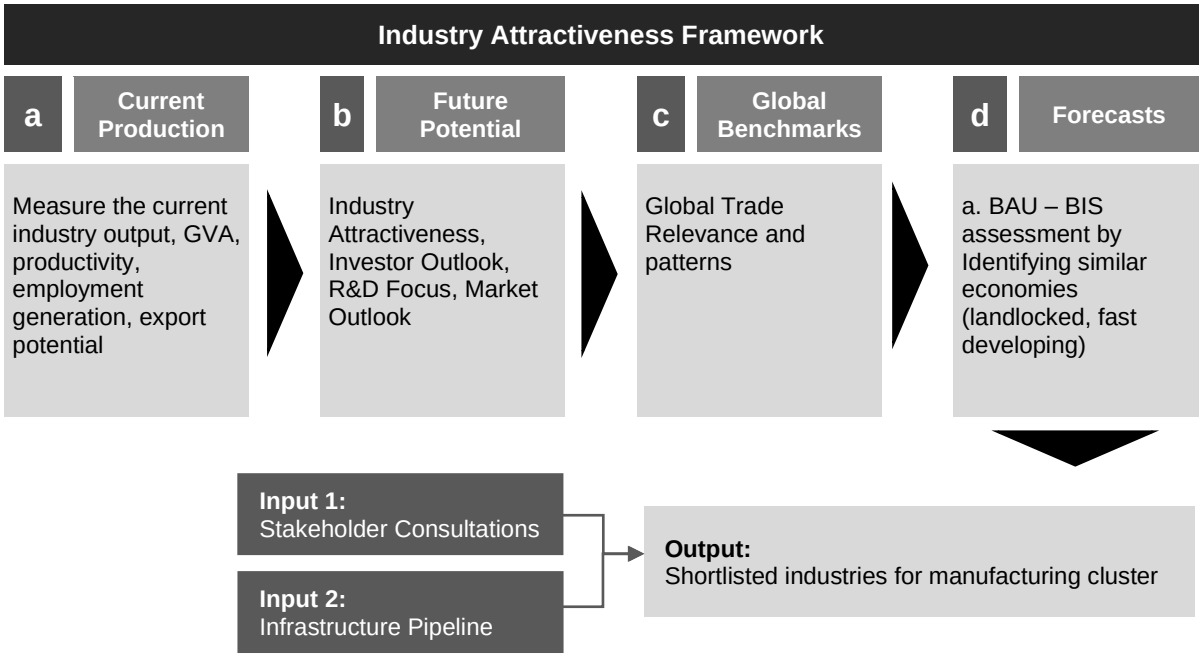
Figure 12: Key Themes for Benchmarking

Leverage regional cooperation	•**Regional trade cooperation** among landlocked countries and developing regions will form part of this theme. Best practice to facilitate cross-border trade shall be analyzed.
Infrastructure	•**Infrastructure** for trade facilitation and best practices in cross-border trade, such as green corridor transit for perishables, etc.
Digital Integration	•**Digital integration** for trade facilitation process in cross-border trade shall be analyzed. Viability of best practices such as single window clearance, online customs declaration shall be analyzed for STKEC
Trade Architecture	•**Trade architecture** will cover analysis on Global Governance and best practices of trade facilitation and tariff regimes

108. To identify the industries which augment industrial cooperation between Kazakhstan and Uzbekistan, the study team shall analyze the commodity composition of the countries'

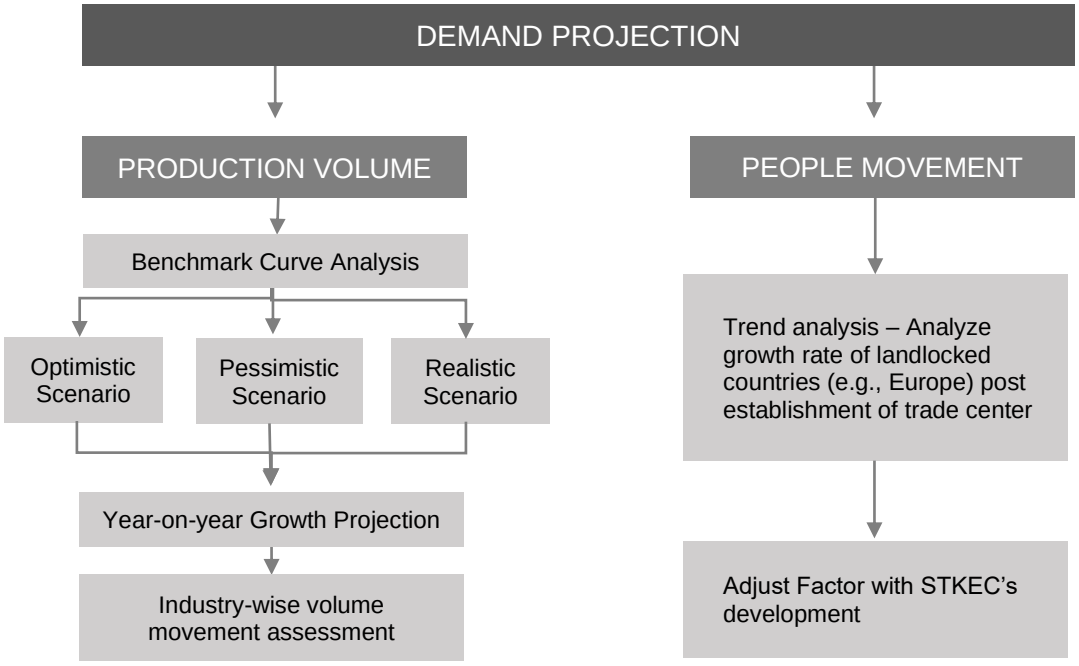
merchandise trade and their revealed comparative advantages. The team will also assess manufacturing parameters backed by the current and potential mega trends to integrate the ICIC into global value chains (Figure 13).

Figure 13: Industry Shortlisting for ICIC



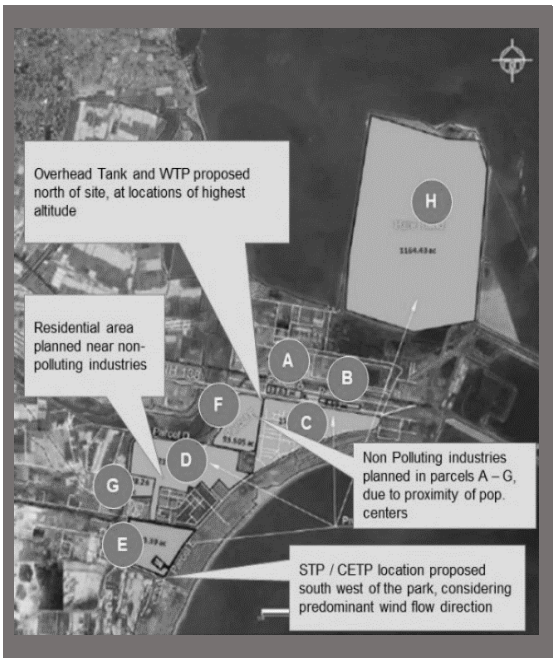
109. The demand projection uses data of production, cross-border movement of both goods and people, and estimate the land area requirements, capital expenditure and support services required for each sector. The projections shall be carried out by plotting a benchmark curve analysis, scenario analysis, and creating annual volume projections (Figure 14).

Figure 14: Demand Projection



110. After identification of industries and evaluation of volumes, certain parameters pertaining to the location, area requirements based on volume projections, infrastructure requirements, BCP layout, etc. shall be discussed in detail. Block cost estimates for each of the elements shall also be analyzed by undertaking stakeholder consultations with relevant stakeholders. The ICIC shall be designed as an integrated structure with following but not limited to the major categories of assets - BCPs, exhibition center, industrial area, wholesale market, and additional commercial spaces. The study team will individually assess the elements of the ICIC taking into consideration the overall constraint of land to come up with the final list of elements within the ICIC. Based on the trade volumes at BCPs and land availability, the design shall be either in one complete block of land or be segregated in nearby vicinity. An illustrative layout of an industrial zone is presented in Figure 15.

Figure 15: Layout of an Industrial Zone (Illustrative)



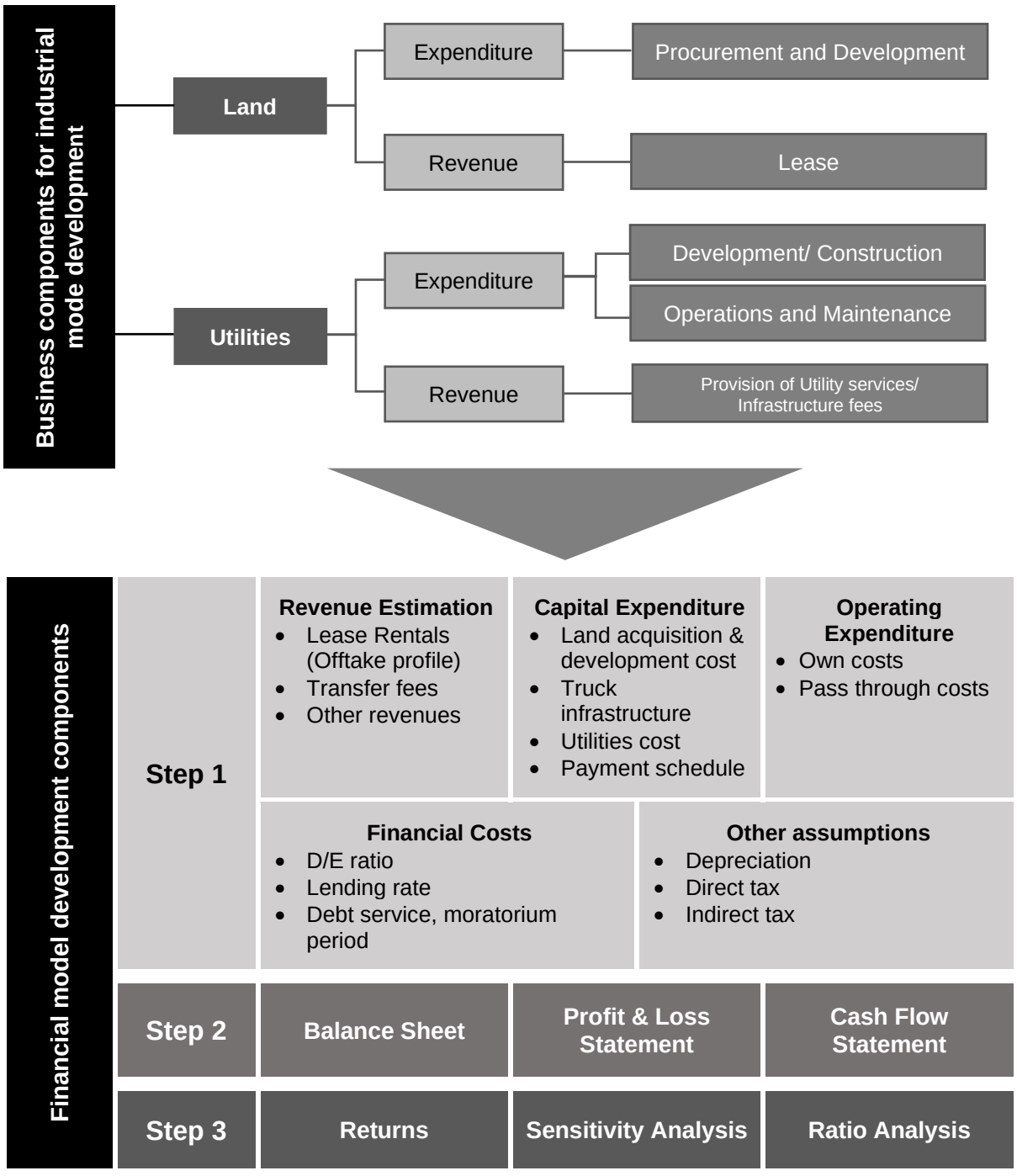
A	12.6 acres: Located on VOC road
B	8.6 acres: Located on VOC road
C	218.9 acres (Port Colony)
D	202.7 acres: Between labour and tsunami colony
E	118.7 acres
F	92.3 acres (Port Colony)
G	25.4 acres: Between Tsunami colony and Parcel D
H	1,164.4 acres: Hare Island

Type of development (in %)	
Industrial Area	64.1
Logistics & Warehouse	5.3
Saleable Area	69.3
Residential	4.6
Amenities	2.2
Utilities	3.4
Green Space	12.0
Roads	8.5
Non-Processing Area	30.7
Total Area	**100**

Master – planning for the industrial, logistics & warehousing park addressed an area of 1868 acre over 8 parcels with an effective planning area of ~940 acre

111. Furthermore, economic benefits of the ICIC will be identified and quantified as much as possible using the broad cost estimates. The assessment will comment on the feasibility of the project at a macro level (Figure 16).

Figure 16: Economic Benefit Analysis of ICIC



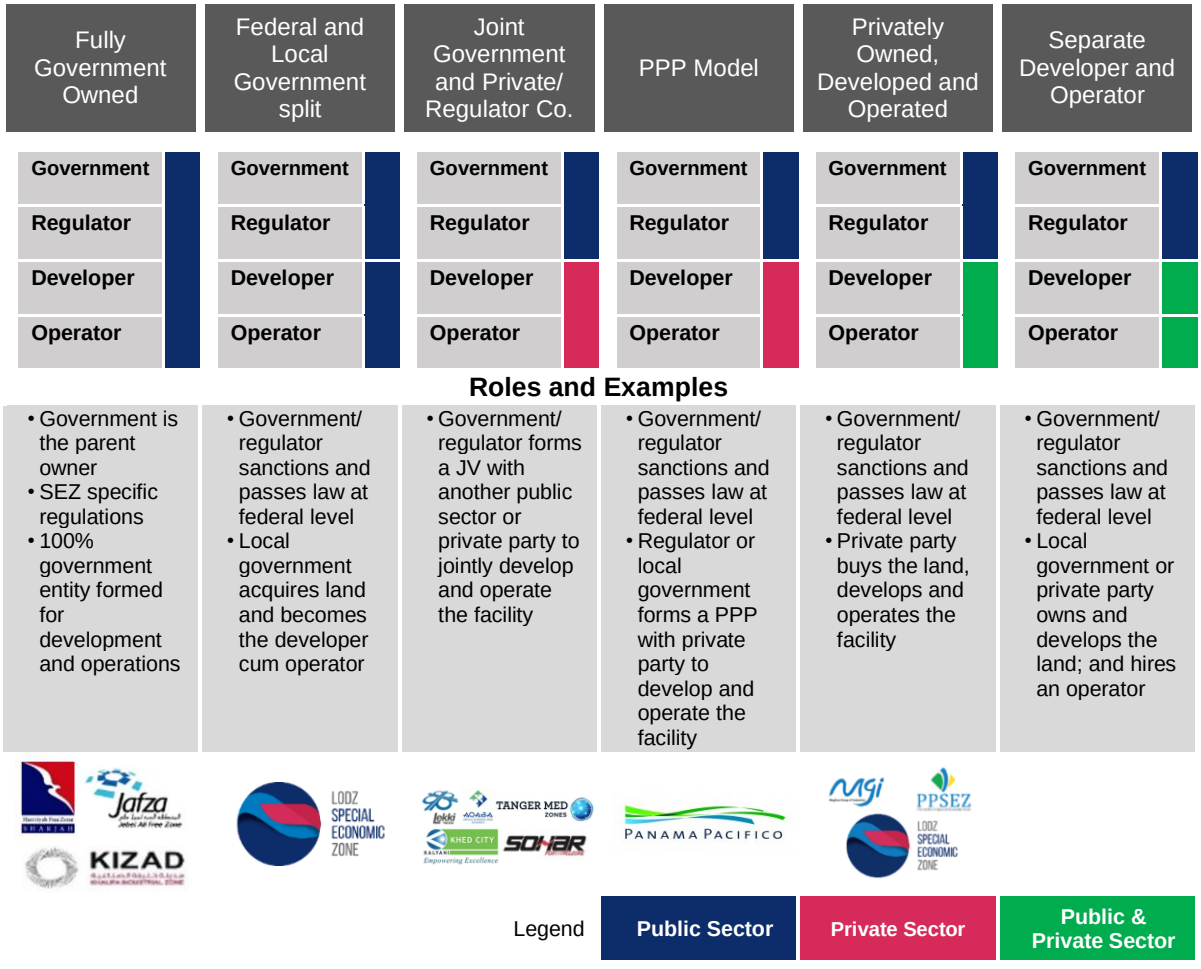
112. In the financial feasibility assessment, block cost estimates will be conducted to project the capital investment for developing the ICIC which will also apply to the TLC. The major investment areas are land related investments (acquisition and development), transport networks (roads and railways) as well as public utilities (water, power, waste treatment) (Table 8).

Table 8: Block Cost Estimates (Illustrative)

Item (All cost in Rs. Crore- escalated prices- 5% per annum)	Up to FY 19	FY 20-24	FY 25 onwards
Land acquisition cost	6,697	-	-
Land development cost	90	165	540
Roads	589	787	1,611
Railway	151	4	30
Water and Effluent Treatment Facilities	563	1,043	3,393
Solid Waste Management	30	41	232
Power infrastructure cost	137	412	767
Contingency	78	123	329
Total CAPEX	8,438	2,724	7,037

113. Industrial cooperation and trade center development will require conducive policies and operational alignment between Kazakhstan and Uzbekistan. The study team shall analyze the current policies pertaining to cross-border trade, border management, taxation, industry setup and affiliated civil administration matters, and international treaties affecting trade for both the countries. As per the findings from review module and benchmarking with the best practices, the study team shall furnish recommendations. These shall be further discussed with the concerned stakeholder group to further refine the recommendations. Figure 17 details different types of operating models and roles of relevant stakeholders.

Figure 17: Types of Operating Model and Roles



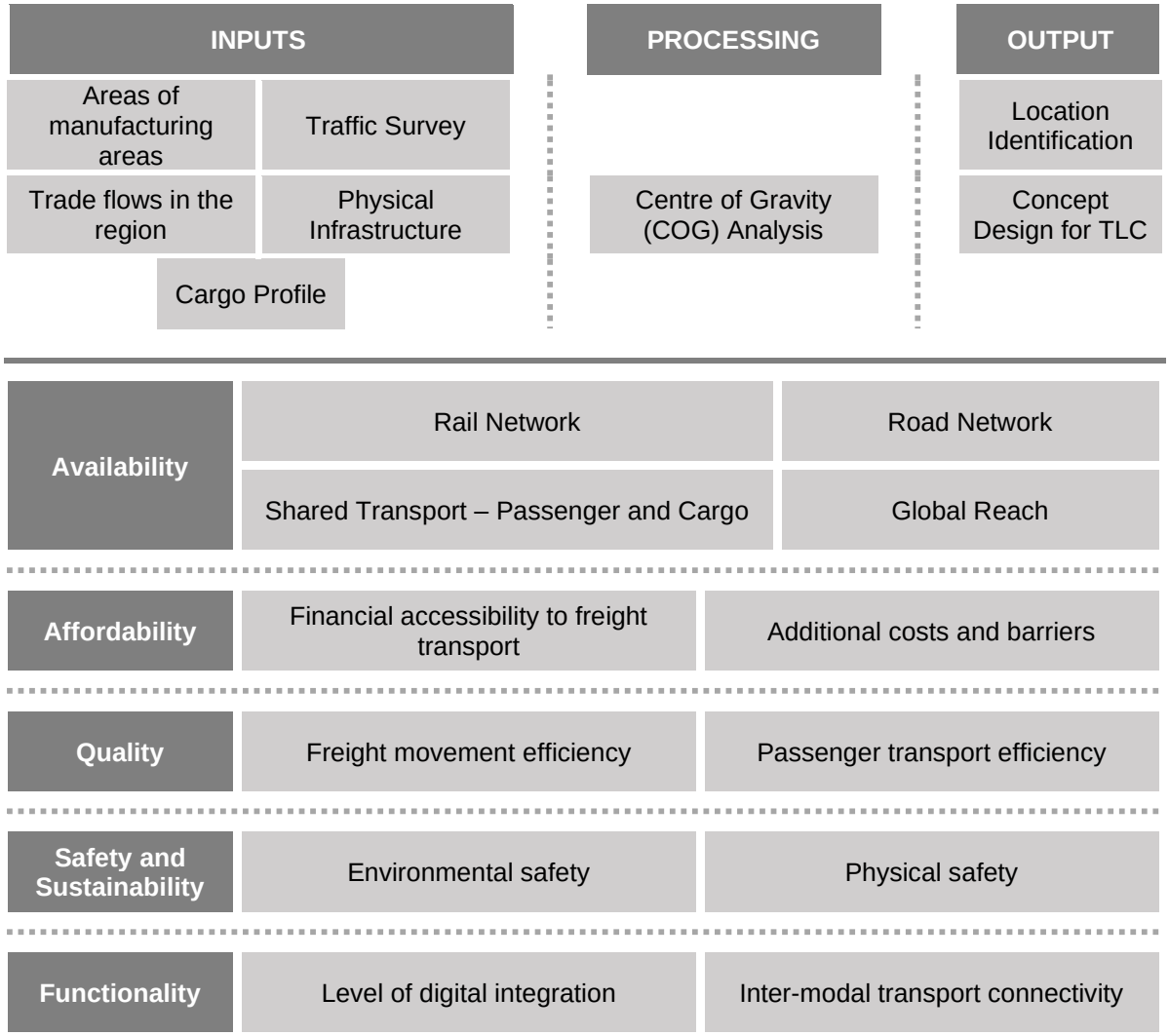
B. Approaches for TLC

114. The TLC in the Sughd oblast is conceptualized to be an enabler of trade with modern systems for customs clearances and logistics services. The TLC shall seek to generate revenue stream by customs clearance facility, logistics services provision, and commercial office spaces. The possibility of enhanced partnership from private sector can also be explored for ancillary units which can be operated on a public-private partnership (PPP) model. This module sets forth the approach to conduct prefeasibility assessment for setting up a TLC in the Sughd oblast area. The study team shall conduct the prefeasibility assessment in these stages:

a. Review traffic and trade flows to understand needs of a TLC in the region,
b. Design, conceptualize, and plan for the TLC,
c. Identify location,
d. Prepare layout,
e. Assess financial feasibility and,
f. Provide policy recommendations for implementation of the TLC.

115. The first step is a comprehensive review of the traffic and trade flows at the regional, national and the Sughd oblast levels, to help understand the needs of a TLC in the region. The activities are illustrated below (Figure 18).

Figure 18: Comprehensive Review of Traffic and Trade Flows



116. The assessment of traffic and trade flows in the Sughd oblast shall facilitate estimation of current and future growth in vehicle and rail movement. The industry-specific demand estimation shall help in understanding the need of a TLC in the region. Furthermore, it will be leveraged to undertake estimation of size and capacity of the physical assets within TLC.

117. In terms of concept planning, the TLC shall not only facilitate trade and promotion activities in Tajikistan, but also act as a gateway to connect Tajikistan to STKEC and to the larger global value chain. Facilitation of trade is a key function of the TLC. The TLC shall provide specific support to traders, provide relevant market intelligence, connect domestic market players to global value chains and provide commercial office space for trade associations, customs, and other stakeholders to operate in proximity.

118. Firstly, priority sectors will be identified and supported. TLC shall work with a focused approach to increase trade in specific sectors such as food and argi business, textile manufacturing, other upcoming industries such as pharmaceuticals and medical equipment manufacturing. The TLC shall create strategic development plans outlining the status of the sectors market in Tajikistan and explain plans to overcome the challenges to reach a predefined target exporting goal. Centers of excellence shall be created and engage in trade advisory services, impart training programs for relevant stakeholders and undertake regional development projects to strengthen exporter's capacity. The center of excellence will collaborate with other government agencies responsible for export promotion to further promote knowledge-based exports promotion.

119. Secondly, efficient customs controls and clearance process will be designed. As the TLC will further trade opportunities, it may be setup near an urban settlement in closer proximity to production and consumption centers. In this case, a differentiated approach to customs such as Inland customs setup can be explored within the TLC facility. Inland clearance provides simplified clearance procedures as regular importers who may not need separate import declaration for each shipment, thus easing bottlenecks at BCPs. Expedited customs procedures result in faster movement of traffic at BCPs, also when the goods are cleared where they are consumed. For Sughd oblast with high volumes of agricultural and horticulture products traded, it is necessary for the clearance facility to be equipped with a specialized customs laboratory with highly skilled customs staff. A centralized location for customs within TLC shall augment better control of cargo clearance and movement, provide security of cargo and ensure policy consistency (Figure 19).

Figure 19: Facilities Required for Difference Types of Cargo (Illustration)

	Dry Cargo		Container		Value added services
Cargo type	Perishable	Non-perishable	Empty	Stuffed	
Storage type	Covered Warehouse	Open Storage or Covered Warehouse	Covered Warehouse	Open Storage or Covered Warehouse	
Cargo Handling facilities	• Weather and pest proof bagging facilities. • Cold storage facilities • Pack house for horticulture produce. • Multimodal transport • Packing and sorting	• Normal storage – heavy industrial floor • Conveyor belt systems for bulk cargo • Multitrack facilities • Multimodal transport • Bagging or packaging	• Stuffing warehouse/ yard • Empties container stack yard and repair yard • Loading/ Unloading equipment • Multimodal EXIM transport	• Cargo destuffing yard or stacking yard • Multimodal and EXIM transport • Unpacking • Multitrack warehouses	• Facilities for labelling and packaging • Horticulture/ food processing • Late-stage manufacturing-grading and assembly • Return management
Common facilities	• Bonded zone and customs clearance • Communication facilities (information technology linkage with port, customs, railway, and end users) • Business center facilities, banking and insurance facilities, etc. • Refreshment/ recreation facility		• Toll gates for entry/exit • Parking facilities • Petrol/ CNG/ diesel fueling stations and truck repair shops • Power, water supply, drainage facilities • Rail, road, and any other mode connectivity • Weighbridge facilities • Security services		

120. Thirdly, transport infrastructure and logistics services are necessary to reduce shipment cost, which is a major barrier for Central Asian exports to access and diversify into international markets. The prefeasibility study will examine the regional connectivity in terms of the TLC to the main corridor networks as well as address any last-mile connectivity. In addition, it is envisioned that the TLC will have a dedicated logistics park to offer logistics services and provide multi-modal transportation, cold chain, packaging, break-bulk and consolidation services.

121. The study team will conduct location analysis to understand suitability of a greenfield location for TLC or the modification of existing BCPs for development of TLC. Besides using the center of gravity (CoG) analysis (details in Appendix 4), the team will analyze two major factors: ease of implementation, and cost of implementation (Figure 20).

Figure 20: Framework for Selection of Location for TLC

Ease of Implementation			
Construction time	Land availability	Approach road	Regulation
Cost of Implementation			
CAPEX		OPEX	

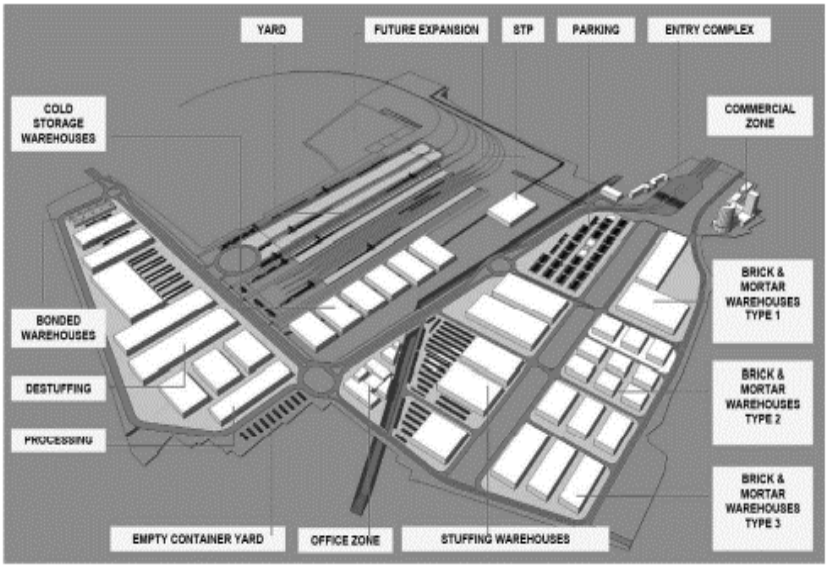
122. Considering majority of the trade in the region is based on railway transport, railway based BCPs will be studied to understand the feasibility. As per the ADB report on STKEC development, railway transport accounts for four-fifths of cross border cargo traffic in the Uzbek part of the STKEC region, while majority of the cargo movement for Tajikistan is also transported via rail. The TLC needs to be located in proximity to the railways network. Additionally, road infrastructure is an important consideration especially for the first-mile and last-mile connectivity, and can be created around existing railway line but creating a greenfield railway will attract more challenges and CAPEX.

123. Once the candidate locations of the TLC are identified, the study team will prepare, for each of the locations a detailed representation highlighting merits and limitations of establishing a trade center facility at that location through consultations with government entities to finalize the location.

124. In layout and design, a high-level concept will be proposed to describe the various elements inside the TLC, the purpose of each and the estimated land use. The layout seeks to optimize the flow of freight linking to external transport networks such as the nearest railways stations and border-crossing points, as well as internal cargo movements, i.e., between the export processing zone to the logistics park inside the TLC. A sample illustration is provided to showcase the high-level design of a logistics park (Figure 21).

125. Block cost estimates with be also conducted to project the capital investment for developing the TLC (refer para 112 and Table 8).

Figure 21: Sample Design of a High-level Logistics Park



Land use	% Area
Yard lines including platforms	9.0
Stacking Area & Sick Container Yard	3.0
Warehouses	23.0
Supplementary infrastructure (STP, fire station, WTP, etc.)	15.0
Commercial area	4.0
Open area for cargo separation and green spaces	31.0
Sub-total	**86.0**
Approach track area	14.0
Freight Village Area	**100.0**

126. Policy recommendations will focus on both physical infrastructure development and policy environment needed for the TLC in maximizing its functions, to be provided under the broader context of economic development, international trade, industries development, transportation, transit, customs, investment, certification and standards related to Tajikistan and the STKEC countries.

C. General Approaches for Data Collection and Analysis

127. Data collection and analysis will be instrumental for the two studies. These will include definitions for primary and secondary data and/or information, data collection techniques and analysis methods.

128. Primary data are the original or first-hand' materials that could include empirical data (e.g., cross-border trade statistics), information (e.g., policy papers) and insights (opinions, assessment or conjectures) given by stakeholders. Both quantitative and qualitative primary data are useful. This is expected to account for a major part of the efforts in data collection because the materials are typically not publicly available, disorganized in its raw form and requires processing, or they are classified information.

129. Secondary data includes materials that has been collected, analyzed and processed by other researchers or professionals that are usually useable immediately for understanding the 'As-Is' situation or they could be further studied for additional conclusions. While secondary data are useful, they are sometimes outdated and require efforts to update. This applies to the STKEC related studies published in 2020. Trade statistics used in the two studies was until 2018, which needs to be updated to reflect years of 2019, 2020, 2021 and onwards if available.

130. There are various methods in collecting primary data including focus group discussions, and bilateral Interviews (key informant interview is also applicable for private sector enterprises). The consultations will leverage the network strength of the project team, such as the national transport association in Tajikistan (ABBAT) where there are staff and offices at the international border-crossing points and inland facilities.

131. Methods in collecting secondary data includes literature review and desktop research. During the key informants' interview, pertinent and relevant documents would also be requested. This includes presidential decrees, signed bilateral or multilateral agreements, policy papers, masterplans, economic whitepapers and forecasts, statistics, past research papers and any other useful materials. The project team will pay particular attention to intra-regional and extra-regional dynamics, and trade potential within and outside the trilateral corridor.

132. For data analysis, all empirical and quantitative data are collected and processed, and then stored in a central repository, using Microsoft SharePoint. The trade economist will use the statistics software application STATA for modelling and analysis. Time series analysis is particularly instrumental to building a projection model based on historical trade statistics. Harmonized System (HS)-6 digits code is proposed to offer a granular level of analysis. The trade data will have the following attributes:

- Product HS Code (Harmonized System) 4 digits
- Direction of Trade (Import or Export)
- Product Name
- Year
- Cargo Value (USD)
- Cargo Tonnage (Metric tons)

133. Analytical tools to be utilized for data analysis include Trade Complementarity Index and Revealed Comparative Advantage Analysis. These tools use the latest trade statistics to form a conclusion on the trade potential of the STKEC. The Trade Complementarity Index and Revealed Comparative Advantage will be used for identifying opportunities while undertaking demand projection of the centers. The details of Trade Complementarity and RCA is mentioned in Appendix 4. Additionally, the study team may consider product space analysis for Kazakhstan and Uzbekistan to identify manufacturing opportunities for the ICIC.

134. The qualitative analysis will draw on international and regional trends in assessing existing and emerging drivers, identifying potential barriers, identifying potential investors and operators in the STKEC, the effect of major investments made or planned in ICIC and TLC, etc. By integrating both empirical and non-empirical data, the model could be refined to be more robust taking into consideration the geodynamics of the countries and the region. Two qualitative analysis methods are proposed.

1. Delphi Method: Delphi method is used to obtain optimal responses on prediction and forecasts from experts. This is employed in situations when the quantitative data are not easily available, or when the expert opinions could be helpful to support or suggest refinement to a quantitative model. This technique could be integrated into a follow up focus group discussion.
2. Panel Consensus: A technical working group consisting of technical experts shall be organized to gather insights and predictions by industry thought leaders and business luminaries. Respondents would contribute to the quality of the discussion through question and answer. This is expected to be applied when prioritizing recommendations. The experts would consist of in-house experts.

V. ECONOMIC CORRIDOR RELATED CAPACITY BUILDING

135. Economic corridor development (ECD) as an effective tool for promoting spatial development is gaining increased interest in the Central Asia including the STKEC region and Almaty-Bishkek Economic Corridor, which is originally established as a pilot with a number of investment projects (ABEC) being developed or financed. However, ECD is a still a relatively new development concept particularly in Central Asia. The stakeholders including government officials as well as private sector practitioners need to strengthen their capacity and understanding of ECD for better designing and implementing the ECD-related projects in the region. Therefore, wider diffusion of ECD-related information and experience to the various communities and societies will help their understanding of the connections between ECD and growth, particularly the core concepts and key conditions for economic planning and development under a regional context—in certain cases complex regional context. Thus, enhanced knowledge sharing on ECD-related experiences, including with countries in other regions, will help increase awareness and knowledge of ECD in the STKEC region and strengthen coordinated in undertaking ECD related projects. ECD related capacity building has thus been included in the TA.

136. Capacity building activities will be composed of two key aspects: ECD-related regional workshop for knowledge sharing, and a study tour in a country outside of the STKEC region. Under this phase of the TA, capacity building activities will focus on sectors and themes closely related to the ICIC and TLC—cross-border industrial cooperation, transport connectivity and trade facilitation. They will be undertaken by both ADB and the consulting firm in two forms: regional workshops planned during the TA implementation period and a study tour. The number of ICIC and TLC related regional workshops will be dependent on the progress of the preparation of the two studies. The study tour is planned to be a physical activity, which depends on the development of the COVID-19 related travel regulations.

Regional Workshops

137. A virtual regional workshop on “Digitalizing Trade Documents in STKEC Region” has been jointly conducted by ADB and the United Nations Economic Commission for Europe (UNECE) on 25 May 2022. The workshop presented global standards and practices applicable to key documents that will harmonize and integrate information flows. It identifies ways to optimize the digitalization of key documents accompanying goods transported by road and rail in the STKEC countries, including building capacity for the use of international standards and tools for practical implementation of projects. Focus was on documents such as the entry declaration, commercial invoice, Convention Merchandise Routier (CMR) consignment note, agreement concerning International Goods Transport by Rail (SMGS), packing list, TIR carnets. The workshop reviewed current state of digitalization, challenges faced by transport operators in using these documents, international standards available, and regional initiatives to become paperless. Customs and other trade-related government agencies in Kazakhstan, Uzbekistan, and Tajikistan transport operators in the three countries and development partners participated and shared experiences in their respective countries.

138. A first regional workshop related to ICIC and TLC (concurrently the first meeting of the Technical Working Group on Cross-Border Connectivity and Trade Facilitation) is planned to be held in Q4 2022 or Q1 2023 after the completion of the first draft of the two studies.[7] The consulting firm will present outcome of the initial analysis, findings, and recommendations for the ICIC and TLC, based on literature review, consultation meetings with multi-stakeholders of the STKEC countries and development partners, and data and information collected, and seek feedback from the three countries.

139. A second workshop related to the ICIC and TLC is planned to be held in Q2 2023 after completion of the two studies incorporating comments from the countries and other

[7] The TA is expected to be extended to 31 October 2023.

stakeholders. The consulting firm will disseminate the final findings of the prefeasibility studies to the public and private sector stakeholders of the three countries. A session dedicated to private sector practitioners will be considered to promoting the ICIC and TLC and sensitizing investment interest from private sector in the three countries.

Study Tours

140. An ICIC and TLC related study tour will be organized in the second half of 2022 or first half of 2023 with the possibility of linking it to the first or second regional workshop depending on the readiness of travel conditions. The objectives of the study tour will be for the STKEC countries to learn good practices of cross-border economic cooperation, including trade and industrialization, and help them understand the main features/concepts of ECD, thus contributing to planning, designing and implementing of future ECD projects. Destination country/countries will be carefully selected. Selection criteria will include: (i) the existing physical facilities with cross-border cooperation functions (e.g., international center for trade cooperation; cross-border SEZs and/or industrial parks; trade and logistics center); (ii) the applicability of these facilities in the STKEC countries, taking into consideration their landlock nature; and (iii) ease of travel arrangement, among others.

141. As part of the study, the team will identify multiple best practices in cross-border trade and economic cooperation. For each theme a set of countries which are having good performance will be shortlisted to be considered by the stakeholders for their visit. The study tours will have the objective to demonstrate trade facilitation reforms across the globe, highlighting context for the reforms within STKEC countries and subsequent implementation ideas. Some of the themes related to cross-border trade and economic cooperation will include regional trade cooperation; digital integration; trade facilitation; and trade architecture.

Regional Trade Cooperation

142. As the STKEC region is a landlocked area with evident logistics and cross-border connectivity problems, the best practices of regional trade cooperation will be analyzed. Some of the best examples on cross-border trade cooperation from European Union and Southeast Asia will be explored as part of the study.

143. Based on global and regional developments, the study team will review the trade facilitation measures adopted by multilateral organizations in these landlocked countries. The key example for successful implementation of regional transit system is European Union countries. Learnings from integration efforts such as the establishment of TIR, European Common Transit System, New Computerized Transit System (NCTS), etc. shall be captured as part of the workshop.

Digital Integration

144. Digital infrastructure is an enabler of trade which helps countries streamline data flow and clearances of goods. Autonomous operations can help reduce operational friction and implement full-stack, application-aware automation across complex on-premises and cloud-based infrastructure. The study team will identify best practices for optimizing autonomous operations and streamlining and standardizing operations to improve operational efficiency, such as single window clearance, online customs declaration, etc. One of the case studies that can be explored includes the US-Mexico Joint Working Committee - introduction of the best practice for freight management. Firstly, it included Border Technology Exchange program to increase safety, efficiency and the secure movement of people and goods, which was obtained by exchanging technology, key information, and trainings in the six transfer centers. Secondly, Free and Secure Trade Lane freight movement program between Mexico - U.S.A. and U.S.A. - Canada. The program ensures clear movement of trucks and pre-approved transports and shipments. Thirdly, Border Wizard program provides necessary

information on the cross-border traffic flow and suggests alternative traffic flow management. The setup planning on the border crossing points has made the border control more efficient.

Trade Facilitation

145. Trade facilitation is important to boosting cross-border trade. One of the examples of best practices in trade facilitation is Super Green Lane Plus (SGL+) program in the Philippines, developed by the Philippine Bureau of Customs. It incentivizes to give exclusive access to priority and hassle – free customs clearance lanes. Companies are qualified for the program if they have a good reputation, engaged in specific business, and are not associated with any illegal and irregular transactions. The SGL+ gives access to an efficient clearance program, exemption from documentation, physical examination, and an exemption from post-entry audit for 3 years. The program boosts the economy and trade with other countries.

Trade Architecture

146. As part of the analysis on best practices, the study team will undertake case studies on global governance, trade facilitation reforms and tariff regimes. For example, Georgia has been implementing a series of highly effective reforms as part of ongoing effort to facilitate trade and tourism. The team will study these developments in detail to identify key lessons for STKEC development.

VI. WORKPLAN AND TIMELINE

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
1	**Inception Phase - Background and Methodology for prefeasibility assessment**	a. Initial Stakeholder Consultations with STKEC Countries	Conduct one-on-one bilateral meetings with public and private sector participants	Team leader to allocate the task of conducting stakeholder discussions to relevant Subject matter experts	T+5	Need assessment and problem identification	Submission as part of the Inception Report	Inception Report
		b. Government vision for ICIC and TLC	Strategic Context of the assignment and Government's vision in creation of ICIC and TLC facilities; Assessment of factors enhancing close economic cooperation such as external geopolitical risks, pandemic, etc.	Team leader to allocate the task of reviewing the reports/ documents to respective experts	T+4	Potential impact on development of ICIC and TLC, provision and risk mitigation		
		c. Methodology for prefeasibility assessment	Defining the scope and methodology for prefeasibility of ICIC and TLC facility	Experts to define the methodology to be adopted for conducting prefeasibility assessment	T+6	Data collection and benchmarking for the prefeasibility assessment		
2	**Review of the STKEC Region**	a. Review existing trade in the STKEC Region	Conduct as-is assessment of trade patterns and products, Review of existing supply chains for top 80% traded products (by value), Review existing bottlenecks of informal trade and review regulatory measures adopted by the government	Team leader to allocate the task of reviewing the reports/ documents to respective experts	T+6	Initial list of major industries and product profiles for establishing ICIC and TLC.	Submission as part of the Status Report on STKEC Review and client approval as part of Workshop (M-#7)	Status report on STKEC review

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
			Review existing wholesale markets in STKEC region and specific procedures for clearances					
		b. Review existing economic / trade relations in STKEC Region	As is assessment of physical, cross-border, hard and soft infrastructure requirements, and procedures (policy measures). Also, review the existing policies and intergovernmental trade agreements on economic cooperation	Border management and Trade Facilitation expert, and Trade and Logistics Specialist will lead the review of trade and economic relations	T+6	Policy and regulatory drivers at BCP nodes, framework development for both ICIC and TLC shall be linked to this activity		Status report on STKEC review
		c. Region's Logistics Review	Review existing transport flows through BCPs in the STKEC region, study the transport and traffic patterns in the region and conduct logistics market survey in the STKEC region based on Logistics Performance Index Scores.	Trade and Logistics Specialist and Transport Specialist will conduct the Review studies	T+7	Facilitate critical inputs for a Trade and Logistics Centre (TLC) and recommendations for ICIC operations.		Status report on STKEC review
		d. Review Investment Climate	Review large investment projects in the areas near the proposed ICIC, and investment climate in the STKEC countries. Also, review impact of upcoming projects - Trans-Afghan corridor, construction of the Mazari-Sharif-Peshawar railway on trade and connectivity with the backdrop of geopolitical scenario and its implication in the region.	Trade Economist expert will lead the review of investment climate	T+8	Inputs for enhancing private participation in the development of ICIC and TLC		Status report on STKEC review

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
3	**Prefeasibility study for ICIC between Kazakhstan and Uzbekistan**	a. Concept of ICIC	The module shall entail elements of ICIC such as services, location, market planning, physical asset requirement, etc. along with the factors affecting / enabling the development of ICIC.	Team Leader will coordinate the review	T+6	Defining elements of ICIC shall further help in infrastructure planning and layout designs	Presentation to client during interim workshop (M-#9,10) on Concept Planning of ICIC, and interim client approval as part of this workshop.	Prefeasibility study Report for ICIC
		b. Best practices of cross-border Industrial Cooperation	Analyze the trade practices and establishments governing cross-border trade in EU, Eurasia EU and Southeast Asia. Benchmark strategies of key trade players in EU, Eurasia and Southeast Asia Conduct assessment on themes such as regional cooperation, digital integration, infrastructure and trade architecture.	Team Leader will coordinate the review; Project Leadership including Economic Corridor and CAREC region experts will also share insights	T+7	Incorporate global best practices in ICIC framework and concept development phase		Prefeasibility study Report for ICIC
		c. Industry identification and prioritization in Kazakhstan and Uzbekistan	Develop framework for identification of potential industries to further identify focus sectors between STKEC economies. Conduct the sub-industry sectors/products categorization and O-D survey for the sectors.	Trade Economist specialist will conduct the macro-economic assessment with the help of financial expert	T+7	Inputs from the inception report on the as-is review of policy and industrial development regulatory framework review.		Prefeasibility study Report for ICIC

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
		d. Demand Projection for prioritized industries for STKEC	Conduct the BIS projection study of demand for identified industry sub-sectors under different scenarios dependent on Covid-19 impact on the industries. Review/Analysis of supplier availability and potential suppliers to address demand in three STKEC nations	Trade economist and Trade & Logistics Specialist will lead the activities related to demand projections	T+8	Projection study shall help determine the scale of operations required on the ICIC premises and help in concept development planning		Prefeasibility study Report for ICIC
		e. Concept Planning of ICIC	The study shall also incorporate review conducted earlier for trade center establishments in other parts of the world.	Border Management and Trade Facilitation expert along with the Team Leader will develop the Concept Plan for ICIC with assistance of economist and financial expert.	T+11	NA		Prefeasibility study Report for ICIC
		f. Financial feasibility study for ICIC	The section will provide preliminary estimates of capital and recurrent costs, quantify potential financial and economic benefits of establishing the ICIC The module will also consist of project viability assessment and identifying modality for attracting private investment for the development of ICIC	Finance and Investment Specialist to conduct feasibility assessment for ICIC under proposed scenarios as mentioned above	T+12	Inputs from this section shall form critical part of selection of concepts for ICIC and in the Final report for the project		Draft Final Report; Prefeasibility study of ICIC;
		g. Policy Recommendation and Institutional Framework	Provide recommendations on policy and regulatory reforms for Kazak and Uzbek and advise on key factors required for ICIC facilitation. Devise the policy/regulatory	Border Management and Trade Facilitation expert along with the Team Leader and Trade and Logistics specialist will provide	T+12	NA		Prefeasibility study Report for ICIC

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
			recommendations to de-bottleneck informal trading sector in the region. Form the institutional framework for ICIC.	key inputs for the recommendations				
4	**Prefeasibility study for Trade and Logistics Centre (Sughd oblast)**	a. Review of traffic and trade flows in Sughd oblast	Assessment of traffic and trade flows in the Sughd oblast region, develop framework for identification of demand for logistics services and conduct demand assessment for logistics services. Conduct location assessment for TLC based on GoC analysis.	Transport Specialist and Trade and Logistics Specialist will conduct the review	T+9	Inputs from trade and traffic review shall help in location assessment for TLC	Presentation to client during interim workshop (M-#13 14) on Concept Planning of TLC, and interim client approval as part of this workshop.	Prefeasibility study Report for TLC
		b. Conceptualization and benchmarking of TLC	Benchmark strategies of key trade players in EU, Eurasia and Southeast Asia Conduct assessment on themes such as digital integration, infrastructure and trade architecture. Define elements of TLC	Transport Specialist and Trade and Logistics Specialist will conduct the review	T+9	Incorporate global best practices in TLC framework and concept development phase		Prefeasibility study Report for TLC
		c. Concept Planning of TLC	Propose concept design and functionalities of TLC, an institutional framework for operations and provide recommendations on policy and regulatory reforms for the Tajik region	Transport Specialist and Trade and Logistics Specialist will develop the concept plan	T+11	Inputs from industry stakeholder survey will be a critical input for this activity		Prefeasibility study Report for TLC

	Key module	Key tasks and activities	Broad content and expected outcome	Key responsibility	Estimated timelines (in months)	Interrelations / dependencies	Milestones including interim client approvals	Key report encapsulating the tasks /activities
		d. Financial feasibility study for TLC	The section will provide preliminary estimates of capital and recurrent costs, quantify potential financial and economic benefits of establishing the TLC The module will also consist of project viability assessment and identifying modality for attracting private investment for the development of TLC.	Finance and Investment Specialist to conduct feasibility assessment for TLC under proposed scenarios as mentioned above	T+13	Inputs from this section shall form critical part of selection of concepts for TLC and in the Final report for the project		Draft Final Report; Prefeasibility study of TLC
		e. Institutional Framework	Propose institutional framework for operations of TLC	Experts involved in concept planning of TLC will be responsible for proposing an institutional framework	T+13	Part of Prefeasibility assessment for TLC		Draft Final Report; Prefeasibility study of TLC

Workplan

Sr No	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Team Mobilization	■													
	Data collection and Collation	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Module 0: Background and Methodology for prefeasibility assessment														
a.	**Initial Consultations with STKEC Countries**														
	Stakeholder Consultations with public and private sector participants from Kazakhstan, Uzbekistan and Tajikistan			■	■	■									
b.	**Government vision for ICIC and TLC**														
	Strategic Context of the assignment and Government's vision in creation of ICIC and TLC facilities		■												
	Assessment of factors enhancing close economic cooperation such as external geopolitical risks, pandemic, etc.			■	■										
c.	**Methodology for prefeasibility assessment**														
	Defining the scope and methodology for prefeasibility of ICIC and TLC facility			■	■	■	■								
	Inception Workshop and Stakeholder Consultations		■	■	■	▲									
	Key Deliverable: Work Plan, Inception Report						▲								
	Module 1: Review of the STKEC Region														
1.1	**Review existing trade in the STKEC Region**														
	As is assessment of existing trade patterns and products traded in STKEC			■	■										
	Review of existing supply chains for top 80% traded products (by value)			■	■										
	Review existing bottlenecks of informal trade and review regulatory measures adopted by the government				■	■									
	Review existing wholesale markets in STKEC region and specific procedures for clearances				■	■	■								
1.2	**Review existing economic / trade relations in STKEC Region**														
	As is assessment of physical, cross-border, hard and soft infrastructure requirements and procedures (policy measures)				■	■									
	Review existing policies and intergovernmental trade agreements on economic cooperation				■	■	■								
1.3	**Region's Logistics Review**														
	Review existing transport flows through BCPs in the STKEC region					■	■	■							
	Review the logistics services network, key operations and features						■	■							
1.4	**Review Investment Climate**														
	Review large investment projects in the areas near the proposed ICIC, and investment climate in the STKEC countries							■	■						
	Review impact of upcoming projects - Trans-Afghan corridor, construction of the Mazari-Sharif-Peshawar railway on trade and connectivity								■						
	ADB consultation workshop								▲						
	Key Deliverable: Status Report on STKEC Review									▲					
	Module 2: Prefeasibility study for ICIC between Kazakhstan and Uzbekistan														
2.1	**Concept of ICIC**														
	Define elements of ICIC						■								
2.2	**Best practices of cross-border trade and economic cooperation**														
	Review trade practices and establishments governing cross-border trade in EU, Eurasia EU and Southeast Asia						■								
	Benchmarking of strategies of key trade players in EU, Eurasia and Southeast Asia						■	■							
2.3	**Industry identification and prioritization in Kazakhstan and Uzbekistan**														
	Development of framework for identification of potential industries						■	■							
	Identification of focus sectors between STKEC economies - limit to 2 digit HSN code						■	■							
	Identify sub-industry sectors/products						■	■							
	Origin-Destination assessment of the identified products						■	■							

Sr No	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2.4	**Demand Projection for prioritized industries for STKEC**														
	BIS projections of demand for identified industry sub-sectors														
	Review/Analysis of supplier availability and potential suppliers to address demand in STKEC														
2.5	**Concept Planning of ICIC**														
	Review trade center establishments in other parts of the world (selection of 2/3 international border trade centers)														
	Propose concept design and functionalities of ICIC														
2.6	**Financial feasibility study for ICIC**														
	Provide preliminary estimates of capital and recurrent costs														
	Quantify potential financial and economic benefits of establishing the ICIC														
	Project viability assessment and outlining modality for attracting private investment														
2.7	**Institutional structure and Policy Recommendations**														
	Recommendations on policy and regulatory reforms, other such activities required for ICIC facilitation														
	Policy / regulatory recommendations to de-bottleneck informal trading sector														
	ADB consultation workshop												▲		
	Key Deliverable: Prefeasibility study Report for ICIC													▲	
	Module 3: Prefeasibility study for Trade and Logistics Centre (Sughd oblast)														
3.1	**Review of traffic and trade flows in Sughd oblast**														
	Assessment of traffic and trade flows														
	Development of framework for identification of demand for logistics services														
	Demand assessment for logistics services and identify preferable locations for TLC														
3.2	**Conceptualization and benchmarking of TLC**														
	Review trade practices and establishments governing Trade and Logistics Centers in EU, Eurasia EU and Southeast Asia														
	Benchmarking of strategies of key trade players in EU, Eurasia and Southeast Asia														
	Define elements of TLC														
3.3	**Concept Planning of TLC**														
	Propose concept design and functionalities of TLC														
3.4	**Financial feasibility study for TLC**														
	Provide preliminary estimates of capital and recurrent costs														
	Quantify potential financial and economic benefits of establishing the TLC														
	Project viability assessment and outlining modality for attracting private investment														
3.5	**Institutional structure and Policy Recommendations**														
	Propose institutional framework for operations of TLC														
	Recommendations on policy and regulatory reforms, other such activities required for TLC facilitation														
	ADB consultation workshop														▲
	Key Deliverable: Prefeasibility report on TLC in Sughd oblast														▲
	Key Deliverable: Final Draft Report														▲

VII. QUALITY CONTROL PLAN

Quality Management Approach

147. The Quality Control Planning performed by the consultant team shall give a directional view for the implementation of the quality management. For quality control purposes and mitigation of quality risks, a team of experts with a balanced mix of global and local experience were gathered. The quality management team will be led by a pool of three experts including (i) Max EE, the team leader and RCI specialist, who will be responsible for leading and controlling the processes of the project; (ii) Mr. Mohammad Athar, an Engagement Partner and Economic Corridor Specialist, who will act as a final reviewer and will ensure the quality of the deliverables; and (iii) Mr. Arman Nurkin, Co-Engagement Partner and CAREC Region Leader, who will conduct a preliminary and final review of deliverables to ensure compliance with the requirements of the project.

Quality Control and Planning

148. The consulting firm has an over-arching quality and risk management framework engrained in and guiding all internal management practices. This framework manages quality in the workplace, the interactions with clients, and its delivered outputs. It focuses on quality standards throughout the engagement life cycle. These have been further detailed out as below.

149. The consulting firm has an outlined approach towards handling complaints concerning the performance of experts or the quality of the reports submitted for this assignment and internal controls to address and resolve complaints. Complaints of staff performance are dealt with in the following manner: interaction with the Client / Executing Agency to understand the issue, refer to the Team Leader for review, identification of the problems through interaction, resolution of the issue with the Team and Client. In case if the situation demands staff replacement, the staff will be replaced with an expert with the same or higher level of qualification and experience.

150. Within the scope of the project, the team will deliver four main modules which include: inception report, a review of the STKEC region, and a prefeasibility study for ICIC between Kazakhstan and Uzbekistan, and a prefeasibility study for TLC in Sughd oblast of Tajikistan. The project leaders will take responsibility for the quality of deliverables.

151. Internal communication between the experts and leaders as well as external communication with the Client will be held frequently to keep the working processes effective. In each stage of review the deliverables will be commented and will not pass to the next level of review unless the previous comments are cleared. Besides quality control of the deliverables, we are planning to perform sanity checks for the data collected which are used for the analysis and project deliverables. During the process of analyzing, all the gathered data and the documents will be retained in a safe and proper manner, any confidential or unpublished information that has been received or generated by the Consultant will not be disclosed.

152. In order to control delivery of output, the study team has included a Compliance Officer from the consulting firm. The consulting firm has well-developed and time-tested procedures to monitor the quality of work at the level of individual assignments. Whilst staff are encouraged to develop personal initiative and to work to the limits of their capabilities, all work is subject to review by senior personnel. The culture within the consulting firm encourages consultation which in turn promotes quality. All major outputs go through three levels of review, namely Project Manager Review, Director Review, and Peer Director Review, each carried out at a different stage of the assignment. Further, a set of rules and regulations will be agreed

upon by all members of our consortium to assure standard procedures for quality management for the performance of the assignment.

153. The team will manage and monitor the resource requirement of individual tasks or project components throughout the project life cycle, through a clearly defined scope and timelines on the agreed scope of work, since the start of the assignment. To ensure that the deadlines are met, and deliverables are submitted in timely manner the schedule tracker will be used by the project leaders.

Project Monitoring and Reporting

154. The scope states the demand for progress reports to be generated by the study team as per the prescribed milestones with a summary of activities and recommendations for action on issues. The study team will provide reports to ADB team about the progress.

155. In addition to the main objectives and particular tasks of the report, the study team shall also provide various information including status of key activities and tasks, list of key meetings with different government officials and stakeholders, minutes of meetings, and any action points.

156. The study team will share a background analysis report and lessons and best practices of cross-border trade and economic cooperation (Q3 2022), proposed establishment of the ICIC and TLC (Q4 2022), and final draft reports on ICIC and TLC by Q2 2023.[8]

Project Cost Management

157. As it is already stated in the TOR that the assignment is a fixed fee contract with fixed maximum budget, the study team will adhere to its budget which was mentioned as part of the financial proposal and acceptance letter. In case of any additional work, apart from the agreed scope of work at the start of the assignment, the cost for the same would be based on mutually agreed terms between ADB and the study team.

158. The team will manage and monitor the resource requirement of individual tasks or project components throughout the project life cycle, through clearly defined scope and timelines on the agreed scope of work, since the start of the assignment.

Roles and Responsibilities

159. Project scope management and roles and responsibilities within the project is crucial for delivering projects involving multiple stakeholders. The study team has defined the entire scope of the study in line with the TA scope of work. The Team Leader will lead this exercise, with guidance and input from the ADB.

160. To ensure the quality planning in all above-mentioned deliverables, the team leader will allocate the task of conducting stakeholder discussions to relevant subject matter experts. The team leader will be also in charge of managing the review process of the reports and documents for the credibility and adequacy performed by relevant experts.

161. Border management and trade facilitation expert, and trade and logistics specialist will lead the review of trade and economic relations, whereas the trade and logistics specialist and trade economist will lead the activities related to demand projections. During the project implementation, trade economist will conduct the macro-economic assessment with the help of a financial expert. Based on the workplan, the trade economist will lead the review of the

[8] Timelines set are tentative as per the initial scope of work received and is subject to change depending on the actual progress of the studies in consultation with the STKEC countries and with ADB. An extension of the TA until October 2023 is expected to be processed in Q3 2022.

investment climate. Transport specialist and trade and logistics specialist with the help of other experts will develop the concept plan, which will incorporate a review conducted earlier for trade center establishments in other parts of the world. Based on the research, interviews and data gathered, experts will conduct feasibility assessment for ICIC and TLC under proposed scenarios.

Acceptance criteria

162. The quality of the deliverables will be ensured to the acceptance criteria based on the expectation of the Client and the quality requirements.

163. All undertaken desk reviews of relevant works and literature will be checked for sanity and prudence, and all the consultations and data collection will be conducted and led by above-mentioned experts. The presentations will be held at national or regional workshops for guidance and insights. The final deliverables, the prefeasibility studies for ICIC and TLC, will be prepared and finalized, and other related tasks will be undertaken to ensure the quality and compliance with the contract arrangements.

APPENDIX 1: COVERAGE OF THE REPORTS

The background analysis report will cover following:

a. Review of economic relations particularly trade relations among Kazakhstan, Tajikistan and Uzbekistan
b. Review of existing trade in the STKEC region (including transit trade), trade patterns, types of traded goods, costs, lead time, origins and destinations, informal trade, and government plans in handling informal trade
c. Review and determination of the most attractive types of industries that have a high potential in joint production within STKEC
d. Review of the regulatory and legal framework of international trade in the STKEC region.
e. Review of existing border crossing points (BCPs) within the STKEC region
f. Review of existing transport/traffic patterns through the BCPs in the STKEC region, including mode of transport, transit traffic.
g. Review of existing wholesale markets in the STKEC region, key features of operations, and specific procedures for clearance of goods and delivery to the retail markets.
h. Review of existing markets for trade and logistics services
i. Review of large investment projects in the areas near the proposed ICIC, and investment climate in the STKEC countries.
j. Lessons and best practices of cross-border trade and economic cooperation

The pre-feasibility report on ICIC will cover following:

a. Assessment of the demand for the ICIC. In particular, the study will analyze cross border trade and traffic flows between Kazakhstan and Uzbekistan and assess the demand for the services to be provided by the ICIC.
b. Summary of lessons learned from the establishment of similar centers in other parts of the world.
c. A design for the ICIC, including (a) a modern border crossing point within the ICIC and procedures for cross-border movements of people, vehicles and goods, and (b) related facilities and services (e.g., trade and logistics center, wholesale market, exhibition letter) in the border area of the ICIC as arise from the need/demand analysis.
d. Preliminary estimates of capital and recurrent costs of establishing and operating the ICIC
e. Identify and, quantify potential financial and economic benefits of establishing the ICIC, including spill-over effects—if any—on Tajikistan's Sughd oblast, and beyond.
f. Recommend an appropriate policy, regulatory reforms and intergovernmental agreements that would increase the benefits of the project and help attract private investment.
g. Propose an institutional framework for the effective operation of the ICIC.
h. Other related activities which may be requested by the governments.

The pre-feasibility report on TLC will cover following:

a. Assessment of the need for the TLC. In particular, the study will analyze traffic and trade flows in the Sughd oblast and assess the demand for logistics services.
b. Propose location and a design for the TLC, including modern facilities and procedures for customs clearance of exports and imports.
c. Provide preliminary estimates of capital and recurrent costs of establishing and operating the TLC.
d. Identify and, as much as possible, quantify potential financial and economic benefits of establishing the TCL, including its positive effects on the development of the STKEC.
e. Recommend an appropriate policy and regulatory reforms that would increase the benefits of the project and help attract private investment.
f. Provide a preliminary assessment of the viability of the project and propose the most appropriate modality or modalities for attracting private investment.
g. Undertake other related tasks which may be requested by the government.

APPENDIX 2: LIST OF COUNTRY PARTICIPANTS IN INCEPTION WORKSHOPS

Virtual Inception Workshop for Prefeasibility Study
on "International Center for Industrial Cooperation"
8-16 December 2021

List of Participants

A. Kazakhstan

Ministry of Trade and Integration

1. Mr. Kairat Torebayev, Vice Minister, Ministry of Trade and Integration
2. Ms. Gulzhan Arginbayeva, Adviser to the Minister of Trade and Integration
3. Mr. Omirbek Bashtay, Director, Department of Export Promotion
4. Mr. Berik Akhmetov, Chief Expert, Department of Export Promotion

Ministry of Industry and Infrastructural Development

5. Mr. Azamat Kozhanov, Head of Transport Logistics Development Division, Department of Transport Policy and Infrastructure

State Revenue Committee of the Ministry of Finance

6. Mr. Dmitry Le, Deputy head, Division of Classification and Place of Origin, Methodology Department
7. Mr. Omir Abdykalykov, Chief Expert, Division of Customs Procedures Administration and Clerarance, Control Department
8. Mr. Serikbol Zholdasbaev, Expert, Division of Non-Trade Turnover, Department of Individuals Administration and Tax Regimes

Border Service of the National Security Committee:

9. Mr. Mundash Mullashev, Deputy Head, Border Control Department
10. Mr. Nurzhan Ernazarov, Senior Consultant, Border Control Department

Akimat of Turkestan Oblast

11. Mr. Kanat Sydykov, Head, E-Commerce and Services Development Department;
12. Mr. Abay Shengelbayev, Head, Division of Monitoring for Socially Significant Food Products
13. Ms. Marzhan Urazgeldieva, Chief Expert, Department of Trade

Akimat of Shymkent City

14. Mr. Erlan Kydyrov, Head, Department of Tourism and External Relations
15. Mr. Timur Derbis, Deputy Head, Department of Entrepreneurship and Industrial and Innovative Development
16. Mr. Erbolat Ospanov, Head, Division of External Relations, Department of Tourism and External Relations

National Chamber of Entrepreneurs "Atameken"

17. Ms. Zhadyra Rakhimbaeva, Head, Department of Multilateral Cooperation

JSC Center for Trade Policy Development «QazTrade»

18. Ms. Gulmira Akhmettaeva, Deputy General Director
19. Mr. Nurlan Kulbatyrov, Deputy General Director
20. Mr. Marat Adyrbaev, Director, Department of Internal Trade

JSC International Center for Border Cooperation "Khorgos"

21. Mr. Dauren Iskakov, Director, Department of Investment and Strategic Development
22. Mr. Arsen Burkhandinov, Director, Department of special economic zones

B. Uzbekistan

Ministry for Investments and Foreign Trade

1. Mr. Abdulla Khashimov, Head, Department for Development of Transport Corridors
2. Mr. Mirpulat Mirnasirov, Chief Specialist
3. Mrs. Dilnoza Bakaeva, Chief Specialist, Department of Cooperation with International Financial Institutions

Ministry of Transport

4. Mr. Bekzod Khalmatov, Head, Department of the International Cooperation
5. Mr. Sherzod Ata-Mirzaev, Deputy Head, Department for the Development of Transport Corridors, Logistics and Transit
6. Mr. Mirazimbek Khamidov, Chief Specialist, Department for the Development of Transport Corridors

Ministry of Tourism and Sports of the Republic of Uzbekistan

7. Mr. Shukhrat Isakulov, Adviser to Director, “Silk Road Office (UNWTO)”

State Customs Committee

8. Mr. Elyor Khakimov, Chief Inspector, Organizational-Control Department
9. Mr. Jamshid Khatamov, Head, Department for the Development of Digital Customs and Simplification of Customs Procedures
10. Mr. Odil Mamajonov, Chief, Department of International Cooperation
11. Mr. Zafar Alimkulov, Senior Inspector, Department of International Cooperation

Tashkent Region

12. Mr. Nurbek Radjabov, Deputy Chief, Department of Investment
13. Mr. Umid Ubaydullayev, Head, Department for International Relations

Tashkent City

14. Mr. Anvar Djuraev, Chief, Department of Transportation
15. Mr. Sanjar Tadjiev, Deputy Chief, Department of Tourism and Sport
16. Mr. Bakhtiyor Abidov, First Deputy Chief, Department of Investment and Foreign Trade
17. Mr. Gani Ismoilkhodjayev, First Deputy Chief, Department of Investment and Foreign Trade

Chamber of Commerce and Industry

18. Mr. Sardor Azamov, Senior Specialist, Department of Support for Export

C. Tajikistan

Ministry of Economic Development and Trade

1. Mr. Abdurahmon Abdurahmonzoda, Deputy Minister
2. Mr. Abdullo Ziyoiyon, Head of Main Department of Trade Policy and Consumer Market
3. Mr. Shukuhiddin Abrori, Head of Industry and Infrastructure Department, Main Department of the Development of the Real Sectors of Economy.

Ministry of Transport

4. Mr. Rahmiddin Salomzoda, Director of State Institution “Road Transport and Logistics Service”
5. Mr. Alexander Shkurenko, Chief of Land Transport Division
6. Mr. Khurshed Kabirov, Deputy Director of State Institution “Road Transport and Logistics Service”

Ministry of Industry and New Technologies

7. Mr. Rahmonov M.S., Deputy Head of the New Technologies Department
8. Mr. Giyosov B.A., Chief Specialist, Construction Materials Industry Department
9. Mr. Sangakov E., Chief Specialist, Food Industry Department

Sughd oblast Administration

10. Mr. Anvar Yakubi, Deputy Chairman, Sughd oblast
11. Mr. Sharifjon Akhmedov, Head, Department for Investment and State Property Management

Khujand City Administration

12. Mr. Azimjon Karimov, Head, Investment and State Property Management Sector of Khujand
13. Mr. Muzaffar Rakhimkhojaev, Director, State Communal Enterprise "Public Transport of Khujand"

Customs Service

14. Mr. Barakatullo Haydarov, Head of Unit, Department of International Cooperation
15. Mr. Ahmadjon Boboev, First Deputy Head, Regional Customs Department in Sughd oblast
16. Mr. Parviz Latipov, Consultant for the Border Services Improvement Project (CAREC)

APPENDIX 3: LIST OF COUNTRY PARTICIPANTS IN VIRTUAL BILATERAL MEETINGS

A. Kazakhstan

Ministry of Trade and Integration

1. Ms. Gulzhan Arginbayeva, Adviser to the Deputy Prime Minister of Trade and Integration
2. Ms. Guldana Sadykova, CAREC Senior Regional Cooperation Coordinator
3. Mr. Diyar Tassym, Advisor to CAREC NFP

Ministry of Industry and Infrastructural Development

4. Mr. Satzhan Uzbekov, Head, Department of Railway Transport and Passenger Transportation, Transport Committee
5. Mr. Almaz Aisin, Deputy Head, Road Transport Department, Transport Committee
6. Mr. Almat Doskaliyev, Head, Department of Special Economic and Industrial Zones, Committee for Industrial Development
7. Ms. Zhanetta Yergalieva, Deputy Head, Transport Logistics Development Division, Department of Transport Logistics and Infrastructure
8. Mr. Rafkhat Berkutbaev, Head, Department for the Preparation of Investment Projects, Roads Committee

State Revenue Committee of the Ministry of Finance

9. Mr. Bolat Ibragimov, Head, Customs Methodology Division
10. Mr. Azat Isenov, Deputy Head, Excise Administration Division
11. Mr. Arman Zhalitov, Deputy Head, Customs Administration and Clearance Division
12. Mr. Nariman Uatkanov, Deputy Head, Transit Division
13. Mr. Zhandos Sekenov, Chief Expert, Customs Operations Division
14. Mr. Yury Maksakov, Chief Expert, Non-Commercial Turnover Division
15. Ms. Damilya Esaliyeva, Chief Expert, Non-tariff Regulation and Costs Division
16. Ms. Raziya Akhmetzhanova, Chief Expert, Technical Infrastructure Development Division
17. Mr. Yeldos Kulzhabai, Chief Expert, Risk Management Division
18. Ms. Balshakar Balkibayeva, Chief Expert, Tax Methodology Division
19. Mr. Amir Abdykalykov, Chief Expert, Customs Administration and Clearance Division
20. Mr. Temirlan Makhmetov, Expert, International Cooperation Department

Ministry of Agriculture

21. Mr. Asamat Zabekov, Head, International Cooperation Department, Veterinary Control and Surveillance Committee
22. Mr. Mukhtar Zhanabaev, Acting Head, Plant Quarantine and Digitalization Department
23. Mr. Askar Sarsenbin, Head, Department for External Control and Supervision
24. Mr. Zhanibek Suleimenov, Chief Expert, Division on Certification of Agriproducts, Department of Agricultural Markets and Agricultural Processing
25. Mr. Rizabek Aubakirov, Chief Expert, State Inspection Committee
26. Mr. Temirlan Maratov, Chief Expert, State Inspection Committee

Border Service of the National Security Committee

27. Mr. Gani Agadilov, First Deputy Head, Border Control Department
28. Mr. Mundash Mulashev, Second Deputy Head, Border Control Department
29. Mr. Nurzhan Ernazarov, Chief Consultant

Akimat of Turkestan Oblast

30. Mr. Hikmat Raimbekov, Head, Industry Department
31. Ms. Gulmira Akhberdieva, Head, Tourism Department
32. Mr. Themirzhan, Director, Turkestan Invest Company
33. Mr. Kuat Sharipov, Head, Industry Department
34. Mr. Alibek Momynbekov, Expert, Department of Trade

B. Uzbekistan

Ministry of Agriculture

1. Mr. Ramin Gasanov, Head of the Department for Attracting and Coordinating International Financial institute's projects and Grant Funds
2. Mr. Shokhruh Akramov, The Deputy of the Head of the Department for Attracting and Coordinating International Financial Institute's Projects and Grant Funds

State Customs Committee

3. Mr. Sh Muminov, Head, Department of the Digital Custom Development and Simplification of Customs Regulations
4. Mr. Kh. Ruzmetov, Deputy Head, Department of Monitoring and Estimation of the Risks
5. Mr. D. Sherbinin, Deputy Head, Department of the Organization of Customs Control
6. Mrs. O. Pulatova, Chief Inspector, Department of Customs Payments
7. Mr. Z. Olimqulov, Senior Inspector, Department of the International Relations
8. Mr. Kh. Boybekov, Chief Inspector, Department of Customs Audit
9. Mr. Zafar Olimkulov, Focal Point

Uzbek Agency for Standardization, Metrology and Certification

10. Mr. Dodoev Alisher, Head, Department for the Development of Certification and Laboratory Complexes
11. Mr. Mukhitdinov Ulugbek, Head of the Department for Standardization and Coordination of State Supervision
12. Mr. Allaev Botir, Deputy Head, Department for International Cooperation
13. Mrs. Abdusalomova Diyora, Chief Specialist, International Cooperation Department
14. Mr. Alimov Shokir, Deputy Director, State Unitary Enterprise "Center for Accreditation
15. Mr. Khairidinov Muzaffar, Head, Department for Coordination of Certification Works, State Unitary Enterprise "Uzbek Center for Scientific Testing and Quality Control" (SUE UzTest)
16. Mr. Abdulla Orifboyev, Focal Point

State Committee of the Republic of Uzbekistan on Statistics

17. Mr. Botir Irgashey, Head, Department of the Statistics Foreign Activities and Trade
18. Mrs. Anjela Avakova, Head, Department of the Analysis of Statistics on Industrial Sectors and on Development Projects
19. Mrs. Komila Maksumova, Focal Point

Sanitary Epidemiological Service (SES), Ministry of Health and Agency for Plant Quarantine and Protection

20. Mr. Odil Tursunkhodjayev, Chief Specialist, Department of International Relations - Coordinator of the Projects
21. Mr. Sardor Donishev, Senior Specialist, Department of International Relations
22. Mr. Ulugbek Ismoilov,Chief, Department of State Services
23. Mrs. Shamsutdinova Mavlyuda,Chief, Laboratory

Tashkent City and Regional Hokimiyat

24. Mr. Nosir Ibragimov, Chief Specialist of the Export Section, Department of Foreign Trade and Investment
25. Mr. Umid Ubaydullayev, Chief, Department of International Relations

Uzbekistan Ministry of Transport and Uzbekistan Railways

26. Mr. Muhammadali Norkuziev, Chief Specialist of the Study of Market Conditions
27. Mrs. Mavjuda Nurmuhammedova, Deputy Head of the Tariff Policy Section, Department of Economic Analysis and Forecasting

28. Mrs. Makhfuza Ruzmetova, Specialist of the Tariff Policy Section, Department of Economic Analysis and Forecasting

From Ministry of Transport

29. Mr. Mirazim Khamidov, Deputy Head, Department for the Development of International Transport Corridors, Logistics, and Transit
30. Mr. Umarkhon Akhmadov, Head, Department for the Development of International Freight Transportation, Export and Import
31. Mr. Yevgeniy Novosartov, Chief Specialist, Railway Development Department

C. Tajikistan

Agency on Standardization, Metrology, Certification and Trade Inspection

1. Mr. Nurrulozoda Tohir, Deputy Head, Department of Technical Regulation and Standardization
2. Mr. Rahmatulloev Ubaidullo, Deputy Head, Food and Agricultural Products Testing Centre

Ministry of Economic Development and Trade

3. Mr. Abdullo Ziyoiyon, Head, Main Department of Trade Policy and Consumer Market
4. Mr. Ilyos Yunusov, Chief Specialist, Unit on Industry and Infrastructure Development

Agency of Statistics

5. Ms. Sabzina Minakova, Head, Department of Trade and Services Statistics
6. Mr. Firdavs Ahmadbekzoda, Head, Department of Industrial Statistics

Khujand City Administration

7. Mr. Azimjon Karimov, Head, Department of Investment and State Property Management of Khujand City

Sughd oblast Administration

8. Mr. Anvar Yakubi, Deputy Chairman, Sughd oblast
9. Mr. Sharifjon Akhmedov, Head, Investment and State Property Management Department of Sughd oblast
10. Mr. Ilyosiddin Kamoliddinzoda, Director, FEZ " Sughd"
11. Mr. Suhrob Sharipov, Deputy Director, FEZ "Sughd"

Tajikistan Customs Service

12. Mr. Ahmad Boboev, Deputy Head, Regional Department for Sughd oblast
13. Mr. Timur Arabov, Chief Inspector, Department of Organisation of Customs Clearance and Control
14. Mr. Barakatullo Khaidarov, Head of Division, International Cooperation Department
15. Mr. Umed Nazarov, Deputy Head, Department of Customs Tariff Regulation and Currency Control
16. Mr. Khurshed Chillayev, Deputy Head, Department of Analysis and Customs Statistics

Ministry of Transport and Tajik Railways

17. Mr. Shodiev Bakhrom Timurovich, First Deputy Head, Tajikistan Railway
18. Mr. Odinaev Rajabmurod Karimovich, Head, Transportation Service
19. Mr. Ismoilov Ismoil, Head, External Affairs Department
20. Mr. Nozimov Aso, Head, Labour Protection and Technical Policy Department

Participant from the Ministry of Transport

21. Mr. Rahmiddin Salomzoda, Director, State Institution, Road Transport Logistics Service
22. Mr Gulyamov Kamol Hikmatovich, Head, Department for Development of Logistic Services Projects and International Relations

23. Mr Kabirov Khurshed Gurezovich, Deputy Director, State Institution "Road Transport Logistics Service
24. Ms. Tulieva Umeda, Advisor to the Director, State Institution "Road Transport Logistics Service

Sanitary and Epidemiological Station (SES)

25. Mr Jafarov Navruz, Head, Sanitary and Epidemiological Safety Department

Ministry of Industry and New Technologies

26. Ms. Malika Yarbabaeva, Head, Department of Light Industry
27. Mr. Murod Khasanov, Lead Specialist, Department of Engineering, Industrial Defense and Chemistry
28. Ms. Zokiri Musallamai, Lead Specialist, International Relations Department
29. Mr. Pirov Abubakr, Specialist, New Technologies Department

Ministry of Agriculture

30. Ms. Nigina Anvari, Deputy Minister
31. Mr. Faizimahmad Amonov, Head, International Relations Department

APPENDIX 4: TOOLS USED IN THE STUDY

The Trade Complementarity Index (TCI) helps in determining how well the structures of a country's imports and exports match between trade partners. A high degree of complementarity is assumed to indicate more favorable prospects for a successful trade arrangement. The initial industry screening shall be conducted by analyzing the imports of one country and the export share of another country in the same category. The study for industry identification shall be carried out at a 2-digit HS code level. The study team will also factor in the list of champion sectors in line with individual government's aspirations and priorities. The team will further analyze growth rates of global exports in historical and recent past to gain a deeper understanding of trade dynamics and implications for sectors driving global exports.

TC Index:

$$\left[1 - \left[\sum_i \left| \frac{\sum_w m_{iwd}}{\sum_w M_{wd}} - \frac{\sum_w x_{isw}}{\sum_w X_{sw}} \right| \right] \div 2\right] \times 100$$

Where d is the importing country of interest, s is the exporting country of interest, w is the set of all countries in the world, i is the set of industries, x is the commodity export flow, X is the total export flow, m the commodity import flow, and M the total import flow.

TC Index:

$$\left[1 - \left[\sum_i \left| \frac{\sum_w m_{iwd}}{\sum_w M_{wd}} - \frac{\sum_w x_{isw}}{\sum_w X_{sw}} \right| \right] \div 2\right] \times 100$$

Where d is the importing country of interest, s is the exporting country of interest, w is the set of all countries in the world, i is the set of industries, x is the commodity export flow, X is the total export flow, m the commodity import flow, and M the total import flow.

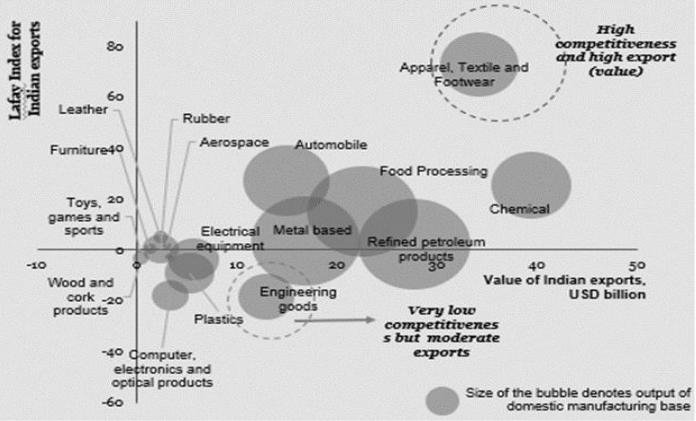
The Revealed Comparative Advantage (RCA) assessment is to evaluate the nation's / region's relative specialization across sectors. Final scoring of these shall reveal the industries with high collaboration potential within STKEC region. The study team will Identify the productivity gaps of an industry within STKEC countries by plotting their trade patterns and export strengths. The study team shall use indexes such as the Lafay Index to reveal the comparative advantage of the industry under review.

Illustrative showcasing individual economy's export strength

We calculate Revealed Comparative Advantage (RCA) to assess India's relative specialization across sectors

ILLUSTRATION

Comparison of value of Indian exports in 2016 with Lafay Index values of select sectors



- Lafay Index indicates relative specialisation of a country in manufacturing of a product/sector – Revealed Comparative Advantage
- For example, sectors like Apparels have high exports and domestic output along with high LI
- Engineering goods and Metal based sectors registered moderate exports but not competitive

** Due to volatility of oil prices, LI comparison has not been made for Refined petroleum products*

Lafay **= $K*[(X_{d,i} – M_{d,i}) – (X_d – M_d)* (X_{d,i}+ M_{d,i} / X_d + M_d)]$**

where d is the country under study, i refers to a specific industry, X are the exports, M are the imports and K is a constant

COG Analysis

CENTRE OF GRAVITY METHOD

Identify core issues in facility location

- Proximity to customers, Business Climate, Total Costs, Infrastructure, Quality of Labor, Suppliers, trading blocs, environmental regulation,

COG Programing

- Consider existing facilities, the distances between them, and the volumes of goods to be shipped between them
- Methodology involves formulas used to compute the coordinates of the multi -dimensional point that meets the distance, volume and other such important criteria
- Formulas:

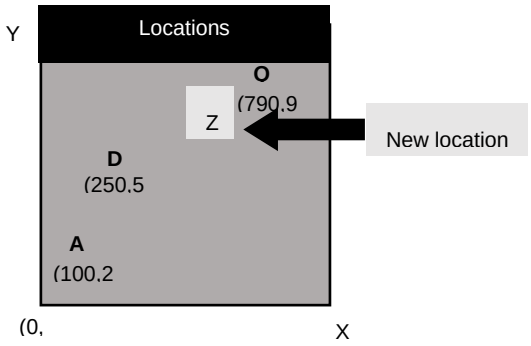
C_x = X coordinate of center of gravity
C_y = X coordinate of center of gravity
d_{ix} = X coordinate of the ith location
d_{iy} = Y coordinate of the ith location
V_i = volume of goods moved to or from ith location

Illustration of COG analysis output

Compute the new coordinates using the formulas:

$$C_x = \frac{100(1250) + 250(1900) + 790(2300)}{1250 + 1900 + 2300} = \frac{2{,}417{,}000}{5{,}450} = \mathbf{443.49}$$

$$C_y = \frac{200(1250) + 580(1900) + 900(2300)}{1250 + 1900 + 2300} = \frac{3{,}422{,}000}{5{,}450} = \mathbf{627.89}$$



Volume	
Showroom	No of Z-Mobiles sold per month
A	1250
D	1900
Q	2300