

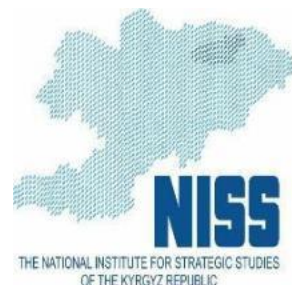


# THE 3RD CAREC THINK TANKS DEVELOPMENT FORUM REPORT 2018

KNOWLEDGE CORRIDORS ALONG THE SILK ROAD

CAREC INSTITUTE





# The 3rd CAREC THINK TANKS DEVELOPMENT FORUM

Building Knowledge Corridors along the Silk Road

17-18 July 2018  
Bishkek, Kyrgyzstan

## Table of Contents

Abbreviations.....	4
Background .....	5
Format of the Forum .....	5
Objectives and Outputs .....	6
Session I: Welcome and Opening Remarks, Keynote Address .....	6
Session II: Taking Stock .....	9
Asia-Pacific Regional Integration Index .....	9
CAREC Regional Integration Index.....	10
Trends in Intra-Regional Investments .....	14
Intra-Regional Tourism as a Driver of Regional Integration .....	16
Session III: New Approaches.....	18
Regional Markets as Knowledge Sharing Platforms: Trade Financing of SMEs.....	18
SMEs in Global Value Chains.....	21
Technology Transfer: A Case for Regionalism .....	22
Environmental Challenges Affecting Central Asia .....	22
Regional Platforms for Promoting Cooperation in Know-How & Technology .....	23
Session IV: Regional Problems, Regional Solutions .....	25
Standardizing TVET: A Force Multiplier for Regionalism .....	25
TVET in CAREC: Opportunities and Challenges.....	31
Session V: Materializing Knowledge Corridors .....	32
Developing Knowledge Parks: Building Blocks .....	32
Connecting Destinations of CAREC Knowledge Corridors .....	33
Session VI: Role of Stakeholders in Building Knowledge Corridors .....	34
Universities .....	34
Think Tanks .....	34
Governments .....	34
Business Sector.....	35
Session VII: Institutional Capacity Building of Think Tanks.....	36
Maintaining Financial Sustainability in the Age of Decreasing Funding.....	36
Establishing Regional Networks: Key Challenges and Best Practices .....	37
Knowledge Value Chain .....	37
Thematic and Geographic Approaches.....	39
CAREC Think Tanks Forum and Network: Way Forward.....	41
Closing Remarks.....	43
Biographies of Resource Persons.....	44
Forum Agenda.....	50
List of Participants.....	53
History of the CAREC Think Tanks Network.....	60

## Table of Boxes, Figures, and Pictures

Box 1: Regional integration recommendations to boost trade .....	12
Box 2: Recommendations to access to resources of financial multilateral institutions.....	15
Box 3: Recommendations on tourism promotion .....	18
Box 4: Policy proposals for SME access to finance .....	20
Box 5: Policy proposals for SME engagement in global value chains .....	22
Box 6: Policy proposals for mutual recognition of qualifications .....	30
Box 7: Policy proposals for TVET reform.....	31
Figure 1: CRII dimensions.....	11
Figure 2: Costs of inaction in water cooperation.....	24
Figure 3: Knowledge value chain .....	38
Figure 4: Think tank networking issue diagram.....	42
Table 1: CRII dimensions and indicators .....	13
Table 2: TTCI ranking of CAREC countries.....	17
Picture 1: Welcome remarks by Mr. Bayaraa Sanjaasuren, Director, CAREC Institute .....	6
Picture 2: Opening remarks by Ms. Candice McDeigan, Country Director, ADB, Kyrgyzstan.....	7
Picture 3: Keynote Address by Mr. Oleg Pankratov, Minister of Economy, Kyrgyz Republic.....	8
Picture 4: Forum participant asking a question during the forum .....	16
Picture 5: A small group discussion during the forum.....	28
Picture 6: Participants of the forum .....	29
Picture 7: Forum discussions .....	35
Picture 8: Forum participant asking a question during the forum .....	40
Picture 9: Family photo of the forum .....	49

## Abbreviations

ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
AIIB	Asian Infrastructure Investment Bank
APRII	Asia-Pacific Regional Integration Index
ASEAN	Association of Southeast Asian Nations
BETP	Border Economic Transformation Program
BOI	Board of Investments
BRI	Belt and Road Initiative
CAREC	Central Asia Regional Economic Cooperation
CI	Central Asia Regional Economic Cooperation Institute
COC	Chamber of Commerce
CPEC	China Pakistan Economic Corridor
CRII	CAREC Regional Integration Index
CTTDF	CAREC Think Tanks Development Forum
CTTN	CAREC Think Tanks Network
DP	Development Partners
EIAS	European Institute for Asian Studies
EU	European Union
FDI	Foreign Direct Investments
FTZ	Freed Trade Zone
GDP	Gross Domestic Product
HDI	Human Development Index
ICT	Information and Communication Technologies
ITTLDC	International Think Tank for Landlocked Developing Countries
JFG	Japan Federation of Credit Guarantee Corporation
JPC	Japan Productivity Center
KOF	Konjunkturforschungsstelle
LDC	Landlocked Developing Countries
LPI	Logistics Performance Index
MENA	Middle East and North Africa
NISS	National Institute of Strategic Studies
OBOR	One Belt One Road
PCA	Principal Component Analysis
PRC	People's Republic of China
RCT	Randomized Control Trial
RDD	Regression Discontinuity Design
SBA	Small Business Administration
SDG	Sustainable Development Goals
SDPI	Sustainable Development Policy Institute
TFP	Total Factor Productivity
TTCI	Travel and Tourism Competitiveness Index
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UNDP	United Nations Development Program
US	United States
USD	United States Dollars
WTO	World Trade Organization



## Background

The CAREC Institute (CI) is mandated to promote the regional cooperation agenda among CAREC<sup>1</sup> countries as described in the Intergovernmental Agreement (IGA) which gives CI a full legal personality under the auspices of the Ministerial Council (MC) of the CAREC Program, and defines its main functions as follows: a) conduct strategic research; b) disseminate research findings and results; c) enhance capabilities of government officials; and d) develop a network of research institutions in the CAREC region.

Realizing its role as a knowledge arm of the CAREC 2030, the CI conceptualized connectivity as a multi-dimensional notion, a system of ideas and knowledge. The Institute partnered with the National Institute of Strategic Studies (NISS) of Kyrgyzstan to organize the 3rd CAREC Think Tanks Development Forum (CTTDF) in Bishkek with a thematic focus on building knowledge corridors along the Silk Road.

The rationale of the forum was that the region lacks effective mechanisms for promoting the regional knowledge integration. Unlike infrastructure which is tangible, knowledge corridor is an intangible pathway. It is virtual but substantive. It is a missing link for completing the connectivity paradigm. Knowledge corridors, alongside the economic corridors, can not only strengthen connectivity but sustain it.

Knowledge corridors can be visualized as an interconnected web with virtual destinations, thoughts and ideas of knowledge enablers (government), knowledge articulators (sector experts), knowledge generators (research entities), and knowledge transformers (business sector) to translate knowledge into tangible gains. Similar to the economic corridor, the outcome of knowledge corridors is a stronger regionalism.

Recognizing significance of numerous stakeholders and their complementary roles, the CTTDF brought key players together at one platform. This meeting aimed to initiate the intellectual discourse that may help in building consensus and synergies to contribute in development of knowledge corridors along the economic corridors of the Silk Road.

## Format of the Forum

The forum was designed to provide a holistic understanding of the knowledge corridors by introducing a global, regional and country-specific perspective, and then narrowing down the discussions and ideas to the role of each group: universities, think tanks, government officials, and the business sector, in building knowledge corridors.

The forum was divided into two segments. The components of the first segment aimed to collate ideas and suggestions regarding the knowledge corridors, that were extracted from panel discussions and breakout sessions held by each group. The second segment comprised of ancillary parallel sessions of intra-university, intra-government, intra-think tank, and intra-business discussions. This segment provided a dialogue opportunity to each group to discuss their respective roles in providing solutions to eliminate the key issues confronting the region and building the knowledge corridors.

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<sup>1</sup> Afghanistan, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, People's Republic of China, Tajikistan, Turkmenistan, Uzbekistan.

The forum covered a wide range of topics including: intra-regional trade connectivity and economic integration, investments and tourism, new approaches to regional markets and technology transfers, regional employment generation, and strategies for making knowledge corridors a reality by building on strengths of academia, think tanks, businesses, and government stakeholders as well as development partners.

## Objectives and Outputs

The forum was designed to meet the following key objectives:

- 1) Provide a dialogue opportunity to universities, think tanks, governments, and the business sector to discuss key policy issues confronting the region.
- 2) Expose participants to concepts, trends, best practices, and lessons on topics of the forum.
- 3) Identify major institutional challenges confronting think tanks and attempt find solutions.
- 4) Produce forum report based on presentations, discussions, and recommendations.
- 5) Prepare a blueprint for the knowledge sharing mechanism for the CAREC region.

## Session I: Welcome and Opening Remarks, Keynote Address

The forum commenced with a formal opening ceremony that included remarks by the representatives of the partnering organizations: Mr. Bayaraa Sanjaasuren, Director of CI, Ms. Candice McDeigan, Country Director, Asian Development Bank (ADB) Resident Mission, Kyrgyzstan, and Mr. Oleg Pankratov, Minister of Economy of Kyrgyzstan.

Picture 1: Welcome remarks by Mr. Bayaraa Sanjaasuren, Director, CAREC Institute



In his welcome remarks, Mr. Bayaraa Sanjaasuren gave a brief introduction of the CI and highlighted its role in supporting the CAREC Program through knowledge generation and capacity building. He mentioned that the decision to establish the CI was made during the CAREC Ministerial Conference

in 2006. In 2009, the CI commenced its operations as a virtual entity to establish its physical base in 2015 and start forging collaborations with various international, regional, and national institutions.

Picture 2: Opening remarks by Ms. Candice McDeigan, Country Director, ADB, Kyrgyzstan



He further stated that the annual Think Tanks Development Forum is a flagship event of the CAREC Institute that serves as a platform for regional think tanks to deliberate upon key policy issues faced by the region. The CI's inaugural forum was held in Astana, Kazakhstan in 2016 with a prime theme of "Promoting Economic Cooperation for an Integrated Central Asia." The second forum was held in Urumqi, PRC in 2017 under the theme of "Exploring Knowledge Solutions for Regional Cooperation and Integration." The third forum is intended to help develop a regional knowledge sharing mechanism that will help foster cooperation and coordination for a more connected region.



The CI Director extended his gratitude to the Government of Kyrgyzstan for hosting the event. He also thanked the National Institute of Strategic Studies (NISS) of Kyrgyzstan for co-hosting the forum. Furthermore, he acknowledged the support provided by the Government of PRC and ADB for arranging the forum. He concluded his welcome remarks by thanking the participants for finding the time to attend the forum.

In her opening remarks, Ms. Candice McDeigan, Country Director of ADB Resident Mission in Kyrgyzstan affirmed that this forum provides an opportunity to work together and exchange knowledge and research on contemporary development challenges confronted by the CAREC region.

Picture 3: Keynote Address by Mr. Oleg Pankratov, Minister of Economy, Kyrgyz Republic



She remarked that the knowledge corridor is the evidence-based information and analytical insight essential for policy makers and stakeholders to make an economic corridor come to life. Ms. McDeigan mentioned that she looked forward to hearing diverse thoughts of the participants of this forum. Talking of the CAREC Think Tanks Network in particular, she emphasized the potential that it holds to become an important board for the CAREC Institute's outreach efforts. She mentioned that the initial Think Tanks Forum in Astana raised awareness in CAREC member countries about the network's objectives, and the second forum established the informal network as well as an advisory panel to supervise the functioning of the forum.

Ms. McDeigan stated that the third forum seeks to build on past results by gaining perspectives of think tanks, academia, business, and the government. She highlighted the importance of topics that the forum covered. She concluded that the Think Tanks Network can positively contribute to the CAREC Institute's flagship research and capacity building work, specifically to the development of the CAREC Regional Integration Index which could help provide measures for policy coordination and harmonization to boost regional cooperation and economic integration.

Mr. Oleg Pankratov, the Minister of Economy of Kyrgyzstan, took over from Ms. McDeigan as a keynote speaker and expressed his appreciation to the CI for organizing the forum. He noted that

the forum has the potential to transform the economic corridors to skillfully linked knowledge corridors in the form of regional cooperation programs and initiatives such as CAREC, BRI, and others. He spoke of Kyrgyzstan's openness to trade, its WTO membership, and readiness to integrate further. Mr. Pankratov concluded that CAREC member countries need further capacity development support to analyze the existing issues in the region and address them in a timely manner. He reiterated that the CAREC forum can meet these needs well through networking, exchanging collective wisdom of the participants, and by offering innovative and analytical insights to address challenges. He extended his appreciation to the CAREC Institute for this initiative and the NISS for its support as a host organization.

## Session II: Taking Stock

Moderator: Ben Slay, Senior Adviser, UNDP Regional Hub, Istanbul, Turkey  
Speaker I: Fahad H. Khan, Economist, ADB, Manila, Philippines  
Speaker II: Dr. Saeed Qadir, Senior Research Officer, CAREC Institute  
Speaker III: Kashif Noon, Head of Knowledge Management Unit, CAREC Institute

### Asia-Pacific Regional Integration Index

The regional integration is believed to increase economic and non-economic benefits by expanding markets, boosting industrialization, enhancing market structures, fostering productivity, introducing more investment opportunities, improving political stability and socio-cultural harmonization. Various integration indices help track this progress. Since integration is a multidimensional phenomenon, a composite index is required, comprised of numerous indicators to allow summarizing complex issues. Such indices can assist decision-makers improve accountability and facilitate communication with the general public.

Mr. Fahad H. Khan, the Economist from ADB, spoke at the forum about the Asia-Pacific Regional Integration Index (APRII) constructed by Park and Huh (2017) and Park and Clavera (2018).

He elaborated that the APRII aims to identify the strengths and weaknesses of the regional integration across different dimensions. It helps monitor progress over time and modify goals. There has been a lack of indicators that are broad-based and comprehensive enough to capture numerous dimensions of the regional integration, limiting one's ability to understand the regional integration dynamics and assess its progress.

The APRII consists of 26 indicators that measure various aspects of regional integration along six dimensions: (i) trade and investment integration, (ii) money and finance integration, (iii) regional value chains, (iv) infrastructure and connectivity, (v) free movement of people, and (vi) institutional and social integration. The 26 indicators – based on bilateral data, expressed as a ratio of intra-regional sum (or average) to total sum (or average) – are normalized and aggregated using the Principal Component Analysis (PCA) to yield an index ranging from 0 to 1, with higher values representing a greater extent of integration.

The KOF Globalization Index, the Economic Freedom of the World Index, the Chicago Fed National Activity Index use PCA weightage schematics. The African Regional Integration Index (ARII), however, uses an arithmetic average weightage scheme (i.e., assigning equal weightage), which may be justifiable when the data includes many indicators (50-100) with a lack of consensus on weightage (ARII includes five dimensions and 16 indicators). Similarly, a problem of double counting may arise if indicators are highly correlated. Therefore, PCA is most appropriate to reduce data dimensionality while combining overlapping information between correlated indicators.

According to Mr. Khan, the APRII has contributed to good policy decisions in Asia and the Pacific, however the degree of regional integration varies across different sub-regions and socioeconomic dimensions. South East Asia experiences the most advanced regional integration, driven by trade and investment. However, the progress has been slow in institutional and social dimensions which requires more attention.

When comparing APRII results with the CAREC Regional Integration Index (CRII) findings, CAREC proves more integrated within the sub-region than with the rest of Asia and Pacific except for the dimensions of trade and investment, and regional value chains. Excluding the PRC data (due to its magnitude), CAREC index shows better integration within itself than with the rest of Asia, except for the dimensions of infrastructure connectivity, and institutional and social integration.

Placing CAREC's regional integration in a comparative context with Asia and the Pacific, it is found that CRII is lower than APRII in trade and investment, regional value chains, and free movement of people. However, it is substantially above the APRII in institutional and social integration, due to shared historical ties among the economies of CAREC.

Moving forward, CRII potentially provides guidance for the policy makers of the sub-region to integrate more forcefully by deepening trade and investment linkages, and developing regional value chains. The CRII could be more robust and useful with the following methodological improvements, concluded Mr. Khan:

- a) Data gap needs to be filled (mostly for Turkmenistan and financial data of several other CAREC economies).
- b) Due to data limitations, the infrastructure and connectivity dimension includes non-bilateral data (World Bank's Logistics Performance Index and Ease of Doing Business indicators). The quality of data used for this dimension could still be improved by utilizing the bilateral data from the CAREC Performance Measurement and Monitoring Program.
- c) Construct historical data series to track progress of integration over time.
- d) While interpreting CRII, reconsider if all dimensions of integration are equally desirable.
- e) Reconsider if intra-regional integration implies inward orientation as opposed to integration across regions.
- f) Reconsider how CRII can assess not only the state of regional integration but the economic analysis of costs and benefits, and optimal extent of the regional integration.

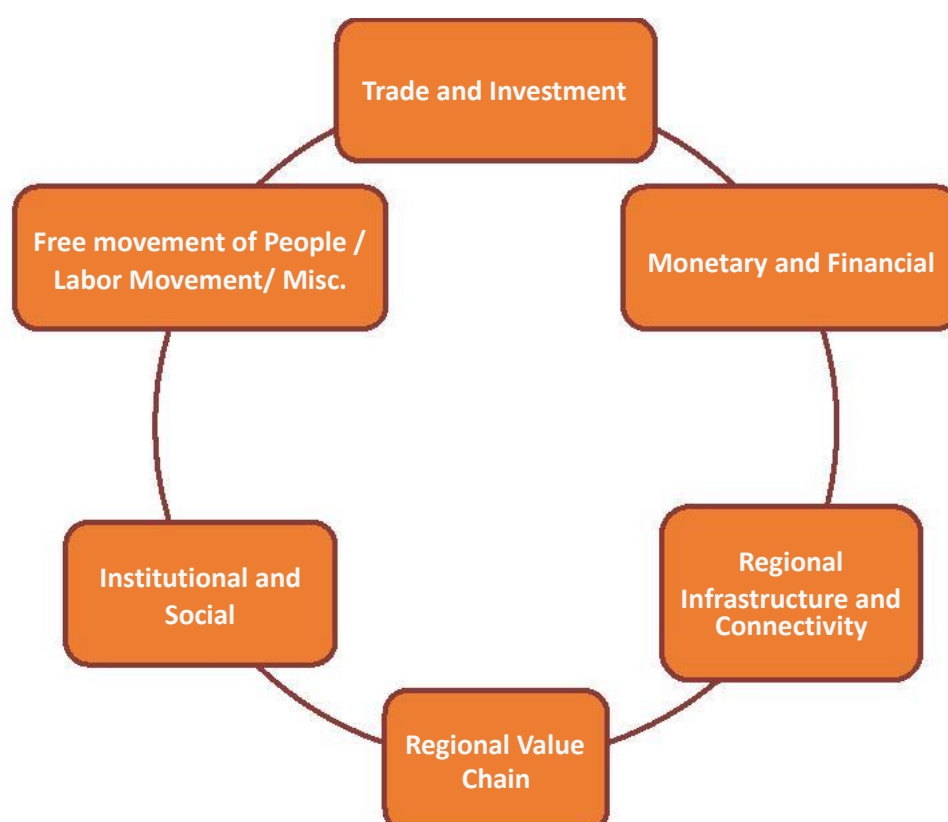
## CAREC Regional Integration Index

Dr. Saeed Qadir, Senior Research Officer of the CAREC Institute, spoke at the forum about the CAREC Regional Integration Index (CRII) designed by the Institute to help identify policy gaps and provide policy recommendations to boost regional integration.

The rationale behind creating the index was the regional integration objective of the CAREC Program which is in its 17th year of operation. The regional cooperation and integration requires more connectivity between the economies, and a collective action for regional public goods. The CRII measures the depth and breadth of the regional economic integration among 11 member countries. It also compares the intra-CAREC state of integration with regional and global integration index rankings. The index filters the heterogeneities and asymmetries in terms of scale, scope, and size of the economies. It is a weighted index comprising of six dimensions of integration as shown below.

The CRII maps out the state of the regional cooperation and integration on six socio-economic dimensions (with 26 constituent indicators) for each of the CAREC member country. The CRII employs a panel-based approach for construction of the index using the dataset from 2006 to 2016, imputing missing data values, normalization of raw data for each dimension using min-max rescaling, two-stage PCA technique to ascertain and apportion the weights for each of the indicators and dimensions for aggregation of a composite weighted index. The PCA based panel approach helps gauge the dynamic behavior of the drivers of the regional cooperation and integration over years, track its evolution and assess the state of regional integration in each of the dimensions, as well as the overall index progress for policy analysis and targeted policy interventions.

Figure 1: CRII dimensions



According to the CRII findings, the CAREC region displays the low level of regional cooperation and integration. This level is consistent with the findings under the APRII research.

Of the six dimensions in the CRII, the dimension VI 'Institutional and Social Integration' and Dimension V on 'Free Movement of People' have the highest weights, followed by the dimension III on 'Regional Value Chain' and dimension IV 'Infrastructure and Connectivity' weights. Counter-intuitively, dimension I 'Trade and Investment' and dimension II 'Money and Finance' integration do not seem to derive cooperation and integration in the CAREC region.

In order to leverage on its integration potential, the CAREC cooperation agenda needs revision to scale up political commitment, improve trade facilitation, promote intra-regional trade, streamline the rules, reduce regulatory burden and costs to promote cross-border trade, and open up the service sector under the WTO General Agreement on Trade in Services.

The CAREC region is labeled as maintaining the highest share of reforming economies, however, the intra-CAREC regional trade is less than 3%. Excluding PRC, the CAREC region is least regionally integrated in terms of trade, investment, and movement of people. The CAREC countries global trade share stands at 0.7%. Within the region, trade is predominantly bilateral, e.g. Afghanistan trades with Pakistan, and Tajikistan, Kyrgyzstan, Turkmenistan, Mongolia, Pakistan, Georgia, and Kazakhstan trade with the PRC.

On the other hand, the CAREC region has a lot of potential to capitalize on its agricultural market (more than \$200 billion) and attract investments from PRC, EU, India, North America, etc. Currently, this potential remains unrealized because of the existing factors that affect the trade integration of the region, namely:

- a) Asymmetrical markets and institutional development constraints
- b) Market access restrictions
- c) Inconsistent and restrictive foreign direct investment (FDI) policies
- d) High trade costs
- e) Lack of trade facilitation and economic connectivity
- f) Fragmented regionalism

The reduction in time and cost of trade can enhance competitiveness and aid in integration with the global value chains. A 10% reduction in time at the importers' border raises intra-CAREC trade by 2-3% which accounts for a \$1.4 billion increase in intra-regional trade. Similarly, full implementation of the WTO Trade Facilitation Agreement (TFA) can reduce trade costs of manufactured goods by 18% and of agricultural goods by 10.4%.

**Box 1: Regional integration recommendations to boost trade**

**The following recommendations are provided to strengthen the regional integration:**

- a) Make formal regional arrangements to open up market access opportunities by eliminating tariff, non-tariff, and other barriers to trade.
- b) Reduce trade costs.
- c) Focus more on eastern regional markets i.e. East Asia, Asia, and Eurasia.
- d) Formulate a relevant trade adjustment to support the vulnerable sectors and address developmental challenges.
- e) Adopt a generalized system of preferences for the CAREC landlocked economies.
- f) Adopt a non-discriminatory treatment to most competitive products, sectors, and partners.

Dr. Saeed concluded that the geo-strategic location and advantages offered by the ancient Silk Road provide an opportunity for the CAREC member countries to build resilient and sustainable regional infrastructure for economic connectivity and emerge as a center of trade and commerce.



Table 1: CRII dimensions and indicators

Dimension	Indicator	Definition*
I. Trade and Investment	I-a	Proportion of intra-regional goods exports to total goods exports
	I-b	Proportion of intra-regional goods imports to total goods imports
	I-c	Intra-regional trade intensity index
	I-d	Proportion of intra-regional FDI inflows to total FDI inflows
	I-e	Proportion of intra-regional FDI inflows plus outflows to total FDI inflows plus outflows
II. Money and Finance Integration	II-a	Financial Institutions Depth Index
	II-b	Financial Markets Access Index
	II-c	Financial Markets Depth Index
	II-d	Financial Markets Efficiency Index
III. Regional Value Chain	III-a	Ratio between the averaged trade complementarity index over regional trading partners and the averaged trade complementarity index over all trading partners
	III-b	Ratio between the averaged trade concentration index over regional trading partners and the averaged trade concentration index over all trading partners
	III-c	Proportion of intra-regional intermediate goods exports to total intra-regional goods exports
	III-d	Proportion of intra-regional intermediate goods imports to total intra-regional goods imports
IV. Infrastructure and Connectivity	IV-a	Ratio between the averaged trade cost over regional trading partners and the averaged trade cost over all trading partners
	IV-b	Ratio between the averaged liner shipping connectivity index over regional trading partners and the averaged liner shipping connectivity index over all trading partners
	IV-c	Logistics performance index (overall)
	IV-d	Doing Business Index (overall)
V. Free Movement of People	V-a	Proportion of intra-regional outbound migration to total outbound migration
	V-b	Proportion of intra-regional tourists to total tourists (inbound plus outbound)
	V-c	Proportion of intra-regional remittances to total remittances
	V-d	Proportion of other Asian countries that do not require an entry visa
VI. Institutional and Social Integration	VI-a	Proportion of other Asian countries that have signed FTAs with
	VI-b	Proportion of other Asian countries that have an embassy in
	VI-c	Proportion of other Asian countries that have signed business investment treaties with
	VI-d	Proportion of other Asian countries that have signed double taxation treaties with
	VI-e	Cultural proximity with other Asian countries relative to that with all other countries

## Trends in Intra-Regional Investments

Mr. Qiangwu Zhou, Director General of the International Economics and Finance Institute (IEFI) of Beijing spoke about promoting investment growth in the Central Asia and mentioned three constituent elements of the growth paradigm: i) status quo of intra-regional investments; ii) challenges to regional investments; and iii) thoughts on promoting investment growth.

In 2017, most of the CAREC members registered a growth rate of over 4% whereas Tajikistan's growth rate was as high as 7.1%. According to the World Bank's 2018 Global Doing Business Report, Kazakhstan ranks 36th, Uzbekistan is among the top ten countries which have made the greatest improvement in the business climate.

The World Bank's forecast shows that the economic growth rate of the Central Asian countries will continue to exceed that of the United States, Russia, and the EU in the next consecutive years. Mr. Zhou elaborated that measures to streamline administrative review and approval procedures have improved the investment climate in the region. Improvements were noted in transparency of the government information, provision of tax incentives, and the financial support.

The three characteristic features of investments in the CAREC region were described as follows:

- a) The investments are highly concentrated. Due to natural resources, the energy sector has become the primary area for foreign direct investment (FDI). On the one hand, it has played an important role in stabilizing and promoting the economic development, on the other hand, it has also resulted in lack of diversification.
- b) Foreign investments vary significantly from country to country, Kazakhstan attracts most of the investments. Namely, it has absorbed approximately \$11 billion annually on average over ten years. In contrast, Tajikistan and Kyrgyzstan have attracted relatively little foreign investments, with an annual average of less than \$1 billion.
- c) The CAREC intra-regional investment is vulnerable to external shocks. The amount of foreign investments has fluctuated greatly in recent years. In Kazakhstan, \$10 billion of 2013 reduced to \$6.4 billion in 2015, followed by a dramatic increase to \$16.7 billion in 2016 before plunging to \$4.5 billion in 2017. Nonetheless, the Central Asian countries have the tendency to attract foreign investments steadily. Their gradual adjustment towards the industrial structure and reduced dependency on the energy sector ascertains that the prospects for attracting foreign investments will keep improving.

Despite the immense potential and investment growth in many economies of the region, a few challenges remain. The first challenge is the huge investment gap despite abundant energy and mineral resources. It is estimated that from 2016 to 2030, the total demand for infrastructure investment in the Central Asia will reach \$492 billion, accounting for 6.8% of its total GDP. Yet, the gap between investment and demand is significant.

Furthermore, the financial market is relatively weak hampering the growth of investments. The capital market is not developed, the financial legal system is less than perfect with governments often making interventions, with financing efficiency being low and the costs remaining high.

Mr. Zhou concluded that at the regional level, a mature regional financial connectivity mechanism has not yet been formed, and a regional financial center is lacking. In addition, the economic structure of the Central Asian countries is relatively unsophisticated, with high external dependence,

high vulnerability to external shocks, and relatively weak risk resilience. In recent years, there has been several currency devaluations caused by external shocks, which poses great risks to foreign investments.

### **Belt and Road Initiative**

The forum proceeded to take stock of the Belt and Road Initiative (BRI) as an opportunity to promote regional development.

In 2013, President Xi Jinping proposed building the Silk Road Economic Belt. Over the five years, the BRI initiative has made significant progress. By May 2018, PRC signed 103 cooperation documents with 88 countries and international organizations to move forward the BRI jointly.

Subsequently, the investments of the PRC enterprises into countries along the Belt and Road increased by 8.2% (year on year). Freight trains between PRC and Europe have made 9000 trips, connecting 42 cities in 14 Asian and European countries. In 2016-17, PRC has become the largest source of investment in Kyrgyzstan. The two countries have carried out cooperation in transportation, energy, agriculture, and other fields. Hence, the BRI brings new opportunities to the Central Asian countries to enhance the level of investment and economic development.

The improved business climate and efficient financing models are crucial for the future growth of investments in the region. The governments can play a supportive role by putting in place sound institutional frameworks. Additionally, governments can help create a transparent, friendly and non-discriminatory financing environment for businesses to ensure that financial services meet the local needs and are based on innovative and country-driven financing models.

#### **Box 2: Recommendations to access to resources of financial multilateral institutions**

**To attract resources from the financial multilateral institutions and the private sector, some of the key measures need to be taken as follows:**

- a) Multilateral development institutions should play a proactive role given their rich experience in development financing, multi-faceted cross-country coordination, and knowledge on top of ample capital and strong resource mobilization capability. The Asian Infrastructure Investment Bank (AIIB) is one of the best examples. Since its establishment, AIIB has invested a total of \$1.08 billion in three CAREC countries (Tajikistan, Azerbaijan, and Pakistan) and mobilized nearly \$10 billion creating a powerful multiplier effect.
- b) The banks and other financial institutions are of great importance. For instance, the Xinjiang Branch of China Development Bank alone has disbursed \$11.6 billion of loans to neighboring countries for infrastructure connectivity projects, namely the Central Asia natural gas pipeline, aircraft procurement of Uzbekistan, and power transmission plants of Kazakhstan. Likewise, the Export-Import Bank of China is financing the China-Tajikistan highway, the China-Kyrgyzstan-Uzbekistan highway, and the Uzbekistan railway tunnel.
- c) The proximity of the CAREC region to the Asia-Pacific region presents abundant opportunities for fund mobilization. It is estimated that the private capital alone is as much as \$35 trillion. The key is making targeted efforts and channeling these investments into the region.

Picture 4: Forum participant asking a question during the forum



### Intra-Regional Tourism as a Driver of Regional Integration

Mr. Noon of CAREC Institute delivered a presentation and asked the forum looked into the issues of tourism, its spillover effects on integration, and how the teamwork of knowledge enablers, knowledge articulators, knowledge generators, and knowledge transformers can boost this industry.

According to the United Nations World Tourism Organization (UNWTO) Annual Report 2017 ,

tourism is one of the most dynamic and fast-growing sectors in the world: it accounts for more than <sup>2</sup> 10% of the world's GDP, 7% of the (WTO) exports, and generates about 10% of jobs globally. Except for Afghanistan, Turkmenistan, and the People's Republic of China (PRC), can reach almost 20 million in 2018. This represents an annual growth of about 4.5% over the past five years. Prospects for the next decade look promising, with tourist arrivals in eight CAREC countries (excluding PRC, Afghanistan, and Turkmenistan) forecasted to reach 31.7 million by 2028, with a predicted growth rate of 5%.

The CAREC is a diverse region with areas and routes rich in history and culture, associated with the Silk Road, fine culinary traditions, and an outstanding range of unspoiled natural resources that traverse the national boundaries. There is a wealth of biodiversity, especially the mountainous areas of the region, with unique plant and animal species.

<sup>2</sup> <http://publications.unwto.org/publication/unwto-annual-report-2017>

<sup>3</sup> <https://www.wttc.org/>

Table 2: TTCl ranking of CAREC countries

CAREC country	TTCl Rank 2017
PRC	15
Georgia	70
Azerbaijan	71
Kazakhstan	81
Mongolia	102
Tajikistan	107
Kyrgyzstan	115
Pakistan	124
Uzbekistan	n/a
Turkmenistan	n/a
Afghanistan	n/a

In spite of the above, taken in a global context, the aggregate share of tourism traffic for CAREC countries (excluding PRC) is less than 2% of the world tourism (UNWTO, 2017). According to

the Travel & Tourism (T&T) Competitiveness Index (TTCl) 2017 by the World Economic Forum which looks into 90 indicators across 14 dimensions, the CAREC countries rank as follows in Table 2.

As per the UNWTO, the tourism sector has boomed in the Caucasus (Azerbaijan and Georgia) between 2012 and 2017. The share of the total employment taken up by the tourism sector

has increased from 7% to over 13% in Azerbaijan, and from 16% to nearly 27% in Georgia.

Contribution of the sector to the GDP has also nearly doubled in both countries. In the east, China has emerged as a world leader in tourism.

The five Central Asian countries, however, demonstrate modest indicators. Here, tourism accounted for 5.5% of the GDP in 2017 and employed little over a million people which constituted only 4.2% of the total employment. The contribution of the tourism sector to the Pakistan's GDP was only 7.4% in 2017, while the annual ratio being significantly lower in Afghanistan due to the ongoing security and public safety issues.

The 2017 TTCl report lists Azerbaijan as one of the most improved economies in 2017, rising 13 places in the global rankings between the two index publications. The country's investment in the sector, liberalization of its visa regime, enhancement of its natural and cultural resources by increasing the total size of protected areas, active promotion of its oral and intangible cultural expressions, lowering of hotel prices and exchange rate fluctuations, its relatively safe environment, flexible labor market, and positive health conditions contributed to its growing attractiveness as a tourist destination.

The UNWTO report on travel trends suggests that eight CAREC countries are featured in the top 10 locations most associated with the Silk Road, i.e., Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, PRC, Tajikistan, Turkmenistan, and Uzbekistan.

Yet, apart from the PRC, none of the CAREC countries are in the top 10 Silk Road countries which travelers intend to visit in the next five years.

Such findings suggest that the CAREC countries are in need of building a coherent and persuasive positive tourism image, individually and collectively, with a strong identification with the Silk Road, combined with improvements across 14 TTCl dimensions.

#### 14 Dimensions of TTCl

- Business environment
- Safety and security
- Health and hygiene
- Human resource and labor market
- ICT readiness
- Prioritization of T&T market
- International openness
- Price competitiveness
- Environmental sustainability
- Air transport infrastructure
- Ground and port infrastructure
- Tourist service infrastructure
- Natural resources
- Cultural resources
- Business travel

4 <https://www.weforum.org/reports/the-travel-tourism-competitiveness-report-2017>

5 <http://silkroad.unwto.org/>



**The session on tourism concluded to suggest the following:**

- a) The CAREC Secretariat and the CI to facilitate the agenda setting for regional tourism promotion through workshops, conferences, and policy dialogues.
- b) Domestic tourism promotion policy formulation in each CAREC country, including but not limited to, affirmative legislation, e-visas, tourism promotion fairs, etc.
- c) A tourism conference to be organized among member countries and a CAREC-wide chamber of tourism operators to be developed.
- d) A five-year policy implementation evaluation to be conducted on the economic impact of tourism.

## Session III: New Approaches

- Moderator: Paul Vallely, Program Leader, World Bank Central Asia Office, Almaty, Kazakhstan
- Speaker I: Debarshi Nandy, Associate Professor and Program Director, MSF Brandeis University, International Business School, Boston, USA
- Speaker II: David J. Smallbone, Professor of Small Business and Entrepreneurship, Kingston Business School, Kingston University, London, United Kingdom
- Speaker III: Dr. Farhad Taghizadeh-Hesary, Senior Assistant to Dean, ADBI Assistant Professor, Faculty of Political Science and Economics, Waseda University, Tokyo, Japan
- Speaker IV: Shakhboz Akhmedov, Manager of Knowledge, Projects and Resource Management Unit, the Regional Environmental Centre for CA, Almaty, Kazakhstan

## Regional Markets as Knowledge Sharing Platforms: Trade Financing of SMEs

The speaker, Mr. Nandy, elaborated that the SMEs play a key role in national economies around the world, generating employment, value addition, and contributing to innovation. They are central to the efforts to achieve environmental sustainability and inclusive growth.

There are different aspects that contribute to growth of SMEs. Namely, the financial and investment barriers undermine contributions of SMEs to the economies. The credit constraints are especially severe in mid- and low-income countries, where funding gaps are often the main barrier to formalization and SME development. While the disproportionate effects of the financial constraint on SMEs is well documented, perspectives differ on how it should be tackled and there are different opinions about the policy instruments which are effective in addressing specific barriers to SME development.

The challenge for research is to identify causal effects. However, it proves difficult to establish causality given data limitations. A policy based on evidence provides benefits to both the government and the private sector. The speaker proposed use of Randomized Control Trials (RCTs) methodology to conduct real time experiment on the population targeted by the policy to identify the causal impact.

Further, the speaker proposed a Regression Discontinuity Design (RDD) approach to explain Total Factor Productivity (TFP) for the firms which are financially constrained. This model studies the change before and after de-regulation. If productivity increases for the firms that are financially constrained followed by the banking de-regulation, then the TFP increase for the firms which fall above the SBA (Small Business Administration) threshold should be greater than the TFP for the

firms which fall below the SBA threshold. The findings suggested that smaller the financial constraints, higher the productivity for a firm once the financial constraint was resolved.

Findings on regional markets as platforms for knowledge sharing include:

- a) Increased access to bank financing has a drastic positive impact on local SME growth.
- b) Regional free trade policies are beneficial for businesses that are closer to borders due to increased market share.
- c) Co-agglomeration or development of business clusters facilitates SME growth and performance.
- d) Increased trade credit becomes available within business clusters.
- e) There is increased labor efficiency in businesses where the learning curve is high.
- f) Regional trade policy should promote development of business clusters closer to border areas (and not only at urban centers) to facilitate migration and knowledge spillovers.
- g) Trade policy should facilitate creation of co-agglomerated local economies that will develop into cross-border knowledge economies overtime.
- h) There must be labor mobility and skill-based specialization within clusters.
- i) Increased access of bank financing in border areas should accompany the development of regional trade policies.

To conclude, greater access to bank financing leads to higher productivity and profitability in SMEs. This increase is due to elimination of financial constraints which enables them to opt for more productive projects, previously not in their investment capability. The correlation between trade credit and SMEs performance describes co-agglomeration as an important factor. The trade credit is thought to be an efficient source of short-term finance on which SMEs depend. The countries with agglomeration spillovers lead to greater TFP in opening of large manufacturing plants which indirectly affect SMEs growth through availability of increased trade credits for business clusters.

Dr. Farhad Taghizadeh-Hesary presented comparison of contribution of SMEs to employment and GDP in the CAREC region and other Asian sub-regions. The CAREC region demonstrated the lowest results.

One of the major reasons behind the low development of the SME sector in this region is that they experience difficulties in accessing the finance. The domestic credit provided to the private sector in Central Asia remained comparatively modest as compared with the 148% of OECD as a domestic credit to the private sector as a percentage of GDP. This percentage stood at 34% in Kazakhstan, 21% in Kyrgyzstan, 58% in Mongolia and 19% in Tajikistan in 2017. The non-performing loans remained high in Central Asia with Tajikistan at the top maintaining 20.4% of non-performing loans out of total gross loans.

Additionally, the credit conditions remain tight in the region with high interest rates that hinders the SME growth. More than a third of SMEs are discouraged from applying for loans due to tight credit conditions and high collateral requirements compared with less than a fifth in selected OECD countries. Further, low financial literacy hampers SME business development opportunities.

Dr. Farhad Taghizadeh-Hesary emphasized on applying necessary policy measures in order to ease the SME access to finance to facilitate their contribution to employment and GDP. This will help CAREC member countries to diversify their economies as well.

As most Central Asian countries are bank-dominant economies, capital market financing is not a realistic option for SME. Other solutions are needed which make the bank lending to SME easier.

**The key policy proposals include:**

- a) Development of credit information infrastructures for SME. A nationwide SME database exists in Japan with the name of Credit Risk Database (CRD). The CRD was established in 2001 to promote streamlining and efficiency of SME financing by measuring credit risk and assessing business conditions based on data. Those SME which had better credit scores, would get credit guarantee coverage from the government in lower premium rates. The riskier SME needed to pay higher premium rates. The risk assessment using a nationwide credit risk database will make the bank lending to SME easier.
- b) In the short term, banks and credit guarantee corporations can utilize the credit risk assessment techniques described in the N. Yoshino and F. Taghizadeh-Hesary publication <sup>6</sup>.
- c) To remedy the undersupply of credit to SME, various government and donor initiatives have emerged in both developed and developing economies, including so-called credit guarantee schemes (CGS). A public guarantee scheme is a tool that aims to reduce the gap between supply and demand in SME finance. Many countries have used CGS for decades, in various forms, as a way to increase the flow of funds into targeted sectors and groups. The purpose of creation of such a scheme is to contribute to the flow of funding into sectors that have difficulty raising funds, including the SME sector. A CGS makes lending more attractive by absorbing or sharing the risks associated with lending to the targeted sector. Such schemes can also increase the amount of loan funds available to an enterprise beyond its own collateral limits. In order to have a sustainable CGS, it is important to calculate and adjust the optimal credit guarantee ratio for each CAREC member country. A comprehensive method for calculation of this ratio is proposed in the Yoshino N., and Taghizadeh-Hesary, F. publication <sup>7</sup>.

7

Dr. Farhad Taghizadeh-Hesary concluded that asymmetry of information and high transaction costs are the major reasons that many banks are reluctant to lend to SMEs. For CAREC countries, establishment of a nationwide credit risk database deems necessary. The role of credit risk database is to remedy the problem of asymmetric information and for making the bank trade finance easier. In the short run, it is possible to implement various methods for measuring the credit risk and assessing the credit rating of SMEs. These methods could be used by lending institutions, credit guarantee corporations, or independent local rating agencies. Development of credit guarantee schemes reduce information asymmetry and share the risk incurred by banks when lending to SMEs. Improving financial skills, in particular financial literacy, can address the demand issues on access to finance by enhancing financial competences and loan applications of SME.

<sup>6</sup> N. Yoshino and F. Taghizadeh-Hesary, 2015. Analysis of Credit Risk for Small and Medium-Sized Enterprises: Evidence from Asia. Asian Development Review. Vol. 32 No. 2: 18-37, MIT Press.

<sup>7</sup> Yoshino N., and Taghizadeh-Hesary, F., 2018. Optimal Credit Guarantee Ratio for Small and Medium-Sized Enterprise Financing: Evidence from Asia. Economic Analysis and Policy, <https://doi.org/10.1016/j.eap.2018.09.011>.

## SMEs in Global Value Chains

Mr. David J. Smallbone informed the audience about growth rates of the Central Asian economies since 2000 and further expanded that growth has now stalled, and the relevant countries need to adopt more sustainable growth models involving diversification to continue growing.

He elaborated that the economies of the region are heavily dependent on low-productivity sectors e.g. agriculture and trade, whereas mining and hydrocarbons are of particular importance to the region. Ironically, these natural resource-based sectors are capital-intensive and employ relatively few workers.

Moreover, they are not able to generate high-productivity employment on a sufficient scale to assure broad-based prosperity. Therefore, in order to generate adequate employment levels on a sufficient scale, the region must shift towards high-productivity sectors. He added that SMEs in Central Asia are more constrained than large companies in terms of trading across borders, compliance with border crossing procedures, identification of foreign partners, and overcoming infrastructure barriers.

According to available data, the region generated 0.6% of global exports in 2012 which dropped to 0.38% in 2015. The major reasons for this decline is that current exports from the region are mainly natural resources where large companies dominate and SMEs play a very limited role. Another reason is that export markets in the region are highly concentrated, with the top three products representing more than 60% of total exports. Last but not the least, a key barrier that SME face when exporting is lack of human and time resources to undertake marketing, sales, and distribution abroad. Moreover, SMEs often have limited resources and negotiation power to overcome difficulties in the business climate compared to large companies.

There are ways that SMEs may engage in internationalization, export promotion, and integration into global value chains. Namely:

The SME can supply larger domestic or multinational companies that are exporters, thus contributing to indirect exports for their suppliers. Besides, the establishment of backward linkages with large investors and foreign affiliates, participation in international trade through global value chains offers further opportunities to SMEs. It can help SMEs overcome some barriers to exporting, such as access to international markets, finance, technology, management skills, and knowledge.

However, in order for SMEs to be competitive in global markets, the region must concentrate on prioritizing the development of an entrepreneurship action plan for both the region as a whole and for individual countries within it. The action plan should be based on international best practices whilst taking into account key features of the region. The plan should distinguish both the short-term and long-term goals (considering both the demand side and supply side). An institutional map along with institutional responsibilities should be a key deliverable. Additionally, the entrepreneurship action plan should include the gender dimension as part of the assessment of the countries' potential for entrepreneurship.

**Along with the development of an action plan, policy makers should:**

- a) Address information gaps as they can have a positive impact on SMEs exporting, offering welfare gains to the economy as a whole.
- b) Provide export credits and guarantees to reduce the risks faced by SMEs exporters.
- c) Provide financial assistance to help SMEs participate in trade fairs and obtain information about foreign markets, intellectual property rights (IPR) and other issues.
- d) Draft a Regional Entrepreneurship Strategy.
- e) Continue prioritizing the improvement of the regional business environment. This is important not just because it will reduce the barriers to entrepreneurship but it will also contribute to improving the business environment potentially attracting more FDI.

## Technology Transfer: A Case for Regionalism

Mr. Shakhboz Akhmedov brought attention of the audience to the topics of knowledge, technology, innovation, robotics, the future of job markets, and how robotics and technology will take over majority roles.

He cited recent forecasts that the global population would reach 8.3 billion in 2028 and 50% of jobs will be replaced by artificial intelligence. The 3D printing would enable most of the products to be made by means of in-house production which would have a major impact on manufacturing industry and transportation sector. No vehicle insurance would be needed as most of the risk associated would be mitigated through artificial intelligence and driverless road experience.

He highlighted that by 2028 most scarce resource on the planet would be water, urban population would constitute around 62% of world population, and depression would be the second highest cause of disease in middle-income countries. According to him, the largest growing economy of PRC would have a drastic impact on future as Chinese would be the most widely spoken language in 2028 with India constituting second biggest economy globally. The technology will impact schooling, and the future employment, in its turn, will affect education.

He further argued that in the next 15 years technology, science and innovation would play the key role in delivering all SDGs. If in the 1990s, the north (industrialized nations) were transferring knowledge to the south (non-industrialized nations) to accelerate economic, social, and industrial development, now there is a multidimensional nexus, which has value-added supply chain functions operating globally, production process is taking place in various geographical locations to make use of available resources.

The speaker concluded that cooperation among the key enablers of technology development and innovation – academia, policy makers, and business – would facilitate sustainable development.

## Environmental Challenges Affecting Central Asia

The forum continued deliberations on environmental challenges affecting the region and potential for cooperation.

The geographic area of Central Asia is largely arid and semi-arid and very sensitive to environmental events. Recent changes in social structures and resource management practices, accompanied by regional climate change, have caused substantial environmental concerns, namely:



- a) Water challenge: reduction of quality and quantity, growing competition for water resources, degradation of water environment and increase in frequency of natural disasters.
- b) High levels of land degradation related to the over irrigation, salinization, agricultural and industrial activities. The region's land resources are degrading in quality and may continue degradation if no proper care taken.
- c) Reduction of biodiversity, reduced resilience of environmental systems: number of species of flora and fauna in Central Asia are becoming extinct due to long-term human interventions and intensive economic utilization of the environment.
- d) Climate change to aggravate issues. The countries might face serious challenges due to higher and longer heat waves, melting of glaciers, and increased number of droughts and floods.

Currently, the Central Asian countries count 70 million people (estimated 90 million in 2050) which creates a demographic and economic pressure regarding equitable distribution. The economies are resource intensive with high carbon footprint development models linked with outdated infrastructure and technologies. Both national and regional cooperation need substantial revision. The multi-layer and multi-partner activities in the area of environment make overlap and un-coordinated activities unavoidable, compounded with the circumstances that environmental projects often lack scientific ingredients or have no link to research.

Until recently, cooperation over water in Central Asia had been very limited. The costs of inaction are the opportunity costs derived from not cooperating closely. As indicated in the figure below, direct and indirect economic, socio-environmental, and political costs are compromised.

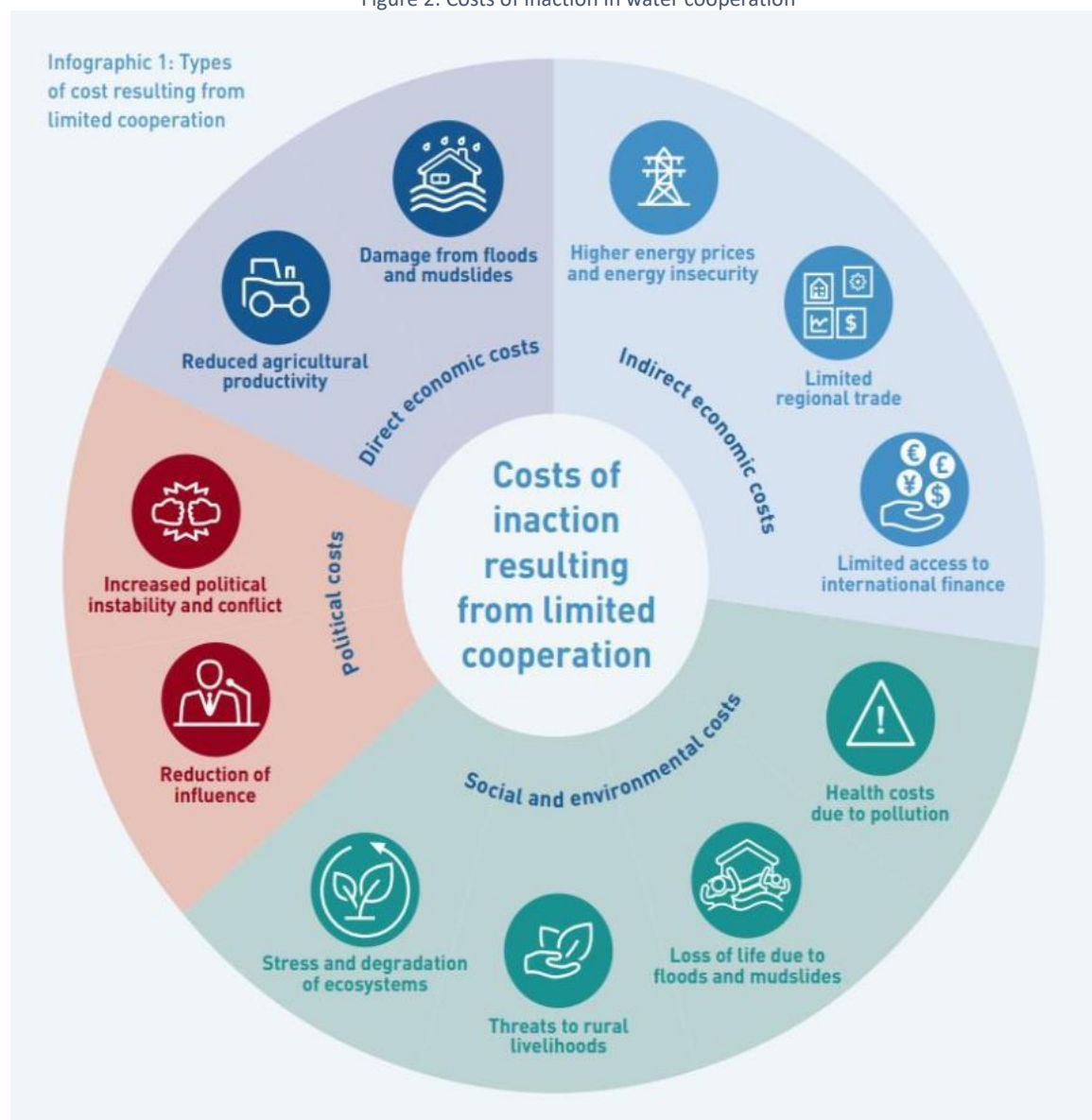
The study by the Regional Environmental Centre for Central Asia and the World Bank (2016) estimated that costs of non-cooperation would equal more than 20% of GDP for the Central Asia by 2050.

## **Regional Platforms for Promoting Cooperation in Know-How & Technology**

Regional cooperation is of strategic importance to Central Asia as the countries face several challenges that require a coordinated response. Regional platforms can play a key role to improve the capacity of regional institutions to adopt innovative systems and respond to regional challenges better. The following regional platforms that have been functioning for several years can enhance their agendas to incorporate knowledge transfer across know-hows and technologies:

- a) Meeting of regional organizations – a platform to articulate important decisions, plans, aspects and role of different regional organizations.
- b) Meeting of parliamentarians and representatives of the Ministries of Foreign Affairs – a platform to convey policy and legislative messages.
- c) Central Asian International Environmental Forum – a platform for regular exchange of progress in the region on environment and sustainable development projects, plus facilitation of dialogue on environmental challenges and possible solutions across different stakeholder groups: government, civil society, and academia.

Figure 2: Costs of inaction in water cooperation



The following layers of coordination would enhance cooperation:

#### Layer 1

Regional and inter-regional platforms and initiatives dealing with environment and sustainable development issues, e.g. Shanghai Cooperation Organization, SPECA, Eurasian Economic Union, Eurasian Bank of Development, CAREC Program and Institute, Belt and Road Initiative (BRI), South-South Partnership, etc.

#### Layer 2

Interstate and/or regional organizations: human capacity development, technical infrastructure and hardware development; setup of suitable and customized regulations and procedures.

#### Layer 3

Regional instruments: preparation of regional agglomeration, collation of dispersed information sources, research and development, content development, implementation, reporting and monitoring.

#### Layer 4

Commitment from countries: representative dialogue, establishing branches, incentivizing participation, informed agenda setting and decision making, committing finance.

#### Factors to Consider in Know-How & Technology Sharing

- ▶ Regional cooperation is important. Environmental challenges have no boundaries.
- ▶ Building a bridge between Central Asia and international development organizations, and fundraising for innovative projects.
- ▶ Technology/know-how absorbing, adapting and operational capacities of countries need to be shared bilaterally, regionally, and globally.
- ▶ Regional knowledge and technology sharing centers need to be established.
- ▶ Focus on R&D at universities, and consistent cooperation among academia, government and business. Establish innovation clusters and initiate regional technology parks.
- ▶ Startups to be encouraged through affirmative policy actions.
- ▶ Focus on efficiency and operational effectiveness to be at the core, minimizing legal and bureaucratic barriers.

### Session IV: Regional Problems, Regional Solutions

Moderator: Akiko Hagiwara, Principal Economist, ADB, Manila, Philippines

Speaker I: Fahad H. Khan, Economist, ADB, Manila, Philippines

#### Standardizing TVET: A Force Multiplier for Regionalism

Mr. Fahad H. Khan elaborated that population change is one of the key driving forces of economic growth and social development. All CAREC member countries have experienced significant demographic transformation over the past decades, characterized by reduced fertility and increased life expectancy.

According to the most recent UN estimates, the population of the CAREC region has nearly doubled from 938 million in 1970 to 1.7 billion in 2017, driven mainly by Afghanistan, Pakistan, and Tajikistan. However, the annual population growth rate of the region in 2017 is 0.7% which is just about a quarter of what it was in 1970 i.e. 2.6%. Over the same period, life expectancy in the region's individual economies have also increased by at least five years, with Afghanistan gaining the most.

While the population of most CAREC countries is young, internal demographic dynamics differ. The region can be divided into two groups, based on differences in labor force supply and demand projections.

The PRC, Georgia, and Kazakhstan represent the first group. According to ADB (2018), these countries have either reached an aged population (Georgia) or have begun experiencing an aging population (PRC and Kazakhstan), with a relatively lower projected (2020) proportion of their population under the age of 25 (29%–41%). As a result, these countries are potentially facing labor shortages and they will need to boost labor productivity by constantly improving the skill levels of their domestic labor force.

The second group comprises the rest of the CAREC countries. These countries are considered 'young' (ADB, 2018), with at least 37% of their population under the age of 25. As the youth moves through the working-age pipeline, it continues contributing to the country's economic growth, especially if adequate human development policies are cultivated.

These demographic trends and labor force projections carry significant implications for the CAREC countries. Sustained population growth in ‘young’ CAREC countries will continue to expand their labor forces. The PRC, Kazakhstan and, especially, Georgia, on the other hand, experience a counter pressure in increase of labor demand that outpaces labor supply. Collectively, these dynamics must be addressed at the regional level for sustainable and regionally beneficial solution. Inevitably, a regional solution will entail the greater mobility of workers across the skills spectrum, including the highly educated.

Under the educational trends, economies are making progress by increasing the number of nationals who attend and complete secondary and basic education. Using the education statistics given by the World Bank and UNESCO, the college enrolment grew more than eightfold in the region, from 5.6 million in 1990 to 46.1 million in 2014. The largest proportional increases were seen in Afghanistan, the PRC, and Pakistan, with the latter two also having the largest absolute gains. Furthermore, the expansion of higher education has also driven an increase in the share of adults with completed tertiary education across CAREC between 1980 and 2010.

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TVET can help address labor market skills needs,  
close skills gaps, and enhance productivity.

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Similarly, between 1980 and 2010, the share of adults who had completed secondary schooling roughly doubled in Mongolia and Tajikistan; more than doubled in the PRC, Kazakhstan, Kyrgyzstan, and Pakistan; and increased more than sevenfold in Afghanistan.

However, significant differences in the levels of educational attainment in the region persist. While close to 20% and about 14% of adults in Mongolia and Kazakhstan, respectively, have a college degree, fewer than 5% in Afghanistan, the PRC, Pakistan, and Tajikistan do.

Despite such differences and with the exception of Tajikistan, the share of the region’s population with completed tertiary education increased over the past 30 years, and this trend is likely to be sustained. Large numbers of students graduate with engineering, manufacturing, and construction degrees in Kazakhstan and Uzbekistan, and with health and welfare degrees in Kazakhstan and Tajikistan.

In addition, the statistics provided by the ILO show that the skill composition of the labor force differs enormously in the CAREC region. About a third of Kazakhstan employed workforce is in high-skilled occupations (managers, professionals, technicians, and associated professionals). In contrast, the share of workers in high-skilled occupations in Afghanistan and PRC is small (less than 15%). In the remaining countries, about one-fifth to a quarter of employed workforce is in highly-skilled occupations.

On the other hand, the economic trends demonstrate significant wage disparity across the region. Services are an important emerging sector in CAREC, with the group recording an annual average growth of about 15% in 2000-2016. There is scope to expand intraregional trade in some services, especially in tourism and transport.

The convergence of demographic, educational, economic, and social trends presents opportunities for greater human capital development and skill exchange within CAREC. Regional and domestic

labor forces are interlinked. Rising educational achievement across a region helps grow the number and share of skilled and mid-skilled workers in a given country. This, in turn, means greater labor mobility within the region, given the right incentives and supporting mechanisms.

UNESCO's global education agenda (2030) devotes considerable attention to technical and vocational skills development, specifically regarding access to affordable quality Technical and Vocational Education and Training (TVET); the acquisition of technical and vocational skills for employment, decent work and entrepreneurship; and elimination of gender disparity and ensuring access for the vulnerable.

TVET is expected to address multiple demands of an economic, social and environmental nature by helping youth and adults develop the skills they need for employment, decent work and entrepreneurship, promoting equitable, inclusive and sustainable economic growth, and supporting transitions to green economies and environmental sustainability.

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Gains which labor movement can generate remain speculative unless many constraints to the movement of people including tight visa quotas, burdensome licensing requirements, discriminatory standards, host country refusal to recognize professional qualifications, and explicit prohibitions on foreign service are resolved.

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A deeper level of economic integration, which is required for sustainable development and inclusive growth, calls for regional cooperation in skill development. Formulating skill development strategies in general and increasing regional cooperation in TVET in particular offers potential regional solutions in addressing both national and regional skill development issues and employment challenges.

For any form of education and training, including TVET, systemization at the policy level and development of common tools and principles are fundamental to facilitate better labor migration and encourage skills mobility. The skills mobility across geographic areas is an effective way to tackle skills mismatch in one geographic location by tapping excess resources of supply from another.

The TVET helps promote liberalization under trade in services sector. The CAREC 2030 Strategy recognizes expansion of trade in services as a core policy goal to help reduce barriers faced by Central Asia's landlocked economies. The ADB's 2017 Aid for Trade report highlights that enhancement of service sectors would improve trading opportunities for Central Asia's landlocked economies.

The CAREC region continues to trade significantly more with the rest of the world than within itself and other sub regions in Asia. Nonetheless, further expansion and continued liberalization of trade in services may offer a path to trade integration and labor mobility. In particular, significant liberalization of trade in services may help address unemployment, skill shortages and skill mismatch, among others.



Picture 5: A small group discussion during the forum



The CAREC countries can benefit from reducing barriers to the movement of people. For one, promoting the temporary movement of people allows countries avoid brain drain caused by permanent immigration. The exporting countries maximize financial benefits, the importing countries refill skill shortage and have fewer domestic problems as compared with immigration.

However, gains which labor movement can generate remain speculative unless many constraints to the movement of people including tight visa quotas, burdensome licensing requirements, discriminatory standards, host country refusal to recognize professional qualifications, and explicit prohibitions on foreign service are resolved. Eliminating these barriers through standardization is critical not only in realizing the potential gains from trade, but also in achieving a broad range of employment issues such as skills and job mismatch and under- and unemployment.

In reference with the skill development, there must be a strengthened regional mechanism for the cross-border recognition of qualifications and occupational competence. Developing a regional TVET strategy similar to CARICOM and EU would be significant.

The TVET could play an important role in technology diffusion through knowledge and skill transfer. The nature and use of ICT brought many and far-reaching impacts and new external demands on TVET systems. The ICT is a source of new job opportunities in areas such as mobile phone unblocking and cable television installation, while vehicle mechanics are increasingly required to deal with the computerization of vehicle systems. The TVET is responding to the diverse ICT needs of learners, whether these are related to work, education, or citizenship. New courses have been introduced to address occupational changes in the ICT job market, while many TVET providers have shifted provision towards a blended approach, with significantly more self-directed and/or distance learning. In developed countries, new ICT approaches have been introduced to modernize TVET organizations and to manage their administration and finance, including learner records.

The TVET systems are progressively enhancing the management of labor migration in support of the integration of migrant workers. This is being accomplished through policies for:

- a) Skill development, such as language skills and cultural knowledge and understanding.
- b) Career guidance and counselling, including skills in understanding and navigating labor markets.
- c) Skills recognition, recognition of prior learning, and qualifications gained abroad.

The TVET systems are responding to migration by progressively providing qualifications that can stand the rigor of national and international recognition systems and by creating frameworks for mutual recognition of qualifications.

Removal of barriers to skill mobility requires mechanisms for skill recognition across countries. Countries with a large share of emigrants need to ensure that skill certifications are recognized by the most dominant destination countries. At the same time, as a region progresses toward greater global and regional integration, the rationale for efforts to harmonize regional standards becomes stronger.

There are a number of regional cooperation initiatives in TVET, for which CAREC may learn from:

### **The ASEAN MRA System**

The development of a system of mutual recognition is a core strategy of the Association of Southeast Asian Nations (ASEAN) which has made substantial progress in developing mutual recognition arrangements, particularly in tourism and hospitality. The ASEAN MRA aims to (i) develop mutually recognized professional qualifications; (ii) complete mutual recognition arrangements in identified professions (e.g., architecture, accountancy, surveying, medical and dental practitioners); and (iii) develop the required core competencies and qualifications for occupations as well as technical and vocational education and training of trainers.

Picture 6: Participants of the forum



**Supporting mechanisms for mutual recognition include the following:**

- a) Joint certification programs, which are increasing in number and relatively straightforward for skill recognition. In addition to facilitating skill mobility and employability across borders, joint certification programs offer the prospect of improvement in quality and governance through convergence between the participating education systems.
- b) Regional Qualifications Framework (RQF) which serves as a translation device to enable comparison and communication of an individual country's national qualifications framework with a common regional reference framework. An RQF can promote skills-based mobility across borders and greater regional integration.
- c) Mutual Recognition Arrangements (MRAs) which serve as a process whereby the qualifications gained in the home country are recognized in the host country with no need for recertification. Learning from international experiences on MRAs, the following are noteworthy: (a) the harmonization of training standards is hard to achieve and even harder to maintain; (b) centralized MRA systems require enormous resources to implement, while a decentralized approach, although less resource intensive, is difficult to monitor; (c) partial recognition can only be effective if guidelines for compensatory measures are clear and not unnecessarily complex; and (d) umbrella agreements offer a promising, alternate approach to MRA negotiations—but only if there is political will at the highest levels. The MRAs are living documents that require constant revision, improvement, and even periodic renegotiation. Signing an MRA is just the critical first step. Without constant monitoring, evaluation, and revision, an MRA will not stand the test of time and could become easily irrelevant and costly to maintain.

### **The European Union System**

The European countries have been working intensively on the comparability of their qualifications, qualification recognition, and periods of learning undertaken to make possible the portability of learner and worker qualifications among different countries.

Examples of the TVET tools in the region include: (a) Europass (a framework for transparency of qualifications and competencies); (b) European Qualifications Framework (EQF) (established in 2008, serves as a common European reference system aimed at linking different countries' national qualifications systems and frameworks together, so it can function as a mapping device helping learners and workers to move between countries or change jobs or move between educational institutions); (c) European credit system for vocational education and training (ECVET); and (d) European quality assurance in vocational education and training (EQAVET) which is a community of practice bringing together member states, social partners and the European Commission to promote European collaboration in developing and improving quality assurance in TVET by using the European quality assurance reference framework.

### **The Caribbean Community System**

In 2015, CARICOM adopted a regional TVET strategy for workforce development and economic competitiveness with a focus on 'redefining TVET' and on 'developing a CARICOM training system underpinned by a quality assurance framework.'

## TVET in CAREC: Opportunities and Challenges

Almost all economies in CAREC experienced growth in TVET enrolment rates. The share of the vocational education in the secondary education in CAREC reached 18% in 2016 from 14% in 2000. This change is related to the political and economic transition of the region as a whole and the specific pathways of economic development in its individual member countries.

Most CAREC countries have adopted a state-regulated/bureaucratic model of TVET. However, the participation of the private sector and other stakeholders has been increasing in recent years and some countries are looking to implement a dual system model (e.g., Kazakhstan) where the design, development, and implementation of TVET includes a wide range of public and private stakeholders, such as trade unions and state agencies and organizations.

### Box 7: Policy proposals for TVET reform

#### Priority areas for reform in TVET:

##### a) Develop TVET quality assurance, accreditation systems, and qualification frameworks

In order to facilitate the development of standardized and harmonized regional accreditation systems and develop/implement regional qualification frameworks, countries should make efforts to build and/or continuously improve their own standards, accreditation systems, and national qualification frameworks for TVET.

##### b) Good governance, TVET policy reforms, networking within the region

Significant investment is required to provide the necessary infrastructure for TVET sector's overall modernization, quality improvement, and system development. Implementing systemic administrative reforms in the sector is also important to ensure regional comparability, permeability, and mobility.

##### c) Improve evidence base for TVET policy and practice

Data/information on TVET frameworks, at both domestic and regional level, are often limited, outdated, scattered, and too aggregated to allow for more disaggregated labor market analysis. To address this challenge, strong collaboration among national governments and ministries within countries is vital particularly in terms of enhancing data collection systems and information sharing practices, as well as in improving management information systems.

Ultimately, these measures can help improve TVET's responsiveness to domestic and cross-border labor market needs and generate strong evidence base for regional cooperation on TVET development and skills mobility.

Nonetheless, the TVET standardization is not without challenges. First, there are differences in practice of profession among countries. In this regard, simply signing an MRA between governments is not enough. Detailed occupation-by-occupation analysis is necessary. Second, the recognition of school diploma is not the same as recognition of qualification. Third, the negotiation/recognition process is a highly complex system and politically difficult because of the wide range of stakeholders involved. Fourth, inadequate and underdeveloped legislative and institutional frameworks (e.g., legislations on education covering TVET, national qualifications frameworks, structures for quality assurance, TVET infrastructure and financing policies) can pose significant hurdles to developing

regional frameworks that could support TVET standardization and, ultimately, cross-border employment and skills mobility.

## Session V: Materializing Knowledge Corridors

Moderator: Dr. Abid Suleri, Executive Director, SDPI, Islamabad

Speaker I: Dr. Aradhna Aggarwal, Asia Research Center, Copenhagen Business School, Denmark

Speaker II: Ruud Crul, ADB's Consultant, Netherlands

### Developing Knowledge Parks: Building Blocks

Dr. Aradhna Aggarwal presented knowledge corridors as special areas which provide an attractive environment for investors, firms, corporations, knowledge-based institutions, and citizens to promote new technologies and value-added businesses. These are virtual networks with long term collaborations for knowledge creation, sharing, and transfer.

The building blocks of knowledge corridors have several interrelated components which revolve around knowledge structure and actors who build the corridors. They include:

- i. Labs, think tanks, social scientists, incubators, startups, and business.
- ii. Financial markets, banks, venture capital, equity markets, pension funds, and similar.
- iii. Labor markets to provide quality skillset as well as quality educational institutions to equip the labor market with knowledge.
- iv. Logistics is key to supporting knowledge corridors.
- v. Social infrastructure.
- vi. Proactive government.

### Case Studies

#### Florida High-Tech Corridor

Three universities in Florida initiated the Florida high-tech Corridor program: University of Central Florida (UCF), University of South Florida (USF), and University of Florida (UF).

The Florida High Tech Corridor Council which is represented only by knowledge institutions is looking after the administration of the corridor. The regional government and economic development organization are also onboard for council consultations. The effort ranges from workforce development programs to research collaborations between the corridor community colleges and universities. The formations of tech camps and career expos; partnership with companies on research projects; joint marketing with the government, and public and private organizations are the key to the success of this knowledge corridor.

#### New England Corridor

The New England Corridor is an interstate partnership of regional economic development, planning, business, tourism and educational institutions that includes Hartford, Springfield, and New Haven metro areas. It is an initiative of the regional government and previously faced few certain issues but now operates smoothly. Its administration is overseen by a volunteer steering committee made up of representatives from public and private organizations with the objective of promoting the region through a variety of initiatives focused on business development, talent retention, advocacy, and research.



## **GZ-SZ Science & Technology Innovation Corridor**

In 2017, the Guangzhou Shenzhen - Dongguan Science and Technology Innovation Corridor was established with provincial governments included in its official planning. The three cities are home to over 60% of high-tech enterprises. In 2016, Guangzhou saw 250,000 new patents licensed and 20,000 international patent applications. With a total area accounting for 15% of the Pearl River Delta, Guangzhou, Shenzhen, and Dongguan yielding about 60% of the region's GDP.

## **Malaysia's Multimedia Super Corridor**

The Malaysia's Multimedia Super Corridor (MSC) was launched in 1996 by the Malaysian government as a small initiative. It expanded rapidly creating more jobs, keeping development of multimedia and communications products, solutions, services, and R&D as the key to growth. The corridor is supported by the MSC Malaysia Bill of Guarantees (BOG) which provides the legal framework for the corridor. The MSC status companies that consist of institutes of higher learning, high tech companies, incubators, and startups are eligible for attractive incentives, rights and privileges under the BOG (set of incentives, rights, and privileges conducive to the development of these companies).

The session concluded that cross borders economic corridors have the potential to serve as knowledge corridors in the CAREC region. It is crucial to find if any of the six physical economic corridors can be leveraged by knowledge corridors. In the meantime, a virtual corridor may act as a learning platform for the region. After all, the CAREC Program and Institute are enablers of knowledge corridors as it is all about building trust and shifting perceptions. The virtual knowledge corridors could be manifested through the following channels: exchange programs, research collaborations, cross-country networks of think tanks, civil society knowledge networks - collection of institutions varying in scale, goals, reach and geography, but connected through flows of resources, ideas, and knowledge with academic and professional institutions to create and disseminate knowledge.

## **Connecting Destinations of CAREC Knowledge Corridors**

Mr. Crul presented a case for establishment of the industrial parks where knowledge hubs can be located. The networks of the networks previously termed as a hub of knowledge networks is already being discussed. The tech parks are now being developed or premeditated in the CAREC countries to connect geographically dispersed collaborating nodes: industrial and knowledge parks, research hubs, technology, innovation and logistical clusters, and cities with an interlinking ICT infrastructure. These nodes are still at development stage and face a range of challenges that include lack of skilled personnel, collaboration, investment, and technological research. The ICT infrastructure is a bottleneck for virtual knowledge sharing among the network nodes which are weak in some of the CAREC countries, however work is ongoing to improve and remove these bottlenecks, namely:

- i. UNIDO regional project on fostering inclusive and sustainable industrial development in the New Silk Road Economic Belt (Azerbaijan, Tajikistan, Turkmenistan, and Uzbekistan)
- ii. ADB regional project on supporting industrial park development in Kazakhstan and Kyrgyzstan
- iii. Digital Central Asia – South Asia (CASA) is initiating new projects in Afghanistan, Kyrgyzstan, Uzbekistan, and Tajikistan to support ICT/digital development in Central Asia

In building knowledge corridors, the key actors include R&D universities and institutions, private sector companies, and governments. They are advised by think tanks on how to create a conducive environment for knowledge parks to become successful drivers of economic development.

The knowledge corridor collaboration focuses on technology transfer, knowledge exchange, and innovation. Each entity brings its own expertise and improved products and services are delivered in collaboration. The corridors represent a good platform to bring all actors of the region under one roof to share ideas and work under the same umbrella.

## Session VI: Role of Stakeholders in Building Knowledge Corridors

Moderator: Kashif Noon, CAREC Institute

### Universities

Facilitator: Prof. Debarshi Nandy, Brandeis University, USA

The role of universities in developing and promoting research cannot be neglected. The main challenge is financial resources and data for research.

Universities can play a role in developing a coordinated curriculum focused on local issues. They can introduce traditional and applied study programs that focus on new areas which can help students broaden research. The university research shall help governments incorporate findings in policy design and implementation.

The partnerships with programs and institutes similar to CAREC could incorporate faculty and student exchange, also dual degree programs to explore a framework of credit/course transfer. A virtual faculty working group can leverage some knowledge activities in the region. Advocacy is required to adopt research findings.

### Think Tanks

Facilitator: Ulan Ryskeldiev, Public Policy Expert, Kyrgyzstan

The issues which think tanks face while conducting research are numerous, namely: data, independence, funding, etc. Coordination among governments and think tanks might help execute impactful research. More partnerships should be formed among universities and think tanks in the region. There is necessity for editorial boards, quality assurance mechanisms, and uniform data collection tools.

### Governments

Facilitator: Guoliang Wu, Unit Head, CAREC, ADB, Manila, Philippines

The knowledge corridors represent a prerequisite for the development of economic corridors. They are quality multipliers for economic corridors. Governments can play a role through provision of a clear concept on knowledge corridors and facilitate their establishment. The review of existing knowledge products and assessment of knowledge needs would be useful. Governments can strengthen links among participating stakeholders, and be instrumental in promulgating results.

Picture 7: Forum discussions



## Business Sector

Facilitator: Nasruminallah Mian, Country Program Officer, ADB Resident Mission, Pakistan

There is a framework needed on engagement of business in knowledge corridors to define how best it can assist the purpose. Inclusion of non-government stakeholders, such as the Chambers of Commerce, stock exchanges, and other entities that can connect relatively easily with their counterparts across borders to share knowledge about their respective markets would be useful. The knowledge corridors would benefit if a good research is conducted and advocacy is exercised to enable decision makers make better and informed decisions.

The government regulatory regimes tend to be unwelcoming and tedious in terms of procedures and approvals. The tariffs and taxation structures are cumbersome and complex leading to legal issues. Transport linkages - both air and ground – could be improved. The ease and cost of doing business needs to be improved by harmonizing standards across countries. The role of the knowledge corridor partners would be invaluable in creating a demand to effect positive regulatory changes.

Businesses and corridors can only thrive in peace. Security is an absolute must before businesses start mobilizing plans and investments. Managing security related issues places an additional cost on doing business. The region presents exciting opportunities for businesses, given the low levels of intra-regional trade. Proposals like establishing a CAREC Stock Exchange and CAREC Chambers of Commerce need to be looked at for their role in supporting concrete future developments.

The idea of a knowledge platform need to be shaped properly to engage business and generate the dialogue that leads to regulatory developments and eventually translates into actual business connectivity. Investments need to be facilitated before they can create a momentum of their own.

The session concluded with a common understanding that the knowledge corridor actors might get constrained by language, lack of availability of publications, poor internet connectivity, etc. The governments can help in technology leapfrogging which will help all involved stakeholders learn the new dimensions of research. The governments need to get aligned with the priorities on digitalization and smart city development. They can also facilitate development of uniform databases. A regional framework on knowledge corridors could help, and a working group with specific objectives and tasks could bring such concept to reality. A combined approach is needed among member countries, and a constant dialogue among knowledge corridor actors.

## **Session VII: Institutional Capacity Building of Think Tanks**

Moderator: Dr. Gubad Ibadoghlu, Senior Analyst, Economic Research Center, Baku, Azerbaijan  
Speaker I: Axel Goethals, CEO, European Institute for Asian Studies (EIAS)  
Speaker II: Dr. Abid Suleri, Executive Director, SDPI, Islamabad

### **Maintaining Financial Sustainability in the Age of Decreasing Funding**

The session participants deliberated that unavailability of adequate funds was one of the major hurdles for research, making it one of the reasons why think tanks were decreasing in number in the region.

However, discussion continued, the Central Asia is getting media exposure on numerous topics, from tourism to business. This is a golden chance for CAREC Program and Institute to present the region as an attractive investment case.

The speaker - Mr. Goethals argued that service industry and FinTech were good opportunities for the landlocked countries of the region as no physical borders could constrain their development and international opening. He elaborated that these sectors could unlock new opportunities for the think tanks funding, however the long-term commitments from interested parties will only materialize if confidence was assured.

The speaker continued that the role of government is to offer FinTech infrastructure investments a premium return. Domestic sources of finance should be nourished and encouraged to invest in FinTech infrastructure projects. The participation of domestic agents would be an important sign of confidence for foreign investors. The multilaterals should be involved as much as possible, either as co-financers (lender or guarantor), or as technical advisors.

The region should make sustainability as a key feature in all its projects. The CAREC Program or Institute could be a coordinator to set common benchmarks. The smartphone revolution has created a whole new universe of FinTech applications of which we even could not dream of ten years ago and it is uplifting all the social levels in the region on a scale that was never witnessed before. The think tanks can tap into these opportunities. The region needs innovative models and mechanisms of financing. A regional FinTech Infrastructure Fund could be a model to explore. It would need relevant branding, marketing, and fundraising strategy.

The second speaker Dr. Abid Suleri expanded that funds for research and development are shrinking globally. Think tanks require credible partners for funding which include government agencies, bilateral development partners, intergovernmental development partners, corporate sector and various national and international foundations. It could be the case that foreign funding is perceived as foreign agenda, making it impossible to justify sometimes. Sometimes, funders prefer supporting

consortiums and associations. The thinking spaces are rapidly shrinking making it difficult to charge the true cost of research. Moreover, the quality of research is substituted with the urgency in delivering the outputs.

In adapting to new realities in the funding landscape, both domestically and internationally, think tanks need to get innovative and adjust business models accordingly, without compromising the core principles of independence, autonomy, integrity, quality, relevance, and timelines in the research and findings. A focus is required to collaborate and build synergies to explore complementarities around topics like SDGs and BRI. The CAREC think tanks could also develop north-south and south-south partnerships. A common approach would be needed for the long-term research to cover regional topics and tap into private sector resources.

## **Establishing Regional Networks: Key Challenges and Best Practices**

Moderator: Ms. Alma Sultangaliyeva, Senior Expert, Central Asia Program at the Institute of Asian Studies, Almaty, Kazakhstan  
Speaker I: Altaaf Hasham, Aga Khan Development Network, Bishkek, Kyrgyzstan  
Speaker II: Alberto Turkstra, European Institute for Asian Studies (EIAS), Brussels, Belgium

Mr. Hasham presented the knowledge value chain and deliberated that a strategic framework for CAREC has laid out a pathway and a road map to achieve the programmatic objectives. A lot can be done to promote an open and inclusive regional cooperation for sustainable development, especially when a general consensus exists. The new regional vision provides an opportunity for all to benefit without compromising interests of another. The idea of a knowledge corridor fosters this vision.

## **Knowledge Value Chain**

A theory of change, which can also be referred as a knowledge value chain, has the following five ingredients:

### **Opportunity Identification**

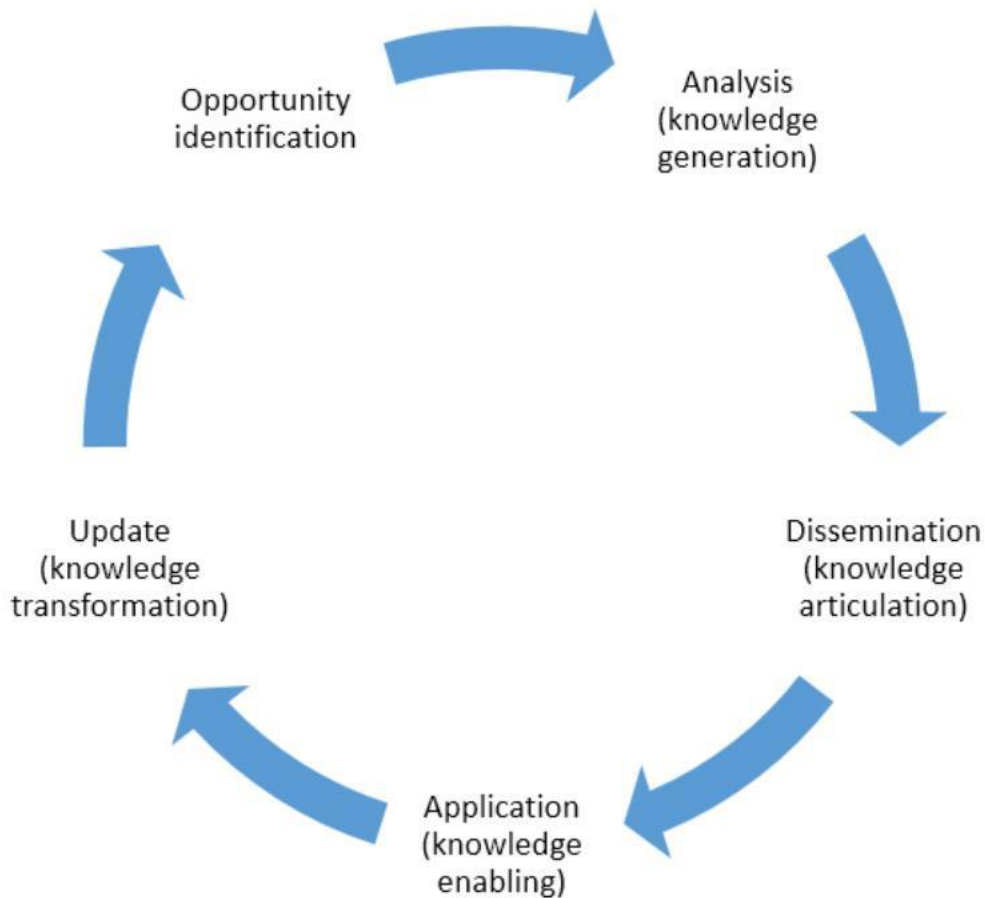
There are a few issues that need attention, however controversial and sensitive topics often get neglected. It might work if such topics are raised by honest brokers, i.e. institutions that are respected for their objective perspective and for their convening power to get the key stakeholders at the table for a constructive dialogue. Oftentimes, articulation of development challenges involve finger pointing and “blame game” which is not productive. Discussion of challenges requires “trusted forums” where partners can be open about the issues and seek seeking practical and acceptable solutions constructively.

### **Harnessing Knowledge Generation**

The researchers often pursue knowledge for the sake of knowledge. This may not always yield useful for policy makers. The second concern is that traditional research takes a considerable amount of time. Some research is left incomplete since there is no data or data is not reliable. One option is to explore research questions in a phased approach. Another option would be to host a student or a postdoctoral fellow to learn new techniques, and engage in collaborative problem solving.



Figure 3: Knowledge value chain



### **Fostering Knowledge Articulation**

It is important for knowledge articulation that think tanks maintain their intellectual independence. It happens that think tanks are mouthpieces for specific political agendas. Think tanks will carry considerable weight if they serve as bridges linking various stakeholders, institutions, and individuals.

### **Supporting Knowledge Enablers**

The knowledge enabler is the government which often lacks purposeful strategies that are clear and consistent. When there is sustained political will to follow a well-defined path, the results could be attained. Another challenge in the CAREC countries is continuous lack of resources to implement policies. Another impediment is that oftentimes issues get buried out of fear to upset the ones with power. Joint work and advocacy with development partners can help in this case.

### **Promoting Knowledge Uptake**

It is paramount to ensure that the business community is aware of policy reforms and the Chambers of Commerce and other business associations actively engage with a wide range of development partners. Connecting large multinational enterprises with smaller national firms can enable better knowledge flow in the value chain.

Participants concluded that there must be appropriate common-interest platforms for the think tanks with an access to time series data, there shall be engagement of diverse stakeholders in the knowledge value chain, and research shall provide evidence-based guidance to policy makers.

## Thematic and Geographic Approaches

Mr. Turkstra unfolded a topic about think tanks continuously facing a need to redefine their priorities, funding strategies, and develop new international and regional partnerships. Developing a network of thematic think tanks around a niche topic can facilitate exchange of best practices and lead to more effective policy formulation. It can help address and prioritize emerging policy issues, especially considering think tanks' role as a platform for a dialogue and a bridge among policymakers, civil society, and academia.

The discussion continued that there are two main approaches to building regional networks and alliances: thematic and geographic (covering one region or sub-region).

### Thematic

Under the thematic approach, CAREC Institute's mandate might be more relevant to the Belt and Road Initiative's fifth goal regarding promotion of people-to-people bonds through establishment, among other initiatives, of the University Alliance of the Silk Road. The transfer of knowledge cannot only be enhanced via trade or better roads and railway connections, but also through facilitation of exchange of ideas and people-to-people contacts. Individual contacts are the biggest stimulus and inspiration for enhanced mutual understanding. In this respect, student exchange programs, scientific cooperation across borders, youth dialogues, and higher education cooperation are significant.

The 2012 EU-China Youth Dialogue was organized in cooperation with the Chinese Association for European Studies and the Institute for European Studies of the Chinese Academy of Social Science, with funding from the European Commission. The dialogue gave participants opportunity to get heard by the decision-makers and the wider public.

The speaker highlighted that an emphasis should be placed on providing the youth with the required tools to become involved in policy-making and the dialogue focused on different topics, such as urbanization, EU-China relations, climate change, environmental issues, youth policy, and education. It is particularly important for think tanks to tap into major ongoing or planned high-level initiatives. In the case of the EU and its Asian partners, it is paramount to provide the necessary support and visibility. People-to-people ties have steadily grown in importance and became the third pillar of EU-China relations, after strategic and economic relations. This concept is applicable to other regions, including Central Asia, as the youth is one of the most important assets of the society. The region's demographics provide the rationale for the establishment of youth dialogues within the region and with different international partners.

### Geographic

Through several country-specific studies, it is observed that landlocked developing countries face a unique set of challenges and barriers to greater integration into trade and investment flows, and global supply chains. They experience heavy dependence on low productivity sectors, on exports of primary commodities and other mineral resources, and on remittance inflows from migrant workers.

The International Think Tank for Landlocked Developing Countries (ITLDC) can provide the landlocked countries a more unified voice on the international arena and identify concrete actions to

be taken towards the full implementation of the Vienna Program of Action for Landlocked Developing Countries. This think tank, established under the United Nations umbrella, brings together 32 landlocked developing countries across Asia, Latin America and Africa, who are actively engaging in global dialogues on LLDC-related issues by organizing regional as well as international seminars and conferences to contribute to the development of policy debate in collaboration with governmental and non-governmental organizations, including private sector, national and international universities as well as research institutes. Their focus ranges from transport and trade facilitation, technology and connectivity issues, and integration into global value chains, among others.

Picture 8: Forum participant asking a question during the forum



The Central Asia Program of the Brussels-based European Institute for Asian Studies (EIAS) was initiated in 2014 for strengthening the visibility of Central Asia in Brussels. In light of the extraordinary opportunities deriving from the region's increasingly central role in the numerous land-based trade and economic corridors navigating Eurasia, there was a growing demand for regular analysis and visibility activities to be organized in the capital of EU. Through these activities, and cooperation with several government-affiliated think tanks in the Central Asian countries (primarily Uzbekistan), EIAS facilitates visit of scholars and researchers to Europe. The aim is to gather input from the civil society, academia, and policymakers for the new EU Central Asia Strategy and other areas of cooperation.

Furthermore, EIAS provides a platform for SMEs to reach out to the Benelux countries which possess the technical know-how and expertise necessary to help tackle some of the challenges which the Central Asia faces, for instance in the fields of water management and advanced agricultural techniques. Such think tanks help build the political trust which shall pave the way for the dialogue platforms and consensus building mechanisms.

## CAREC Think Tanks Forum and Network: Way Forward

Speaker: Ziqian Liang, Deputy Director, CAREC Institute

According to some estimates, there are over five hundred of think tanks in the CAREC region and there may be intense bilateral collaboration between individual think tanks, however there is an absence of region-wide collaboration to tackle the challenges which are complex and interdependent. A multi-disciplinary, cross-sector and cross-national collaboration is required to reduce the duplication and waste of efforts in research and knowledge sharing.

The core value of CAREC Think Tanks Network (CTTN) is regionalism and promotion of regional policy agenda. This can be done by acting collectively as a policy community, building adequate policy advocacy coalition, informing policy action through research and data, and by projecting policy influence nationally and regionally. The CTTN provides access to sources of data, information and knowledge. It shall also help exert influence nationally, regionally, and globally.

The CTTN has a purpose to act as a regional network of research institutes in the CAREC region to promote regionalism through sharing of ideas, data, information, and conducting joint research. It will also help adapt to the fast-changing regional context, bringing together capacity on priority topics and break ground on new topics. It shall support learning and innovation by bringing new talent and resources together and build and boost cross-fertilization of ideas.

The objectives of the CTTN is to promote regional economic cooperation and integration across the CAREC 2030 thematic areas by:

- a) Enhancing regional knowledge sharing and integration
- b) Fostering policy research and knowledge solutions to support governments
- c) Enabling better policy advice and bridging gap between research and policy
- d) Enhancing collective intelligence to consolidate development resources for effective cooperation, better services, and improved performance

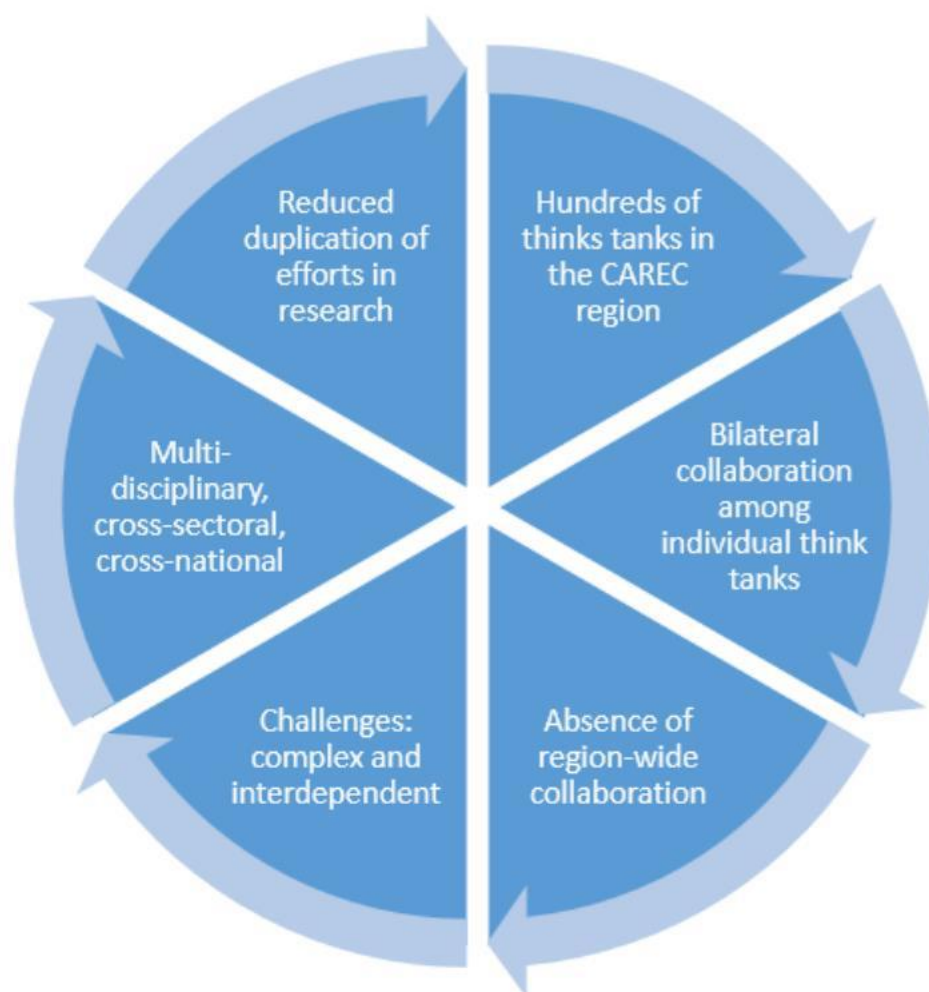
The CTTN connectivity shall facilitate the flow of data, information and knowledge through demand-led knowledge management activities in four main areas:

- 1) Data and information management: provide online access to data, research publications, expert and project information, news and events using a web portal with advanced search and navigation tools.
- 2) Policy development / project management (research): support in research planning.
- 3) Collaboration and networking: support in collaboration and networking through a social web portal for online group work and discussions next to traditional networking.
- 4) Learning and innovation: facilitate online and face-to-face knowledge sharing and learning, and foster new ideas, research, and solutions.

The CTTN network is meant to be a membership-based network for think tanks having non-binding and no liability association.

The annual think tanks development forum is designated to serve as a highest platform for deliberation, resolutions, and decision-making and is comprised of all members of the network.

Figure 4: Think tank networking issue diagram



The Advisory Panel has a role to provide leadership support in developing governance framework and effective organizational structure of the CTTN. It will also offer insights and ideas about pressing regional issues and advice on finding innovative solutions for promoting regional economic cooperation. The panel will be liable to provide vision for selecting topics for research grants, and themes and content of the annual Think Tanks Development Forum. It will also encourage and support the exploration of new ideas generating opportunities for regional cooperation. The panel will work with the CTTN secretariat for institutional strengthening of member think tanks; and advise on devising strategies for collaborative research and capacity building initiatives focusing on regional needs and priorities.

#### **The proposed structure of the CTTN Governance Advisory Panel:**

- 📖 Membership: 14 members (preferably with representation of every country).
- 📖 Duration: three years
- 📖 Chair: an accomplished and eminent person from the CAREC member country with demonstrated experience in strategic thinking, leadership, regional or international experience nominated by consensus.
- 📖 Meetings: the Advisory Panel will meet annually through in-person participation or using other inter-net based means depending on circumstances.



## The CTTN Secretariat

The CI will serve as the permanent Secretariat of the CTTN. It will be responsible for the day-to-day management of the CTTN arranging meetings, workshops, and the annual forum; implementing resolutions and decisions of the forum; and raising and managing funds for the CTTN. Its Secretariat will be headed by a Secretary nominated by the CI among its officials who will be responsible to comply with the rules of the CTTN. The CI will provide support through the research grant administration, call for proposals, and ensuring collaboration for the CAREC Regional Integration Index (CRII).

Members are expected to participate actively in the network, contribute with ideas, data, information and knowledge, and provide mutual support.

Contact: Khalid Umar, Coordinator of the Think Tanks Forum, CAREC Institute  
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## Closing Remarks

Speaker I: Mr. Azamat Dikambaev, Director, NISS, Kyrgyzstan  
Speaker II: Mr. Bayaraa Sanjaasuren, Director, CAREC Institute

Mr. Azamat Dikambaev thanked the CAREC Institute for the learning opportunity that this forum provided to the key stakeholders of the region. He also thanked the government of the PRC and ADB for their support. He stated that this forum provided a mutually beneficial opportunity for knowledge and experience sharing and appreciated the participants from all corners of the region and beyond.

Mr. Azamat Dikambaev appreciated the excellent ideas regarding integration that were voiced at the forum. He also acknowledged the efforts of all organizations engaged in making the forum a fruitful experience and encouraged making "knowledge corridors" a reality through creating knowledge park networks and delineating respective roles of academia, business and government stakeholders as well as development partners.

Appreciating the active role played by all participants, Mr. Sanjaasuren Bayaraa, stated that dialogue and debate is important to foster development of ideas. He said that the real issue is finding mechanisms for implementation of these ideas. He emphasized that even if one of the recommendations of the forum is considered useful for the region and is implemented, the CI will consider this as a huge success. He stated that the discussions showed that countries have different understandings of the concept of knowledge corridor and are at different development stages for building knowledge economies. Hence, the understanding of the responsibility of stakeholders in building knowledge corridors is crucial. He hoped that forum presentations and interactive discussions deepened understanding of these issues. It was suggested that a multi-stakeholder group be established to take the knowledge corridor development forward. He also announced that the CI will prepare a draft blueprint on knowledge corridors based on the forum discussions and circulate it to stakeholders for further feedback.

He concluded his address by presenting the next steps for development of the CAREC Think Tanks Network (CTTN), which included: establishing governance arrangements, defining membership, launching a website section and a blog by Q1 2019; call for proposals and award of research grants by Q2 2019; and convening the fourth CTTDF by Q3 2019.

## Biographies of Resource Persons

### Fahad Khan



Mr. Fahad Khan is an Economist in the Economic Research and Regional Cooperation Department (ERCD) of the Asian Development Bank (ADB). He joined ADB after completing his PhD from the Australian National University in 2015. He holds a BA in Economics from Yale University (USA). In addition, he is an honorary visiting research fellow at the Australian National University. His primary research fields are international and development economics and empirical political economy.

At ERCD, Mr. Khan has been involved in research on foreign direct investment, aid for trade, people's mobility, trade facilitation, and trade finance. His works have been published in international peer-reviewed journals, including Economic Letters and PLOS Medicine.

### Debarshi Nandy



Mr. Debarshi Nandy is an Associate Professor at the International Business School and the Department of Economics at the Brandeis University (USA). His research interests include entrepreneurial finance and innovation, banking, and corporate finance. Mr. Nandy's research has been published in leading journals in financial economics, such as the Journal of Financial Economics, and the Review of Financial Studies. He is a research fellow at the Boston RDC of the Center for Economic Studies of the U.S. Census Bureau and the National Bureau of Economic Research. He is also a mentor and advisor to several startups. He received his PhD in Finance from Boston College (USA).

### Qiangwu Zhou



Mr. Qiangwu Zhou is a Director General of International Economics and Finance Institute (IEFI) of the Ministry of Finance (MOF) of the PRC. Under his leadership, IEFI carries out economic research on a wide range of issues and topics, both domestic and international, and provides strategic and overarching policy recommendations to the top decision-makers of the Ministry of Finance and other governmental bodies of the PRC. Before joining IEFI, he worked in the budgetary and international departments of MOF for over 15 years, including assignments to the United Nations and the World Bank.



### **Farhad Taghizadeh-Hesary**

Mr. Farhad Taghizadeh-Hesary is a Senior Assistant to the Dean of the Asian Development Bank Institute (ADBI) and Assistant Professor of Economics at Waseda University, Tokyo, Japan. In addition, he is a visiting Professor at Keio University in Tokyo. He obtained his PhD in Economics from the Keio University (2015), where he taught economics as an Assistant Professor from April 2015 for three years. He authored more than 45 journal papers and book chapters and co-edited five books: Monetary Policy and the Oil Market (Springer: 2016), Japan's Lost Decade (Springer: 2017), Money and Modern Banking, Handbook of Green Finance (Springer: forthcoming), and ADBI-OECD-Unlocking SME Finance in Asia (Routledge: forthcoming).

### **Shakhboz Akhmedov**



Mr. Shakhboz Akhmedov is the Head of Knowledge, Projects and Resource Management Unit and Resource Mobilization Coordinator at the Regional Environmental Centre for Central Asia (CAREC), based in Almaty, Kazakhstan. He is also responsible for strategic development and partnerships. Prior to joining CAREC, he worked with the Regional Environmental Centre for Central and Eastern Europe (REC) and GIZ on project development and fundraising.

He earned his MA from the Willy Brandt School of Public Policy (Germany) and BA in International Relations from the University of World Economy and Diplomacy (Uzbekistan). Currently, he is pursuing postgraduate diploma studies in Organizational Leadership at Said Business School, University of Oxford (UK). Mr. Akhmedov resides in Almaty, Kazakhstan and is passionate about promoting cooperation for better environment involving science, technology, and innovation.



### **Kashif Noon**

Mr. Kashif Noon worked as the Head of Knowledge Management Unit at the CAREC Institute during 2016-18. He has more than 20 years of experience working with the Government of Pakistan, and United Nations agencies. He received his first MA from the Quaid-e-Azam University (Pakistan) in International Relations, and the second MA in Public Policy from Queen Mary and Westfield College, University of London (UK).



### **Aradhna Aggarwal**

Dr. Aradhna Aggarwal is the Chair Professor in Indian Studies at the Copenhagen Business School (Denmark). Dr. Aggarwal holds a PhD from the Delhi School of Economics, and has over three decades of experience in teaching and research. Dr. Aggarwal is interested in industry, technology, international trade, value chains, FDI, health and education. She has published extensively in leading international and national journals and newspapers on these issues. In addition to teaching, she served at various prestigious think tanks including the Institute of Economic Growth (IEG), ICRIER, and NCAER. She worked as an external consultant to international agencies, such as UNESCAP, ADB, UNDP, World Bank, GIZ, UNCTAD, Swedish Board of Trade, Ministries of Commerce and Information Technology, Government of India and RIS (research wing of the Ministry of External Affairs), among others.

She is the principle author of the Kerala Perspective Plan 2030. She has authored two monographs both published by the Oxford University Press and has published several journal articles and book chapters. She has presented her research in seminars and conferences in many countries.



### **Saeed Qadir**

Dr. Saeed Qadir is a Senior Research Officer at the CAREC Institute. Dr. Qadir manages research portfolio of the CAREC Institute and is spearheading CI's flagship research on the CAREC Regional Integration Index. Dr. Qadir is a Fulbright Scholar. He holds PhD in Economics and Public Policy from the Claremont Graduate University, Los Angeles (USA). His research interests include international trade and sustainable development, and globalization and economic policy analysis. He taught as an adjunct faculty at leading universities in Pakistan and Dubai (UAE) during 2011-2016.

He is a career civil servant working for the Ministry of Commerce of Pakistan since 1999. Prior to the current assignment, he worked as a Commercial Counsellor for the Consulate General of Pakistan in UAE during 2013-2016.





### **Abid Qaiyum Suleri**

Dr. Abid Qaiyum Suleri heads Sustainable Development Policy Institute (SDPI), Pakistan. He is the member of different policy making forums, such as the National Economic Advisory Council; Advisory Committee of Planning Commission & Climate Change. He is an Adjunct Professor at the University of Agriculture, Faisalabad. He has served as a Board Member of Pakistan State Oil. Dr. Suleri represented Pakistan in various official delegations, including COP22, COP20, Rio+20, and WTO Hong Kong Ministerial Conferences.

Dr. Suleri earned his PhD in Food Security from University of Greenwich (UK). He has conducted intensive research on issues, like resilient livelihoods, food security, regional trade, climate change, and political economy of development.

### **Altaaf Hasham**

Mr. Altaaf Hasham is a Senior Officer of the Aga Khan Development Network (AKDN) Representation Office in the Kyrgyzstan supporting identification and advancement of strategic partnerships. His portfolio includes program coordination within AKDN agencies and their engagement with various development partners including the government, academia, international organizations and civil society institutions.

Prior to his current appointment, Mr. Hasham held a number of posts within the AKDN including Executive Officer, Agha Khan Foundation (AKF), Tanzania; Institutional Advisor and Rural Development Lead, AKF, Tajikistan; and Chief of Mission, Focus Humanitarian Assistance, Tajikistan. Between 2004 and 2006, he served as a Lead Advisor to the United Nations High Commission for Refugees, Durable Solutions Program based in the Office of the Prime Minister, Uganda.

Mr. Hasham holds a BA in International Relations from McGill University (Canada) and an MSc in International Politics of Asia and Africa from the University of London, School of Oriental and African Studies. He speaks English, French, Spanish, Tajik and has a working knowledge of Russian.







### **Axel Goethals**

Mr. Axel Goethals is the CEO of the European Institute for Asian Studies (EIAS), Brussels, Belgium, a leading think tank focusing on EU-Asia relations. His current and past directorships and offices include mandates as CEO, Managing Director, and Chairman of several companies and business organizations in Luxembourg, Belgium, and the European Union. He has vast experience in different corporate sectors, such as the pharmaceutical industry, real estate development, M&A and management services, in the EU as well as in Asia.



### **Alberto Turkstra**

Mr. Alberto Turkstra is a Program Coordinator at the Brussels-based European Institute for Asian Studies which aims to promote understanding and cooperation between the EU and Asia. He holds MA in International Relations from the University of Melbourne and a B.Sc. in Economics and Geography from the Queen Mary University of London. During his studies, he spent time abroad at the University of California Berkeley and at the University of Delhi. He has authored research on Central Asia, Chinese foreign policy, and China-Africa relations.



### **David J. Smallbone**

Mr. David Smallbone is a Professor of Small Business and Entrepreneurship at Kingston Business School, Kingston University (UK) and Associate Director of the Small Business Research Centre. David is a former President of both the International Council for Small Business and Entrepreneurship (ICSB) and the European Council for Small Business (ECSM). David is a Fellow of the ECSB and a Wilfred Whyte Fellow of ICSB. David is also an Associate Editor of the Journal of Small Business Management. David has been involved in research relating to SME and entrepreneurship since late 1980s. One of his main research interests is entrepreneurship in transition economies. Much of his policy oriented research has been conducted in partnership with researchers in other international centers.



### **Ruud Crul**

Mr. Crul works as a Consultant in knowledge management and institutional development with a range of United Nations, governmental, academic, and international development organizations in Africa, Asia, and the Caribbean.

His advice focuses on the use of ICT, and innovation in the context of sustainable development, climate change, environment, sustainable agriculture and fisheries, water and energy, natural resources management, and poverty reduction.

Picture 9: Family photo of the forum



## Forum Agenda

### 3 CTTDF - Building Knowledge Corridors along the Silk Road

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17-18 July 2018, Presidential Residence, Bishkek, Kyrgyzstan

July 16	Arrival of Participants Welcome Dinner Poolside Terrace, Hyatt Regency Bishkek
07:30 – 09:00	
<b>Day One: July 17</b>	
09:00	<b>Departure from Hyatt Regency to the Presidential Residence</b>
10:00 – 10:30	Registration
<b>Session I: Opening of 3 CAREC Think Tanks Development Forum</b>	
10:30 – 10:40	Welcoming Remarks by Mr. Bayaraa Sanjaasuren, Director CAREC Institute
10:40 – 10:50	Opening Remarks by Ms. Candice McDeigan, Country Director, Asian Development Bank Resident Mission, Kyrgyzstan
10:50 – 11:00	Keynote Address: Mr. Oleg Pankratov, Minister of Economy, Kyrgyzstan
11:00 – 11:40	<b>Group Photo and Coffee Break</b>
<b>Session II: Taking Stock</b>	
Moderator Ben Slay Senior Adviser UNDP Regional Hub, Istanbul, Turkey	<b>Developing CAREC Regional Integration Index: Intra-CAREC Trade</b>  <b>Speaker I:</b> Fahad H. Khan Economist, Asian Development Bank (ADB), Manila, Philippines  <b>Speaker II:</b> Dr. Saeed Qadir Senior Research Officer, CAREC Institute
11:40 – 01:00	<b>Trends in Intraregional Investment</b> <b>Speaker:</b> Qiangwu Zhou Director General, International Economics and Finance Institute (IEFI) Beijing, China  <b>Intraregional Tourism as Driver of Regional Integration</b> <b>Speaker:</b> Kashif Noon, Head of Knowledge Management Unit, CAREC Institute
01:00 – 01:30	Open Discussion
01:30 – 02:30	<b>Lunch Break</b>
<b>Session III: New Approaches</b>	
Moderator Paul Vallely Program Leader World Bank Central Asia Regional Office, Almaty, Kazakhstan	<b>Regional Markets as Platform for Knowledge Sharing: A case for Trade Financing of SMEs</b> <b>Speaker I:</b> Debarshi Nandy Associate Professor and Program Director, MSF Brandeis University, International Business School, Boston, USA  <b>Speaker II:</b> Farhad Taghizadeh-Hesary Senior Assistant to Dean, Asian Development Bank Institute (ADBI) and Assistant Professor, Faculty of Political Science and Economics, Waseda University, Tokyo, Japan
02:30 – 03:30	<b>Technology Transfer/Sharing: A case for Regionalism</b> <b>Speaker:</b> Shakhboz Akhmedov,



	Manager - Knowledge, Projects and Resource Management Unit, The Regional Environmental Centre for Central Asia, Almaty, Kazakhstan		
03:30 – 04:00	Open Discussion		
04:00 – 04:20	Coffee Break		
Session IV: Regional Problems, Regional Solutions			
Moderator: Akiko Hagiwara Principal Economist EARD, Asian Development Bank (ADB), Manila, Philippines	<b>Standardizing Technical and Vocational Education and Training (TVET): A force multiplier for regionalism</b> <b>Speaker:</b> Fahad H. Khan Economist, Asian Development Bank (ADB), Manila, Philippines		
04:20 – 05:00	<b>Sectoral Employment Analysis in the Region; Policy recommendation for regional employment generation</b> <b>Speaker:</b> David J. Smallbone Professor of Small Business and Entrepreneurship, Kingston Business School, Kingston University, London, United Kingdom		
05:00 – 05:20	Open Discussion		
Session V: Materializing Knowledge Corridors			
Moderator Dr. Abid Suleri Executive Director Sustainable Development Policy Institute (SDPI), Islamabad	<b>Developing Knowledge Parks; Building Blocks</b> <b>Speaker:</b> Professor Aradhna Aggarwal, Asia Research Center, Copenhagen Business School, Denmark		
05:20 – 06:00	<b>Connecting Destinations of CAREC Knowledge Corridors; The Network of Knowledge Parks</b> <b>Speaker:</b> Ruud Crul, ADB’s Consultant for CAREC Institute on Knowledge Management, Netherlands		
06:00 – 06:30	Open Discussion		
07:00 – 08:00	Dinner at Banquet Hall, Presidential Residence		
08:15	Departure for Hyatt Regency		
	Day Two: July 18		
09:00	Departure from Hyatt Regency to the Presidential Residence		
09:45 – 10:00	Registration		
Session VI: Role of Stakeholders in Building Knowledge Corridors			
10:00 – 11:20 Breakout Sessions			
<u>Breakout Session I</u> Universities Venue: Arashan Hall Facilitator: Prof. Debarshi Nandy Brandeis University USA	<u>Breakout Session II</u> <b>Think Tanks</b> <b>Venue:</b> Press Center <b>Facilitator:</b> Ulan Ryskeldiev Public Policy Expert, Kyrgyzstan	<u>Breakout Session III</u> <b>Governments</b> <b>Venue:</b> Aksakal Hall <b>Facilitator:</b> Guoliang Wu Unit Head, CAREC Asian Development Bank (ADB), Manila Philippines	<u>Breakout Session IV</u> <b>Business Sector</b> <b>Venue:</b> Big Conference Hall <b>Facilitator:</b> Nasruminallah Mian, Country Program Officer, ADB Resident Mission, Pakistan
11:20 – 11:40 Tea/Coffee Break			
Session of the Whole			
Moderator Kashif Noon CAREC Institute	<b>Group Presentations</b> i. Universities ii. Think Tanks iii. Governments iv. Business Sector		
11:40 – 01:00			

01:00 – 02:00	<b>Lunch Break</b>	
Session VII: Ancillary Parallel Sessions		
Institutional Capacity Building of Think Tanks (attended by all except business sector)	<b>B2B Conversations</b> (attended by business sector)	
02:00 – 02:40 Venue:Press Center	02:00 – 03:10 Venue: Big Conference Hall	
Moderator Dr. Gubad Ibadoghlu Senior Analyst Economic Research Center (ERC), Baku, Azerbaijan	<b>Maintaining Financial Sustainability in the age of Decreasing Funding</b>  <b>Speaker I:</b> Axel Goethals CEO European Institute of Asian Studies (EIAS), Brussels, Belgium <b>Speaker II:</b> Dr. Abid Suleri Executive Director Sustainable Development Policy Institute (SDPI), Islamabad, Pakistan	<b>Moderator:</b> Nasruminallah Mian, Country Program Officer, ADB Resident Mission, Pakistan <b>Business Environments-Plenary Session I</b>  <b>Country Presentations</b>
02:40 – 03:10	Open Discussion	
03:10 – 03:30	<b>Coffee Break</b>	
03:30 – 04:10 Moderator Ms. Alma Sultangaliyeva Senior Expert Central Asia Program at the Institute of Asian Studies Almaty, Kazakhstan	<b>Establishing Regional Networks and Alliances: Best Practices and Key Challenges</b>  <b>Speaker I:</b> Alberto Turkstra Program Coordinator European Institute of Asian Studies (EIAS), Brussels, Belgium  <b>Speaker II:</b> Altaaf Hasham Management Program Liaison Officer, Agha Khan Development Network (AKDN) Bishkek, Kyrgyzstan	03:30 – 5:00 <b>Business Environments-Plenary Session II</b>  <b>Country Presentations</b>
04:10 – 04:30	Open Discussion	
04:30 – 05:00	<b>Think Tanks Forum &amp; Network: Way forward</b> <b>Speaker:</b> Ziqian Liang, Deputy Director,CAREC Institute	
05:00 – 05:30	<b>Closing Ceremony</b> Closing Remarks by Mr. Azamat Dikambaev, Director, National Institute of Strategic Studies (NISS), Kyrgyzstan  Closing Remarks by Mr. Bayaraa Sanjaasuren, Director CAREC Institute	
06:00	<b>Departure for Hyatt Regency</b>	



## List of Participants

Country	Category	No	Name & Designation	Organization
AFG	Think Tanks	1	Matthew Lawrence Longmore Communications Officer	Afghanistan Research and Evaluation Unit (AREU)
		2	Mohammad Irfani Researcher & Program Coordinator	Afghanistan Institute for Strategic Studies Kabul
	University	3	Hamidullah Farooqi Chancellor	Kabul University
AZE	Think Tanks	4	Dr. Gubad Ibadoghlu Senior Analyst	Economic Research Center (ERC), Baku
		5	Ahmad Alili Project Coordinator	Center for Economic and Social Development (CESD), Baku
		6	Ayaz Chaparli Research Fellow	Center for Analysis of Economics Reforms & Communication Baku, Azerbaijan
	University	7	Dr. Shahriyar Mukhtarov Vice Dean	School of Economics and Management, Khazar University, Baku
	Government	8	Dr. Vilayat VALIYEV, Director	ISRER, Ministry of Economy of Azerbaijan
PRC	Think Tanks	9	Li Minghui Economist Research Division	International Economics and Finance Institute
		10	Dr. Yang Jie Lecturer	The Belt and Road Financial Development Research Centre, Xiamen National Accounting Institute (XNAI)
		11	Dr. Li Shi Assistant Professor	The Belt and Road Financial Development Research Centre, Xiamen National Accounting Institute (XNAI)
	University	12	William Yun (Yun Wen Jie) Associate Professor	China Center for Special Economic Zones Research (CCSEZR), Shenzhen University
	Business Sector	13	Bai Hui Secretary of the Board	IPS Technology
		14	Hou Kai Head of Marketing	IPS Technology
		15	Yang Feng Yi Production and Technology Manager	IPS Technology
		16	Eerdunmutu	EERDUN Sheep Business Co,
		17	Wei Hua Deputy Manager, Overseas Division	Shanxi Construction Company

Country	Category	No	Name & Designation	Organization
GEO	Think Tanks	18	Ekaterine Metreveli President	Georgian Foundation for Strategic and International Studies, Tbilisi
		19	Maka Chitanava Senior Researcher	ISSET Policy Institute, Tbilisi
		20	Andro Gigauri Development Director	Economic Policy Research Center
	University	21	George Katsitadze Director of the Institute of Asia and Africa	Free University of Tbilisi
	Business Sector	22	Mikheil Khidureli Director	LEPL "Enterprise Georgia"
KAZ	Think Tanks	23	Rustam Burnashev Professor	Kazakh-German university
		24	Alma Sultangaliyeva Senior Expert	Central Asia Program at the Institute of Asian Studies
		25	Shakhboz Akhmedov Manager - Knowledge, Projects and Resource Management Unit	The Regional Environmental Centre for Central Asia (CAREC)
	University	26	Dr. Serik Orazgaliyev Assistant Professor	Graduate School of Public Policy, Nazarbayev University
	Business Sector	27	Sakuov Nurlan Director of the Department of Economics	National Chamber of Entrepreneurs of the Republic of Kazakhstan
	Government	28	Almukhambetov Chingiz Head of Division	The Department of Development of Entrepreneurship
KGZ	Think Tanks	29	Kanat Sultanaliev Director	Tian-Shian Analytical Center of American University of Central Asia
		30	Marina Lazutkina PR Specialist	Tian-Shian Analytical Center of American University of Central Asia
		31	Roman Isaakovich Mogilevskii Deputy Director	Institute of Public Administration and Policy of the University of Central Asia
		32	Tynaliyev Bakytbek Asylbekovich Head of the Department	Research Center of the National Bank of the Kyrgyzstan
		33	Seitov Choro Research Expert	Research Center of the National Bank of the Kyrgyzstan
	University	34	Mirlan Tashkylov Deputy Director	Academy of Management of the Kyrgyzstan
		35	Sarybaev Ailchi Sarybaevich Head of the University	Institute of Economics and Finance of the Kyrgyzstan
		36	Dr. Gulnara Dzhunushalieva	University of Central Asia

Country	Category	No	Name & Designation	Organization
			Head of School of Professional and Continuing Education	
	Business Sector	37	Asrandiev Erkin Shamshudinovich Chairman	Russian-Kyrgyz Development Fund
		38	Bahramova Ikbol Rahimovna Director	LLC Viva -Tex
		39	Malieva Shailogul Dushenovna Director	LLC Prodimpex
	Government	40	Mr. Oleg Pankratov Minister	Ministry of Economy, Kyrgyzstan
MON	Think Tanks	41	Tuvshintugs Batdelger Director	Economic Research Institute
		42	Battur Bayankhuu Head, Department for Economic Policy	Institute for Strategic Studies, National Security Council of Mongolia
		43	Myagmarsuren Altanbagna Head of Social Economics Geography Division	Regional Economic Integration Research Institute (PEIRI)
	University	44	Ch. Undram, Vice President for Administration and Cooperation	National University of Mongolia
	Business Sector	45	Irmuun Demberel Vice President	Mongolian Economic Cooperation Confederation
	Government	46	Munkhtuya Lhagva, Specialist	Development Financing Department, Ministry of Finance
PAK	Think Tanks	47	Haris Qayyum Khan Senior Program Officer	Asia Foundation- Pakistan Islamabad
		48	Samina Khalil Director	Applied Economic Research Center, University of Karachi
		49	Abid Qaiyum Suleri Executive Director	Sustainable Development Policy Institute (SDPI), Islamabad
	University	50	Dr. Anwar Shah Associate Professor	School of Economics (SOE) Quaid-e- Azam University Islamabad, Pakistan
	Business Sector	51	Rehan Saeed Khan General Manager Government Relations	Engro Foods Limited, Karachi Pakistan
	Government	52	Syed Mujtaba Hussain	Pakistan
TAJ	Think Tanks	53	Rustam Babajanov	Analytical Center "NAVO"
		54	Dr. Farida Muminova Deputy Director	Strategic Research Center under the President of Tajikistan
		55	Gulnora Beknazarova Chairperson Board of Directors	Research Company "Z-Analytics

Country	Category	No	Name & Designation	Organization
	University	56	Ilkhom Amonzoda Rector	Technological University of Tajikistan
	Government	57	Abdurakhmon Adurakhmonov Head WTO Affairs Department	Ministry of Economic Development and Trade
TKM	Think Tanks	58	Charymuhammet Shallyyev – Head of the management department,	Turkmen State Institute of Economics and Management
		59	Myrat Tuvakov – Head of language and literature	History and education science division, Academy of Science of Turkmenistan
		60	Berdimyrat Orazov Senior lecturer	Information technologies department, Turkmen State Institute of Economics and Management
	University	61	Nuryagdy Aynazarov Acting Head	Specialized department for Finance discipline, Turkmen State Institute of Finance
	Business Sector	62	Ahmetjan Mavlyanov	“Bir Dunya” business entity, member of the Union of Industrialists and Entrepreneurs of Turkmenistan
	Government	63	Allanazar Tagannurov Deputy Head	Financing of socio and cultural development department, Ministry of Finance and Economy of Turkmenistan
		64	Mr. Yakov Asminkin Director	Tahlil Center for Social Research
		65	Nazarov Sharofiddin Khakimovich Director	Center for Economic Research
	Think Tanks	66	Nodira Yuldosheva Junior Researcher	Analysis and Forecasting of Main Macroeconomic Indicators, Institute of Forecasting and Macroeconomic Research Tashkent,
	University	67	Durbek Akhmedov Vice Rector	Tashkent State Economic University
UZK	Business Sector	68	Eka Margishvili Senior Specialist	Foreign investments promotion department, Chamber of Commerce & Industry of Uzbekistan (CCIU)
			<b>Name &amp; Designation</b>	<b>Organization</b>
		69	Lilia Kadyrberdieva	IMF Representative Office Bishkek, Kyrgyzstan

Country	Category	No	Name & Designation	Organization
	<b>Development Partners</b>	70	Paul Vallely Program Leader	Central Asia Regional Office World Bank, Almaty, Kazakhstan
		71	Ben Slay Senior Advisor	UNDP Istanbul Regional Hub
		72	Zharkeynai Tashplotova	EBRD, Bishkek, Kyrgyzstan
<b>ADB</b>		73	Akiko Hagiwara Principal Economist	EARD, Asian Development Bank (ADB)
		74	Candice McDeigan Country Director	Asian Development Bank Resident Mission Bishkek, Kyrgyzstan
		75	Guoliang Wu Unit Head, CAREC	Asian Development Bank (ADB)
		76	Anne Myongsook Witheford Senior Regional Cooperation Specialist	CWRC, Asian Development Bank (ADB)
		77	Fahad Khan Economist	ERCD, Asian Development Bank (ADB)
		78	Aidana Berdybekova, CAREC Regional Cooperation Coordinator	Asian Development Bank Resident Mission Bishkek, Kyrgyzstan
		79	Meder Turgunbekov NFP Adviser	ADB/ Kyrgyzstan
		80	Alimouev Tenurbek	Asian Development Bank Resident Mission Bishkek, Kyrgyzstan
		81	Ms. Guliyam Kolbaeva	Interpreter
<b>ADB</b>		82	Farhad Taghizadeh-Hesary Senior Assistant to Dean ADBI	ADB and Faculty of Political Science and Economics, Waseda University, Tokyo, Japan
<b>USAID</b>		83	Gary Shu Economic Development Officer	USAID Bishkek, Kyrgyzstan
<b>Resource Persons/Facilitators</b>			<b>Name &amp; Designation</b>	<b>Organization</b>
		84	Qiangwu Zhou Director General	International Economics and Finance Institute (IEFI) Beijing, China
		85	Debarshi Nandy Associate Professor and Program Director, MSF	Brandeis University, International Business School, Boston, USA
		86	Aradhna Aggarwal Professor	Asia Research Center, Copenhagen Business School, Denmark



Country	Category	No	Name & Designation	Organization
		87	Nasruminallah Mian Country Program Officer	ADB Resident Mission, Pakistan
		88	David J. Smallbone Professor of Small Business and Entrepreneurship	Kingston Business School Kingston University London, United Kingdom
		89	Axel Goethals CEO	European Institute of Asian Studies (EIAS), Brussels, Belgium
		90	Alberto Turkstra Program Coordinator	European Institute of Asian Studies (EIAS), Brussels, Belgium
		91	Ulan Ryskeldiev Consulting expert	Administration of the President of the Kyrgyzstan
		92	Altaaf Hasham Management Program Liaison Officer	Agha Khan Development Network (AKDN) Bishkek, Kyrgyzstan
<b>Special Guests</b>		93	Kubat Umurzakov Former CI Director	Kyrgyzstan
		94	Syed Shakil Shah Chief, International Customs	Federal Board of Revenue, Pakistan
<b>Rapporteurs</b>		95	Talha Zakria	Pakistan
		96	Maliha Naveed	Pakistan
<b>Interpreters</b>		97	Elena Tsoi	Kyrgyzstan
		98	Elena Mironova	Kyrgyzstan
		99	Svetlana Chirkova	Kyrgyzstan
		100	Vita Mironova	Kyrgyzstan
<b>CAERC Institute</b>		101	Bayaraa Sanjaasuren, Director	CAREC Institute
		102	Ziqian Liang Deputy Director	CAREC Institute
		103	Kashif Noon Head of Strategic Planning Unit	CAREC Institute
		104	Saeed Qadir Senior Research Officer	CAREC Institute
		105	Khalid Umar Coordinator Think Tanks Forum	CAREC Institute
		106	Bolotbek Oruzbaev Secondee-Agricultural Economist	CAREC Institute
		107	(Rick)Hengchun Yu Administration & Personal Management Officer	CAREC Institute
		108	(Kevin)Tianpeng Yan Research Officer	CAREC Institute
		109	Ruud Crul Consultant	CI/ADB

Country	Category	No	Name & Designation	Organization
KGZ		110	Azamat Dikambaev Director	National Institute for Strategic Studies
		111	Nuradil Baidoletov Deputy director	National Institute for Strategic Studies
		112	Jumagul Beketaeva Research officer	National Institute for Strategic Studies
		113	Kuvat Dehkanov Research officer	National Institute for Strategic Studies
		114	Sanat Ryskulova Research officer	National Institute for Strategic Studies
		115	Chalbaeva Aigerim Research officer	National Institute for Strategic Studies
		116	Aiza Esenzhanova Research officer	National Institute for Strategic Studies
		117	Amantur Saparbaev Research officer	National Institute for Strategic Studies
		118	Alexandra Puzikova Research officer	National Institute for Strategic Studies
		119	Akkaziev Bektur Research officer	National Institute for Strategic Studies
		120	Amantur Marazykov Research officer	National Institute for Strategic Studies
		121	Zeine Asanalieva Research officer	National Institute for Strategic Studies
		122	Aitkulova Meerim Research officer	National Institute for Strategic Studies
		123	Ugai Alina Research officer	National Institute for Strategic Studies
		124	Akbar Kubatbekov Web-manager	National Institute for Strategic Studies
Volunteers		125	Ruoyu Wang Research Intern	CI/Xinjiang University of Finance and Economics
		126	Shoshana Stern	Kingston Business School Kingston University London, United Kingdom

## History of the CAREC Think Tanks Network

Leading think tanks from the CAREC member countries gathered in Urumqi, People's Republic of China (PRC) in 2017 for the second CAREC Think Tanks Development Forum (CTTDF) and, after extensive deliberations, agreed to establish the CAREC Think Tanks Network (CTTN) to provide innovative solutions for promoting economic cooperation by recognizing importance of regional perspectives.

The “Urumqi Declaration” became the founding document of the CTTN. As of now, 33 prominent think tanks from 11 countries of the CAREC region are members. The CTTN promotes the regional economic cooperation by:

- Enhancing systemic regional knowledge sharing and integration
- Fostering policy research and knowledge solutions to support governments
- Enabling better policy advice and reducing gaps between research and policy
- Enhancing collective intelligence to consolidate development resources for effective cooperation, better services, and improved performance

The CTTDF is organized annually under the auspices of the CTTN. From a modest beginning, the CTTDF has grown in size and appeal. The forum has become an attractive destination for think tanks, universities, and researchers from the CAREC region and beyond to exchange views and knowledge on evolving regional and global policy challenges.

The CAREC Institute hosted the first CTTDF in June 2016 in Astana, Kazakhstan, with the theme of “Promoting Economic Cooperation for an Integrated Central Asia.” The second CTTDF was held in Urumqi, PRC, in September 2017 with the theme of “Exploring Knowledge Solutions for Regional Cooperation and Integration.” During the second forum, the CTTN was established. The third forum was held in Bishkek, Kyrgyzstan, in July 2018 under the theme of “Building Knowledge Corridors along the Silk Road.”

The previous three forums offered a platform for diverse stakeholders to debate critical issues focused around regional economic cooperation and integration. Going forward, it is considered that the fourth CTTDF should narrow down on one crucial driver of regionalism – trade. The fourth CTTDF will, inter alia, identify and discuss the main challenges to trade within the region, among which are the economic implications of the possible trade conflicts among the major global trading partners. An assessment of these tensions will help identify the necessary policy mechanisms for the CAREC member countries to craft positive responses and avert negative consequences to the region.

The fourth CTTDF will be held on 27-28 August 2019 in Xi'an, Shaanxi, PRC.

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