



# CAREC Institute Newsletter

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## CAREC Regional Integration Index: Policy Perspective

The CAREC Institute’s working paper on the CAREC Regional Integration Index (CRII) explains the CRII, which was designed in 2017 based on the Huh and Park Asia-Pacific Regional Cooperation and Integration Index to measure the depth and breadth of regional economic cooperation.

The paper defines regional integration as a strategy that promotes the benefits of collective and collaborative activities among member countries through economies of scale, more vigorous intra-regional trade, expansion of markets, shared information platforms for exchange, and harmonized frameworks for social and economic interaction, and proposes three growth areas and five knowledge corridors in CAREC.

The growth areas include 1) Azerbaijan-Georgia-Turkmenistan-Afghanistan-Pakistan growth area to connect the seaports of Azerbaijan and Georgia with the proposed Turkmenistan rail network, and with the Gwadar and Karachi ports of Pakistan; 2) regional value chain growth area for the middle and far-west portions of CAREC to stimulate regional production systems primarily in agriculture whose outputs can move through the railway network in Turkmenistan and into the port outlets of Georgia and Azerbaijan, connecting the sub-region to Europe, as well as through the port outlets of Pakistan and into South Asia and the Middle East; and 3) cross-border tourism growth area involving all CAREC countries and the Silk Road branding.

The knowledge corridors include: the energy corridor, tourism, regional value chains, transport and logistics, and finance. Read more [here](#).

## Comparison of Integration in Asia & Europe: Policy Brief for CAREC

The CAREC Institute's policy brief on "Comparison of Regional Economic Integration in Asia and Europe: Policy Implications for the CAREC Region" emerged from a joint workshop by the CAREC Institute and the Asian Development Bank Institute (ADBI) held in July 2019 in Tbilisi, Georgia. The document argues that the economic integration can cause a permanent increase in the rate of economic growth. It continues the sentiment of the CRII working paper that, starting from a position of isolation, countries can achieve closer integration by increasing trade in goods or by increasing exchange of ideas.

The paper provides descriptions of five levels of economic integration, underlines differences and similarities between Europe and Asia, and infers that lessons drawn in one region cannot be simply copied and implemented in another region under particular conditions or circumstances.

This policy brief compares the economic integration perspectives in Asia and Europe in order to provide policy recommendations for the CAREC region. The paper concludes that CAREC needs an effective and efficient system for policy coordination, for infrastructure development and infrastructure financing, also reduction of non-tariff measures, and establishment of effective intra-regional energy trade. Read more [here](#).

## Achieving Energy Security in Asia: Workshop Proceedings

The summary of proceedings on "Achieving Energy Security in Asia: Diversification, Cooperation, and Renewable Energy" emerged from a joint workshop organized by the CAREC Institute and ADBI in October 2019 in Almaty, Kazakhstan.

The document discusses energy security as an assurance of energy supply both in times of abundance as well as in times of scarcity, and defines it through the following dimensions: economic, political, geopolitical, and institutional. It describes an index for energy insecurity which includes five CAREC members. The index results demonstrate a trend of increasing energy insecurity in the People's Republic of China (PRC), and Pakistan. On the other hand, certain fluctuations but steady improvements in energy security are observed in Mongolia, while Kazakhstan and Tajikistan demonstrate a trend of fluctuations and increased energy insecurity.

The proceedings include discussions about some CAREC countries which are rich in fossil fuels (oil, gas, coal) and hydro resources, and others which lack sufficient domestic resources to adequately cover their energy demand, also seasonal variability among countries which is particularly pronounced.

Discussions continue with a quantitative "4A" framework to calculate energy security levels across the following dimensions: availability of resources, applicability of technologies, acceptability by society, and affordability of energy resources. The energy security assessment of Pakistan is presented under the 4A framework.

Further, the document provides information about the PRC Shanghai crude futures, community-based financing solutions called hometown investment trust (HIT) funds that worked well in Japan and some other Asian economies for mitigating the financing gap of small-scale renewable energy projects, energy security assessment in the Caspian region, examples of ASEAN, and details of eight CAREC member presentations.

Read more [here](#). The CAREC Energy Strategy 2030 is available [here](#).

## Assessing Energy Security in Asia & Europe: Policy Brief for CAREC

The CAREC Institute's policy brief on energy security emerged from a joint workshop titled "Achieving Energy Security in Asia: Diversification, Cooperation, and Renewable Energy," organized by the CAREC Institute and ADBI in October 2019 in Almaty, Kazakhstan.

This policy brief aims to compare energy security in Europe, a more advanced region in terms of economic integration and energy security, and Asia to provide policy recommendations for the CAREC region which has abundant energy resources but low level of regional integration.

The literature shows that despite weaknesses in availability and accessibility due to low resource endowments, the EU's efforts towards sustainability and price reduction have contributed to increase in overall energy security. Energy security in Asia, however, is on decline due to rapid depletion of resources, steady increase in demand, steady increase in CO2 emissions, and a renewed vulnerability to price volatility.

This policy brief provides policy recommendations including simultaneous increase in all four dimensions of energy security - availability, applicability, acceptability and affordability – to improve the national energy security in CAREC countries, establishing a unified legal energy framework, and building a common energy market in CAREC region to improve the regional energy security. Read more [here](#).

## Sector-Identification Diagnostics for Potential CAREC RVCs

Under the CAREC Think Tanks Network (CTTN), the CAREC Institute has launched the Research Grants Program in May 2019 to support scholars and researchers from members of the CTTN to produce targeted knowledge products which would add to the body of knowledge on regional cooperation in CAREC. The ISET Policy Institute of Georgia, a CTTN member, undertook a research on assessing participation of CAREC countries in global and regional value chains.

At the first stage of the study, researchers concluded that CAREC countries are not well integrated into regional or global value chains. At the second stage, the team examined existing value chain linkages at the industry level and used a diagnostic method to identify the economically significant sectors with the highest regional value chain (RVC) potential.

As a result, six industries have been identified: electricity, gas and water, hotels and restaurants, post and telecommunications, financial intermediation and business activities, mining and quarrying, textiles and wearing apparel. Among these, post and telecommunications as well as financial intermediation and business activities are the type of sectors that are typically servicing existing trade linkages between countries, therefore, in case RVC linkages between Georgia and CAREC countries increase, the participation index of these industries will increase as well.

Additionally, researchers identified industries with significantly higher RVC participation and a demonstrated capacity for RVC trade: transport, wholesale trade, wood and paper.

The study concludes with two case studies in textile & apparel and wood & paper sectors and recommends use of methodology for industry/sector level identification and analysis for other CAREC countries to identify potential areas for value-chain cooperation.

Read more [here](#).

## CAREC Corridor Performance Measurement and Monitoring

The Corridor Performance Measurement and Monitoring (CPMM) mechanism is an empirical tool designed by the CAREC Program to assess and track the time and cost of moving goods across borders and along the six CAREC corridors, spanning the 11 participating countries—Afghanistan, Azerbaijan, the People’s Republic of China (PRC), Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.

The CPMM evaluates a set of trade facilitation indicators (TFIs) to illustrate the overall annual performance and efficiency of the CAREC corridors. Measured over time and across corridors, the indicators provide a comparative picture that allows the assessment and validation of impacts of transport and trade initiatives in the region. The TFIs include (i) time taken to clear a border-crossing point (BCP), (ii) cost incurred at a BCP, (iii) cost incurred to travel a corridor sector, and (iv) speed to travel along CAREC corridors.

While the 2019 CPMM report is getting ready for publication in Q2 2020, the 2018 CPMM data analysis demonstrated steady average improvement in speed without delay (which increased by 3% for road transport and 9% for rail), largely attributed to the success of physical and connectivity infrastructure investment along the CAREC corridors. Delays at the border declined for road transport by an average of 22%, and rail by an average of 20%, resulting in improved speed with delay by up to 5.5% for road and 7.8% for rail. However, these delays remain a major impediment to efficient trade. Furthermore, the average cost to clear a border crossing and the cost incurred to travel a corridor section remain low.

The CPMM report identifies country-level developments and challenges to assist national policy makers in determining the necessary focus of national strategies to address both national and regional transport, trade, and trade facilitation issues. Read more [here](#).

## Electronic Exchange of SPS Certificates in CAREC: Preliminary Findings

The CAREC Institute, in cooperation with the Asian Development Bank (ADB), conducted a feasibility study for developing a framework for mutual recognition and electronic exchange of phytosanitary certificates in CAREC. The study examines the institutional, regulatory, and policy frameworks to identify accompanying challenges in the issuance of phytosanitary certifications by National Plant Protection Organizations (NPPOs). It provides an assessment of the CAREC member capacity to digitize certification procedures and develop mutual recognition agreements for trade facilitation.

The agricultural trade costs in the region are particularly high as compared with manufactured goods, mainly due to tariffs, non-tariff barriers, trade procedures, and logistics. Half of the regional population relies on agricultural production making it central to sustainable development and poverty reduction. Access to global markets is therefore essential to ensure sustainable livelihoods and food for all.

The analysis of manual documentation used during trade reveals major drawbacks, including double data entry, clearance delays, safety risks, and high administrative costs. On the other hand, digital trade facilitation is a means of reducing non-tariff barriers to trade, reducing trade costs by optimizing regulatory trade procedures, and increasing access to international trade avenues. Preliminary findings identify, *inter alia*, necessity for significantly improved reporting systems on plants and plant pests across CAREC, establishing standards for evaluation of cross-border trade facilitation to identify gaps at both policy and technology levels, a comprehensive national strategy for implementation of a digitized system of electronic phytosanitary certification, legislative reform,

capacity building measures for technical staff, and scoping documents for implementation of an International Plant Protection Convention (IPPC) hub to standardize processes.

The study suggests using the model of the e-Phyto certification system of the PRC for inception of a harmonized system in CAREC. Contact us for [more](#).

## E-commerce Regulatory Framework in CAREC: Preliminary Findings

The CAREC Institute, in cooperation with ADB, conducted analysis of a regulatory framework for e-commerce development in CAREC. The study examines the state of legislation and regulation of electronic commerce in eleven member states of CAREC and recommends ways to modernize and harmonize them.

Firstly, it considers the type of challenges that electronic documents present for traditional legal systems, notably the invisibility and mutability of digital communications. It then reviews how the legal world has responded to these challenges, with particular attention to the work of the United Nations Commission on International Trade Law (UNCITRAL) and several other intergovernmental and non-governmental organizations.

The analysis elaborates on electronic transactions, both electronic documents and electronic signatures. It discusses the principal methods that legal systems, in particular CAREC member systems, use to deal with them. It also gives an overview of rules for electronic payments, privacy, cybercrime, and consumer protection in an electronic age.

One part of the analysis focuses on the international dimension: which treaties are available for countries to resolve issues of cross-border paperless trade. It touches on the use of free-trade agreements to drive e-commerce law reform, as well as the usefulness of conventions that deal only indirectly with electronic communications. There is a particular focus on developing rules for mutual recognition of authentication systems.

The report then analyses the e-commerce laws, as defined broadly, of the CAREC member states, and recommends a number of ways for bringing them in line with the current international best practices. Contact us for [more](#).

## Silk Road Knowledge Corridors: Policy Dialogue Proceedings

The CAREC Institute policy dialogue proceedings emerged from a session on the Silk Road Knowledge Dialogue in the framework of the Tbilisi Silk Road Forum held in October 2019 in Tbilisi, Georgia. The session was organized jointly by the Asian Development Bank (ADB) and the CAREC Institute to generate a dialogue on the role of knowledge corridors in strengthening economic corridors along the Silk Road.

The objectives of knowledge corridors are not different from those of the economic corridors. Economic corridors, interlinked through hard and soft infrastructure, are used for trade in goods and services leading to increased positive dependencies, value chains, and enhanced economic activity, which contribute to greater regional integration. Knowledge corridors, on the other hand, enable standardization and systemic approach to regional transport, trade, energy, and other sector development.

Rapid advancement in information and communication technology, reduction in time and cost, better access to information and data sharing, and higher connectivity and mobility facilitate

knowledge exchange and partnership at a greater degree. The region with its comparatively young and well-educated population can benefit significantly from these emerging platforms for knowledge sharing and exchange. Read more [here](#).

## Reforming State-Owned Enterprises: Policy Brief for CAREC

The policy brief on reforming state-owned enterprises (SOE) emerged from a joint workshop organized by the CAREC Institute, ADBI, and the American University of Central Asia (AUCA) in September 2019 in Bishkek, Kyrgyzstan.

The SOEs dominate key sectors in most Central Asian economies as significant borrowers and trade controllers of major exports and imports. They also command a sizable share of public resources. These enterprises also actively provide social services and preserve social stability.

In Central Asia, government's large role in the economy, reflected in the dominance of SOEs in local markets, impedes efficiency and entrepreneurship. The inefficient SOEs make the business environment tough for the private sector. While SOEs find it easier to access the state-bank loans, access to finance is challenging for the private enterprises. Objectivity and transparency of indicators to measure results of financial and economic performance of SOEs remain an issue.

Examples of deficient SOE corporatization and privatization cases demonstrate that most transition economies face the same set of challenges, namely: (i) lack of price-setting mechanism for state assets; (ii) unrealistic goal setting in the privatization process; (iii) lack of strategy, comprehensive plan and clear timetable; (iv) lack of public awareness about options; (v) insufficient expertise and knowledge about privatization; and (vi) underdeveloped capital market.

The policy brief assesses and reviews this set of challenges and provides policy recommendations for the Central Asian economies with the large public sector including 1) small-scale privatization program should come first, 2) managerial reforms are required during the privatization process, 3) policies must be transparent to public, 4) policies must consider the local culture and shall not follow blindly external prescriptions, 5) lessons shall be drawn from previous attempts of privatization, 6) non-productive enterprises shall be liquidated, and their property shall find more productive use, 7) establishment of a fully independent advisory committee for privatization of SOEs would be needed, and 8) establishment of a synergy between privatization and capital market development is advisable as selling of state assets provides a tremendous impetus to stock market activity. Read more [here](#).

## Climate Insurance, Infrastructure, and Governance

The CAREC Institute, in partnership with the Innovations and Scientific Research Cluster of Uzbekistan, IAMO-Halle, and Humboldt University, has conducted a study on climate insurance, infrastructure, and governance in CAREC region. The study aims to fulfil research gap and provide overview of the current realities of the climate change in 11 countries through the prism of water, energy, and food nexus, economic and financial aspects, and governance.

The paper provides an overview of the changing climate and weather patterns in the region and analysis of most climate-vulnerable sectors, and geographic areas. It examines three important sectors of water-agriculture-food as part of resources and policy nexus approach, reflecting on water and energy efficiency, footprint and greenhouse emissions. Further on, the paper reviews economics and financing of climate change adaptation, where authors examine existing financial instruments for adaptation and mitigation measures. It also discusses comprehensively governance systems, legal

policies, collaborative stakeholder mechanism and institutions on national levels, linkages between Intended Nationally Determined Contributions (INDC) and SDGs for climate change adaptation and mitigation efforts.

Some of the preliminary findings include the following: grain yields will be adversely affected by increases in evaporation rates and temperatures surpassing conditions favorable for the crop, where Kazakhstan might see a decrease in grain yields by 14-45% by 2050 (wheat is also used for livestock and poultry sectors, on average 26% of the total agricultural lands are allocated under wheat (i.e. ca. 51 million ha) in the region); the yields of non-grain crops in the Caucasus are expected to decrease by 3–28% by 2040; pasture productivity is expected to decline in Mongolia, Kazakhstan, and Kyrgyzstan due to decline in summer precipitation coupled with increase in seasonal temperatures; the intensity of droughts followed by harsh winters is expected to increase in Mongolia resulting in increase in the livestock losses by about 50% by the middle of the century in comparison to losses observed in the past; climate change may disturb the operation of the existing pump-lifted hydraulic infrastructure due to the lower water levels in waterways and irrigation canals. This may increase demand for the electricity to sustainably run and operate pump-lifted irrigation infrastructure (Azerbaijan, the PRC, Georgia, Pakistan, Tajikistan, and Uzbekistan irrigate more than 20% of their lands with electric pumped schemes); Uzbekistan, Pakistan, Kazakhstan, Turkmenistan, and the PRC shall re-think their allocation of strategic crops under reduced water availability for production of wheat, rice, and cotton; Afghanistan, Kyrgyzstan, and Pakistan shall prioritize designing energy efficiency programs for residential sector as it consumes more than 50% of total electricity, whereas industry and construction sector of the PRC, Mongolia, and Kazakhstan use more than 60%; water and energy are closely linked as energy cost is usually the greatest expenditure for water and wastewater utilities, thus measures to identify and reduce water and energy losses and enhance efficiency can result in substantial energy and financial savings.

The paper is scheduled to be finalized for publication in Q3 of 2020. Contact us for [more](#).

## Towards CAREC Tourism Strategy 2030

The tourism focal points from CAREC countries, private sector representatives, and development partners joined the regional inception [workshop](#) and first expert group meeting in December 2019 in Almaty, Kazakhstan to identify challenges and regional initiatives and collaborative actions to foster partnerships and strengthen the competitiveness of the region in the tourism sector.

Participants also initiated discussions for the formulation of the CAREC Tourism Strategy 2030 which is scheduled to be finalized in Q4 2020. The workshop followed in the footsteps of the high-level public-private dialogue on promoting sustainable tourism development in the CAREC region through PPPs in November 2019 in Tashkent, Uzbekistan.

Tourism can be a powerful tool for promoting inclusive and sustainable economic growth and generating employment and business opportunities. Tourism development falls squarely within the mission and objectives of the CAREC Program, and it is one of the operational priorities under [CAREC 2030](#). The scoping study on promoting regional tourism cooperation under CAREC 2030 conducted in 2018 identified potential opportunities for enhancing tourism cooperation among CAREC members and maximizing economic opportunities while safeguarding ecosystems.

The [Travel & Tourism Competitiveness Report 2019](#) by the World Economic Forum noted significant progress made by CAREC countries in the tourism sector, although several common challenges remain which the upcoming strategy 2030 shall address.