

# ANNUAL REPORT 2022

**Promoting Post-Pandemic  
Green, Sustainable  
and Inclusive Recovery**



March 21, 2023



# ABBREVIATIONS

ADB	Asian Development Bank
ADB I	Asian Development Bank Institute
ASEAN	Association of Southeast Asian Nations
CAREC	Central Asian Regional Economic Cooperation
CDDI	Cumulative Digital Divide Index
CPMM	Corridor Performance Measurement and Monitoring
CRII	CAREC Regional Integration Index
CTTN	CAREC Think Tank Network
CTTDF	CAREC Think Tank Development Forum
COVID-19	Coronavirus disease
DD1	Deputy Director One (of the CAREC Institute)
DD2	Deputy Director Two (of the CAREC Institute)
ESG	Environmental, Social, and Governance
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
HR	Human Resources
ICT	Information and Communications Technology
IMF	International Monetary Fund
IsDB	Islamic Development Bank
MOU	Memorandum of Understanding
PRC	People's Republic of China
RAM	Road Asset Management
QEM	Quarterly Economic Monitor
RKSI	Regional Knowledge Sharing Initiative of the ADB
SDG	Sustainable Development Goal
SEZs	Special Economic Zones
TVET	Technical Vocational Education and Training
UNICEF	United Nations International Children's Emergency Fund
4IR	Fourth Industrial Revolution

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# DIRECTOR'S MESSAGE

Dear Stakeholders,

I am delighted to present the CAREC Institute's Annual Report for 2022. The CAREC Institute, as an international knowledge organization, supports the CAREC Program through research, capacity building and knowledge sharing. The institute works with CAREC governments to achieve their policy goals of creating a more prosperous and economically integrated region.

In 2022, the 21st CAREC Ministerial Conference commended the institute's expanded activities, including the production of important knowledge products which contribute to the formation of effective policies by CAREC member countries and the implementation of ADB projects. The CAREC Institute has committed to developing a background report for "CAREC Post-Pandemic Framework for a Green, Sustainable and Inclusive Recovery"—one of the key strategic documents endorsed at the Ministerial Conference. Based on this framework, CAREC countries have agreed to increase productivity, achieve green growth, and promote inclusiveness.

The CAREC Institute is developing more established flagship activities by producing more analytical papers using own resources. In 2022, the CAREC Institute successfully organized the Sixth CAREC Think Tank Development Forum and the Second Annual Research Conference on topics of post-pandemic economic recovery. Our quarterly economic monitors, policy briefs, and research reports have made a valuable contribution to the regional policy dialogues. Institute's growing e-learning platform and trainings serve as powerful tools for cross-regional capacity building and learning. The CAREC Institute's knowledge sharing, advocacy, and media outreach continue to play an important role in developing and disseminating high-quality and user-friendly knowledge products.

The institute continues to expand its research portfolio by supporting research projects through the ADB-CAREC Institute Visiting Fellows Program, CAREC Think Tank Network Research Grants Program and new partnerships.

Support from CAREC member countries and the ADB is vital to the growth of our institute. I would like to acknowledge the signing of the Intergovernmental Agreement on Establishing the CAREC Institute by Kazakhstan in April 2022.

While the CAREC region continues to cope with the effects of inflation, disruptions in value chains, and economic uncertainties, our institute is committed to adapt to emerging challenges, changing priorities, and growing needs for regional actions, which we have reflected in CAREC Institute's 2023 workplan. We understand the ongoing need to strengthen our institutional capacity, financial and operational sustainability, and adapt to changing priorities in order to better serve our member countries and the CAREC Program.

Sincerely,  
Kabir Jurazoda

# EXECUTIVE SUMMARY

The COVID-19 pandemic has a devastating effect on the global economy, with many countries experiencing a dramatic contraction in economic activities. In 2022, the pandemic continued to spread unabated, causing further disruption to businesses and individuals alike. The effects of the pandemic are being felt across all sectors, from retail and hospitality to healthcare and education. In addition, the Russian-Ukrainian conflict has a damaging impact on the world's economic stability. With the conflict escalating, countries have seen an increase in inflation, a decrease in GDP growth, and a rise in unemployment. This has led to macroeconomic policies being implemented by countries to stabilize their economies. However, these measures have not been enough to prevent further economic hardship for many people.

The new CAREC Institute Strategy 2021-2025, which is based on the new world and regional developments, provides the institutional strategic framework on how the CAREC Institute will support the CAREC member countries through research, capacity building and knowledge management in the post-pandemic period.

In 2022, the CAREC Institute revisited the work of the Advisory Council to improve its efficiency and involvement in CAREC Institute's activities. Relevant rules and procedures were renewed, and a meeting of the Advisory Council was held in a new composition, consisting of well-known experts.

The rotation of the leadership of the CAREC Institute was carried out in accordance with the established rotation procedure. The institute completed the recruitment of Deputy Director One in March 2022, and the new Director joined the institute on 11 November 2022.

The CAREC Institute continued policy dialogues on important regional topics, conducted virtual and hybrid capacity building trainings, produced research reports, economic briefs, quarterly economic monitors and monthly newsletters.

In 2022, the CAREC Institute held its Sixth CAREC Think Tank Development Forum and the Second Annual Research Conference on subjects of inclusive and sustainable growth.

CAREC Institute's Chief Economist Team major contributions in 2022 include the Background Report for the 21st CAREC Ministerial Conference "[CAREC Post-Pandemic Framework for Green, Sustainable and Inclusive Recovery](#)" which contains an analysis of recovery options and proposals for enhancing regional cooperation for green, sustainable and inclusive growth. The team continued publishing the quarterly economic monitors in English, Russian and Chinese, which provide an overview of the latest economic developments in the region. The team prepared economic briefs on inflation and Environmental, Social, and Governance (ESG) financing development in the region, assisted with review of research reports from Research Grants and Visiting Fellows Programs.

CAREC Institute's Research Division, in partnership with the ADB and the ADBI hosted the Research Conference on Challenges of Post-Pandemic Recovery and New Economic Uncertainties. CAREC Institute's research conference stimulates research collaboration and capacity building to create cutting-edge research products which will enable CAREC countries to stay at the forefront of sustainable development and economic integration. Based on conference results and with the support of the ADBI, the CAREC Institute published its First Annual Book.

The institute systematically conducts holistic and agile capacity-building activities for member countries and stakeholders in the form of seminars, webinars, and dialogues. In 2022, the institute had 18 such events. The subjects of CAREC Institute's capacity building activities included the digital trade or e-commerce, COVID-19-related economic recovery policy guidance, Road Assets Management, and others. The CAREC Institute held its first capacity building events in a hybrid mode in Azerbaijan and Georgia, where they achieved very high satisfaction rates by participants. All capacity building activities are recorded, adapted, and uploaded to the institute's E-learning platform. As of November 2022, there are 96 online resources available on the platform. The total numbers of visitors and visits have reached almost 30,000 and 200,000 respectively.



CAREC Institute's knowledge management team continues to communicate the technical and complex knowledge in more accessible and simplified formats to a wider audience. Our new e-newsletter format not only shares news, but also provides monthly research digests to over 3,000 subscribers in 3 languages. In 2022, about 20 important topics of the CAREC Institute were covered in 60 media outlets in 10 countries in 3 languages. The CAREC Institute's LinkedIn and Weibo pages have been regularly updated, followed by 1,600 regular users and more than 15,000 regular users, correspondingly. To support the knowledge creation, the CAREC Institute Publication Policy was updated, and a new Anti-Plagiarism Policy was developed.

The staff of the CAREC Institute actively share knowledge at conferences, forums, and seminars organized by institute's partner organizations, and produce knowledge adaptations for Development Asia platform.

The PRC and the ADB remain as main donors of the CAREC Institute; and the Government of Pakistan has declared of its contribution. To ensure its financial sustainability, the institute has developed a Resource Mobilization Work plan and held the second discussion of its financial sustainability in the inter-governmental Financial Sustainability Working Group. Kazakhstan has signed the Inter-Governmental Agreement on Establishing the CAREC Institute; its ratification process is on the way.

The CAREC Institute continues to expand its collaboration with regional and national institutions by strengthening partnerships in research, capacity building and knowledge sharing. New partnerships have been formed with several academic institutions and think tanks, and other new partnership negotiations are ongoing.

# 2022 ACTIVITIES AT GLANCE

## JANUARY

- CAREC Quarterly Economic Monitor: Issue No.5
- New MOU with the Agricultural Development Bank of China

## FEBRUARY

- First Regional Water Dialogue
- Workshop on the Analysis of the Regional Digital Gap
- Webinar on Measuring Regional Integration



## MARCH

- Report "Sustainable Pathways to Energy Transition in the CAREC Region"
- Report "Digital CAREC: Analysis of the Regional Digital Gap"
- Multi-Session Training Series on Cross-Border E-Commerce

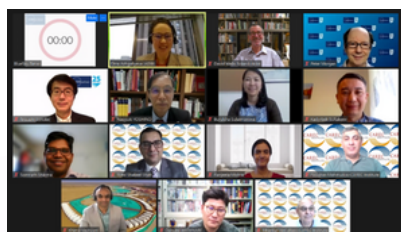
## APRIL

- First Annual Book
- Second Annual Research Conference
- Second Regional Water Dialogue
- Second CAREC Chai Webinar
- Virtual Workshop on Input-Output Analysis
- Workshop on Improving Road Safety Engineering in Turkmenistan
- CAREC Institute Quarterly Economic Monitor: Issue No.6



## MAY

- CAREC Institute Joins the South-South Global Thinkers Initiative
- Webinar on Analyzing Infrastructure Impacts in Asia Through Big Data
- Knowledge Sharing Series: Chinese Best Practice in Cross-Border E-Commerce



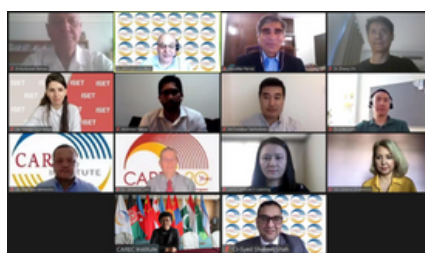
## JUNE

- Third CAREC Chai Webinar
- Training Course on Industrial Value Chain Diagnostics for Policymaking



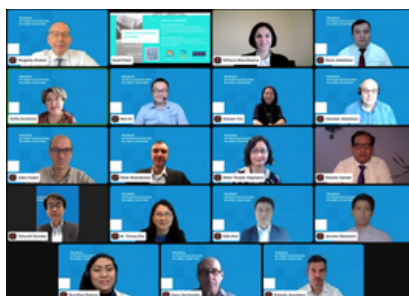
## JULY

- First Climate Change Dialogue



## AUGUST

- Report "Water-Agriculture-Energy Nexus in Central Asia Through the Lens of Climate Change"
- Report "Identifying the Potential of Horticulture Exports to China from Pakistan, Tajikistan, Kyrgyzstan, and Uzbekistan"
- Conference "Trade Facilitation in CAREC: A 10-year CPMM Perspective"
- Second Climate Change Dialogue
- Webinar on Debt and Financial Sustainability
- Policy Brief "Excessive Use of Natural Resources and Sectoral Over-Reliance Are Behind Central Asia's Vulnerability to Compound Climate Challenges"
- Policy Brief "Regional Cooperation Is Key For Overcoming Climate Challenges Along Water-Agriculture-Energy Nexus in Central Asia"
- CAREC Institute Quarterly Economic Monitor: Issue No.7



## SEPTEMBER

- Sixth CAREC Think Tank Development Forum
- Road Asset Management Workshops in Azerbaijan and Georgia
- Forum on Developing Sustainable Economic Zones
- Workshop on Promoting Sustainable Economic and Social Development



## OCTOBER

- Consultation Meeting to Discuss the Findings of the Institute's Background Report
- Economic Brief "Environmental, Social, and Governance (ESG) in the CAREC Region"
- New MOU with the Sustainable Development Policy Institute - Pakistan

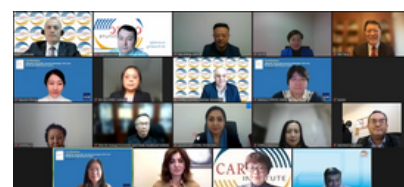
## NOVEMBER

- Background Report presented at the 21st CAREC Ministerial Conference
- Knowledge-Sharing Modules on CAREC Trade: Gravity Modeling and its Applications



## DECEMBER

- CAREC Institute Quarterly Economic Monitor: Issue No.8
- Knowledge Sharing Webinar on the Development of the TVET in the PRC and Other CAREC Member Countries



# KEY ACHIEVEMENTS IN 2022



## PUBLICATION

- 1 Annual Book
- 6 Research Papers & Reports
- 4 Quarterly Economic Monitors
- 2 Policy Briefs
- 1 Economic Brief



## CAPACITY BUILDING

- 18 Workshops, Webinars, Forums & Dialogues
- 96 Resources on E-Learning Platform
- 30 000 E-Learning Platform Visitors
- 200 000 Visits to the E-learning Platform



## FLAGSHIP EVENTS

- 2 Rounds of the Research Conference
- 1 CAREC Think Tank Development Forum



## PARTNERSHIPS

- 2 New Memorandums of Understanding



## MEDIA OUTREACH

- 20 CAREC Institute Topics & Events Are Covered In Media
- 39% Increase in LinkedIn Followers
- 60 Media Outlets Published About CAREC Institute's Activities
- 15 000 Followers on Weibo

3 000 Subscribers of E-newsletter in Chinese, English, and Russian

# MANAGEMENT



## **Mr. Kabir Jurazoda**

Director (joined in November 2022)

Mr. Jurazoda has over 25 years of professional experience in public service and public finance management, regional economic cooperation and integration, public social policy, strategic planning, monitoring and evaluation. Prior to joining the CAREC Institute, Mr. Jurazoda was an Advisor in the Office of the Assistant to the President of the Republic of Tajikistan for Economic Affairs. He was also the First Deputy Chairman of the Committee of Youth, Sport and Tourism under the Government of Tajikistan from 2006 until 2014 and Deputy Chairman to the Committee of Youth Affairs under the Government of Tajikistan from 2003 to 2006. He worked as a National Coordinator of the World Bank Project on Creating Socio-Economic Opportunities for Youth in the Republic of Tajikistan in 2007-2010.

Mr. Jurazoda holds MA in Political Sciences and International Relations from the Tajik State University and to date, he is completing his Dissertation on "Influence of World and Regional Integration Processes on Tajikistan's Development" for the degree of Ph.D. in Economics.



## **Ms. Huang Jingjing, Ph.D.**

Deputy Director One (DD1) (joined in March 2022)

Ms. Huang graduated with BA (1991) and MA in Economics (1994) and holds a Ph.D. in management (2000) from Xiamen University. She worked as a Deputy Director of the Teaching and Research Center, Director of Academic Affairs, the Assistant President and the Vice President of Xiamen National Accounting Institute.

With ten years at an accounting firm, and over twenty years of academic experience in accounting and audit in higher educational institutions,

Dr. Huang holds the title of the national leading accountant (academic) and an outstanding teacher in Xiamen. She is a member of the Internal Control Standards Committee of the Ministry of Finance of the People's Republic of China, a council member of the Accounting Society of China and the Chinese Institute of Certified Public Accountants. And she is a distinguished professor with strong expertise on audit, financial fraud prevention and internal control.



## **Mr. Iskandar Abdullaev, Ph.D.**

Deputy Director Two (DD2) (joined in June 2019)

Dr. Abdullaev has over 25 years of experience in the field of water and environmental management. His academic and professional experience include Central Asia, Sri Lanka, Iran, Pakistan, Thailand, Israel, USA, Germany, and Netherlands. Mr. Abdullaev held various advisory, editorial, research, and senior posts with GIZ, ZEF Center of Bonn, CCICED, NGOs, and associations.

Mr. Abdullaev is well linked with the academic circles. He is a member of editorial boards of several internationally peer reviewed journals. He authored three monographs, over 30 peer reviewed articles, and over 150 conference papers.

Mr. Abdullaev holds MSc and Ph.D. degrees from the Tashkent Institute of Irrigation and Agriculture Mechanization Engineers, where he taught classes during 1992-1999. He continues teaching at the German-Kazakh University (2013-present).



# GOVERNANCE

## GOVERNING COUNCIL MEETING

The Governing Council is an apex decision-making body of the institute that reviews the institute's progress and approves work plan, budget and institutional rules and policies. It draws its membership from all eleven countries of the CAREC Program, and currently CAREC Program's National Focal Points serve as members of the Governing Council. The chairmanship of the Governing Council is held by the country chairing the CAREC Program, following the system of alphabetical rotation among CAREC member countries. Currently, under the CAREC Institute Governing Council, there are Advisory Council and two committees—the Selection and Recruitment Committee, and the Budget and Audit Committee.

The 13th meeting of the CAREC Institute's Governing Council was held on December 22, 2022, to review the institute's 2022 Progress Report, 2023-2024 Rolling Operational Plan, and 2023 Budget and Recruitment Plan. Mr. Genadi Arveladze, Deputy Minister of Economy and Sustainable Development of Georgia and the CAREC National Focal Point, chaired the meeting.

During the meeting, the management of the CAREC Institute noted that, over the next two year, the institute's research activities will continue to focus on the five priority operational clusters of the CAREC 2030 Strategy, integrating the post-COVID-19 situation, growing global uncertainties and new regional challenges. The capacity-building activities will be tightly aligned with research activities, optimizing geographical outreach and use of e-learning capabilities by designing and delivering hybrid and blended learning capacity building programs. The CAREC Institute will continue external communications and outreach, knowledge adaptation and advocacy campaigns, building new partnerships with national media. In order to diversify its resource base, the CAREC Institute will continue to seek additional contributions from key partner organizations and member countries. Stable and diversified funding for the CAREC Institute will help expand its collaboration networks with international and domestic research institutions, think tanks and the private sector, which in turn will also benefit the CAREC Institute member countries through diversified knowledge sharing and capacity building activities.

Members of the Governing Council provided the recommendations on the activities of the CAREC Institute for 2023-2024. Mr. Lu Jin shared additional thoughts on how to improve the institutional effectiveness of the CAREC Institute. First, the CAREC Institute should continue to use a demand-driven approach to support member countries and further strengthen engagement and cooperation with member countries, and provide them with tailored knowledge support, including high-quality policy advice. Second, the CAREC Institute should continue to collaborate with academia and development institutions to build regional and interdisciplinary research networks which are crucial for strategic research and knowledge sharing. Third, the CAREC Institute should further strengthen institutional governance and capacity by conducting an organizational review and reforms. Fourth, the CAREC Institute should continue to expand its funding sources and strengthen the financial sustainability.

Ms. Lyaziza Sabyrova, ADB Representative, stressed the importance of topics such as climate change, green energy and regional economic cooperation for CAREC Institute's research. Mr. Natig Madatov, Representative of Azerbaijan, offered to expand cooperation with national think tanks, and the Azerbaijan Institute for Economic and Scientific Research, a new partner of the CAREC Institute, will in turn provide detailed proposals for joint research projects.

Members of the Governing Council have also selected the Representative of Pakistan as the new Chairman of the Budget and Audit Committee.

## GOVERNING COUNCIL MEMBERS

Country	National Focal Point
Azerbaijan	Mr. Samad Bashirli
PRC	Mr. Jin Lu
Georgia	Mr. Genadi Arveladze
Kazakhstan	Mr. Abzal Abdikarimov
Kyrgyz Republic	Mr. Kanat Abdrahmanov
Mongolia	Mr. Batkhoo Idesh
Pakistan	Dr. Irfan Abbas Shah
Tajikistan	Mr. Nematullo Hikmatullozoda
Turkmenistan	Mr. Muhammetgeldi Serdarov
Uzbekistan	TBD

The CAREC Institute's Budget and Audit Committee and Recruitment and Selection Committee compositions are as follows:



### Budget & Audit Committee

- Pakistan (Chair)
- Georgia
- Kazakhstan
- Tajikistan
- Turkmenistan



### Recruitment & Selection Committee

- PRC (Chair)
- Azerbaijan
- Mongolia
- Kyrgyz Republic
- Uzbekistan

## ADVISORY COUNCIL MEETING

The Advisory Council of the CAREC Institute comprises renowned regional and global experts on Central Asia and the thematic priorities of the CAREC Program and the CAREC Institute. The nomination and approval of new Advisory Council members, as per the revised Rules of Procedure, have been undertaken in the second half of 2021 and approved by the CAREC Institute's Governing Council in 2022. The experts, half representing the CAREC region, serve in the Advisory Council from 2022 until 2025. The ADB and the CAREC Institute's management participate in the Advisory Council meetings as observers.

The CAREC Institute held its Fourth Advisory Council Meeting on July 29, 2022. The meeting was aimed at soliciting feedback and input on i) CAREC Institute's operational background, institutional strategy, strategic priorities and planning cycle. Furthermore, the Advisory Council deliberated on (ii) the CAREC Institute input for the Ministerial Conference—"CAREC Post-Pandemic Framework for Green, Sustainable and Inclusive Recovery" and (iii) CAREC Institute's contribution in the fifth CAREC priority cluster on human development. The Advisory Council members were provided with the CAREC Institute Strategy for 2021-2025, results framework and annual planning mechanisms of the institute.

As the main agenda topic, inputs and suggestions were received for the "CAREC Post-Pandemic Framework for Green, Sustainable and Inclusive Recovery." The report suggests that the recovery from the COVID-19 pandemic requires enhanced productivity, diversification and trade, greening and sustainability, inclusion and fostering human capital is at the center of the imminent economic, technological, and social changes and the directions of needed policy actions. Advisory Council members provided insightful feedback and recommendations to upgrade the focus, structure and content of the report in order to support policymakers for drafting result-oriented regional policies. Advisory Council inputs were reflected in the final draft of the report.



The current status and outlook for the CAREC Institute's research projects, capacity building activities, and knowledge management work were presented to the Advisory Council. In addition, Advisory Council members' advices were sought on research and capacity building activities for the fifth CAREC cluster - Human Development, especially in the health and education sectors. Advisory Council members suggested expanding CAREC Institute's collaboration with governments, think tanks and research institutes who have better comparative advantages in these sectors, creating regional alliances for a collective response, and promoting regional dialogue on health and education issues.

Country	Name	Designation
PRC	Dr. Fan Shenggen	Professor and Chair at the College of Economics and Management at China Agricultural University in Beijing, PRC.
Pakistan	Dr. S. Sohail H. Naqvi	Former Rector of the University of Central Asia.
Georgia	Dr. Tamar Sulukhia	Director, Policy Institute, International School of Economics at Tbilisi State University.
Uzbekistan	Dr. Bakhrom Mirkasimov	Rector of Westminster International University in Tashkent.
Kyrgyz Republic	Dr. Chingiz Shamshiev	Vice-President and Chief Operating Officer at the American University of Central Asia.
Australia	Dr. Richard Pomfret	Professor at Adelaide University Australia and John Hopkins University
USA	Dr. Johannes F. Linn	Nonresident Senior Fellow in the Global Economy and Development Program at the Brookings Institution, Distinguished Resident Scholar of the Emerging Markets Forum, and Senior Advisor at the Results for Development Institute.
UK	Dr. Siddharth Saxena	Chairperson of the Cambridge Central Asia Forum of the Cambridge University, Director of Cambridge Kazakhstan Centre, and Honorary Secretary of the Committee for Central and Inner Asia.
Italy	Mr. Alessandro Pio	Scientific Advisor (Asia) at the Institute for International Political Studies.
USA	Mr. Craig Steffensen	Independent Consultant and Advisor to the World Bank on the Central Asia - South Asia Transport Platform.

## MEETING OF THE FINANCIAL SUSTAINABILITY WORKING GROUP

The Financial Sustainability Working Group was established by decision of the Governing Council of the CAREC Institute to examine and propose alternative funding options in addition to the current financial arrangement defined in its Inter-Governmental Agreement.

The second meeting of the CAREC Institute's Financial Sustainability Working Group was held on April 25, 2022, where the CAREC Institute, with technical assistance from the ADB, presented the Resource Mobilization Strategy for diversifying its resource base to achieve long-term institutional financial sustainability. The Resource Mobilization Strategy examines the external financing environment and internal capacity, and provides strategic considerations and key steps necessary to institutionalize the process. Working Group members elaborated on the directions and key actions proposed in the strategy document.

Working Group members also provided inputs on possible financial and in-kind contributions, alternative financing options and potential funding partners in their countries. During the meeting, the Government of Pakistan announced the continuation of its voluntary donation. The Government of the People's Republic of China and the ADB remain the major contributors to the CAREC Institute. The CAREC Institute has also expanded its research portfolio, adding new projects funded by international development partners, such as the Islamic Development Bank, UNICEF and others.

# INSTITUTIONAL STRATEGY

## 2021-2025

The CAREC Institute Strategy for 2021-2025 is designed to respond to the evolving post-pandemic environment by enabling a green, sustainable, and inclusive recovery of the CAREC region. Based on the new strategy, the CAREC Institute increases the volume and quality of its products and services to meet the demand for knowledge from its member countries and the CAREC Program. Our twelve strategic priorities for 2021-2025 are:

- **Deepening Stakeholder Engagement.** The CAREC Institute increases its engagement with member countries, the CAREC Secretariat and national and international think tanks to better understand regional and country-specific research and capacity building needs.
- **Attracting and Retaining Technical Talent.** To become an innovative knowledge-based organization, the CAREC Institute continues to identify significant skill gaps by transparently hiring staff and secondees, developing their skills, and reviewing and updating staff compensation mechanism to attract and retain high-quality talents.
- **Diversifying Financial Resources.** With its newly developed Resource Mobilization Strategy for 2022-2025, the CAREC Institute continues to deepen engagement with its member countries and build staff capacity to advance resource diversification.
- **Ensuring Conducive Working Environment.** The CAREC Institute promotes a conducive working environment to optimize its productivity and efficiency by providing sustained access to state-of-the-art tools and techniques, databases, and knowledge sources for producing quality outputs.

- **Strategizing Operational Priorities.** The CAREC Institute (i) builds in-house technical expertise around a few core themes selected from all five clusters of the CAREC 2030 strategy and integrates its resources around them for producing high impact, high quality knowledge output; (ii) selects relevant topics for knowledge interventions within the core themes; (iii) keeps the flexibility to offer demand based technical knowledge services on any country-specific issues, as long as they support regional cooperation and integration and are within the institute's in-house technical expertise and specific CAREC priority clusters; and (iv) integrates COVID-19 pandemic as an overarching and cross cutting theme in its operations.
- **Expanding Research Portfolio.** The CAREC institute's new focus areas in which member countries need urgent post-pandemic research support are: (i) promoting trade and foreign direct investment for increasing regional trade flows and participation in regional and global value chains; (ii) building back better by supporting greener, resilient and inclusive policies, particularly in tourism and climate change areas; (iii) facilitating cross-border financial cooperation among member countries; (iv) promoting capacities and regulatory environment for creating and benefiting from regional public goods; and (v) leveraging digital technologies for resilience and poverty alleviation. The institute continues to develop in-house sectoral research capacity, lessening its reliance on outsourced research consultants.
- **Revitalizing Capacity Building Approach.** The CAREC Institute continues responding to emerging capacity gaps in member countries. The newly conceptualized capacity building approach—spearheaded by an e-learning platform with hybrid modalities—helps the institute (i) build on its programmatic achievements by identifying core capacity gaps in member countries—policy, regulatory, procedural, and so on; (ii) determine levels of capacity for various tiers of government—leadership, operational; (iii) determine stages of capacity building—short duration to extended period; and (iv) define measurable outcomes of capacity building interventions—anticipated changes in policy formulation.

- **Adopting an Innovative Knowledge Management Approach.** The CAREC Institute continues to innovate its knowledge management approach by emphasizing and designing user-friendly knowledge products and harnessing digital technology for bolstering dissemination to reach out to senior policymakers and stakeholders, organizing and indexing knowledge to ensure user-friendly navigation.
- **Improving Partnerships and Networks.** The CAREC Institute continues to refine its approach to building partnerships by identifying opportunities and developing synergies, including joint activities within the CAREC Think Tank Network, in particular the CAREC Think Tank Development Forum.
- **CAREC Corridor Performance Measurement and Monitoring (CPMM).** The CAREC Institute and the ADB are working together to transfer ADB's expertise in CPMM methodology, data collection and analysis, and preparation and publication of reports to the CAREC Institute by the end of the strategy period.
- **Adoption of Digital Approaches.** The CAREC Institute's transition from a relatively new institution to a mature, go-to place for knowledge solutions in the region largely depends on its adaptability to embrace agile, cutting-edge technologies in its operations to increase efficiency and effectiveness. The institute continues to leverage digital/virtual technologies, finetune approaches in its operations, inspire and lead other regional think tanks to learn from institute's experience, and facilitate member countries in bridging digital adoption gaps.
- **Quality Assurance Framework.** To achieve the status of a reputable and mature think tank in the region, the CAREC Institute will significantly enhance the quality of its products and interventions by implementing a quality assurance framework for all its activities.

# PRIORITY THEMES AND MAJOR EVENTS

## POST-PANDEMIC GREEN, SUSTAINABLE AND INCLUSIVE RECOVERY

*In 2022, as CAREC countries begin to emerge from the COVID-19 pandemic, they need policy knowledge on how to rebuild their economies and ensure sustainable development in the new realities caused by the pandemic, climate change, supply chain disruptions, geopolitical tensions, the Russian-Ukrainian conflict, high inflation, etc. To meet the knowledge needs of its member countries, the CAREC Institute undertook several activities to identify key areas where knowledge is required, shared best policy practices, conducted policy dialogues, supported research on the region's economic recovery from the pandemic and conducted advocacy campaigns.*



The CAREC Program and the CAREC Institute worked together on the Post-Pandemic Framework for a Green, Sustainable and Inclusive Recovery, which is one of the key deliverables for the 21st CAREC Ministerial Conference held on November 24, 2022. The framework provides directions for strengthening macroeconomic policy coordination and managing disruptions of supply chains, as well as guidance on trade and investment liberalization and new innovative cooperation areas such as the digital economy and green development. The framework sets the need for CAREC countries to consider greater efforts to promote regional cooperation initiatives and programs to achieve the Sustainable Development Goals (SDGs) and explore ways to promote green and inclusive economic growth that should include digital transformation, development of relevant infrastructure and innovative financing models, as well as deepening regional economic integration.

The main contribution of the CAREC Institute was [the Background Report for the "Post-Pandemic Framework for a Green, Sustainable and Inclusive Recovery"](#), which was prepared by a group of CAREC Institute researchers led by Dr. Hans Holzhacker, Chief Economist of the CAREC Institute.

The report draws upon various research projects and publications by the CAREC Institute over the last few years. It calls on the CAREC community to focus on issues of green, sustainable, and inclusive development and to cooperate on these issues to build resilience against new shocks, accelerate technological change, promote human capital development, and further intensify trade to enable the CAREC region to realize its comparative advantages.

The report highlights that most CAREC economies outgrew the COVID-19 recession in 2021 as consumption and foreign trade recovered. However, the mineral fuel net importers saw foreign trade deficits widen. Public debt in CAREC countries increased in 2020, and in some countries the high share owed to non-residents makes refinancing difficult. The CAREC countries have been exposed to immense impacts of climate change such as water shortages, food insecurity, loss of livelihoods, health issues, and natural hazards. CAREC countries need to increase productivity and advance social protection, gender equality and women's empowerment together with further upgrading education and health care to achieve inclusive green growth and sustainable economic development. The productivity push should come in digitalization, trade facilitation, foreign direct investments, and the development of human capital. The report provides important policy recommendations on how to sustain long-term growth and strengthen regional economic integration.

To obtain feedback on the background report findings and policy implications, the CAREC Institute held several preliminary discussions with experts from national and regional think tanks, the CAREC Institute's Advisory Board, and the CAREC Secretariat, including representatives from the ADB and CAREC national governments. Important recommendations collected during the preliminary discussions were included in the final version of the report.





To ensure a broad discussion of the current situation on economic development in the CAREC countries, the CAREC Institute, in partnership with the ADB-PRC Regional Knowledge Sharing Initiative, the Economic Scientific Research Institute, the Center for Economic and Social Development and with support of the ADB, organized the Sixth CAREC Think Tank Development Forum (CTTDF) "[Recalibrating Growth Dynamics for Inclusive and Sustainable Economies](#)" on 15-16 September 2022, in Baku, Azerbaijan.

Forum participants discussed the progress of CAREC member countries in achieving the SDGs and issues of access to healthcare, education and digital technologies, as well women's labor force participation and countries' vulnerability to climate change. The discussion sessions included presentations of research findings and policy best practices.

Think tanks representatives jointly stated that the economic policies need to be people-centric, and not just promote GDP growth in the CAREC region. To ensure this, the CAREC members need to focus on building their fintech foundation, bolstering the ICT and digital infrastructures, ensuring regulatory quality, and enhancing the required capabilities to advance inclusive trade and finance. Developing countries with limited fiscal space will need to prioritize resources and efforts to areas with the greatest social development. The pandemic has shown that regional cooperation and integration with customized solutions can be a desirable goal for the region.

Forum participants commended the CAREC Institute's diligence in supporting the CAREC Think Tank Network (CTTN), including the Research Grants Program, which encourages think tanks to conduct joint research on pressing regional issues, and the annual CTTDF, which serves as a platform for the exchange of ideas and knowledge. The CAREC Institute published the Sixth CTTDF Report on "[Recalibrating Growth Dynamics for Inclusive and Sustainable Economies](#)."



To engage the research community of the CAREC region on post-pandemic recovery issues, the CAREC Institute, in collaboration with the ADBI and the ADB, conducted its Second Annual Research Conference "[Resilience and Economic Growth in Times of High Uncertainty in the CAREC Region](#)" on 11-12 April 2022. The two-day conference brought together over 150 researchers, policymakers, and representative from international development organizations.




The conference participants discussed the results of independent new research and research-based policy recommendations on possible options for recovery from the current economic crisis and uncertainties caused by the COVID-19 pandemic, and how CAREC economies can anticipate and prepare for challenges by responding to crisis and building resilience. The main trends, current challenges and developments were divided into three thematic areas for extended discussions: (i) Green Economy and Sustainable Development; (ii) Understanding Current Business Risks and Regional Cooperation; (iii) Sustainable Agriculture and Food Security.

Conference participants highlighted that there is a growing awareness across CAREC countries to further embed economic recovery and resilience initiatives into national economic planning processes. However, the generation of evidence-based solutions to issues of economic development and integration of the region is still a great need. Emerging from the pandemic, evidence-based prospects for economic growth of CAREC economies are critical. As the crisis continues, public policy research and discussions can contribute to effective economic growth strategies, which will be a critical backbone for better navigating the crisis and improving resilience to accelerate recovery.

During the Second Annual CAREC Institute's Research Conference, the CAREC Institute presented its inaugural volume of its Annual Books series "[COVID-19 and Potential for Economic Recovery in the CAREC Region](#)." Published in partnership with the ADBI, the book reveals how recovery and response measures to crisis might look like across different sectors of CAREC economies. The Annual Book comprises an array of analytical works with policy recommendations on recovery through digital transformation, e-taxation, strengthened financial inclusion, and crisis strategies for small businesses and households. Its chapters are developed by researchers from the CAREC Institute, the ADBI, the ADB, academic partners, and think tanks. The book's findings form the basis for crisis response efforts in CAREC countries aimed at accelerating economic recovery. The road to recovery from the pandemic may be daunting, however, economic trends highlighted in the book suggest the potential for the recovery process to positively influence socioeconomic development in Central Asia.



The visiting research fellow Mr. Nam Foo published a research paper on “[The Influence of the Pandemic on the People’s Republic of China \(PRC\)’s Outward Foreign Direct Investment in ASEAN and CAREC Regions,](#)” providing an insight into the attitudes of relevant stakeholders toward the performance of the state-owned enterprises with regard to the Belt and Road Initiative in ASEAN and CAREC regions in relation to the current global health crisis. The study’s results show that the global pandemic can impair PRC’s outward foreign direct investments in ASEAN and CAREC member states. The study also evidences that the strong connections between the PRC, ASEAN, and CAREC member states in the Belt and Road Initiatives can eliminate the risks. These connections can provide the PRC with another platform to promote shared regional prosperity while resisting counter-globalization. In addition, strong economic capacities in line with the demands of the on-going pandemic offer another opportunity for the PCR to develop its foreign economic assistance policy by offering more foreign aid, humanitarian assistance, and medical, professional, academic, and cultural exchanges to countries along the routes of the Belt and Road Initiative. The study further reveals that the impact of the COVID-19 pandemic can be minimized if governments can implement useful and effective post-pandemic recovery plans to sustain their economic growth with respect to cross-border investments.



To exchange views on the prospects for a post-pandemic green, sustainable, and inclusive recovery in the CAREC region, the CAREC Institute hosted Chai webinars with leading experts, leading scientists, think tanks, development partners, and CAREC government representatives. [The Second CAREC Chai Webinar](#) focused on the immediate effects of the conflict between Ukraine and the Russian Federation on Central Asian and South Caucasus economies, as well as how their businesses and governments are adjusting. The experts shared their thoughts about the opportunities that have emerged as a result of this crisis and the role of the CAREC Program in strengthening regional cooperation among the CAREC countries. This event was conducted in a format of open discussion, so participants felt comfortable providing their professional expert insights based on own observations. Over 140 participants attended this event.

The Third CAREC Chai Webinar focused on Afghanistan's primary drivers of poverty during the last two decades. Webinar participants observed that, on the one hand, the country enjoyed unprecedented levels of income and economic growth, coupled with impressive gains in various dimensions of human development, particularly in education and health. On the other hand, Afghanistan failed to leverage the strong economic growth experienced until 2012 and the opportunities brought about by the massive inflow of foreign aid to reduce poverty and build pro-poor institutions. While being extensively dependent on foreign aid, weak institutions could not curb pervasive corruption and vested interests. Not only the resources but also the policymaking processes were subject to elite capture and social divisions. Such trends made the country suffer from political instability and regime change waves. Webinar participants highlighted the importance of evidence-based strategic response toward sustainable community development and capable governance.



To inform about the latest economic developments in the CAREC region, government measures, and initiatives for closer cooperation among CAREC countries, the CAREC Institute continued to publish its Quarterly Economic Monitors (QEMs). The QEMs examine economic development in the CAREC region based on the latest available GDP, fiscal, monetary, inflationary, and external economic data, as well as some frequently recurring data. The main following aspects of current and potential future developments have been explained in the QEMs: the recovery and growth prospects, the room for maneuver that is left for fiscal and monetary policy to support growth, and the CAREC region's progress in catching up with the developed economies. The QEMs emphasize that CAREC economies need profound structural changes to ensure quality growth and implement policies to improve the efficiency of investment and accelerate technological change, while promoting the development of human capital for the adoption and use of advanced technologies and strengthening close regional cooperation in the CAREC region.



The COVID-19 pandemic has affected debt performance in almost all CAREC countries, pointing to the need to strengthen knowledge about debt management and the ability of policymakers to respond to market conditions on time. On August 24, 2022, the CAREC Institute hosted a webinar on "Debt and Financial Sustainability in the CAREC Region"

that discussed the comprehensive overview of the debt situation and fresh evidence on broad-based debt accumulation in the CAREC region by considering the individual country growth dynamics. Dr. Ghulam Samad, Senior Research Specialist of the CAREC Institute, discussed the findings of Chapter 4 of the CAREC Institute's Annual book "Debt and Debt Sustainability in the CAREC Region." He stressed that three important factors like structure of the debt, the nature of economic policies, and the trajectory going forward are important for the analysis of the debt sustainability. Resident and non-resident debt paints a very different picture, highlighting the importance of the disaggregated debt structure dimension in debt sustainability analysis, which implies different approaches to debt management. The study also shows that sustained large budget deficits, current account deficits, currency depreciation, reduced foreign direct investment, and depletion of foreign exchange reserves are the main causes of public and external debts. Some countries in the region are facing liquidity and solvency problems caused by the historical structure of their economies, the conflict in Ukraine, inflation in the region, and debt repayments. The study suggests that the CAREC countries should continue with tax policy reforms, financial sustainability strategies, and expenditure control and optimization. More importantly, countries must increase their exports and restructure their economies for sustainable economic growth. The invited experts from the World Bank, the ADB, the ADBI, the IMF and other partner organizations discussed key issues related to debt management in the CAREC region, as well as ways to resolve the debt crisis and achieve debt sustainability in the current post-crisis period. Experts agreed that the CAREC countries' recovery policies need to target at green and inclusive economic growth and include measures to implement structural reforms and attract more investment from the private sector by improving the business environment, strengthening regional cooperation and closer coordination with international financial institutions.



While the 2030 Agenda sets an important goal for countries worldwide to promote economic and social progress, its achievement is threatened by new challenges brought by the COVID-19 pandemic, global crises, and conflicts. The global economic recovery from the pandemic is fragile and inconsistent due to rising inflation, severe supply chain disruptions, growing labor market pressures and unsustainable debt in developing countries. To discuss these issues with academia, public

and private sectors, on 26-30 September 2022, the CAREC Institute, in partnership with the Xiamen National Accounting Institute of China, conducted a five-day virtual Workshop on “[Promoting Sustainable Economic and Social Development](#).” Economists from the CAREC region also discussed topics of green and inclusive economic growth and sustainable development, such as the introduction of innovative public-private partnership models in the development of quality infrastructure, digital finance and taxation, carbon neutrality and green finance. The participants also learned about best practices and examples of green finance and digital transformation projects for governments and businesses.



The post-pandemic economic recovery requires more skilled professionals in fields, where TVET plays an instrumental role. Governments have high expectations of TVET for employment, economic recovery and social security. However, the TVET sector is less developed in CAREC member countries: the former Soviet countries of the region face many challenges in transforming TVET systems in line with the needs of their labor markets. On December 13, 2022, the CAREC Institute, in collaboration with the ADB Resident Mission in the PRC, co-hosted a knowledge sharing webinar on the development of the TVET in the PRC and other CAREC member countries. During the workshop the results from the ADB Technical Assistance report “[People’s Republic of China: Sharing ADB’s Operational Knowledge in Technical and Vocational Education and Training in the PRC with CAREC Member Countries](#)” were presented. According to report’s findings, six CAREC countries (Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan) have made great efforts in vigorously developing TVET and have achieved remarkable progress in the past decade. However, three noteworthy challenges remain: a) mismatches between curricula in TVET programs and the skills required by employers; b) lack of a national qualification framework; and c) inadequate human and financial resources. Kazakhstan and Turkmenistan are facing TVET problems and challenges such as the supply of TVET does not match the demand of the labor market, high unemployment rates of TVET graduates, insufficient digital skills, inadequate teachers’ ability, etc.

The Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan face more severe problems and challenges, including an inadequate number of TVET schools, lack of TVET teachers, insufficient job opportunities for TVET graduates, etc. The PRC had similar problems in the development of TVET during its transition period. Since opening-up reforms, Chinese economy has generated strong demands for professional and skilled labor. The PRC has made great progress in many fields of TVET in recent years with the long-term unremitting efforts from governments and vocational schools. The assistance from the ADB, the World Bank, and several bilateral aid agencies has also contributed greatly to the development of the PRC's TVET.

## CLIMATE CHANGE AND WATER-AGRICULTURE-ENERGY NEXUS

*Countries in the CAREC region, one of the world's most vulnerable regions, experience greater seasonal and geographic fluctuations in temperature and precipitation, which affect household well-being. The most recent example of the devastating impact of climate change is the monsoon floods in Pakistan that have taken the lives of 1,739 people and affected more than 30 million people across the country. To meet the knowledge needs of the CAREC member countries about impact of climate change, the CAREC Institute conducted a series of knowledge sharing activities, enabling the countries to rethink their economic growth models and to understand the problems associated with climate change to draw actions to respond to environmental and social impacts.*



The CAREC Institute produced the research report “[Water-agriculture-energy nexus in Central Asia through the lens of climate change](#),” which examines the climate vulnerabilities of Central Asia's water, agriculture and energy sectors at province level by quantifying their exposure, sensitivities and adaptive capacities. The report suggests the Central Asian countries to prioritize increasing water use efficiency, especially in agriculture, as a means of reducing their sensitivity to climate change. Promoting alternative, less water-intensive sectors of the economy could be another adaptation approach. In agriculture, due to heterogenous impacts of climate change on crops, reducing reliance on monocropping and crop structure optimization should be prioritized to diminish the sensitivity of the local agricultural sector to climate change. The drought-resistance of crop cultivars may become one of the important criteria in cropping decisions.



Research findings also suggest the closer regional coordination of transboundary water management, which can reduce seasonal and annual water supply uncertainty for region's downstream countries, it also reduces their sensitivities and increases overall capacity in the region to adapt to long-term changes in water availability. With increasing energy demand, improving the economic efficiency of energy use appears to be a cost-effective first step. Countries should also prioritize development of less energy-hungry economic sectors. Large-scale adoption of cost-efficient renewable energy sources appears to be an unavoidable necessity. Moreover, the regional cooperation improves the diversity of power supplies on a regional scale and establishes favorable conditions for exploiting the yet untapped potential of renewable sources in the region.

➤ In addition, the CAREC Institute published the report “[Sustainable Pathways to Energy Transition in the CAREC Region](#),” which defines policy objectives and identifies opportunities for regional cooperation to optimize the use of renewable energy resources and grid networks to balance demand and supply across the region and minimize market and regulatory risks for prospective investors. The report suggests that the region-wide institutions need to achieve the region-wide optimization, real-time matching of the region-wide demand and supply by the regional load dispatch center. In addition, a specially constituted regional entity could facilitate and implement the renewable energy procurement and contracting processes and execute emission reduction contracts. Such entity could then serve to distribute accruing emission reduction revenues to help subsidize the vulnerable sections of population across the region.

➤ The CAREC Institute has produced several economic and policy briefs with information on climate change issues in the CAREC region and policy options. The policy brief “[Excessive use of natural resources and sectoral over-reliance are behind Central Asia's vulnerability to compound climate challenges](#)” stresses that climate change may have significant implications for water resources in Central Asia, by altering its availability on annual and seasonal scales. Excessive reliance on water resources and low economic productivity of water use, particularly in the southern parts of the region, are the primary reason for Central Asia's high sensitivity to the impacts of climate change.

The policy brief provides several policy recommendations for improving the efficiency of natural resource use to reduce Central Asia's vulnerability to climate change: i) foster climate research in the region and improve early warning systems; ii) increase efficiency of water use across the main sectors; iii) optimize crop structure and invest in drought-resistant varieties; iv) diversify the economy and promote less resource-intensive sectors; and v) mainstream energy efficiency and renewables as a crucial and cost-effective strategy.

➤ Another policy brief “[Regional cooperation is key for overcoming climate challenges along water-agriculture-energy nexus in Central Asia](#)” calls for active policy actions to intensify regional cooperation to address climate challenges along water-agriculture-energy nexus in Central Asia. Water cooperation is a fundamental prerequisite for enhanced resilience to climate change that disentangles multiple benefits for all parties. Coordinated management of upstream water storage is crucial for enhancing region's resilience to hydrological droughts on seasonal and annual timescales. In turn, the upstream countries of Central Asia benefit from an enhanced energy security. Regional cooperation on water resources is underpinned by the development of a comprehensive and transparent framework for regional energy trade. The advantages of regional collaboration extend far beyond the lower seasonal water and electricity supply-demand mismatches, but also facilitate sustainable energy development in the region. The region's long-term energy security would be substantially bolstered by more diverse power supply, and the countries would have better alternatives for long-term greenhouse gas emissions reductions in the power sector.

➤ CAREC Institute's economic brief “[Environmental, Social, and Governance \(ESG\) in the CAREC Region](#)” looks at how ESG considerations, an important direction of sustainable finance, are being translated into investment and business activities in the CAREC member countries. ESG development can help accelerate the transition of CAREC member countries to green, sustainable economies, given the region's relatively fragile natural and geographical conditions. The economic brief revealed that the CAREC country members have varying levels of ESG policy and investment development. ESG disclosure and transparency have been improving in recent years in several CAREC members while much progress still must be made in the practical development and implementation of ESG frameworks. The economic



brief suggests that all stakeholders, including governments, financial institutions, standard setters, industry groups, academic institutions should work together to better shape ESG strategies at the national and multinational levels and design and implement ESG rules and standards at the firm level and to accelerate the process of ESG development.



To support knowledge sharing on issues related with the climate change, the CAREC Institute, in partnership with the ADB, hosted two policy dialogues on climate change. [The First Climate Change Dialogue](#) was held on 19 July 2022 to discuss the CAREC Climate Scoping Study with national experts from the CAREC region, and to seek feedback and advice on the scope of the study, its focus and approaches in line with CAREC national priorities. The purpose of the Scoping Study was to develop a cross-cutting, systematic and strategic approach by the CAREC Program to the climate agenda in the region. The study informs CAREC member countries, the Secretariat, and development partners about climate change issues, as well as national and regional policies and instruments related to climate change, explore the role and mechanisms of regional cooperation on climate issues in the region, and identify potential entry points for the CAREC Program and the CAREC Institute in addressing climate change challenges.





[The Second Climate Change Dialogue](#) was held on 2 August 2022 with representatives of regional organizations in the CAREC region to discuss the CAREC Climate Scoping Study, commissioned by the ADB CAREC Program. The Second Climate Change Dialogue focused on regional priorities and joint actions in collaboration with regional organizations. Representatives of regional organizations identified key areas for regional cooperation, such as promoting climate education, developing the capacity of public sector, civil society, the private sector and households to combat climate change, organizing regular policy dialogues, accessing to financial resources for joint actions, collecting and processing data and sharing best practices on policy development, conducting research to fill information gaps in climate change in Central Asia. Experts named water, energy, agriculture, disaster preparedness, security and health, digitalization, vulnerable communities, and gender as key priority areas.



Water is critical to sustainable economic development and a core for climate change adaptation by connecting the climate system, human society and the environment. To highlight the importance of regional cooperation on water management for social and economic development in the CAREC region, the CAREC Institute hosted two policy dialogues on water issues. On 10 February 2022, the CAREC Institute held [the First Regional Water Dialogue](#) where prominent water and development experts discussed collaboration opportunities in support of ongoing efforts and reforms in sustainable water management in Central Asia in times of growing climate uncertainty. Experts noted that water scarcity poses threats to food security, energy production, and regional peace. They discussed if the trend involves more competition or green recovery, if the spirit of cooperation of 2015s prevails or water becomes a reason for instability. Synergizing different national water systems, policies, and priorities is another challenge. Differences were described at the local, national, and regional levels. It was explained how management of transboundary rivers, basins, and reservoirs is exercised to reduce frictions among states. Experts noted that not only the amount of water matters, but its timely supply is important. There a significant gap exists between strategic planning at the national level and investment planning by the multi-lateral development partners. A concern was voiced that dialogue platforms exist only in the framework of donor support where they have only temporary nature and where the process is not necessarily owned by local regional entities. Thus, a need for a sustainable systemized coordination body which would be owned by neighboring states who would not engage in ad hoc damage control but apply systemic management to water issues was articulated.

[The Second Regional Water Dialogue](#) on “Sustainable Water Governance in Central Asia Aimed Climate Vulnerabilities” was conducted by the CAREC Institute in partnership with the ADB, ADB-PRC Regional Knowledge Sharing Initiative and Xinjiang Institute of Ecology and Geography of the Chinese Academy of Sciences on April 27, 2022. The dialogue aimed at promoting an open dialogue among leading experts in the field of water management on pathways to sustainable and climate adaptive water management systems in Central Asian countries, discussing practical implications of the report *Water Footprint Analysis of Central Asia*, and exploring the potential coordination mechanisms between the ADB-CAREC Water Pillar and regional initiatives of

international and regional partners in Central Asia. The experts shared their takeaways from report and views on its main findings which are important for the future of the region's water under an augmenting impact of climate change.

-  The CAREC Institute produced a knowledge adaptation product for the wider public audience through the Development Asia Platform on [“Opportunities for Regional Cooperation on Low-Carbon Energy in Central Asia.”](#) The knowledge adaptation product proposes to strengthen the regional initiatives by harnessing advances in technology, promoting cross-border technology transfer, and harmonizing policies and standards.
-  In addition to publication of the CAREC Institute, the staff of the institute also contributed to external publications to share CAREC knowledge with wider academic community. The staff of the CAREC Institute contributed to ADBI's new book [“Unlocking Private Investment in Sustainable Infrastructure in Asia.”](#) Dr. Iskandar Abdullaev, Deputy Director Two, and Dr. Ayoob Ayoobi, Chief of the Capacity Building Division of the CAREC Institute have co-edited the book, and the Chapter 5 [“Financing Infrastructure in Central Asia”](#) was written by Dr. Iskandar Abdullaev and Mr. Shakhboz Akhmedov, Senior Research Fellow of the CAREC Institute.

## REGIONAL TRADE AND FOREIGN INVESTMENT

*Foreign trade and foreign direct investment play an important role in economic cooperation in Central Asia. To promote closer regional economic cooperation in the CAREC region, the CAREC Institute continued to conduct research and conduct capacity building activities on issues related to regional trade, investment, and integration. The ADB and the CAREC Institute use the Corridor Performance Measurement and Monitoring (CPMM) mechanism as an empirical tool to assess the time and cost of moving cargo across borders and along the six CAREC corridors. The collected data are analyzed and used as inputs to develop joint policy initiatives that foster seamless transport and trade facilitation within the CAREC region.*



The CAREC Program and the CAREC Institute jointly organized a conference “Trade Facilitation in CAREC: A 10-year CPMM Perspective” on August 17, 2022. The purpose of the conference was to present research findings which identify significant trade facilitation and development initiatives in the CAREC countries, with evidence from the CAREC Corridor Performance Measurement and Monitoring (CPMM) data. The conference brought together leading researchers, experts, policy makers, and representatives of international organizations to discuss the implications of research to CAREC's transport and trade facilitation, and how CPMM data and results can be used to support policy development in the region.


The CAREC Institute presented a case of the successful advocacy campaign with the Government of Pakistan based on the CPMM findings. The CAREC Program and the CAREC Institute jointly initiated a policy dialogue process with national stakeholders in 2020, bringing the CPMM research evidence into national policies. Country-specific CPMM policy briefs have been prepared by the CAREC Institute and addressed to national policy makers, providing information on the current situation of regional trade cargo and recommendations for improvement. Through these policy briefs, the CAREC Institute engaged in two-way communication with national governments when the latter took necessary policy action based on CPMM results. The Government of Pakistan provided a considerate response to the CPMM policy brief in 2020 with information on the rapid and effective steps undertaken to address the bottlenecks, which resulted in a significant improvement in border crossing.

During the conference, the CAREC Institute also presented the preliminary results of five research projects by independent researchers. The independent studies employ the CPMM database on different topics such as trade, regional cooperation and integration, and global value chains. All five studies bring new knowledge and modern research approaches to using the CPMM data for policy formulation in the region and deepening academic research in relevant areas.



To assist in regional trade in agricultural products, the CAREC Institute prepared a research report “[Identifying the Potential of Horticulture Exports to China from Pakistan, Tajikistan, Kyrgyzstan, and Uzbekistan.](#)” The study identifies bottlenecks and suggests policy solutions to overcome barriers and increase Central Asian horticulture export to China.

Agriculture is one of the main economic sectors in the CAREC countries and its contribution to GDP remains high, providing jobs for a large part of rural population and foreign exchange earnings from export of agricultural products. At the same time, the PRC is one of the ten largest fruit importers in the world. The countries of Central Asia have significant competitive advantages in fruit production, but their access to PRC's fruit and vegetable market remains limited. Kyrgyzstan, Tajikistan and Uzbekistan together account for 0.01% of Chinese fruit import. The report emphasizes that entering a major fruit market like China requires a stable supply of large volumes that can be achieved by integrating small farmers into the value chain. Farmers in CAREC countries need to be equipped with modern technologies and knowledge about fruit production and processing. Farmers should use branding and marketing as Chinese buyers are not well aware of the taste, quality and nutritional value of Central Asian fruits. Investments in grape varieties and seedless citrus are needed to meet the demand of Chinese customers.

 The digital economy can offer CAREC countries a range of opportunities to drive economic growth and human development, enhancing public and private services. In line with the strategic direction of the CAREC Digital Strategy 2030, the CAREC Institute contributes to research, capacity building, and policy dialogue to address the social and economic challenges arising from the rapid development of disruptive technologies and the impact of the COVID-19 pandemic in the region. In 2022, the CAREC Institute in collaboration with the Islamic Development Bank (IsDB) published a research report “[Digital CAREC: Analysis of the Regional Digital Gap](#)” which uses a Cumulative Digital Divide Index (CDDI) and secondary data from 2016 to 2020 to analyze the inter- and intra-country digital gaps in the CAREC region. CDDI considered cost and affordability, access and infrastructure, Internet quality, digital security, regulations, digital FDI, and ICT output. The study included eight CAREC economies: Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, and Uzbekistan. The average CDDI score exhibited that Kazakhstan and Georgia are the least digitally divided countries among the selected, while Azerbaijan and Mongolia are moderately divided in the digital spectrum, whereas Uzbekistan, Kyrgyzstan, Pakistan, and Tajikistan are the least performing economies in CDDI, confirming a higher digital divide.

In addition to the research, the CAREC Institute has conducted a series of capacity building activities to enhance the capacities of relevant government organizations and experts in the CAREC countries on various topics of regional economic cooperation in the CAREC region. The CAREC Institute in collaboration with the IsDB and the ADBI held a roundtable to discuss findings of the recent research titled “Digital CAREC: Analysis of the Regional Digital Gap” on 23 February 2022. Speakers at the event introduced country profiles and explained methodologies to estimate and analyze four attributes of the digital divide: digital infrastructure, digital payments, e-commerce, and Internet access. During the workshop the participants learned that digital infrastructure and internet access are top-performing indicators of digital development in the CAREC region, while digital payments and e-commerce both report the lowest average score.

On 24 February 2022, the CAREC Institute, the ADB, and the Regional Capacity Development Center of the International Monetary Fund hosted a webinar on regional integration to share a multidimensional assessment of regional integration in Asia in general, and in CAREC more specifically. Dr. Rolando Avendano, ADB Economist, spoke about the Asia-Pacific Regional Cooperation and Integration Index and invited scholars to cooperate on its refinement through a dedicated website which has various datasets available. Dr. Hans Holzhacker, Chief Economist at the CAREC Institute, elaborated on the CAREC Regional Integration Index (CRII) and noted that the strongest and increasing integration is observed in the regional value chain dimension due to forward linkages of commodity exports. He reasoned that CAREC is not so much about the internal regional market than it is about increasing the global (continental) weight of the CAREC region through cooperation and that this should perhaps be reflected in the CRII in future.

The CAREC Institute, in collaboration with the ADB RKSI and the China Association of Trade in Services, launched a [multi-session training series on cross-border e-commerce](#) for national technical vocational educational and training (TVET) institutions of CAREC countries and other interested professionals on 5 March 2022. The series of trainings aimed at addressing existing digital development imbalances across the CAREC region, fostering regional digital collaboration, and sharing best practices among CAREC member countries. Trainings helped the participants: to better understand the role and opportunities of




digitalization in the CAREC region, particularly in the field of e-commerce; how e-commerce may hasten the transition to a digital economy, thereby stimulating economic development, creating jobs, especially in rural areas, and contributing to poverty reduction.

E-commerce specialists from the world's leading Internet enterprises and e-commerce platforms, experts from the CAREC member countries, and training participants exchanged views with digitalization experts and discussed the strength and opportunities of digitalization, as well as how to implement the necessary policy measures, and adopt regulations for the development of the digital economy.

➤ Data analysis is important in the decision-making process, and it enables evidence-based decisions, reduces the risk, decreases bias, and leads to a better strategic outcome. The input-output framework is essential to many macroeconomic analyses and provides guidance in the development of policies, strategies and plans for economic growth. It is vital for depicting production, consumption, and trade activities attributable to any given economy. Therefore, the CAREC Institute in collaboration with the ADB delivered the [virtual workshop on Input-Output analysis](#) from 4 to 8 April, 2022. The main aim of the workshop was to enhance the capacities of the government, statisticians, and analysts involved in national accounts and macroeconomic analysis, including government officials engaged in macroeconomic analysis, macroeconomic analysts from think-tanks, and macroeconomists from academic institutions to produce high-quality economic data and analysis through the Input-Output framework. The five-day virtual workshop consisted of a lecture series and hands-on training on input-output analysis and its applications. All participants were enabled to discuss virtually with experts on input-output data analysis and to resolve issues encountered during the application of the input-output analysis in their work.

➤ Sustainable infrastructure development is the focus of the CAREC Program 2030 strategy. In line with this strategic perspective, the CAREC Institute works together with implementing partners to support member countries in the sustainable development of infrastructure in various sectors. The climate-adjusted investment needed for infrastructure requires many innovative schemes to attract investment.

In this regard, the CAREC Institute, in partnership with the ADBI, held a virtual workshop on [“Analyzing Infrastructure Impacts in Asia Through Big Data: Socioeconomic Spillover Assessment”](#) from 16 to 18 May 2022. The workshop was aimed at analyzing the socio-economic implications of infrastructure projects in the Asian region; assessing the role of big data in evaluating the spillover effects of infrastructure growth and the factors which influence infrastructure projects; and identifying post-COVID-19 infrastructure financing challenges and solutions. During the workshop, guest speakers and researchers presented research findings and explored the relevance of data for assessing and identifying the spillover effects of "soft and hard" and digital infrastructure. The potential spillover benefits are associated with innovation, jobs, attracting investment, housing, ecology, transport and other. The researchers briefed the audience on the importance of big data analytics in attracting private investment to meet post-pandemic needs.

 CAREC governments, industries, and development groups currently focus on value chain development. Such agencies expect that by developing value chains, they may create more revenues and job opportunities for diverse communities participating in industrial value chains, thereby reducing poverty and achieving policy objectives. To strengthen the national capacities on value chain development, the CAREC Institute, in partnership with the United Nations Industrial Development Organization and the ADBI, conducted the training course [“Industrial Value Chain Diagnostics for Policymaking”](#) from June 7 to 20, 2022. The module was an [online self-study course](#) consisting of self-paced learning units, further reading, assignments, and a final quiz. The training course allowed participants to acquire the necessary knowledge to analyze specific industrial value chains and develop necessary support programs. By performing the diagnostics, participants took a “wide-angle snapshot” of the value chain and the constraints and opportunities for its development. The information provided helps make strategic decisions at the program or project level to implement development support measures at different points of the value chain. Due to its integrated character, this diagnostic tool also enables various entities in governments and the development community to join forces and cooperate in developing value chains.





Special Economic Zones (SEZs) help in increasing the number of jobs, investment, production and exports of CAREC member countries. To improve the performance of SEZs in the CAREC region, on September 13-14, the CAREC Institute, together with the ADB, the World Free Zones Organization and the Ministry of Economic and Development of Mongolia, conducted a forum on “Developing Sustainable Economic Zones in the CAREC Countries” in Ulaanbaatar, Mongolia. The forum informed participants about the trends and concepts related to a new model of SEZs, which embrace sustainable development goals and target investments, contributing to more inclusive, green and resilient economies. Participants received up-to-date information on priority areas for the development of the new generation of SEZs and learned about innovative and sustainable practices of SEZs, national development policies and strategies. The forum participants agreed that the SEZs need to create the socially inclusive and just work conditions where workers can fulfil their potential in dignity and equality and have opportunities for skills development. And the environmental sustainability of the SEZs require healthy environments for all, resource conservation using the green infrastructure, protection from degradation, and sustainable consumption and production. The participants discussed about the characteristics and innovative and sustainable practices of the new generation of SEZs, responses to post-pandemic challenges and emerging opportunities of digitalization, onshoring of production, and ‘greening’ investments. Participants also learned about the best practices of the next generation of SEZs and building resilience and international cooperation to address global challenges, including the COVID-19 pandemic, climate change, and supply chain disruptions. Participants also shared own experiences in developing SEZs, promoting their sustainability and attracting investment, including public-private partnerships.



Trade plays a critical role in the growth and development of a country’s economy. To capture the impact of certain policies on trade, gravity models are one of the most utilized empirical methods. The gravity model explains extraordinarily well the spatial variation of observed trade, which separates trade flows into exporter-, importer- and bilateral characteristics. As the gravity model helps identify the main

factors that define the intensity of trade between the CAREC countries, the CAREC Institute, in collaboration with the ADB, conducted an [online self-study course on Gravity Modeling](#) (from November 3 to December 12, 2022) for government officials and experts from the relevant ministries and agencies of the CAREC member countries, whose work impacts the CAREC Program activities and promotes regional cooperation in the CAREC region. The main outcome of the course was to share knowledge modules, digital learning materials and products related to Gravity Modeling with the CAREC senior officials, experts, and decision influencers; to enhance the capacity and analytical skills of participants in effectively handling main issues and developing bottlenecks using the gravity model; and to support the member countries in the development of the regional cooperation.



Roads are one of the main assets that bring great benefits to the region as a whole, and their timely management, construction and renewal contribute to the development of regional trade and tourism. The CAREC Institute conducts a series of road safety workshops that began in Dushanbe in 2017, followed by development of manuals on road safety audit, safer road works, roadside hazard management and pedestrian safety (in 2018), workshops in Bishkek (March 2019), Tbilisi (April 2019), Hohhot, Inner Mongolia Autonomous Region of the PRC (September 2019), Tbilisi (for participants from Afghanistan, November 2019), individual online workshops for Mongolia (May 2020) and Kazakhstan (October 2021). Based on road safety manuals, the CAREC Institute has developed four Digital Learning Modules, which are available on the CAREC Institute's e-learning platform.

In 2022, the CAREC Institute, in partnership with the ADB, hosted an [online country-specific road safety workshop](#) with government representatives and road safety experts from Turkmenistan. The virtual workshop was divided into six sessions over three weeks in April. This country-specific workshop aimed at sharing best practices in the field of road safety engineering, including treating hazardous road locations (such as black spots), conducting road safety audits, and ensuring the safety on road construction sites. The workshop provided participants with necessary materials for policy advocacy and practical changes required at the national level.

Furthermore, to assist in improving the road assets management in the CAREC region, the CAREC Institute, in partnership with the ADB, launched two four-day [Road Asset Management \(RAM\) workshops](#) in Baku, Azerbaijan, on September 6-9, and in Tbilisi, Georgia, on September 12-15. This is the institute's first series of hybrid workshops since the global outbreak of COVID-19 bringing together in-person and virtually leading national experts with extensive experience in the road sector. The multi-session workshops were developed on the basis of the CAREC Institute's RAM maturity assessment of the CAREC countries conducted in 2021. The workshops aimed to conduct country reviews of the RAM implementation and further develop participants' skills on asset data collection, management and maintenance. During the workshops, participants learned about greenhouse gas emissions from road traffic and measures to combat them, as well as how to prepare a country-specific greenhouse gas emission reduction plan through enhanced RAM.

➤ The CAREC Institute also produced two knowledge adaptation products for the wider public audience through the Development Asia Platform on the issues related to foreign trade in the CAREC region. The first research summary on [“Analyzing the Factors that Constrain Trade Efficiency in CAREC”](#) provides information about the impediments and gaps that hinder the growth of regional trade and ways to reverse declining trade efficiency. And the second research summary on [“Harnessing the Export Potential of Indigenous Products to Lift Rural Economies”](#) provides lessons from Greater Mekong Subregion countries can help efforts to develop premium markets for Kazakhstan's halal lamb meat and Mongolia's camel wool.

➤ To share CAREC's knowledge of the region's international trade and privatization processes with the wider academic community, CAREC Institute's staff have published articles in international academic journals. Dr. Ghulam Samad, Senior Research Specialist of the CAREC Institute, co-authored a book chapter [“Advancement of Science and Technology: Future Prospect of Blue Economy”](#) in the book “The Blue Economy” and co-authored the article [“Public Sector Enterprises \(PSEs\) in Post-Privatization: Evidence from Pakistan,”](#) which was published in the Journal of Applied Economics.



## ROAD ASSET MANAGEMENT WORKSHOPS





## PUBLICATIONS IN 2022





## Participation in Advocacy Events

The staff of the CAREC Institute participated in 38 advocacy events - international conferences, forums and seminars organized by Institute's partner organizations, to present research results for new policy actions.



# FINANCIAL HIGHLIGHTS

The CAREC Institute's expenditure in 2022 was around \$3.91 million, less than the approved budget, mainly due to the impact of the ongoing pandemic situation. However, with pandemic restrictions easing, the CAREC Institute started organizing some physical events in the second half of the year. Overall, the CAREC Institute made full use of digital technology to strengthen its knowledge products and services.

**Table 1: CAREC Institute 2022 Expenditure (\$,000)**

<b>Expense categories</b>	<b>Amount (unaudited)</b>
Operational Activities and Program	241
Staff Salary and Benefits	2,749
Office Rental	844
Administrative Expenditures	75
Capital Expenditure	3
<b>TOTAL</b>	<b>3,912</b>



As usual, the PRC remained the main financial contributor. The CAREC Institute received a donation of \$3.24 million from the PRC Government and about \$807,000 from the Xinjiang Government in 2022. The CAREC Institute also received financial support of around \$404,440 from its partners, including ADB Technical Assistance, RKSI, Xiamen National Accounting Institute (XNAI), Islamic Development Bank (IsDB), etc. The financial and in-kind contributions from member countries and partners were critical in continuing the CAREC Institute's operational and institutional plans, consolidating its financial strength to make sure that the CAREC Institute continues to provide quality knowledge products and services to its member countries.

**Table 2: Partners contributions in 2022 (\$,000)\***

<b>Partners</b>	<b>Amount</b>
Asian Development Bank (ADB)	239.52
Regional Knowledge Sharing Initiative of the ADB (RKSI)	66.3
Islamic Development Bank (IsDB)	48
Xiamen National Accounting Institute (XNAI)	21.43
China Association of Trade in Services (CATIS)	15.19
Economic Scientific Research Institute (ESRI), Ministry of Economy of Azerbaijan	12
Center for Economic and Social Development (CESD), Azerbaijan	2
<b>TOTAL</b>	<b>404.44</b>

\* Unaudited estimates.

# STRENGTHENING OPERATIONS, POLICIES, AND PROCESSES

## HR MANAGEMENT

The rotation of the leadership of the CAREC Institute was carried out in accordance with the established rotation procedure. The institute completed the recruitment of Deputy Director One in March 2022, and a new Director joined the institute on 11 November 2022.

The CAREC Institutes employs 35 staff members: 3 management staff, 13 international staff, 16 national staff, and three secondees.

## FINANCIAL MANAGEMENT

The CAREC Institute issued its external audit report for the year ended 31 December 2021 that was reviewed and endorsed by the Budget and Audit Committee and Governing Council.

The financial software, including the fixed asset management module and salary information module, has been upgraded to the latest version, and the training for finance and administration team was organized.

## POLICIES AND PROCEDURES

CAREC Institute's Financial Manual was revised and updated in February 2022. The CAREC Institute updated its Publication Policy in September 2022 and developed a new Anti-Plagiarism Policy in December 2022.

# 2023 OUTLOOK



In 2023, the CAREC Institute will continue supporting the CAREC Program through research, knowledge generation and capacity building for effective regional cooperation. The CAREC Institute will deliver quality knowledge products to member countries, based on following principles: i) expanding research portfolio, ii) revitalizing capacity-building approach, iii) adopting innovative knowledge management approach, iv) improving partnerships and networks, v) adopting of digital approaches, and vi) ensuring quality assurance of its products and interventions.

The strategic approach of the CAREC Institute in programmatic planning is based on building in-house technical expertise around a few core themes selected from the five priority operational clusters of CAREC Strategy 2030, sector-focused strategies and new initiatives, and selecting relevant topics for knowledge interventions within the core themes. The CAREC Institute will remain flexible to offer demand-based technical knowledge services on any specific issue, keeping regional issues as a priority. The institute will integrate the post-COVID-19 situation, growing global uncertainty and new challenges as an overarching and cross-cutting themes in its activities.

The CAREC Institute will conduct research on six main topics:

- CAREC Region Trade Integration: CAREC FTA (Phase II).
- Building Robust Public Health Systems for Regional Integration – Lessons for CAREC region.
- Digital CAREC Phase III - Digital Economy with 4IR technologies.
- Regional Climate Vulnerability in CAREC and Perspectives for Regional Cooperation (Phase II, Stage 2).
- A roadmap for Fintech-Led Regional Financial Cooperation in the CAREC Region.
- Geopolitical Uncertainties and Their Socioeconomic Impact on CAREC Economies.

Capacity building will be closely linked to the research activities of the Research Division and the Chief Economist's team. The CAREC Institute will continue to optimize geographic coverage and leverage its E-learning platform to develop and deliver hybrid and blended learning capacity building programs. Priority areas for capacity building are water management, climate change, cross-border e-commerce, regional connectivity, and transport corridors.

Furthermore, the CAREC Institute will continue designing a practical road safety program to train trainers and form communities of practices in each CAREC country through collaboration with national and regional partners. The institute will deliver two core country-specific capacity-building workshops to meet the diverse capacity-building needs of the member countries.

The CAREC Institute will continue producing its annual reports, monthly newsletters, new quarterly research reviews, infographics, factsheets, corporate brochures, flyers, cover designs, posters, banners, and postcards in three languages: Chinese, English, and Russian. Institute's major knowledge products will be further shared in the form of briefs through the Development Asia Platform and individual advocacy campaigns with country members. The CAREC Institute will produce short videos, interviews, and knowledge product podcasts through social media platforms Weibo, LinkedIn, Apple and Google podcasts, and Facebook.





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