

# Newsletter

## High-Level Delegation of Xinjiang Visits the CAREC Institute

On May 15, a Xinjiang high-level delegation led by the Secretary of the Xinjiang Uygur Autonomous Regional Committee of the Communist Party of China, Mr. Ma Xingrui, and the Chairman of the Government of the Xinjiang Uygur Autonomous Region, Mr. Erkin Tuniyaz, visited the office of the CAREC Institute. Other accompanying members of the delegation were heads of various departments of the Xinjiang Government.

Mr. Kabir Jurazoda, Director of the CAREC Institute, welcomed the members of the high-level delegation on behalf of the institute and provided information about the CAREC Institute and its key achievements since its inception in 2006. He noted that the CAREC Institute has a unique opportunity to promote regional cooperation as an intergovernmental organization dedicated to generating and sharing knowledge among the CAREC countries. The institute is the knowledge support arm of the CAREC Program, which has mobilized \$41 billion in investments to establish multimodal transportation networks, increased energy trade and security, facilitated the free movement of people and freight, and laid the groundwork for economic corridor development. He noted the importance of the Xinjiang region to CAREC, being the hub of four important CAREC corridors that connect Xinjiang with Europe, the Mediterranean, the Russian Federation, South Asia, and the Middle East. At the same time, four of the six economic corridors of the Belt and Road Initiative run through the CAREC region. And more than 80% of CAREC rail and road transport passes through Xinjiang. "We believe that Xinjiang can reap significant economic benefits by further contributing to economic cooperation in the CAREC region," said Mr. Kabir Jurazoda.

Mr. Ma Xingrui welcomed Mr. Kabir Jurazoda as the new Director of the CAREC Institute and all foreign staff of the institute, who returned to Urumqi after the COVID-19 pandemic. Noting the importance of the institute's activities for the CAREC region and the Xinjiang region, he suggested the institute work more closely with the relevant departments of the Xinjiang Government, research institutes, universities, private sector, and business associations to prioritize areas of mutual interest among the key strategies of the PRC, Xinjiang and CAREC. "For their part, the Xinjiang Regional Government and the Municipal Government of Urumqi will provide the necessary support to the CAREC Institute to fulfill its mandate of promoting regional integration in the CAREC region," said Mr. Ma Xingrui.

Mr. Erkin Tuniyaz welcomed the return of foreign employees of the CAREC Institute to the city of Urumqi, noting the importance of their work in promoting economic cooperation in the Central Asian region. He emphasized that the Belt and Road Initiative and CAREC have common strategic directions, as the operational clusters of the CAREC Strategy are well aligned with the five-pronged approach of the Belt and Road Initiative. The first China-Central Asia Summit held in Xi'an will help expand opportunities for cooperation in the CAREC region. In this regard, he suggested that the CAREC Institute continue to work with its member countries to create effective links between CAREC and the Belt and Road initiative in the future.

Further, the parties discussed new directions and other issues of cooperation for the benefit of the people of the CAREC region.



Meeting with the high-level delegation of Xinjiang.

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## CAREC Institute attends the 56<sup>th</sup> ADB Annual Meeting



Meeting with ADB Vice President Mr. Shixin Chen.

Mr. Kabir Jurazoda, Director, and Mr. Josh Hu, Chief of Human Resources and Finance Division of the CAREC Institute, attended the 56th ADB Annual Meeting in Incheon, Korea. They held discussions with representatives of the Asian Development Bank (ADB), the ADB Institute (ADBI), the Export-Import Bank of China, the ASEAN+3 Macroeconomic Research Office (AMRO), the People's Republic of China (PRC) Poverty Reduction and Regional Cooperation Fund, CAREC national focal points from the People's Republic of China, Kazakhstan, and Tajikistan, and others.

On May 2, Director Kabir Jurazoda met with ADB Vice President Mr. Shixin Chen, ADB Director General for Central and West Asia Mr. Eugene Zhukov and Director General for East Asia Ms. Teresa Kho to discuss the possibility of organizing additional events of the CAREC Institute at the CAREC Ministerial Conference, strengthening the institute's internal capacity in line with its regional mandate and expanding knowledge services for CAREC member countries, promoting the role of organizing South-South knowledge exchange through cooperation with national and regional think tanks and CAREC member countries. ADB representatives stressed the importance of the CAREC Institute improving its research capacity and presenting its own research products. They also stressed that the institute should continue research in the field of regional cooperation and learning from the experience of neighboring countries. Mr. Kabir Jurazoda invited Vice President Mr. Shixin Chen to attend the 7<sup>th</sup> CAREC Think Tank Development Forum in Urumqi this August.

Productive individual meetings were held with Mr. Tetsushi Sonobe, Dean of the ADBI, Mr. Weihua Liu, Executive Director of PRC at the ADB, Mr. Kouqing Li, Director of AMRO, and others. During these meetings, the parties agreed to continue working on joint research and capacity building.



Meeting with the PRC Fund representative.



## CAREC Institute Presents at the SCO Forum on Poverty Reduction and Sustainable Development Program

On 29 May, Deputy Director One of the CAREC Institute, Dr. Huang Jingjing spoke at the Shanghai Cooperation Organization (SCO) Sub-Forum entitled Joint Efforts Towards Poverty Reduction and Sustainable Development, which was held in Yangling, Shaanxi Province, the People's Republic of China (PRC). Dr. Huang presented the related research findings and knowledge sharing activities of the CAREC Institute on the PRC's digitalization development and its impact on poverty reduction with other countries.

During her presentation, Dr. Huang Jingjing highlighted that CAREC economies, like many other nations in the world, have made great progress in poverty reduction and welfare improvement in the past few decades, but poverty has remained a serious curse. The PRC is successfully applying digital technologies for poverty reduction and the economic development of rural communities. There is a growing need to share lessons learned and success stories from the PRC with other countries of the CAREC region in order to achieve global targets on poverty reduction. "As a knowledge hub for the CAREC Program, the CAREC Institute contributes to global poverty reduction through the facilitation of policy dialogue, evidence-based research, capacity-building, knowledge-sharing, and networking and partnership with renowned think tanks and academia," said Dr. Huang.

The Sub-Forum was one of the three concurrent sessions under the plenary SCO Forum on Poverty Reduction and Sustainable Development Program, which was jointly organized by the Good-Neighborliness, Friendship and Cooperation Commission of the SCO, the National Rural Revitalization Administration of the PRC, and the People's Government of Shaanxi Province. Ms. Shen Yueyue, Vice-chairperson of the National Committee of Chinese People's Political Consultative Conference and Chairperson of the Good-Neighborliness, Friendship and Cooperation Commission of the SCO, Mr. Jamshid Kuchkarov, Deputy Prime Minister of Uzbekistan, Mr. Mirza Muhammad Afridi, Deputy Chairman of the Senate of Pakistan, Ms. Zhyldyz Polotova, Vice Minister of Labor, Social Security and Immigration of the Kyrgyz Republic, and other high-level officials and renowned guests participated in the forum.



Dr. Huang Jingjing speaks at the SCO Sub-Forum.

## CAREC Institute Holds Discussions on CAREC Green Economic Recovery

Beijing Greenovation Institute for Public Welfare Development, with the support of the Asia Foundation, in collaboration with the CAREC Institute, organized a workshop entitled "Charting a Pathway towards a Green, Climate-Resilient Economy Recovery in Asia in Post-COVID-19 Era" on May 30, 2023. The event brought together representatives from governmental think tanks, academia, multilateral development financial institutions and civil society organizations to discuss common areas for future cooperation among CAREC countries to accelerate the region's energy transition and green economic recovery. Participants also learned about China's experience in air pollution control, energy transition and green finance development.

Mr. Kabir Jurazoda, Director of the CAREC Institute, spoke about the challenges of climate change for regional development in his opening remarks. The CAREC region is one of the world's most vulnerable regions to climate change, with higher seasonal and geographic fluctuations in temperature and precipitation. The Director noted that the CAREC Institute is devoting considerable attention and effort to climate change research, especially for post-pandemic recovery. In 2022, the CAREC Program and the CAREC Institute worked together on the Post-Pandemic Framework for a Green, Sustainable and Inclusive Recovery, which was endorsed at the 21st CAREC Ministerial Conference. 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 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.



Representatives of the CAREC Institute speak at the workshop.



Dr. Asif Razzaq, Senior Research Fellow of the CAREC Institute, spoke about the challenges of energy transition in the CAREC region and the use of the Chinese experience. Central Asia and neighboring countries need more energy for their development, but climate change means they must reduce their carbon emissions significantly and accelerate the transition to clean energy. Dr. Asif Razzaq suggests that CAREC countries build on China's experience by developing a long-term strategy along with complementary short-term policies like China's 14<sup>th</sup> Five-Year Plan. Energy governance framework, along with a specific regulatory framework, is needed to implement the CAREC Energy Strategy 2030. Countries also need to implement a market-based emission control system and create a more favorable investment climate in the region through regional coordination to take advantage of economies of scale. Achieving this region-wide

optimization will require regional institutions, such as a regional load dispatch center to match regional supply and demand in real time. A specially constituted regional counterparty could facilitate and implement the renewable energy procurement and contracting processes and execute emission reduction contracts. This entity can then distribute accruing emission reduction revenues to help subsidize the vulnerable sections of populations across the region.

Deputy Director Two of the CAREC Institute Dr. Iskandar Abdullaev spoke on climate change and the development of the energy sector in Central Asia. He noted that the countries of Central Asia have shown much higher rates of temperature rise compared to the world average over the past hundred years, with an increase in the frequency of adverse natural disasters of a wide range. The countries of Central Asia are already experiencing high economic losses in the agricultural sector, and they need to prioritize investment strategies in the future and appropriate mitigation and adaptation mechanisms to reduce environmental impact and vulnerability of the population, especially, in rural areas. Appropriate adaptation and mitigation mechanisms should improve water use efficiency, support the establishment of early warning systems for climate-related extreme events, and promote the introduction of no-till technologies and crop diversification, afforestation, improved crop management, and regional cooperation is a prerequisite for effective adaptation.

The high reliance on fossils in energy production has a negative impact on the energy security and economic vulnerability of the region, as they occupy large shares in both energy production and foreign trade. Only 4 of the 11 countries in the CAREC region have a high share of hydropower use. CAREC governments recognize the importance of renewable energy and are strengthening energy security by diversifying their energy mix by increasing investment in renewable energy. However, the energy transition is slow due to the abundant availability of fossil fuels, dependence on low marginal cost hydropower, and the need for large investments to upgrade infrastructure. The Central Asian economy is already struggling with energy shortages, aging infrastructure and increasingly inefficient and unreliable energy generation facilities. Adding new capacity at the expense of the huge potential of all types of renewable energy sources will increase reliability and cover the energy demand in the future. Energy-rich countries are increasingly developing new renewable energy sources, gradually developing standard principles and methods, such as deregulating the electricity market and adopting special legislation. However, energy poor countries do not have financial resources and rely mainly on international grants and external financing for their development. "Therefore, the Central Asian countries need more regional collaboration on 1) technical, financial and other forms of coordinated activities aimed at the rehabilitation of existing and construction of new intra- and inter-regional energy facilities and infrastructure; and 2) harmonization of renewable energy policy standards and sharing of best practices in policy development and implementation," said Dr. Abdullaev.

## CAREC Institute Held Virtual Policy Dialogue on MSMEs Development Potential in the CAREC Region

On 10 May, the CAREC Institute, in partnership with ADBI, hosted a webinar on "Unleashing the Potential of MSMEs in the CAREC Region: Recommendations for Overcoming Barriers to Finance." The event aimed to discuss the barriers and opportunities faced by micro, small and medium enterprises (MSMEs) in the region and identify innovative solutions needed to support the development and financial inclusion.

MSMEs has a substantial share in the CAREC economies. The share of the registered MSMEs is around 90%. The MSMEs share in the GDP of the four CAREC economies namely Pakistan, Uzbekistan, Kazakhstan and Georgia is 40%, 51%, 31% and 61% respectively. The low share of the MSMEs in GDP indicates these economies are still dominated by large and state-owned enterprises. Still MSMEs support a big share of the employment in the CAREC region. MSMEs' share of the total employment in Pakistan, Uzbekistan, Kazakhstan, and Georgia is 80%, 74%, 39% and 64% respectively. Unfortunately, CAREC MSMEs are less integrated regionally and globally. The share of MSMEs who engaged in export and import for Pakistan is 14%, Uzbekistan 4%, Kazakhstan 6%, and Georgia 6%.

Dr. Jingjing Huang, Deputy Director One of the CAREC Institute, welcomed the speakers and participants of the workshop, and noted the important role of MSMEs in stimulating economic growth and development in the CAREC region through job creation, production of goods and services, and poverty reduction. Consequently, policymakers in the region have prioritized the development of MSMEs

and financial inclusion as key components of their national growth strategies. However, MSMEs face various challenges, including limited access to finance, disruptions in supply chains and changing consumer behavior. These challenges have been further intensified by crises and economic shocks such as the COVID-19 pandemic, global trade tensions, and conflicts.

Dr. Kamalbek Karymshakov, Vice-rector and Associate professor at the Kyrgyz-Turkish Manas University, provided an overview of MSME development in the CAREC region. He highlighted the negative impact of recent crises on MSMEs, including supply chain disruptions, rising labor and production costs, and trade diversion. He stressed that policies focused on regional economic cooperation, financial inclusion and digitalization could benefit MSMEs in the region.

Dr. Ghulam Samad, Senior Research Specialist of the CAREC Institute, talked about the coping strategies of MSMEs during the post-pandemic period. He emphasized that most MSMEs need to increase their own production, but the purchasing power of the population of individual countries and national demand are low due to crises. Thus, the business strategies of enterprises should focus on exploring new markets, potential customers, sales channels, digital transformation and the transition to online trading. More importantly, integrating MSMEs into the regional economy can provide greater economies of scale.

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Speakers of the Virtual Policy Dialogue on MSMEs Development Potential in the CAREC Region.



Dr. Shi Li, Associate Professor of Accounting and Vice Dean of the Xiamen National Accounting Institute, presented about how digital payment platforms and tools can be used to provide MSMEs in the region with greater access to finance, reduce the cost and complexity of financial transactions, and enhance financial inclusion.

Dr. Dina Azhgaliyeva, Research fellow of the ADBI, presented preliminary results from the ADBI household survey on family business and fintech use during the pandemic. The survey indicated (i) improved conditions for family businesses in 2022 compared to 2021, and (ii) an increased use of fintech in the CAREC region, which is related either to

the conditions of the family businesses or to the financial conditions.

During a subsequent session, representatives from the CAREC member countries shared their countries' experiences regarding MSME issues and key government policies to support the development of MSMEs. The event ended with a panel discussion with experts from international organizations, focusing on the role of foreign direct investment in the formation and development of the digital economy, the necessary measures to expand access to finance for MSMEs, as well as innovative financing models and technologies that can overcome financial barriers and support the growth of MSMEs.

## CAREC Institute Contributes to Discussion of Pakistan's National SMEs Policy 2021

On May 24, Dr. Ghulam Samad, Senior Research Specialist of the CAREC Institute, spoke at the webinar on "National SME Policy 2021 and its implication on international trade" organized by the Sustainable Development Policy Institute of Pakistan.

There are currently over 5 million small and medium enterprises (SMEs) operating in Pakistan which play a critical role in economic growth and development - they contribute 40% to GDP and 25% to Pakistan's total exports -- creating additional jobs, promoting human resource development, reducing poverty and income inequality and much more. Given this role of the SMEs, in January 2022, the Government of Pakistan launched the National SMEs Policy 2021, which is based on the adoption of a unified definition of SMEs, reform of the regulatory and tax

environment, and institutional restructuring. As a result, 112 reforms have been carried out to simplify the work of the SMEs and the corresponding tax regime, improve access to finance and skills of employees, empower women entrepreneurs, provide access to domestic and foreign markets, and others.

Despite this progress, there still problems exist in Pakistan's SMEs sector, such as high-interest rates for loans making borrowing expensive for startups, issues of blocking of letters of credit causing delays in the import of materials and equipment, outdated technology leading to low productivity, and access to the international market remains a problem due to lack of information, poor infrastructure, inadequate marketing, and logistics. To discuss these issues and find the necessary policy solutions, the Sustainable Development Policy Institute of Pakistan organized the workshop with the participation of national and international economists and policymakers.

During the panel discussion, Dr. Ghulam Samad spoke about how the National SMEs Policy in Pakistan can aim to support the growth and development of SMEs and what specific measures should be included in the policy to improve the competitiveness of Pakistani SMEs in the international market. He noted that Pakistan's authorities should: first, strengthen trade facilitation measures in the context of SMEs; second, promote manufacturing-based SMEs along with other SMEs; third, create and develop an entrepreneurial ecosystem for SMEs; and finally, enhance digitalization by improving digital infrastructure and regulations.



Participants of the webinar on Pakistan's National SME Policy 2021.

# CAREC Institute Holds a Country-Specific Workshop on Road Asset Management for the Kyrgyz Republic

On May 23, the CAREC Institute launched a four-day road asset management (RAM) workshop for the Kyrgyz Republic. The workshop is part of a series of country-specific workshops conducted by the institute in partnership with ADB in a hybrid format that brings together (in person and virtually) leading national experts with extensive experience in the road sector. The modules and other workshop materials are developed based on the CAREC Institute's RAM maturity assessment of the CAREC countries conducted in 2021.

The workshop was opened by Ms. Kanokpan Lao-Araya, Director of the ADB Resident Mission in the Kyrgyz Republic. She noted that the CAREC Transport Strategy 2030 places great emphasis on introducing effective road management practices in the region, improving regional connectivity, and sustainable development. To implement this strategy, CAREC countries have invested considerably in building transport infrastructure and optimizing the service life of road assets. To ensure efficient and sustainable road asset management in the region, national transport agencies of CAREC countries should work together to improve road asset management systems, while the ADB and the CAREC Institute continue providing support through research and capacity building to member countries.

In the opening session of the workshop, Dr. Iskandar Abdullaev, Deputy Director Two of the CAREC Institute, made the keynote presentation on CAREC's economic and transport corridors and their evolution into "knowledge corridors". He noted that, in promoting the "knowledge corridors", the CAREC Institute conducts various studies, capacity building, and knowledge sharing activities. In the area of cargo transport, the institute, jointly with the ADB, conducts the CAREC Corridor Performance Measurement and Monitoring assessments and policy advocacy with national governments to remove impediments to trade. The CAREC Institute's research products provide analysis of current economic issues and policy advice to national governments for economic growth. The CAREC Institute promotes knowledge sharing among CAREC countries to jointly address regional issues of environmental pollution, water resource management, and the impact of climate change. The CAREC Institute conducts capacity building activities and policy dialogues to help CAREC countries develop

climate change mitigation and adaptation strategies that promote sustainable development and improve the quality of life in the region.

The workshop is expected to provide participants with the skills to review the RAM implementation in the country and collect, manage and maintain asset data. Participants will learn about the issues of greenhouse gas emissions from road traffic and measures to combat them, including the development of a greenhouse gas emission reduction plan through enhanced RAM for the Kyrgyz Republic. A series of country-specific workshops help build groups of national asset managers in each CAREC country, and ultimately throughout the CAREC region, who can support each other in RAM and promote collaboration through a committed community of practices.



Participants of RAM workshop for the Kyrgyz Republic.

## CAREC Institute Staff Speaks at the 7<sup>th</sup> Global Cross-border E-commerce Conference in Zhengzhou

On May 10, a delegation from the CAREC Institute, consisting of Mr. Kabir Jurazoda, Director, Dr. Ilhom Abdulloev, Senior Knowledge and Research Connectivity Specialist, and Mr. Huang He, E-Learning Specialist, attended the 7<sup>th</sup> Global Cross-border E-commerce Conference in Zhengzhou, Henan Province, the PRC. The conference aimed to build consensus, enhance cooperation, and map out the future of the global cross-border e-commerce industry. The event, which included six parallel forums, was jointly organized by the Department of Commerce of Henan Province, Zhengzhou Municipal Government, China Association of Trade in Services and several research institutes.

Director Kabir Jurazoda delivered opening remarks at the Cross-border E-commerce Innovation and Development Forum. Mr. Jurazoda provided background information about the CAREC Institute and its main activities. His presentation highlighted the challenges of developing cross-border e-commerce in Central Asian countries, such as the high proportion of Internet users who do not shop online, poor performance in postal and logistics services, and weak e-commerce legislation. He suggested enhancing skills training in the CAREC region and stressed the importance of sharing Chinese experience. As an example, he cited the training program "Sharing Chinese Best Practice in

Cross-border E-commerce," which was jointly organized by the CAREC Institute, the China Association for Trade in Services, and ADB's Regional Knowledge Sharing Initiative in 2022.

Dr. Ilhom Abdulloev spoke at the Cross-border E-commerce Industry and Education Integration Forum on the need to share e-commerce knowledge not only between universities and TVET schools in the CAREC Region, but also to inform national policy makers about best policy and legislative practices. Dr. Abdulloev shared information about the CAREC Institute's e-commerce research reports which were produced in partnership with various international think tanks and financial institutions. He also provided information on 10 different capacity building activities related to e-commerce which were implemented by the CAREC Institute in partnership with different institutions over the past two years. Dr. Ilhom Abdulloev invited PRC e-commerce enterprises, universities, research institutes, and technical and vocational schools to cooperate with the CAREC Institute and educational institutions in Central Asia. Collaboration can include not only assistance in curriculum development and trainings, but also the organization of exchange programs, international summer camps, hackathons, and international internship programs for students from the CAREC region.



Mr. Kabir Jurazoda speaks at the 7th Global Cross-border E-commerce Conference



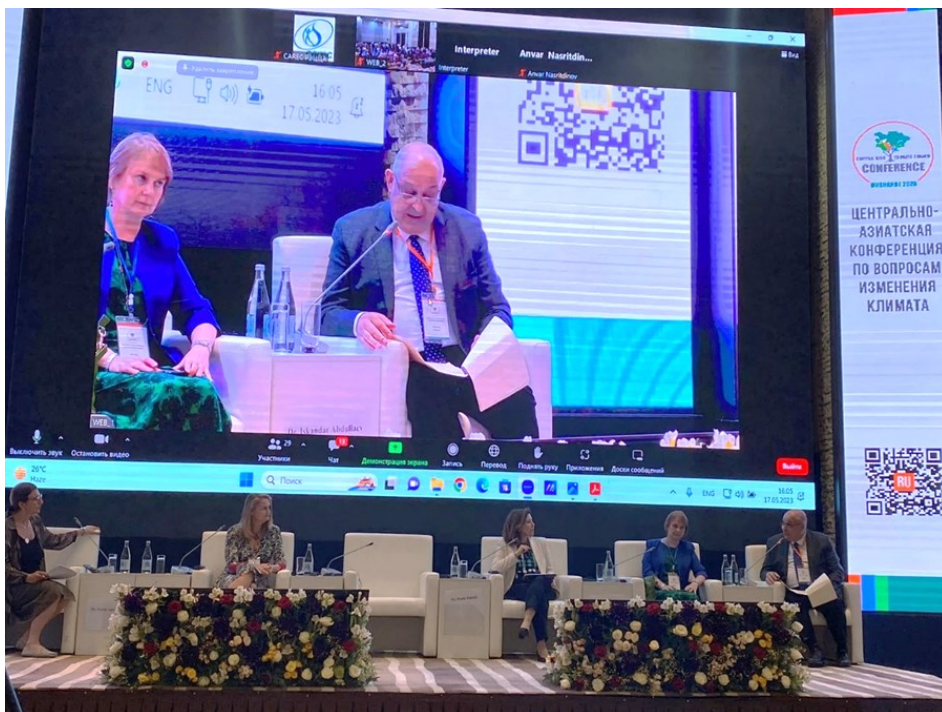
## CAREC Institute Presents at the Central Asia Climate Change Conference

On May 17, Deputy Director Two of the CAREC Institute, Dr. Iskandar Abdullaev, spoke at the Central Asia Climate Change Conference: “Climate Change and Development.” The conference aimed to exchange information on progress, challenges and gaps in implementation of climate commitments by the Central Asian countries, governance and financial arrangements for the implementation of sector-specific strategies at the national and local levels, and available platforms for regional climate coordination and cooperation.

The conference participants discussed the potential for regional collaboration and learned about the outcomes of participation of the Central Asian countries at the UNFCCC COP27, as well as plans for COP28. National government officials and international development partners exchanged views on the challenges and opportunities of strengthening water, energy, food, and environmental (WEFE) sustainability in the context of climate change and the implications of the WEFE nexus approach.

A rapidly changing climate is adversely affecting the Central Asian region due to harsh and unique conditions combined with extensive agriculture, aging infrastructure and high population growth. During a panel discussion on “Climate financing: needs and opportunities,” Dr. Iskandar Abdullaev noted that the highest economic losses in the countries of Central Asia are seen in the agricultural sector. Therefore, in addition to supporting climate change mitigation and adaptation activities aimed at reducing environmental externalities, vulnerability of population, especially in rural areas, Central Asian countries should prioritize investment strategies and attract climate finance from the private sector using different financial tools and mechanisms. Climate finance will help countries in the region move towards a low-carbon and climate-resilient economy, reduce greenhouse gas emissions, and adapt to the impacts of climate change.

Dr. Abdullaev noted the key role of international climate finance in supporting ambitious elements of nationally determined contributions of the countries of Central Asia. The establishment of a Regional Climate Fund to support climate change mitigation and adaptation will help the sustainable development of rural areas in Central Asia. International climate finance should also support efforts at the regional level to address the negative impacts of climate



Dr. Iskandar Abdullaev speaks at the Central Asia Climate Change Conference.

change on water, energy, and food security, promote market-based mitigation mechanisms and regional carbon markets, develop region-wide cooperation on renewable energy development, and implement climate-smart projects.

However, there are some barriers that hinder climate investment in the region, such as (i) the limited knowledge and skills required to attract international climate finance, (ii) the absence of medium and long-term vision plans on climate financing at the regional and national levels, and (iii) low efficiency of the utilization of the current climate financing.

Dr. Abdullaev suggested implementing more capacity-building activities and improving access to information about new funding opportunities. Countries and international financial institutions should consider developing priority climate vision and financing plans both for the region and at the national level. “Structural reforms should be easy to implement, promote climate finance from the private sector, and improve the efficiency of climate investments,” said Dr. Abdullaev.

## CAREC Institute Meets the Visiting Delegation

On May 22, a joint delegation from the Center for International Knowledge on Development of the People's Republic of China (CIKD) and the Xinjiang Policy Research Office visited the CAREC Institute to discuss the areas of research cooperation and knowledge sharing.

Mr. Kabir Jurazoda, Director of the CAREC Institute, welcomed the members of the delegation and presented the history of formation, strategic objectives, and key achievements of the institute. He noted that research is one of the main pillars of the CAREC Institute's mission, through which the institute attempts to identify the most pressing challenges facing the region and offer policy recommendations to address them. The institute's research products include research reports and journal articles that provide analysis and interpretation of CAREC regional trends and challenges, and policy and economic briefs that provide research summaries with policy options. To promote research collaboration in the region, the CAREC Institute supports the Visiting Fellowship Program and Research Grants Program. The institute hosts its annual Think Tank Development Forum to discuss key policy issues facing CAREC member countries and research conferences to provide an opportunity for researchers from the region to discuss

their research work and liaise with other researchers. Institute's periodic publications include i) the Quarterly Economic Review with the latest available financial and economic data, ii) the Annual Book, which comprises an array of analytical works with policy recommendations, as well as iii) the e-newsletter which provides monthly updates on the institute's activities and shares the results of recent research. The institute organizes regular policy dialogues and capacity building trainings using a modern e-learning platform in Chinese, English and Russian.

CIKD Vice President Ms. Zhang Jin presented the mission and activities of the center. The CIKD is an independent institution affiliated with the Development Research Center of the State Council of the People's Republic of China. The center's mission is to become a key member of the global knowledge network for development, to research and transfer Chinese development knowledge for global development. Its main functions include: 1) bringing together Chinese and international research resources; 2) conducting research on development theories and practices; 3) organizing the exchange of research findings on international development issues, including the implementation of the UN 2030 Agenda for Sustainable Development. In 2020-2021, the center conducted several important studies on China's experience in poverty reduction, urbanization, promotion of development zones, implementation of the 2030 Agenda for Sustainable Development, and others. The center also organizes forums and seminars to share best practices of China's economic development policy with other countries.

Further, the parties exchanged views and ideas on the prospects for cooperation in conducting joint research and sharing knowledge and best practices of the economic development policies of the PRC with other countries in the CAREC region.



Meeting with the PRC's Center for International Knowledge on Development and the Xinjiang Policy Research Office.



# CAREC Institute Contributes to China's Digital Finance and Green Growth Policy Debate

On May 24, Dr. Asif Razzaq, Senior Research Fellow of the CAREC Institute, spoke at the China-Shanghai Cooperation Organization Digital Technology Cooperation and Development Forum hosted by the Ministry of Industry and Information Technology of the People's Republic of China in Karamay, Xinjiang. The forum was aimed at developing cooperation in the field of digital technologies between the member countries of the Shanghai Cooperation Organization. The participants discussed the development of the digital economy, digital low-carbon energy, digital infrastructure, digital culture, the use of digital technologies and big data.

Dr. Asif Razzaq's presentation was on "Uncovering the Intersection of Digital Finance and Green Growth in China using Big Data." He talked about how digital finance drives green growth and how this relationship differs across regions in China. He mentioned that green growth is an imperative institutional guarantee and essential underpinning for transforming a crude economic growth model and realizing the green development agenda. It can bridge the link between the "economy" and the "environment" and decouple economic growth from ecological hazards. China adheres to the practice of green growth in various fields and has achieved certain results. At the same time, financial resources are a determining factor in empowering the green economy towards green growth. And digital finance, enhanced by digital technologies and integrated with traditional financial industries, expands financial inclusion, contributes to the efficient allocation of financial resources and the achievement of equitable development.

He shared the results of his latest research revealing an inverted-U relationship between inclusive digital finance and green growth in China. The marginal effect of digital finance development is highest when green growth is low-medium and decreases when green growth is high. This suggests that with high green growth, the financing structure, channel, and amount are already developed and saturated. Digital finance has positively impacted green growth in China by reducing energy poverty and improving the digital transformation of enterprises. A significant positive effect of digital finance is observed in the eastern and central regions and to a lesser extent in the western region, due to the abundant and concentrated resources, technical capabilities and environmental protection mechanisms that facilitate this connection in the developed eastern and central regions. The Western region is underdeveloped, and its level of

market economy development is lower, which limits the role of digital finance in promoting green growth.



Presentation by Dr. Asif Razzaq at the China-SCO Digital Technology Cooperation and Development Forum

Based on his research, Dr. Asif Razzaq recommends further promoting the deep integration of digital technology and financial business and strengthening digital finance oversight to ensure the efficient operation of digital financial services in a green economy. Local governments should consider and internalize the impact of the digital financial channel to reduce energy poverty and increase the digitalization of enterprises. Funding should be directed towards clean and sustainable technologies, research and development, and corporate products to optimize energy development efficiency and use efficiency. The digital finance development model, supported by digital technologies, with the participation of various financial actors should be widely promoted to strengthen the role of digital finance in enhancing green growth opportunities. Public-private partnerships are needed to strengthen digital infrastructure in less developed regions and to develop fintech companies. Underdeveloped regions should use the experience of developed regions in building digital finance and digitalization of local enterprises. It is also necessary to reform the financial supervision system in line with the latest developments and establish a scientific risk management system to maximize the positive impact of digital finance on green growth.



## CAREC Institute Presents Its Research at the First SDSN Kazakhstan Conference

On May 30, Deputy Director Two of the CAREC Institute Dr. Iskandar Abdullaev presented the results of the institute's latest research at the 1st SDSN Kazakhstan Conference on Sustainable Development Goals in Central Asia.

CAREC Institute's research report "Water Infrastructure in Central Asia: Promoting Sustainable Financing and Private Capital Participation" notes that Soviet-era water infrastructure in Central Asia is becoming obsolete. Water leakage has become a problem, with some systems reporting water loss rates of up to 60 percent. Ownership of water infrastructure is largely public, although maintenance and operation costs are borne by various entities and are supported through various financial mechanisms. Water supply systems are not attractive to private investors, and private sector participation in the water sector is also constrained by agricultural policies and land ownership issues, as agricultural water supply in the Central Asian countries is considered a social function of the state. There is a decline in funding for the water sector and delayed operation and maintenance has led to a serious deterioration of the water infrastructure. Fees for water use have been introduced in all countries of Central Asia, but they are symbolic and do not cover the operating costs of water. Service fees charged by state water organizations are not collected in full, as water users do not want to pay for unreliable water supply.

Therefore, Central Asian countries need new technical solutions, new policy and economic frameworks to promote cooperation and integrated planning across sectors and regions. Intersectoral collaboration and integrated planning help reduce costs, evaluate trade-offs, demand-side intervention and decentralized services to ensure infrastructure and sector sustainability.

Based on the research results, Dr. Iskandar Abdullaev suggested that the Central Asian countries create a favorable investment environment for the private sector, including a regulatory framework and effective interaction with government agencies, regulators, communities and other stakeholders in decision-making. In an era of transparency, it is essential to disclose critical information through openness and radical engagement with civil society and businesses. Agricultural policy also needs to be improved to allow the sector to become more market oriented, and unregulated policies may encourage private companies to invest in water services. Engaging the private sector can lead to more technological innovation in the water sector. The long-term effectiveness and sustainability of infrastructure is inextricably linked to how well stakeholders integrate and collaborate with each other, both across the relevant government agencies and others.

*"Capacity building and technology integration are key to improving both the operation and maintenance of water infrastructure and the provision of professional water services. And digitalization and wider application of new digital approaches in the water sector will increase the efficiency of the development and use of water resources,"*

Dr. Iskandar Abdullaev.

## Research Digest: Energy Transition in the CAREC Region

The research report "*Sustainable Pathways to Energy Transition in the CAREC Region: A Governance Perspective*" looks at opportunities for regional cooperation to optimize the use of renewable energy resources and grid networks to accelerate the energy transition in the CAREC region. The energy transition from an electricity system dominated by fossil fuel combusting plants to a world increasingly reliant on electricity generated by renewable energy technologies must be "pushed" by policies, as well as "pulled up" by changes in technology, price, or consumer preferences.

The absence of advanced institutional and regulatory frameworks is still a cause for concern among investors and might continue to deter investments into individual countries within the CAREC region. Electricity demand is projected to grow in the CAREC region excluding China from an index value of 100 in 2015 to an index value of 228 in 2050, representing a compound annual growth rate of 2.4 percent over this period. If the fleet of generating assets were to continue to operate at efficiency factor levels close to efficiency factors

observed in 2018, and if each country were to attempt to attain self-sufficiency in generation, the region would require the addition of an estimated 192,000 MW in incremental capacity by 2030 to replace some 80,000MW of fossil fuel fired generation.

The study has developed an alternative scenario to demonstrate the beneficial effects of regionwide optimization of electricity demand and supply. Demand is aggregated across time zones to smoothen the so called 'duck curve' observed for individual member countries. Supply is presumed to continue from hydropower and non-hydropower plants and from wind energy generation and solar photovoltaic plants that are optimally located within the region with a view to maximizing the efficiency of asset use. Such regionwide optimization of supply to meet regionwide aggregated demand necessitates the addition of about 153,000MW of non-hydro renewable energy options to replace some 80,000MW of fossil fuel fired generation.

Continued on the next page 

In this scenario, larger energy markets in the region, including Pakistan and Kazakhstan, are presumed to serve as intermediate residual consumers and suppliers, while China is presumed to serve as the ultimate residual consumer and supplier, absorbing surpluses, and bridging deficits in the region, and thereby pre-empting the build-up of large storage capacity on the one side and the construction of peaking plants on the other.

They suggest the countries of the region to coordinate electricity generation and supply policy frameworks, governance structures, pricing schemes, and attendant technical infrastructure. Among other things, policy frameworks need to provide stability and assurances of compensation through appropriate remedial measures and suitable payments to ward off any adverse consequences emanating from the curtailment of supplies, from premature and unilateral termination of the power purchase agreements (PPAs) (by counterparties executing such PPAs), against changes in the policy principles and regulatory frameworks implemented subsequent to the execution of the PPAs, currency and repatriation risks, and against other such

factors over which project investors have little control. Realtime matching of regionwide demand and supply could be brought under the purview of the regional load dispatch center. Likewise, a distinct legal entity could be created to serve as the counterparty to implement the procurement and contracting process and to meet the legal and commercial obligations within the PPA, including ensuring periodic payments against the power supplied by the independent power producers. As a corollary to this, emission reduction contracts and revenues would also have to be channeled to such a regional entity, and such revenues flowing from meeting emission reduction commitments might help subsidize the vulnerable sections of populations across the region. In addition to developing regionwide network expansion plans, harmonizing governance structures and standards, and implementing transmission projects, the proposed Central Asia Transmission Cooperation Association could potentially play a part in coordinating between the load dispatch center and the procurement and contracting agency as envisaged herein.

## Research Digest: CAREC Regional Integration Index

*The CAREC Regional Integration Index (CRII) 2021* report by Hans Holzhacker, Kamalbek Karymshakov, and Shiliang Lu discusses integration trends in the CAREC region by comparing data over different time periods across six dimensions: 1) trade and investment, 2) money and finance, 3) regional value chains, 4) infrastructure and connectivity, 5) free movement of people, and 6) institutional and social integration. The CAREC Institute developed the CRII based on the Huh and Park Asia-Pacific Regional Cooperation and Integration Index in 2017 to measure the depth and breadth of regional economic cooperation among the 11 CAREC member countries. The CRII ranges from 0 to 1, with 0 representing the lowest integration, 1 highest.

The CRII indicates moderate progress in integration in the region over the past 15 years. The CRII averages 0.344 over the 2006-2019 period, marginally up from 0.337 for 2006-2016, the period covered by the CAREC Institute's previous CRII report. There is an increase in all six dimensions of the CRII, except for 'institutional and social integration', which shows a marginal decrease.

Excluding the PRC, the index values are 0.310 for 2006-2019 and 0.308 for 2006-2016, indicating some marginal integration progress. However, excluding the PRC, the CRII scores are significantly lower than those including the PRC, underlining the fact that the PRC is an important factor for the CAREC region's integration.

There has been some acceleration in integration since

2013, mostly thanks to 'regional value chains' and 'infrastructure and connectivity.' Integration is the highest, and increasingly so since 2011, in 'regional value chains.' Excluding the PRC, integration is the highest and slightly increasing in 'infrastructure and connectivity,' along with 'regional value chains.' The lowest integration is observed in the dimensions 'money and finance' and 'trade and investment,' including as well as excluding the PRC. For most CAREC countries CRII scores increased marginally between 2006-2016 and 2006-2019. There are slight declines for Pakistan and Uzbekistan, and, excluding the PRC, also for Turkmenistan. The reason is that for Pakistan there was a fall in 'infrastructure and connectivity' scores, but from relatively high levels. Uzbekistan and Turkmenistan saw some decline in 'regional value chains' because trading partner product diversification grew faster than their own.

The report concludes that some progress has been made in CAREC integration over the past decade and a half, but very moderately. Therefore, CAREC integration should move forward more vigorously, and cooperation between CAREC countries should be taken to a new level. Regional cooperation, the exchange of views and ideas, and mutual learning will be essential to the success of close economic integration. The CAREC Institute continues to support economic cooperation in the region through research, capacity building, and knowledge sharing activities related to the CAREC agenda.

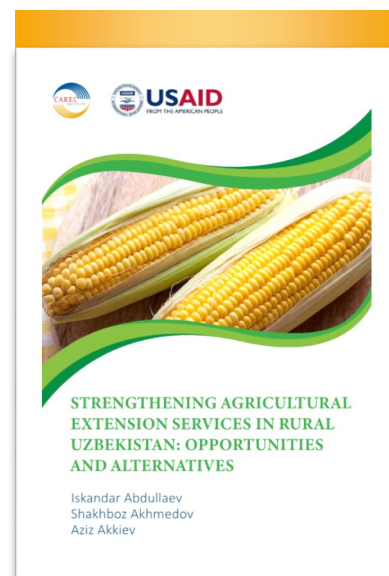
# New Research Report on Agricultural Extension Services in Rural Uzbekistan

CAREC Institute's new report *"Strengthening agricultural extension services in rural Uzbekistan: opportunities and alternatives,"* written by Iskandar Abdullaev, Shakhboz Akhmedov, and Aziz Akkiew, discusses agricultural extension services, the role of research in the sector, and the current state of research and extension services in Uzbekistan.

The recent set of reforms in Uzbekistan extends the commercial scope of agricultural production, provides more space for farmers to produce crops of their choice, and opens markets for trading. However, agriculture requires knowledge and skillsets from farmers to understand the basic concepts necessary for better productivity; these include water management, entomology, and crop science. Also, advances in machinery have expanded the scale, speed, and productivity of farm equipment, leading to more efficient land cultivation. This requires everyone involved to be well versed in technological advancements and backed up by a sustainable infrastructure.

The current state of extension services in Uzbekistan is not sufficient to support both the increasing production of the sector and address the challenges it will face in the near future. Therefore, fresh approaches are needed, and new types of extension services must be built up, based on both public and private initiatives. The use of innovative methods such as ICT based extension services could help to improve long-term and high performing agricultural extension services. Most farmers usually lack such skills and are prepared to purchase such expertise in the market. Yet, the current agricultural services market does not have a strong extension services component.

The authors suggest supporting new alternatives to the currently diverse extension services system. Increasingly digital, commercially driven, supply-based extension services would be more durable and affordable for rural Uzbekistan. Offering incentives and support to the private sector players will bring quicker and more long-term solutions to the development of extension services.



## ANNOUNCEMENT

### Call for Book Chapters for the Third CAREC Institute Research Conference – Deadline Extended

The CAREC Institute has extended the deadline for submission of book chapters for the Third CAREC Institute Research Conference until June 16, 2023. Potential authors are invited to submit original research articles, case studies, and reviews pertinent to the topics of the conference.

The submissions will be commissioned by the Publication Board and External Review Board of the CAREC Institute, comprising independent reviewers with solid research and professional experience. Upon acceptance, the selected manuscripts will be presented at the Third CAREC Institute Research Conference "Prospects for an Inclusive Green Growth and Sustainability in the CAREC Region" on September 5-6, 2023 (tentative dates) and published as chapters of the digital CAREC Institute Annual Book.

Timeline of paper submission and activities is:

16 June 2023	Receipt of abstracts
30 June 2023	Notifications of accepted abstracts
17 July 2023	Receipt first drafts of manuscripts
10 August 2023	Feedbacks to first draft of manuscripts
5-6 September 2023	Third CAREC Institute Annual Research Conference
15 September 2023	Receipt of final drafts of manuscripts

For more information, including topics of papers, submission procedure, paper format, structure, style, and referencing guidelines, please see [the following document](#).

For any question, please contact Ms. Emma Tong at [emmat@carecinstitute.org](mailto:emmat@carecinstitute.org).

#### About CAREC Institute

The Central Asia Regional Economic Cooperation (CAREC) Institute is an intergovernmental organization dedicated to promoting the economic cooperation in the Central Asia and along the Silk Road through knowledge generation and sharing. The CAREC Institute is jointly shared, owned, and governed by eleven member countries.

The institute acts as a knowledge connector among the five CAREC themes—economic and financial stability; trade, tourism, and economic corridors; infrastructure and economic connectivity; agriculture and water; human development—to ensure coherence in design and implementation of policies, programs, and projects to promote regional economic cooperation and integration.