



The Silk Road Knowledge Dialogue

Tbilisi Silk Road Forum



22 October 2019
Tbilisi, Georgia

Disclaimer

The CAREC Institute policy dialogue and workshop proceedings series is a forum for stimulating discussion and eliciting feedback on ongoing and recently completed research, policy dialogues, and workshops undertaken by the CAREC Institute staff, consultants, or resource persons. The series deals with the key economic and development issues, particularly those facing the CAREC region, as well as conceptual, analytical, or methodological issues relating to project/program economic analysis, and statistical data and measurement.

This policy dialogue proceedings emerged from a session on the Silk Road Knowledge Dialogue in the framework of the Tbilisi Silk Road Forum which was held under the patronage of the Prime Minister of Georgia, H.E. Giorgi Gakharia during 22-23 October 2019 in Tbilisi, Georgia. The session was organized jointly by the Asian Development Bank (ADB) and the CAREC Institute to generate a dialogue on the role of knowledge corridors in strengthening economic corridors along the Silk Road.

The views expressed in this paper are the views of the policy dialogue participants and do not necessarily reflect the views or policies of the CAREC Institute, its funding entities, or its Governing Council. The CAREC Institute does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with the CAREC Institute official terms.

This paper is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <https://creativecommons.org/licenses/by/3.0/igo/>. By using the content of this publication, you agree to be bound by the terms of this license. This CC license does not apply to other copyright materials in this paper. If the material is attributed to another source, please contact the copyright owner or publisher of that source for permission to reproduce it. The CAREC Institute cannot be held liable for any claims that arise as a result of your use of the material.

Central Asia Regional Economic Cooperation (CAREC) Institute
No. 376 Nanchang Road, Urumqi, Xinjiang, the PRC
f: +86.991.8891151
LinkedIn
km@carecinstitute.org
www.carecinstitute.org

TABLE OF CONTENTS

| | |
|------------------------|----|
| INTRODUCTION..... | 4 |
| OVERVIEW..... | 5 |
| AGENDA..... | 7 |
| BIOGRAPHIES..... | 8 |
| KEYNOTE SPEECH..... | 11 |
| PANEL DISCUSSIONS..... | 12 |
| CONCLUSION..... | 20 |

INTRODUCTION

The Tbilisi Silk Road Forum side event - *Silk Road Knowledge Dialogue* – was organized as an intellectual discourse platform among the governments, development partners, think tanks, and university representatives to share thoughts about building knowledge corridors along the economic corridors of the Silk Road.

The event was co-organized by the Central Asia Regional Economic Cooperation Institute (CAREC Institute), Asian Development Bank, and the Ministry of Economy and Sustainable Development (MESD) of Georgia on 22 October 2019 in Tbilisi, Georgia, in line with the Tbilisi Silk Road Forum: Partnership for Global Impact – a biennial international forum hosted by the Government of Georgia for multilateral high-level dialogue among senior policymakers, and business and community leaders to discuss important issues on trade and connectivity, examine challenges facing countries along the New Silk Road connecting East and West, and find common solutions that have a positive impact on the region and the global economy.

The event was inaugurated by the keynote speech of the ADB Vice President Mr. Shixin Chen, and moderated by the CAREC Institute Deputy Director Two Dr. Iskandar Abdullaev. The high-level panel included Mr. Akaki Saghirashvili - Deputy Minister for Economy and Sustainable Development (MESD) of Georgia, Mr. Sukhrob Mirzozoda - First Deputy Minister for Transportation of the Republic of Tajikistan, Dr. Taleh Ziyadov – Director General of Port of Baku of Azerbaijan, Dr. Tamar Sulukhia - Director of ISET Policy Institute of International School of Economics at Tbilisi State University, Dr. S. Sohail H. Naqvi - Rector of the University of Central Asia, and Dr. Siddharth Saxena - Chair of the Central Asia Forum of Cambridge University.

The knowledge dialogue is an outcome of joint efforts by MESD, CAREC Institute, and ADB teams, led by Mr. Tarash Papaskua, Acting Head of Department for Trade Development and International Economic Relations of MESD, Dr. Iskandar Abdullaev, CAREC Institute Deputy Director Two, and Mr. Saad Paracha, ADB Senior Regional Cooperation Specialist. Other team members include Ms. Sarah Cueno, ADB CWRD Consultant, Ms. Ekaterina Koroshinadze, ADB Georgia Regional Cooperation Specialist, and Mr. Batsaikhan Zagdragchaa, CAREC Institute Senior Strategic Planning Specialist.

OVERVIEW

Knowledge corridors can be visualized as an interconnected web with virtual destinations, thoughts and ideas of knowledge enablers (government), knowledge articulators (sector experts), knowledge generators (research entities), and knowledge transformers (business sector) to translate knowledge into tangible gains. The idea of knowledge corridors is to harness this immense potential, develop directional frameworks, and translate knowledge into tangible gains.

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

The governments play a critical role in the development of knowledge corridors. They can trigger the process and enable it all along the way, promote domestic knowledge networks, develop demand for knowledge, and make adequate budgetary allocations for investment in knowledge.

The think tanks play an instrumental role in helping governments make informed policy choices. There are more than 500 think tanks in CAREC region, both independent and government-funded, who are playing an important role to close the knowledge gap between government and other stakeholders. Think tanks can process academic research to present it as a policy advice or as user-friendly information for governments and businesses.

The universities develop high skilled professionals for job markets, and high-quality research. Additionally, they can contribute to knowledge hubs and corridors through diversification of their research portfolios by adding topics and themes to their curricula, in which businesses have shown interest.

The development partners play a substantial role in knowledge generation, knowledge sharing, linking knowledge actors and mobilizing necessary technical and financial support as they possess good deposit of knowledge, experience, resources, and connections. In this regard, development partners may play a critical role in supporting the building blocks of knowledge corridors.

The central idea of knowledge corridors is to make knowledge a profitable commodity or convert “data to dollars.” Currently, the private sector in the CAREC region is not equipped with necessary resources, plus investments in innovation are limited. Ideally, the data generated by universities, think tanks, and businesses will be converted into profits and reinvested into knowledge. This would be particularly useful for start-ups.

Rapid advancement in information and communication technology, reduction in time and cost, better access to information and data sharing, and higher connectivity and mobility facilitate knowledge exchange and partnership at a greater degree. The region with its comparatively young and well-educated population can significantly benefit from these emerging platforms for knowledge sharing and exchange.

The Silk Road Knowledge Dialogue brought senior representatives from governments, academic institutions, think tanks, and regional institutions to elaborate on the concept of knowledge corridors, which was initiated by the CAREC Institute during the third CAREC Think Tanks Development Forum in 2018 in Bishkek, Kyrgyzstan.

The policy dialogue focused on the following questions:

- i. How can knowledge corridors support regional economic cooperation and businesses along the Silk Road effectively?
- ii. What is the role of governments, development partners, think tanks, research institutions, and businesses in building and sustaining the knowledge corridors?
- iii. What are the steps that Governments are taking in order to promote regional cooperation and economic corridors?
- iv. Importance and benefits of CAREC strategies, particularly CAREC Transport Strategy 2030, and how governments and the CAREC Institute can make the best use of its knowledge component.

Given the significance of connectivity and infrastructure in economic growth, the dialogue noted the importance of digitalization, centers of learning, role of human interaction, knowledge hubs, knowledge absorption capacity, role of knowledge in value-chains, benefits of corridors, roles and mutual support of different knowledge players, building trust for better partnership in the context of CAREC region and along the Silk Road.

The Silk Road Knowledge Dialogue participants in Tbilisi, Georgia



AGENDA

16:30 – 16:40

Opening Remarks

Mr. Shixin Chen, Asian Development Bank (ADB) Vice President

16:40 – 17:50

Panel Discussion

Moderator: Dr. Iskandar Abdullaev, Deputy Director Two, CAREC Institute

Panelists:

- Mr. Akaki Saghirashvili, Deputy Minister, Ministry of Economy and Sustainable Development, Georgia
- Mr. Sukhrob Mirzozoda, First Deputy Minister, Ministry of Transportation, Republic of Tajikistan
- Dr. Taleh Ziyadov, Director-General, Port of Baku, Azerbaijan
- Dr. Tamar Sulukhia, Director, ISET Policy Institute, International School of Economics at Tbilisi State University
- Dr. S.Sohail H. Naqvi, Rector, University of Central Asia
- Dr. Siddharth Saxena, Chair of Central Asia Forum, Cambridge University

17:50 – 18:10

Discussions, Q&A session

18:10 - 18:20

Closing remarks: Way forward for knowledge cooperation along the Silk Road

BIOGRAPHIES

KEYNOTE SPEAKER

Mr. Shixin Chen, Vice President of the Asian Development Bank



Mr. Shixin Chen is the Vice President of the Asian Development Bank responsible for operations in the South Asia Department and the Central and West Asia Department. Mr. Chen headed the Department of International Economic and Financial Cooperation at the Ministry of Finance of the People's Republic of China and was the World Bank's Executive Director for the PRC from 2013 to 2016 and a Board Director for the PRC in the New Development Bank and the Asian Infrastructure Investment Bank from 2016 to 2018. Mr. Chen holds Ph.D. in Economics from the Graduate School of the Research Institute for Fiscal Sciences, and MA in Public Policy

Management from the John F. Kennedy School of Government of Harvard University.

MODERATOR

Dr. Iskandar Abdullaev, Deputy Director Two, CAREC Institute



Dr. Abdullaev has over 25 years of experience in water management and environmental topics. His academic and professional experience includes 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, NGOs, boards, and associations. Dr. Abdullaev is well linked with the academic circles. He is a member of editorial boards of few internationally peer reviewed journals. He himself authored three monographs, over 30 peer reviewed articles, and over 150 conference papers. Dr. Iskandar Abdullaev holds M.Sc. and Ph.D. degrees from the Tashkent Institute of Irrigation and Agriculture Mechanization Engineers where he also taught classes during 1992-

1999. He continues teaching at German-Kazakh University (2013-present).

PANELISTS

Mr. Akaki Saghirashvili, Deputy Minister, Ministry of Economy and Sustainable Development of Georgia



Mr. Saghirashvili has been holding a post of a Deputy Minister of Economy and Sustainable Development of Georgia since 1 October 2018. Mr. Saghirashvili had a long career with the Georgian Railway LLC, where he held posts of the Head of Corporate Management Department, Deputy Director for Infrastructure Branch, Head of Legal Services, and Advisor to the Executive Director. He also taught law in the Caucasus School of Law. Mr. Saghirashvili holds MA in Civil Law from the Faculty of Law, Ivane Javakhishvili Tbilisi State University, and MA in Civil Law from the Rheinische Friedrich-Wilhelms-Universität in Bonn, Germany.

Mr. Sukhrob Mirzozoda, First Deputy Minister, Ministry of Transport of the Republic of Tajikistan



Mr. Mirzozoda has been the First Deputy Minister of the Ministry of Transport of the Republic of Tajikistan since 2015. Mr. Mirzozoda has a track record of 30 years of professional experience in transport and road sector in Tajikistan and globally. He headed the Department of Construction, Reconstruction and Overhaul of Roads and Bridges in Dushanbe, was the Director of Autostrada LLC, Manager of Road Projects in Tunisia, Deputy General Inspector for Transport Inspection and Project Coordinator with the Ministry of Transport of the Republic of Tajikistan. Mr. Mirzozoda is a candidate for Ph.D. in Technical Sciences.

Dr. Taleh Ziyadov, Director General, Port of Baku, Azerbaijan



Dr. Ziyadov has been serving as the Director General of the Port of Baku by appointment of the President of Azerbaijan since 14 November 2014. Dr. Ziyadov has extensive knowledge in transport, logistics, and supply chain management in the Caspian region. Since 2008, he has been advising private and public companies as well as international organizations on the matter of transport and logistics in Azerbaijan and the Greater Central Asian region. Dr. Ziyadov holds MA from the School of Foreign Service at Georgetown University and Ph.D. from Cambridge University. He is the author of the book “Azerbaijan as a Regional Hub in Central Eurasia.”

Dr. Tamar Sulukhia, Director, ISET Policy Institute, International School of Economics at Tbilisi State University



Dr. Sulukhia was the World Bank's Sustainable Development and Infrastructure Program Leader for Turkey in Ankara and Sustainable Development Program Leader for Ukraine, Belarus, and Moldova, based in Kiev, Ukraine. Dr. Sulukhia served as the Minister of Infrastructure and Development of Georgia in 2004, and as the Head of Local Governance Center of Georgian Institute of Public Affairs in Tbilisi. She is a recipient of the Fulbright Scholarship from the George Washington University (USA). Dr. Sulukhia worked as the Development Assistance Specialist in USAID/Caucasus. She is an author of a number of publications on urban planning and governance. Dr. Sulukhia holds Ph.D. in Urban Planning from the Georgian Technical University, Tbilisi, Georgia.

Dr. S. Sohail H. Naqvi, Rector, University of Central Asia



Prof. Dr. S. Sohail H. Naqvi is the Rector of the University of Central Asia. Dr. Naqvi served as the Vice Chancellor of the Lahore University of Management Sciences (LUMS). Prior to LUMS, he was the Executive Director of the Higher Education Commission (HEC) for eight years. Dr. Naqvi has extensive teaching, research, and entrepreneurial experience both in the U.S. and Pakistan. He has served as a consultant on higher education for the Asian Development Bank and the World Bank. He was awarded the order of the Palmes Académiques with the rank of Chevalier, by the French Government, and the Sitar-e-Imtiaz by the Government of Pakistan for his service to higher education. Dr. Naqvi earned his B.Sc., M.Sc. and Ph.D. degrees in Electrical Engineering from the Purdue University, USA.

Dr. Siddhart Saxena, Chair of Central Asia Forum, Cambridge University



Dr. Saxena is a Chairperson of the Cambridge Central Asia Forum, Director of Cambridge Kazakhstan Centre and Honorary Secretary of the Committee for Central and Inner Asia. Dr. Saxena holds Ph.D. degrees in Experimental Physics and Social Anthropology. Dr. Saxena has been involved in field-based research in Central Asia, the Caucasus, Russia, and the PRC, focusing on the creation of scientific and industrial technology platforms, and studying social and economic developments in Central Asia and neighboring regions. Dr. Saxena was awarded a medal for service to education in Kazakhstan; Presidential Medals by Kazakhstan and Uzbekistan; the Magnetism Medal of International Union of Pure and Applied Physics; and was made Honorary Professor by several institutions in Eurasia.

KEYNOTE SPEECH



The ADB Vice President Mr. Shixin Chen welcomed panelists and participants to the Silk Road Knowledge Dialogue and highlighted the importance of knowledge as basis for innovation which enables sustainable economic growth.

As per the vision shared in the second Belt and Road Forum, it is important to keep up with the trend of the Fourth Industrial Revolution, foster new growth drivers and explore new development pathways, build the digital Silk Road and the Silk Road of innovation, and continue carrying out cooperation in innovation, science, and technology.

The CAREC region lies at the heart of the Silk Road Economic Belt and traverses the Belt and Road Initiative (BRI) space providing further impetus for close coordination to build resilient and sustainable regional infrastructure jointly, strengthen trade links, and create jobs and greater economic opportunities for all our countries. Collaboration between CAREC and BRI, and other regional frameworks, presents an excellent opportunity to further regional economic cooperation and strengthen partnerships among countries and development institutions.

The knowledge and information technology field serves as the critical ingredient and an enabler for other sectors as it affects jobs, labor market, government services, single windows, paperless trade, even transport systems and smart grids, rendering this field strategic importance which will shape the future of the region.

To date, focus in the Silk Road has largely been on connectivity in terms of transport, energy, and trade. However, in order to transform transport corridors into economic corridors, countries and regions need to be connected by knowledge corridors that will capture, generate, disseminate, and utilize information in the form of policy perspectives and new technologies, and forge regional consensus on shared development and growth objectives. This type of connectivity is not merely physical. It is also virtual and increasingly digital, allowing for more give and take of ideas. Knowledge corridors will generate new ideas, innovative approaches, and new solutions to problems and challenges, bring vitality to physical corridors and the region, and strengthen regional cooperation.

The role of the CAREC Institute is to provide knowledge solutions for the CAREC Program. It manages research grants and a visiting fellow program to help scholars and researchers produce targeted policy on regional cooperation and integration. It produces flagship knowledge products, such as the CAREC Regional Integration Index, and supports capacity building efforts among CAREC members.

Efforts by the CAREC Institute and other initiatives represent a good start, however more needs to be done to enhance exchange and use of knowledge. There are connectivity challenges especially for remote areas, but technology is enabling solutions. Some entities may be reluctant to share data, so cooperation gaps are expected. With time, more information will become available, and more think tanks, researchers, development organizations, business groups, and even private individuals will enable governments to deliver regional public goods effectively.

The establishment of a knowledge consortium is proposed based on the principles of data sharing and open access. This can be coordinated and facilitated by the CAREC Institute in collaboration with think tanks and supported by the governments. The first step will be to define information input and knowledge architecture requirements. The consortium may create a common platform such as an information gateway or portal populated by contributions from consortium members. A technical group overseen by a council of eminent knowledge leaders and academics will need to verify the authenticity of contributions. The Institute can expand the think tank forum to include business, youth, and other groups and use the forum to invite discussions on key regional development challenges.

In conclusion, a *Silk Road Knowledge Corridor* will be key to regional cooperation in delivering the regional public goods. It will promote research and knowledge generation on connectivity, trade, tourism, and other key regional issues. More importantly, it will promote open discussion, intersectoral cooperation and partnerships, thus drive action. The ADB takes pride in being a knowledge institute and stands ready to help build the Silk Road knowledge corridor.

PANEL DISCUSSIONS

i. Importance of knowledge corridors in regional economic cooperation along the Silk Road

Deputy Minister Mr. Saghirashvili noted that Georgia and other CAREC member countries work together to implement studies and research on how to improve efficiency of economic corridors. Digitalization, e-commerce, and management of economic corridors are best solutions. In the region, we can create a common platform by combining efforts of businesses, state services, and other players. Meantime, all countries need to combine their internal systems. Transport and logistics are key drivers of economy. Many countries keep investing in hard infrastructure. In order to have a significant economic growth, countries also need to develop the soft infrastructure, including digitalization.

Dr. Ziyadov mentioned that in the past the knowledge was transferred through caravan saray hubs. Bukhara, Samarkand, and Bagdad used to be big hubs of knowledge. In the 21st century, the question is how to transfer knowledge. Obviously, digitalization is key for successful knowledge transfer in the 21st century. A container in the PRC uses digital chips to enable tracking to provide informational benefits to all entities along the road, including the Port of Baku. The current challenge is information system integration.

Dr. Naqvi noted that a human being was a medium of knowledge transfer historically. The great poet Rumi, who originated from a locality in Tajikistan, travelled to Afghanistan and then moved to Uzbekistan. There were no borders. Basic paradigm of teacher, student, and human connection will remain even in the digital world. There is no substitute to human interaction as observed, e.g. in conferences and workshops. Even with modern technology, e.g. Skype, video and digital means, there is no substitute to handshake and face-to-face meetings. Technology comes as a force multiplier. An important ingredient in knowledge corridor is still movement of knowledge workers, who are equipped with ability to use, generate, and apply knowledge.

Next question is which systems can facilitate and allow knowledge to proliferate and address the issues. Last few decades of the European Union provide suggestions where to focus - mobility of knowledge workers. People shall be able to move from one place to another and learn. These EU programs can be replicated in the Central Asia.

Mr. Saghirashvili at the policy dialogue in Tbilisi, Georgia



The First Deputy Minister Mr. Mirzozoda mentioned that knowledge is a key element in transport strategies, however physical corridors are the foundation. In cargo movements, it is important that countries work closely in areas of digitalization, information, software, and system integration. Tajikistan cooperates with partners and focuses on potential of knowledge expansion.

Dr. Sulukhia highlighted that historically information travelled with person or commodity. What is quite common and has remained unchanged is that information still remains as the key and sustainable comparative advantage. Travel of information was associated with innovation, progress, and productivity. Information was always key for building an evidence. Evidence builds trust, whereas trust is key in economic relations and regional cooperation. Early knowledge corridors were simple in structure, slow and spontaneous, nowadays information exchange practices are sophisticated. It provides unlimited resource for innovation. In regional cooperation, chaotic knowledge needs to get structured.

Dr. Saxena continued the thought that eastern commodities used to travel to the western markets through the Silk Road corridors, and there was a belief that corridors just transit information. An algorithm was conceptualized some thousand years ago in Khwarazm, most likely in Bukhara, and an electron was discovered some thousand years ago in Cambridge. When we combine the algorithm and the electron, we get knowledge. Today, we have a choice to wait thousand more years or accelerate knowledge accumulation and transfer.

The idea of structuring knowledge corridors is very important. It is critical to see what kind of knowledge production is happening within the corridors, not only at the edges of corridors. Within the knowledge production paradigm, the algebra of development shall be emphasized. It is about linking systems, processes, natural resources, and human capital. For example, plastic became a global issue, while plastic and petroleum products can have a different value-added meaning in the

knowledge corridor paradigm, e.g. plastic electronics, which means connecting polymers with rare earth elements. Synthesizing various bits of information can spur innovation.

This region has seen an amazing development, but also major disruptions. It has experienced significant brain drain. Generations of specialists, scientists, thinkers, doers, etc. got disconnected. We need to find ways to re-connect them.

Dr. Sulukhia and Dr. Saxena at the policy dialogue in Tbilisi



ii. Roles of governments, development partners, think tanks, research institutions, and businesses in building and sustaining knowledge corridors

First Deputy Minister Mr. Mirzozoda noted that the role of governments is crucial. There should be clear strategy and a systemized structure where think tanks and research institutions join efforts, and governments allocate appropriate support. It would be prudent and better to implement it under certain strategies, such as CAREC Strategy 2030, including promotion of transport, gender equality, and technologies. Information and knowledge sharing should be part of these strategies.

Dr. Sulukhia noted that benefits of knowledge should be maximized. One thing is to generate and deliver knowledge through physical infrastructure, another thing is the absorptive capacity. The role of universities and think tanks is slightly underestimated in transition countries which are moving towards the market economy. The CAREC Institute provides good floor for knowledge exchange and more is needed. Support from development partners and governments is needed in recognizing importance of policy studies beyond one country and one client.

The universities might need to adopt their curricula based on the private sector demand. There is a need for greater flexibility on the part of academic institutions to quickly adopt to frequent changes. The ISET Policy Institute launched a master's program in economics in modern data analysis based on today's need to master big data.

The role of governments is huge in enabling knowledge creation and fluidity, creating favorable regulatory mechanisms through provision of infrastructure, and investing in education and research. It is important that parties commit to provide information and package it in a way that enables the private sector to increase its own absorptive capacity. Creating such complementarities would complete the knowledge exchange cycle in a knowledge corridor.

Dr. Saxena remarked that vast differences and diversity create advantages and disadvantages of knowledge corridors. In Eurasia, historically, when empires and countries become smaller, they tend to overcome the natural barriers through a dialogue and supranational institutions, similar to CAREC, Eurasian Economic Union, and BRI. During the times of Amir Timur and the Mongol Empire, the region itself generated a need to be connected. Connectivity is an essential DNA of the region. Local and regional institutions are very diverse and often do not translate into complementarities or a productive dialogue. In this context, the government can play the role of a connector to bridge differences among variety of actors and variety of choices. Mediation by governments is necessary in knowledge partnerships.

Mr. Werner Liepach and Mr. Shixin Chen of ADB at the policy dialogue in Tbilisi



Deputy Minister Mr. Saghirashvili made remarks that the regional parties shall partner to compete in the global market. As Georgia and other regional countries are market-driven economies, it is not always justified that governments get involved in mediation processes. However, there are cases where governments can take lead and combine forces. In terms of knowledge sharing, digitalization, education system and program setup, a strong governmental support would be appropriate. First, we need to identify priorities and listen to the industry. We need qualified staff to run the business. Industry should benefit from this process.

Incentives and investments need to create a value. Hard or soft infrastructure cannot run without qualified staff. On a broader scale, we shall communicate with other governments and entities to make these efforts beneficial for all.

Dr. Naqvi noted that the notion of a knowledge corridor consists of two words, where a corridor means a passageway, but the two words combined do not represent a passageway anymore. In a knowledge corridor, output is not the same as the input. In the past, every caravan stopped, underwent certain modifications, and continued. This change is what constitutes strength. It is not only about containers arriving at the Port of Baku. In a functional knowledge corridor, the question becomes how Azerbaijan adds value to the movement of cargo, and if these transactions create a worthwhile innovation. When an algorithm is created in Bukhara, and it arrives in a Georgian mathematical institute to contribute to the new way of thinking, e.g. optimization of hydropower generation, etc. This way, an algorithm is converted into solutions that industries pick up.

Majority of universities operate with the rules that the industry has to take and apply their knowledge, while the industry might be in need of a different knowledge. Some may argue that industry sponsorship introduces certain bias in research. Governments can play a connecting role here and incentivize innovation with different players on board to enable flow and transformation of ideas.

iii. Government efforts to promote regional cooperation and economic corridors in making them more competitive

Deputy Minister Mr. Saghirashvili mentioned that Georgia is a part of Persian Gulf, Black Sea, TRACECA, Lapis-Lazuli Corridor, Baku-Tbilisi-Kars railway, and the country became a member of CAREC in 2017. Transport corridors are the engine of the economy. The profit margin in transportation is low but it is high in logistics, labelling, and packaging. Closed economies never prevail, that is why connectivity is key. Once we have these platforms, we shall cooperate and combine our efforts, we shall share information and get benefit from such cooperation. Governments must be more active and supportive of businesses.

Provision of infrastructure alone is not the self-fulfilling goal, it shall be linked with value-added services, e.g. with e-commerce and digitalization. With e-commerce, the supplier and the buyer will have a better chance to find one another, time and cost will reduce, among other.

First Deputy Minister Mr. Mirzozoda mentioned that Tajikistan is also a member of the CAREC Program and the CARC Institute. The Program has mobilized US\$1.5 billion for improvement of one part of the CAREC corridor in Tajikistan. The country needs another US\$6.3 billion to continue improving infrastructure. Such improvements will have positive spillover effects on its neighbors in the region. The IT, e-commerce, logistics, and automated systems are essential parts of development. Tajikistan started work on logistical components two years ago. The CAREC knowledge corridors and workshops can help harness the potential. The Government of Tajikistan is committed to support the CAREC initiatives.

Dr. Naqvi noted that the Soviet system of universities and academic institutions got disrupted some 30 years ago and certain cooperation and knowledge transfer potential was lost. In this regard, these institutions need more governmental support and attention to reinstate the contacts and establish exchange mechanisms. He added that it is impossible to take knowledge from one place to another and directly apply it. For example, in hydropower construction, all localities have their own requirements for soil, earthquake characteristics, water flow, etc. Therefore, knowledge needs customization and local ownership. In order to have value, we must build strong institutions that governments can incentivize.

The Silk Road Knowledge Dialogue panelists in Tbilisi



Dr. Sulukhia expressed the need for greater cooperation between governments and think tanks. While universities and research institutions are mainly generators of knowledge, governments ability to listen and use the results is key. The political parties in the government have strong political agenda, while think tanks produce evidence independent of political agenda. For example, the ISET conducted a research under the CAREC Institute funding regarding the CAREC regional value chains (RVC) and found the RVC participation very weak. In the second part of the research, the ISET will look into the industry-to-industry value-chain participation. Think tanks can produce such studies and share with clients who want to learn. On top of digesting such evidence, engagement of the private sector becomes key.

Dr. Saxena argued that the issue of academic research and its application is not characteristic only of the post-Soviet countries, but also prevalent in Europe. There is predominance of ratings in the West, which are not necessarily transparent or fair, and which often influence the policy direction. Certain indicators in the methodology which quantify rankings are questionable (e.g. number of international students). For example, the Tokyo University is an important university in global standing in research, but it has a low ranking. Why would a Japanese University teach in English in order to qualify for a high ranking? The role of international institutions, such as ADB, IMF, WB is to commoditize education and knowledge and act as knowledge speed bombs.

The Cambridge University has a project called “Comprehensive Capacity Building in Eastern Neighborhood and Central Asia” (CAMPUS) which looks at cases of Belarus, Azerbaijan, Uzbekistan, and Tajikistan, observes how these countries emerge from certain historical events, how they evolve, and which institutions work under which context.

iv. Key pillars of CAREC Transport Strategy and importance of knowledge parts of CAREC strategies

Deputy Minister Mr. Saghirashvili mentioned that Georgia did not have any transport and logistics development strategies. This work started recently as a part of the institutional reform. Since its independence, for the last 27 years, Georgia did quite well in reforms and continues the reform agenda.

The CAREC 2030 is an important document with a vision aligned with the Sustainable Development Goal (SDG) agenda. It includes infrastructure investment, institutional reforms, cooperation with neighboring countries, and vision for trade development. It is not only about transport and logistics, but also about economy. The document is in line with expectations and reflects challenges.

The First Deputy Minister Mr. Mizrozoda noted that Tajikistan has the National Strategy for Transport 2035 and related mid-term programs. Tajikistan will certainly benefit from the CAREC Transport Strategy 2030. Since it is a mountainous country, the components of the strategy relating to the road safety, road asset management, traffic management, and budgeting will allow allocating funds in more efficient way.

Dr. Abdullaev highlighted that the CAREC Transport Strategy 2030 has a knowledge component. The strategy is not only about hard infrastructure development, but also about road asset management, financial management, etc. And the strategy lists the CAREC Institute as a knowledge connector.

v. Questions from the floor

Who are the users of the knowledge corridor information and how does the information from the private sector get incorporated, e.g. end user info, shipping line info, etc.?

Deputy Minister Mr. Saghirashvili responded that, currently, the cost of logistics and transport in a production process is more than 20% in Georgia, which is 7% in Europe. The reason for a high cost in Georgia is lack of smart solutions, deficient infrastructure, and lack of skills to run business. Another issue is adjusting to the needs of end users. For example, the shipping lines made significant investments and all dry docks and storages in the Georgian ports got examined. The APM (A.P. Moller-Maersk Group) terminals perform well with excellent systems. However, a few kilometers away people still move containers with hands. If good knowledge is combined and shared, all countries can benefit. If production cost can be reduced due to better knowledge, Georgia can become more competitive in the global market.

Dr. Saxena mentioned that role and knowledge of the private sector is absolutely critical, but to a certain degree. He provided an example of beryllium copper (98% copper and 2% beryllium), a metal used in all thermostats and switches, to illustrate who can benefit, and what obstacles might be encountered when accessing information. Beryllium is produced only in three plants in the world, majority in Kazakhstan and Uzbekistan. It is a processed metal, but its raw value is of interest. The Central Asian countries, which are landlocked and face difficulties transporting this commodity globally, tend to sell it roughly at US\$10-12 per kg on an international market to few companies. These companies then have a capacity to add value internationally and sell at US\$80/kg. In its purified form, the Cambridge University laboratory buys it at US\$500/kg. So, the Kazakhs involved in the value chain get very little compared with the product's end value. When we have this information, what can we do to add value locally. It is very important to analyze users and value and supply chains. The private sector is geared to make profit, the role of governments and knowledge industries is to re-balance for better welfare distribution.



In a modern world, where information is transferred through digital means, and where there is no caravan saray anymore, how can the knowledge corridor communities, especially those in the hinterland, benefit from information? Is there a risk that, despite massive investments in infrastructure, these communities may not experience inclusive results?

Dr. Ziyadov confirmed that there is such risk but the development plan involves creation of new hubs across Eurasia. In the past, camels used to travel 40 km per day where caravan sarays were installed. These were one-star hotels with basic amenities. Afterwards, in 4-5 days, you would reach townships which were three-star caravan sarays. A five-star location was one thousand km away. Today, many two-star locations aspire to reach the five-star level, however some economies might find it difficult to achieve this level without good concentration of knowledge.

Dr. Saxena remarked that it is important to examine industrial consolidation across the world. For example, many elements participate in making an airplane flight happen: the plane is made of some rare elements from the PRC, metal comes from Australia, passengers are from around the globe, ticket services are digitized, governance is concentrated in a different location, and investors are spread all over the globe. It is a good illustration of an integrated approach in today's world.

Dr. Naqvi elaborated that fast logistics creates new possibilities. People are at the center of knowledge. They look for ideal places to live and work. If the place provides amenities, cultural heritage, beautiful scenery, fabulous weather, knowledge hubs can be created in such locations to enable concentration of talent. This way, we can transform a one-star location into a five-star knowledge hub.

CONCLUSION

Panelists thanked the Government of Georgia and organizers for hosting an important and challenging dialogue about the knowledge corridors. Panelists noted that ninety percent of the dialogue focused on the future.

Dr. Ziyadov shared a story how he worked as an ADB expert and wrote a book about Azerbaijan ten years ago positioning the country as the regional economic hub. Later, he was entrusted by the Government of Azerbaijan to implement policy suggestions he provided in his book. In this sense, the CAREC Institute has a major role to play to provide sound policy suggestions for governments in the region.

Dr. Naqvi proposed to establish a knowledge fund to collect, connect, and use knowledge assets in regional institutions to address issues and find solutions. He suggested that governments define issues, and knowledge actors work on solutions. When funding is available, the entire region can join forces to address regional issues.

The CAREC Institute, as a knowledge connector, will need to re-conceptualize the role of knowledge in building and sustaining the economic corridors. The Institute will also promote development of regional knowledge building and sharing through its CAREC Think Tanks Network activities.

The dialogue concluded that trust is the outcome of knowledge and only knowledgeable people trust each other, otherwise suspicions prevail; that partnerships happen when we share knowledge and learn from one another.