



## Strengthening Regional Cooperation on Skills Development under the Central Asia Regional Economic Cooperation Program (TA-6806)

### KEY HIGHLIGHTS OF THE FIRST MEETING OF THE CAREC WORKING GROUP ON SKILLS DEVELOPMENT

29 February – 1 March 2024  
Tashkent, Uzbekistan, Hilton hotel, Tashkent 1-2 conference-room



#### A. Background information

For much of the last half-century, member countries of the Central Asia Regional Economic Cooperation Program (CAREC) have followed diverse strategies for strengthening skills development. These distinct strategies are now slowly converging as CAREC countries recognize more than ever the value of meeting international and developing regional standards. This applies particularly to the standardization and harmonization in the higher education (HE) and technical and vocational education and training (TVET) sectors.

Nonetheless, HE and TVET sectors in the CAREC region continue to face significant challenges, reflected in the overall low quality of skills, the mismatch between the skills provided by HE and TVET institutions, and labour–market needs. The absence or weakness of national qualifications systems, resource constraints, outdated educational infrastructure and training systems, and weak governance

impose further difficulties. Given these challenges, the region urgently needs to improve its skill standards to be more competitive in global markets and to provide a strong basis for increased foreign direct investments, human capital development, and people-to-people connections.

In this context, **the Asian Development Bank (ADB) is currently implementing a knowledge and support technical assistance initiative that aims to strengthen regional cooperation and integration on skills development in HE and TVET in the CAREC region.** In particular, the project is supporting the development of (i) standardization and harmonization in HE, (ii) standardization and harmonization in TVET, (iii) governance and regulation of recruitment systems, and (iv) labour market database and information system. The expected key outcomes from these four main outputs are strengthened regional cooperation and integration on human capital development, which will subsequently lead to enhanced quality, mobility, and productivity of the labor force of the CAREC member countries aligned with the industry needs.

Considering the above, ADB plans to arrange a series of meetings, workshop seminars, and conferences with the CAREC participating countries to facilitate the collaboration, development, and result dissemination to generate strong buy-in and institutionalization of the developed expertise.

To promote policy dialogue, regional cooperation, and knowledge sharing in HE and TVET among CAREC member countries, **ADB has initiated the establishment of the CAREC Working Group on Skills Development (CAREC SDWG).** The theme and focus of the CAREC SDWG for 2024 is suggested as **“Skills for climate action, climate-smart agriculture and water resources management.”**

**The first meeting of the Working Group was conducted on 29 February-01 March 2024 in Tashkent, Uzbekistan.** The event gathered together about thirty participants (two high-level officials and decision makers) representing the Ministry of Education and (one representative) of a major agriculture university from each CAREC participating country, in addition to academia, think tanks, ADB staff and consultants, and national partners of the hosting country.

The objective of a 2-day meeting was as follows:

- (i) **to officially launch CAREC Working Group on Skills Development (SDWG),** agree with CAREC participating countries on its future role and action plan for 2024.
- (ii) **to discuss and agree on priority areas in strengthening regional cooperation in skills development and to define convergence areas for TVET and HE systems.**
- (iii) **to share the selected knowledge products' key findings and international best practices**

As a result of a 2-day meeting, the following expected outputs were achieved:

1. Improved knowledge of the participants on institutional and regulatory challenges in convergence of HE and TVET systems and on mapping results of HE and TVET partnership in the CAREC region;
2. Improved knowledge of the participants on food security challenges (*climate change, regenerative and climate smart agriculture, water resources management*) in the CAREC region and the role of skills development system in their solution;
3. Agreed list of convergence areas in TVET and HE systems from among CAREC participating countries for future joint cooperation interventions;
4. Shared international best practices on Regional Skills Development Working Group and University Network initiatives;
5. Agreed tasks and functions of the CAREC Working Group on Skills Development and needs assessment for the CAREC University and TVET network.

**Detailed agenda of the first meeting is provided in Appendix 1.**

## B. Key highlights (Day 1)

**Ms. Lyaziza Sabyrova**, Regional Head, Regional Cooperation and Integration, Central and West Asia Department welcomed all the high-level officials and university representatives to the First meeting of the CAREC working group on skills development supported by a technical assistance project which is financed by the Japan Fund for Prosperous and Resilient Asia and the Pacific. Ms. Sabyrova thanked the Ministry of education, science and innovations of Uzbekistan represented by the First Deputy Minister, Mr. Kamiljon Karimov for hosting the event, ADB's Uzbekistan Resident Mission and its Country Director for supporting the work. It is an honour to welcome high-level officials and other distinguished participants from Azerbaijan, Georgia, People's Republic of China (online), Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan. The CAREC program is a partnership of 11 countries (5 Central Asian countries, 2 South Caucasus countries, 2 South Asian countries, 2 East Asia). ADB has many development partners working with us together to promote economic prosperity through regional cooperation. ADB is passionate about regional cooperation guided by the overarching vision: "Good neighbours, good partners and good prospects" (detailed information on the CAREC program is provided in [www.carecprogram.org](http://www.carecprogram.org)). Under the CAREC program there are 5 operational clusters: economic and financial stability; trade, tourism and economic corridors; infrastructure and economic connectivity; agriculture and water, human development and cross-cutting aspects. Human development which includes education and health is a relatively new cluster. Ms. Sabyrova highlighted that while the CAREC countries have many similarities, they are marked by diversity: different income levels, human capital and education outcomes challenges in labour markets, technical and vocational education (TVET) and higher education (HE) systems.

First of all, there is a need to establish the CAREC working group on skills development. There are solid benefits of regional cooperation, namely, promotion of higher standards in TVET and HE systems (only few universities in the CAREC countries reach global top global rankings). University degrees among the CAREC countries lack uniformity, making it harder for skilled labour to move among countries. Secondly, regional cooperation helps to adapt better to the requirements of not only national, but also regional labour markets. No country in today's world can really function in isolation.

Harmonizing education, degree systems and strengthening the recognition of HE and TVET qualifications across countries of the region can enhance mobility of skilled labour, address the supply demand gaps, enhance the efficiency of these labour markets. The CAREC region can draw from the experiences of other regions, such as ASEAN and the GMS, Europe. As for the education sector, ADB can arrange such exchange and knowledge sharing events to understand what the CAREC participating countries need, knowledge and ideas to exchange. It is the right time to create a strong and efficient coordination and exchange platform – the CAREC working group on skills development that will bring together policymakers, think tanks, academia, TVET institutions and universities for a regional policy dialogue to identify challenges and find regional solutions.

The second agenda item for these 2 days is the proposed CAREC agriculture universities network. The recent devastation of floods in Pakistan, heat waves and droughts in Central Asia demonstrate climate change in the region. The collective regional action is required for developing skills for efficient use of water resources, developing climate proof agriculture and introducing new financial instrument for mitigation and adaptation. Cooperation among CAREC universities will be important to produce a competent workforce with new technical skills, strengthening mobility of experts, faculty and students and investing in common research initiatives. We call for regional partnership of agricultural universities to transform the way CAREC countries use advanced technologies in agriculture, energy and water resources. Ms. Sabyrova encouraged all the meeting participants to take an opportunity for exchange and fruitful discussions.

**Mr. Komilzhon Hamidovich Karimov**, First Deputy Minister of Higher Education, Science and Innovations of the Republic of Uzbekistan welcomed all the meeting participants to Tashkent and thanked ADB and the CAREC secretariat for organizing the first meeting of the working group. It was mentioned that the topic of agenda is extremely important today as the CAREC countries share common challenges. Complex actions are required from Governments, academia, universities as without innovations it is impossible to tackle global challenges. As for skills development agenda, Mr. Karimov mentioned that the Government of Uzbekistan makes a strong focus on human development and during the last 6-7 years the country showed a huge progress: in 2017 the enrolment to higher education institutions was below 10% (the lowest figure in Central Asia) and today the enrolment rate is at 42%. Similarly, number of higher education institutions has tripled for the same period of time. Number of students in higher education institutions increased from 300,000 to 1.3 mln. Students. But there are such challenges as quality, equal access for all groups of population, including marginalized (female, poor households, disabled, etc.), research and innovations, international cooperation. 50% of HEIs of Uzbekistan (total-210 HEIs) have international cooperation links (joint ventures, international university campuses). The CAREC working group on skills development is a great initiative that will foster international partnership and further strengthen academic cooperation, knowledge exchange on common challenges.

**Ms. Kanokpan Lao-Araya**, Country Director, Uzbekistan Asian Development Bank Resident Mission welcomed all the participants to such an overreaching meeting that gathers together officials and experts engaged into TVET and HE systems from 10 participating CAREC countries. ADB has used this interregional integration and cooperation as a platform to bring together different partners to work effectively to promote such public good as human development. Even though our member countries are rich in national resources, but they should have efficient human resources by creating opportunities for life-long education and adapting to new innovations. Skills development as a pathway to employment and entrepreneurship is a crucial element to building societies and contributing to the community and society as a whole. The participating countries need to have technical and soft skills to manage daily lives and cope with the changing environment and preparing for the opportunities and challenges brought by the 4<sup>th</sup> industrial revolution. Partnership shall be improved between the public sector, the private sector, employers, education and training service providers, policymakers and skills development practitioners. The event allows to reflect on current skills development challenges, the progress made in implementing strategies and policies and how to participate more meaningfully in economic development. Improving the TVET and HE systems is high on agenda of Governments, key stakeholders. It is a good opportunity for the CAREC participating countries to leverage good practices from each other under the regional cooperation. Ms. Kanokpan Lao-Araya encouraged for active participation, contribution and discussions to improve regional cooperation and knowledge exchange on skills development, climate change, food security agenda.

**Ms. Altyнай Arapova**, Economist, Regional Cooperation and Integration, ADB provided an overview of the technical assistance project and meeting objectives. The main objective of the project is to strengthen the regional cooperation and integration through better utilization and allocation of human resources, including through increased quality, mobility, productivity of labour force of the CAREC countries. In particular, the project aims to support standardization and harmonization of higher education, TVET systems, governance and regulation of recruitment systems and labour market database information system. SWOT analysis of a huge potential for cooperation in skills development in the CAREC region was provided. Despite education is a new pillar under Human capital development of the CAREC program, there is a niche to harmonize education standards, share experiences and promote mutual learning. There are many examples of regional cooperation in HE systems (EHEA, ASEAN university network, Greater Mekong network, etc). The main objectives of the meeting are as follows: (i) to discuss terms of reference and action plan of the CAREC working group on skills development for 2024; (ii) to discuss draft Action plan of the CAREC agricultural universities network for 2024; (iii) to discuss and

agree on priority areas for regional cooperation. The working group will (i) serve as a platform for regional cooperation, integration and peer learning, (ii) enable to improve, harmonize and standardize selected practices and approaches, (iii) foster cross-country collaborations through institutional twinning arrangements or bilateral regional cooperation arrangements; (iv) encourage student exchange, introduction of joint degree programs, faculty exchange, research collaborations, mutual recognition of skills and qualifications. Ms. Altynay Arapova highlighted that Day 2 will be dedicated to discussion of the need for creation of the CAREC Agricultural university network and how to develop the relevant skills to tackle common climate change challenges. All the meeting participants were encouraged to take active participation and provide feedback that will enable to allocate the project resources for right initiatives and which are in need in the CAREC countries. **The detailed presentation is provided in a separate folder (for Opening remarks session).**

**Moderator of Opening remarks and Introduction session: Ms. Altynay Arapova, Economist, Regional Cooperation and Integration, ADB**

**Session I: Reinforcing Convergence to strengthen common regional standards**

**How countries can benefit from harmonization of TVET systems: importance and need for convergence/ harmonization: missing opportunities and what could be achieved, Ms. Dovelyn Mendoza, Consultant, ADB**

*Interventions: Representatives of Ministries of Education from Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan and Uzbekistan*

**Mapping adherence to regional integration frameworks for the higher education sector in the CAREC region, Ms. Elizabeth Colucci, Consultant, ADB**

*Interventions: Representatives of Ministries of Education of Azerbaijan, Georgia, PRC, Mongolia, Turkmenistan*

**Moderator: Ms. Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB**

Moderator of Session I - **Ms. Liliia Kachkinbaeva**, TVET, employment and labour market consultant welcomed all the participants to the session that will present key findings of two knowledge products, elaborate discussions on existing challenges in the TVET and HE systems of the CAREC participating countries and will result into defining a list of convergence areas in TVET and HE systems and selected CAREC participating countries that are closer in practices used and need peer-to-peer assistance.

In her presentation “*How countries can benefit from harmonization of TVET systems: importance and need for convergence/ harmonization: missing opportunities and what could be achieved*” **Ms. Dovelyn Mendoza**, Consultant, shared key findings of the study aimed to understand how well the skills development systems function in the CAREC countries focusing on the TVET and HE systems and converging trajectories the CAREC members have taken over the last 20 years. During the last half century the CAREC members have been following diverse strategies for strengthening skills development which are slowly converging, particularly on the following 3 areas: (i) *setting of foundational laws and decrees (convergence of legal institutional reforms)*; (ii) *centralizing governance structures (there is a tendency to administer them in a centralized manner)*; (iii) *increasing diversity in types of training institutions and programs: private, public, connected training institutions*. According to the literature and some policy review there is an advantage of centralization because it facilitates coordination of the TVET and HE systems, i.e. if there's no centralized management, there's a tendency that the TVET and HE sectors would pursue independent policies resulting in disunity and disintegration. The intensity of collaboration is not as intense in the TVET if compared to the HE system. There is a bilateral, regional and even global collaboration, that involves non-governmental and governmental institutions and ranges

from dialogues, sharing facilities, etc. The study has identified three areas of collaboration which is taking place in the TVET system: (i) *dual approach and apprenticeship*; (ii) *national qualifications frameworks (classification tools aimed at enhancing the relevance of qualifications)*; (iii) *Torino process (initiated in 2010)*. There could be opportunities for experience sharing on these areas by succeeding CAREC countries and those who start their path in these areas. Common challenges of the TVET system of the CAREC countries include inadequate financial resources, demand and supply mismatch, quality, inefficient lifelong and work-based learning opportunities. **The detailed presentation is provided in a separate folder (for Session I).**

During the Interventions session, the following reflections were received from representatives of Ministries of Education from Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan and Uzbekistan:

- *Pakistan*: Mr. Sohail Akhtar, Sr. Joint Secretary (professional training), Ministry of Federal Education and Professional Training mentioned that Pakistan adopted the National VET qualification framework but there are practical implementation problems (8 levels) and it will be grateful to collaborate and exchange with Azerbaijan, Georgia, Kazakhstan which succeed in this area.
- *Kyrgyzstan*: Mr. Azamat Naimanbaev, Head, Higher, Secondary Vocational and Postgraduate Education Department, Ministry of education and science mentioned that Kyrgyzstan has piloted elements of dual and apprenticeship education but is still facing such difficulties as the prevalence of the small- and medium-sized enterprises, reluctance of the private sector to contribute to the learning process in the TVET and HE institutions. Mr. Naimanbaev mentioned that it will be useful to see the experience of Azerbaijan, Georgia and Kazakhstan.
- *Tajikistan*: Ms. Lutfiya Abdulkholiqzoda, Deputy Minister, Ministry of Education and Science shared that Tajikistan would be interested to continue collaboration with Kazakhstan on regulatory and practical implementation of dual education and its elaboration in the Labour code (the notion of dual education is part of the Law of Education of Tajikistan but not of the Labour law yet).
- *Uzbekistan*: Mr. Farrukh Azimov, Head, Department for the Development of the Vocational Education System, Ministry of Higher Education, Science and Innovation expressed the interest to learn and exchange experience with those countries which succeed in NQF and dual education (adopted by Uzbekistan).
- *Kazakhstan*: Ms. Rysgul Kudretullayeva, Head, Division for the Content of Higher and Postgraduate Education of the Committee for Higher and Postgraduate Education, Ministry of Science and Higher Education mentioned that Kazakhstan would like to strengthen cooperation on water resources and agriculture challenges the country is facing and is ready to share its experience and lessons learnt on such areas as NQF, dual education, apprenticeship and others.

**Ms. Elizabeth Colucci**, Consultant, ADB made the presentation: “*Mapping adherence to regional integration frameworks for the higher education sector in the CAREC region*” and highlighted three dominant regional integration frameworks and policy processes that directly have influenced the higher education sector: (1) *Bologna process (it has established a very structured intergovernmental and governmental stakeholder collaboration process which has driven the articulation and the harmonization of HE systems (Georgia, Azerbaijan and Kazakhstan are signatories of the Bologna process))*; (2) *the European Higher Education Area*, (3) *CAHEA (a process that has been largely inspired by the Bologna process and uses the core principles and the tools that have been developed to further regional integration and harmonization of HE systems in the Central Asian countries)*. The study covered the analysis of convergences and divergences between the countries selected in their adherence to these frameworks, the potential for collaboration, results of focus groups consultations. Looking at the articulations, there are potential opportunities and obstacles in the TVET and HE systems of the CAREC countries that play a significant role in stimulating more collaboration. Higher education

system in 7 CAREC countries has been very transformative in terms of international collaboration, credit systems, national quality assurance systems, etc. Country profiles were developed for 7 CAREC countries describing influencing frameworks, policy processes, external support and investments, gap analysis, quality and recognition, inclusion, mobility, staffing, etc. The CAREC countries have been facing challenges in such areas as the autonomy of the higher education sector, quality assurance practices, inappropriate policy, lack of alignment between the TVET and HE systems. **The detailed presentation is provided in a separate folder (for Session I).**

*During the Interventions session, the following reflections were received from representatives of the Ministries of Education of Azerbaijan, Georgia, Mongolia, Turkmenistan:*

- *Azerbaijan: Mr. Nicat Mammadli, Advisor to the Minister, Ministry of science education highlighted that membership in the European Higher Education Area and in the Bologna process endeavours unification of the HE system in line with the European standards, (credit transfer, accreditation system, student mobility, etc.).*
- *Georgia: Ms. Anna Baramia, Head, European Union Integration and International organizations division, Department of International Relations and Strategic Development, Ministry of Education mentioned that Georgia has a dedicated body under the Ministry – National Centre for Higher education quality enhancement, that ensures the Georgian higher education system is organized in accordance with the Bologna process, European Higher Education Area, Lisbon Convention standards. It enables to increase the credibility of Georgian higher education system on the international arena.*
- *Turkmenistan: Mr. Azat Ataev, Deputy Minister of Education for Higher and Secondary Specialized Education asked to update the analysis figures pertaining to Turkmenistan and to provide the publication for countries' comments. Turkmenistan ratified the Lisbon convention, has been cooperating with UNESCO, ETF (Darya) and expressed its interest in regional cooperation, knowledge exchange. Mechanisms and recommendations are proposed to be developed for the areas of regional cooperation mentioned in the study and to be mentioned by countries. Number of occupational standards is limited. Different approaches and mechanisms are used to develop occupational standards that address the employer's requirements. Therefore, when developing a new educational standard for the TVET system, it is necessary to actively involve employers. According to discussions conducted with employers, the main challenge is not the lack of knowledge, skills or abilities among graduates, but the specific ability to perform the necessary duties at their workplace. It is recommended to develop competency-based educational standards as the main mechanism for improving the primary and secondary vocational education towards convergence to the labour market requirements.*
- *Mongolia: Ms. Altanzul Ganbaatar, Department of Technical and Vocational Education and Training, Ministry of Education and Science mentioned that Mongolia would appreciate cooperation in such areas as quality assurance, international competitiveness and academic mobility.*

## **Session II: Reinforcing convergence to develop regional standards – insights from policymakers and academia**

**Short interventions: List of TVET and HE system areas that require improvements from regional perspective and expression of interest on the list of CAREC participating countries for joint cooperation (10 min per country):**

- *Azerbaijan: Mr. Nicat Mammadli, Advisor to the Minister, Ministry of science education;*
- *PRC: Ms, Han Qian, National Academy of Educational Sciences, Ministry of education;*

- Georgia: Ms. Anna Baramia, Head, European Union Integration and International organizations division, Department of International Relations and Strategic Development, Ministry of Education;
- Kazakhstan: Ms. Rysgul Kudretullayeva, Head, Division for the Content of Higher and Postgraduate Education of the Committee for Higher and Postgraduate Education, Ministry of Science and Higher Education;
- Kyrgyzstan: Mr. Azamat Naimanbaev, Head, Higher, Secondary Vocational and Postgraduate Education Department, Ministry of education and science;
- Mongolia: Mr. Choisuren Erdene, Senior specialist, Department of Higher Education, Ms. Altanzul Ganbaatar, Department of Technical and Vocational Education and Training, Ministry of Education and Science;
- Pakistan: Mr. Abdul Sattar Khokhar, Sr. Joint Secretary (HEC); Mr. Sohail Akhtar, Sr. Joint Secretary (PT), Ministry of Federal Education and Professional Training;
- Tajikistan: Ms. Lutfiya Abdulkholiqzoda, Deputy Minister, Ministry of Education and Science
- Turkmenistan: Mr. Azat Ataev, Deputy Minister of Education for Higher and Secondary Specialized Education
- Uzbekistan: Mr. Farrukh Azimov, Head, Department for the Development of the Vocational Education System, Ministry of Higher Education, Science and Innovation of Uzbekistan.

**Moderator: Ms. Dovelyn Mendoza, Consultant, ADB**

Moderator: **Ms. Dovelyn Mendoza**, Consultant, ADB introduced the objectives of the Session II, namely, short interventions from the Ministry officials on the areas of TVET and HE system that require improvements from regional perspective and expression of interest on the list of CAREC participating countries for joint cooperation. Summary of key achievements, challenges and areas for cooperation (by country) are provided in **Appendix 2**. **All the presentations made by Ministries are provided in a separate folder (for Session II).**

### **Session III: Launching the CAREC Working Group on Skills Development**

**Opening remarks**, Ms. Sofia Shakil, Director, Human and Social Development Sector Group, Asian Development Bank

**International best practices:** enhancing regional cooperation in skills development.

- Mr. Kenji Mishima, JICA, Senior Representative, Tashkent,
- Ms. Amanda Crowfoot, Secretary General, European University Network (online)

**Q&A and Interventions:** Representatives of each participating CAREC country will express their ideas on potential tasks and functions of the CAREC Working Group on Skill Development (*draft Action Plan for discussion and TOR sent to all participants*). *To ensure participatory approach and high level of commitment, participants will be welcomed to propose tasks for the Working Group.*

**Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB**

Moderator: **Ms Liliia Kachkinbaeva**, TVET, employment and labour market consultant welcomed all the participants to Session III: Launching the CAREC Working Group on Skills Development.

**Ms. Sofia Shakil**, Director, Human and Social Development Sector Group, Asian Development Bank welcomed all the participants and congratulated on launching such an important regional cooperation initiative - the CAREC Working Group on Skills Development. Inclusiveness lies at the heart of all



successful poverty relief and sustainable development outcomes. ADB's social development agenda involves people and their communities, organizations, institutions, societies, and governments in all poverty relief activities, especially those that aim to build long term resilience. Education and health are under the human development cluster of the CAREC, and ADB has been assisting its members-countries in producing educated, skilled, healthy human resources required for promoting investment, efficiency, and competitiveness of the region in the global economy, as well as improving the quality of lives of the region's population. Despite the critical role of skills development in industrial and economic development, many countries worldwide continue to struggle to deliver high-quality HE and TVET programs. Businesses consistently report the lack of appropriately skilled workers as a major bottleneck for their operations, negatively impacting their capacity to innovate and compete in the global markets. The CAREC countries are not an exception, i.e. HE and TVET systems in the CAREC region face significant challenges, reflected in the overall low quality of skills, skills mismatch, resource constraints, outdated education and training systems, and weak governance. The growing pressures placed on the region's economies in terms of climate change and food security call for a sharpened focus on innovation and upskilling – especially with a focus on green development. The region is home to rapidly transforming and growing economies with unleashing of private sector potential – this calls for an even stronger examination of how education and skills development can be improved. The intra-regional convergence within the CAREC region calls for more collaborations to improve the access and quality of the HE and TVET sectors. Ms. Sofia Shakil called all the meeting participants for regional collaboration that encompasses instructional delivery initiatives, such as student exchanges and introduction of joint degree programs, and non-instructional initiatives, such as faculty exchanges, research collaborations, mutual recognition of skills and qualifications, development of higher education and technical and vocational education and training institutions' networks, and institutional twinning arrangements. Ms. Sofia Shakil assured that the establishment of the CAREC Working group on Skills development and Agriculture Universities' network will serve as efficient platforms to develop academic and professional human resources in the region and to strengthen and exchange knowledge and research skills.

**Mr. Kenji Mishima**, JICA, Senior Representative, shared JICA's experience in enhancing regional cooperation within the ASEAN university network and the South Asia Engineering Education Development Network. Over 20 years JICA has been supporting the partnership between Japanese and the ASEAN Universities. 26 top ASEAN engineering universities joined the South Asia Engineering Education Development Network, out of which 14 are Japanese. 1400 students graduated from Master and a Phd. degree from the Japanese universities under the ASEAN network. The support is provided in the following regional cooperation areas: joint research projects, academic mobility, industry academy collaboration. The platform enables to improve the quality of researchers, share knowledge and know-how, access Japanese advanced technologies, research methodology. Mr. Kenji Mishima informed that there is the Uzbekistan Japanese Innovation Centre for Youth that is being supported by JICA. The centre has more than 10 memorandums of cooperation with Japanese experts and universities. Japanese universities have joint research projects with Uzbekistan universities.

**Ms. Amanda Crowfoot**, Secretary General, European University Association (online) made her presentation about the European University Association (EUA) and benefits of regional cooperation. EUA is the largest, the most comprehensive and diverse non-governmental membership organization (established in 2001), that represents the views of the universities across Europe through advocacy and lobbying and acts as a forum for exchange and peer learning. The EUA has around 40 staff members working mainly in Brussels and has a small office in Geneva with over 870 members from 49 different European countries. The EUA's vision for universities of the future is that they're open, transformative, transnational, strong, autonomous, accountable, sustainable, diverse and engaged. Future skills require strong institutions with clear strategies, and there is the critical importance of enhancing students' capacity to learn and research. Ms. Amanda Crowfoot shared results of the students' survey conducted

by the EUA in 2018: (i) growing student’s demand for short term, non-degree, learning opportunities; (ii) increase in enrolment to flexible courses and degree programs under flexible arrangements; (iii) expansion of micro-credentials. Having reviewed the students’ survey findings, in 2020-2023 three quarters of higher education institutions opened and are developing short-term courses and micro-credentials. Currently higher education institutions put a growing emphasis on greening at 2 levels: (i) universities make their campuses green, environmentally friendly; (ii) universities started thinking of how they can address the sustainable development goals in education, research and innovation. **The detailed presentation is provided in a separate folder (for Session III).**

Moderator: **Ms Liliia Kachkinbaeva** asked meeting participants to review two documents in hand-outs: Terms of reference elaborating tasks and functions of the CAREC Working Group on Skill Development and draft Action Plan for 2024 (**Appendix 3**). To ensure participatory approach and high level of commitment, after 15 minutes of group work participants were welcomed to panel presentation of discussion results.

**Key recommendations to the Terms of reference and Action plan:**

- Further bilateral/ multilateral cooperation shall be structured based on the differences in the employment and labour markets of participating countries;
- Joint collaboration shall be organized within existing CAREC cooperation modality as intergovernmental procedures for new MoU concurrence and signing process might take 6 months. If a new MoU is initiated, it shall be signed by Ministries;
- International benchmarks of proposed areas of cooperation are of a priority;
- Tight timeframe;
- Proposed frequency of meetings – once a month.

**C. Key highlights (Day 2)**

**Ms Liliia Kachkinbaeva**, TVET, employment and labour market consultant, recapped findings of Day 1 (one-slider) and informed the meeting participants that revised Action plan of the CAREC Working group on Skills development will be revised and shared for review.

<b>KEY CHALLENGES:</b>	<b>AREAS FOR COOPERATION:</b>
Poor link with the labour market and skills mismatch, demand and supply mismatch Poor involvement of the private sector	Work-based/ dual training Skills mismatch review by countries Industry and education integration Methodology for exclusion the outdated and adding new occupations
Insufficient incentives for enhancing quality Poor governance Lack of flexibility	Joint research projects (AI Robotics, Space Sciences and Agriculture, others) 2-3 weeks faculty trainings / exchanges Joint degree program in emerging fields (IT, physical and biological sciences)
No pathways between the levels of vocational education (TVET, HE)	Review of existing practices in participating countries on pathways (international benchmarks)
Quality assurance approaches and practices	Comparative studies and International benchmarks
Lack of Digitalization in TVET landscape Implementation of NVQF	Overview of practices on digitalization and practical implementation of NVQF in countries with advanced TVET and HE systems

**Dr. Slawomir Wroblewski**, Deputy Rector of the International Agriculture University of Uzbekistan highlighted that capacity building is a key element in the skills development system and that there shall be some platform/ association created (like Working group) with the role to boost the trust among the population.

**Session IV: Enhancing regional cooperation in skills needed for development of climate-smart agriculture, water resources management and green skills in the CAREC region**

**Regional Cooperation in skills development for water resources management**, *Ms. Niloofar Sadeghi, Water Resources Specialist, ADB*

**Water-Agriculture-Energy Nexus in Central Asia through the lens of climate change**, *Dr. Kuat Akizhanov, Deputy Director, CAREC Institute*

**Q&A session, open discussions involving universities' representatives**

**Moderator: Mr. Md. Abul Basher, Senior Natural Resources and Agriculture Specialist, ADB**

**Moderator: Mr. Md. Abul Basher**, Senior Natural Resources and Agriculture Specialist, welcomed the meeting participants to Day 2 of the meeting and informed that Day 2 will be focused on (i) reviewing of the existing water resources, climate change and environmental sustainability challenges in the CAREC region, perspective regional interventions in capacity building and strategic planning; (ii) identifying which skills are needed to respond to the emerging impacts of climate change on agriculture and water resources and the role of higher education institutions in this agenda.

In her presentation “*Regional Cooperation in skills development for water resources management*” **Ms. Niloofar Sadeghi**, highlighted that the Central Asia depends on groundwater as a source of drinking water and irrigation. Main water user sectors are agriculture, domestic: drinking, urban (landscaping, fire department, city cleaning, building materials, etc.), industrial, energy. Water and energy are heavily inter-dependent in the region. The operation of hydropower projects requires construction of large dams and reservoirs, which alter natural water courses and seasonal variation of river discharge. This influences the timing of flows in transboundary rivers. With increased floods that can lead to landslides, hydropower plants can pose significant risk. Pumped irrigation requires a significant supply of electricity. These and other interlinkages demonstrate a need for greater coordination among countries in the planning and operations of water and energy sectors. According to ADB, higher-than-average temperature rises are likely to lead to greater water scarcity, expanded desertification, and more extreme weather events like floods, droughts, and heat stress. A water supply gap of 37% will occur by 2050 unless irrigation systems and other critical water infrastructure are upgraded and modernized. This gap could lead to lower agricultural productivity, more food insecurity, worse health outcomes—and potential conflicts over scarce resources. At the same time, over the past 50-60 years, there has been a 30% decrease in glacier surface area as a result of changing climate conditions. By 2070 and onwards, availability of water resources and river discharge is likely to decline due to further melting of glaciers. To overcome the challenges two sets of skills will be required: (i) soft skills: climate change impact assessment; climate modelling – downscaling global models; enhanced discharge monitoring of snow-fed catchments and early warning; a climate database for forecasts and vulnerability assessments; water-resource modelling, esp. groundwater modelling; water accounting (monitoring, digitalization, GIS data bank, methodologies) water-energy modelling; (ii) technological and infrastructural: technologies to save energy in the water sector e.g., solar pumps to replace electric pumps; soil reclamation; on-farm water storage infrastructure;

groundwater recharge techniques; treatment and reuse of wastewater; nature-based solutions. **The detailed presentation is provided in a separate folder (for Session IV).**

**Dr. Kuat Akizhanov**, Deputy Director, CAREC Institute presented key findings of the report: “*Water-Agriculture-Energy Nexus in Central Asia through the lens of climate change*”. Climate change impacts on water resources and agriculture in the CAREC region. Tackling climate change is crucial especially in Central Asia where water scarcity and unstable crop yields are major concerns. This region urgently needs smarter water and farming solutions for its future resilience. Identifying vulnerability hotspots based on climate scenarios (pessimistic and optimistic) is crucial for implementing effective mitigation and adaptation strategies in Central Asia addressing the pressing challenges of water scarcity. Central Asia faces increasing electricity demand due to growth and development, alongside the imperative to reduce GHG emissions per the Paris Agreement. Dr. Kuat Akizhanov highlighted that there is a need to (i) promote education and training for climate-smart agriculture and water management; (ii) to enhance local expertise and implement innovative technologies; (iii) to cultivate awareness and behavioural change for sustainability; (iv) to boost climate change awareness and sustainable practices through targeted educational programs and public campaigns. The investment in human capital will be key to adapting to climate change and securing sustainable agricultural and water systems in the region. To boost sustainability and climate resilience in Central Asia, it's key for policymakers to create a cross-border cooperation framework for water and energy, addressing both agricultural and energy needs, and facilitating climate adaptation to improve regional stability and prosperity. **The detailed presentation is provided in a separate folder (for Session IV).**

**Dr. Slawomir Wroblewski**, Deputy Rector of the International Agriculture University of Uzbekistan recommended to get the most recent data for the publication from Governments. Considering that the Central Asia countries have centralized management system, the publication was recommended to be enriched with some mechanisms how regions/sub-regions can present their interests to the central government and to the international level, as well as risk management solutions.

**Ms. Alтынay Arapova**, Economist, Regional Cooperation and Integration informed that ADB is not in a position to collect/ update data but can provide relevant assistance in capacity building of statistical offices. The role of universities is to produce competent graduates in all the areas, including in statistics. Universities were recommended to update their curricula in line with modern labour market requirements.

*During the Interventions session, the following reflections were received from university representatives:*

- Pakistan: *Mr. Iqrar Ahmad Khan, Vice chancellor, Faisalabad university of Agriculture* mentioned that it cooperates with universities of other countries under the signed cooperation agreements for joint solution of available challenges, including at the level of curricula;
- Tajikistan: *Mr. Tohir Mirzoalizoda, Deputy Rector, Tajik Agrarian University* mentioned that 2025 was declared by the President “The year for glaciers’ conservation” and the university plays a crucial role in implementation of the planned interventions.
- Uzbekistan: *Mr. Abdulhakim Salokhiddinov, Vice-rector/professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University* pointed out that there are a lot of uncertainties related to water resources, climate change challenges and only joint actions can help to find solutions.
- Kyrgyzstan: *Mr. Almazbek Ibrashev, First deputy rector, Kyrgyz National Agrarian University named after K.I.Skryabin* addressed that there is a need to make changes into curricula for including new water resource management disciplines, new approaches to teachers’ training.

## **Session V: Skills needed to scale up climate-smart agriculture in the CAREC region: challenges and opportunities**

**Climate change, agriculture and food security in the CAREC member countries**, *Mr.Md. Abul Basher, Senior Natural Resources and Agriculture Specialist, ADB*

**Agricultural/ agribusiness development and strong market system analysis: perspective of Higher education institutions**, *Ms. Monika Sopov, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation*

**Q&A session, open discussions involving universities' representatives**  
**Moderator: Ms. Niloofar Sadeghi, Water Resources Specialist, ADB**

**Moderator: Ms. Niloofar Sadeghi**, Water Resources Specialist, ADB informed that Session V will be focused on discussions around climate-smart agriculture from the perspective of the higher education institutions.

In his presentation "*Climate change, agriculture and food security in the CAREC member countries*", **Mr. Md. Abul Basher**, Senior Natural Resources and Agriculture Specialist highlighted that ADB puts a great emphasis on climate-adaptive agriculture and food security: in 2019-2030 100 billion USD will be allocated to its developing member-countries, and 14 billion USD will be allocated to improve food security (2022-2025). All ADB projects will be aligned with the Paris agreement. Mr. Md. Abul Basher informed that there are 4 pillars of food security: (i) food availability; (ii) food access; (iii) food utilization; (iv) stability. As for the Central Asia countries the number of food insecure people rising since 2015 with sign of decline in 2022. Within the period of 2013-2022 there were the following food security challenges in CAREC countries: (i) *low productivity (land, labour, and capital)*; (ii) *lack of investment in human capital and limited entrepreneurship*; (iii) *inadequate infrastructure and market systems*; (iv) *traditional markets and marketing (producer-pushed)*, (v) *declining agricultural resources (land, water)*, (vi) *weak resilience to climate change*; (vii) *lack of conducive institutional and regulatory harmonization, especially for food trade*. For addressing the challenges, the following measures have been proposed: (i) to develop a climate-smart agriculture system, using digital technology, (ii) to develop agriculture and agri-food value chains, (iii) to improve use of water resources (increase productivity per drop of water); (iv) to promote green trade by increasing access and incentivizing trade of environmental goods, among others. ADB uses 3 tools or platforms to promote climate-smart agriculture and food security: (1) enhancing climate resilience (implementing measures to reduce vulnerability to climate-related hazards); (2) regional cooperation; (3) capacity building where countries identify the knowledge gap to promote climate-smart agriculture on their own. **The detailed presentation is provided in a separate folder (for Session V).**

**Ms. Monika Sopov**, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation in her presentation "*Agricultural/ agribusiness development and strong market system analysis: perspective of Higher education institutions*" shared brief information about the Wageningen university and Research centre (WCDI) with 6700 staff in different areas of expertise. The Wageningen university provides training for 18-23 aged students in the following 5 areas: agrotechnology and food sciences, animal sciences, plant sciences, environmental and social sciences. For the last 20 years WCDI has been applying the Dutch diamond approach where government, businesses, knowledge institutions, and civil society work together. The main objective of the WCDI is to empower individuals, businesses, sectors, governments, civil societies in different countries and strengthen them in their capacity for sustainable and inclusive development. Ms. Monika Sopov showed some examples of projects led by the WCDI (Vietnam, Ethiopia, Bangladesh, Indonesia) in setting up new master programs, enhancing sector performance, developing short courses for the private sector. Two videos

demonstrated: (1) Friesland Campina innovation centre with 22,000 people in different countries and annual revenue of 11 bln. euro, (2) World Horti centre (innovation centre in the Netherlands). The centre is a mix of Government and private sector funding, but the research is conducted by the universities (the private sector identifies the research areas that they are interested in). The WCDI provides assistance to universities in the following areas: enhancing competencies, research and innovation agenda, a student-centred curricula and training materials, organizational development, networks, upgrading, among others. **The detailed presentation is provided in a separate folder (for Session V).**

### **Session VI: Supporting Green Skills Development in the CAREC region**

**Capacity building strategy and green skills development**, *Dr. Iskandar Abdullaev, Visiting Professor Centre for International Development and Environmental Research, Justus Liebig University Giessen*

*Interventions: Representatives of Ministries and universities of all participating countries*

**Moderator: Ms. Monika Sopov, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation**

Moderator: **Ms. Monika Sopov**, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation provided a floor to Dr. Iskandar Abdullaev, Visiting Professor Centre for International Development and Environmental Research, Justus Liebig University Giessen.

**Dr. Abdullaev** in his presentation titled: *“Capacity building strategy and green skills development”* highlighted that to shift the economies and development to a more sustainable manner, more focus shall be put on education and training on the climate change aspects. Key findings of the regional assessment that covered desk review of policies, focus-group discussions, consultations were shared: (i) the CAREC countries take a lot of attempts to improve climate change policies/ strategies, but they are incomplete; (ii) private sector investment is very low; (iii) projects/ investments which have a solid climate change component are limited; (iv) innovative solutions for climate change are limited; (v) existing knowledge at the regional/ national level is non-systematic. Dr. Abdullaev informed that ADB’s Climate strategy of the Central and West Asia is aimed: (i) to support and streamline climate investments in the ADB business process and portfolio; (ii) to streamline the process of climate investments between sectors; (iii) to increase support for climate interventions in the national level. Dr. Abdullaev presented the results of stakeholders mapping into three groups: decision makers, implementers and knowledge-holders. The knowledge gap analysis of each group showed that decision makers need general information on climate change, mitigation strategies, legislation and the Paris agreement, implementers need more information about mitigation strategies, legislation parameters, adaptation strategies, international expertise, whereas knowledge holders have a huge demand on best practice opportunities, role of public, local communities and engaging rural society. Capacity building strategy should comprise of short-term interventions (trainings, ToT, training modules and manuals); medium-term interventions (platforms, partnership, ToT cascading); long-term educational processes (training clusters, centres, etc.). **The detailed presentation is provided in a separate folder (for Session VI).**

**Dr. Slawomir Wroblewski**, Deputy Rector of the International Agriculture University of Uzbekistan recommended to expand the list of stakeholders by adding international donors and partners important for the universities.

**Ms. Dovelyn Mendoza**, Consultant, ADB commented that agriculture is a labour-intensive process and in order to make sure that the agricultural sector is vibrant, the focus shall be not only on the high-skilled

workers, but also the low-skilled workers. The participating CAREC countries are supplying the labour to the EU, Netherlands, UK and we shall adjust the skills provided to the needs of these markets as well.

### **Session VII: Role of the higher education system in building new skills for climate-smart agriculture and water resources in CAREC region**

- Azerbaijan: Mr. Nurali Yusifbayli, Vice-rector, Azerbaijan Technical University;
- PRC: university representative;
- Kazakhstan: Ms. Dani Sarsekova, Dean, Faculty of Water, Land and Forest Resources, Kazakh National Agrarian Research University;
- Kyrgyzstan: Mr. Almazbek Ibrashev, First deputy rector, Kyrgyz National Agrarian University named after K.I. Skryabin;
- Mongolia: Mr. Enkhbayar Gonchigdorj, Vice President, Mongolian University of Life sciences;
- Pakistan: Mr. Iqrar Ahmad Khan, Vice chancellor, Faisalabad university of Agriculture
- Tajikistan: Mr. Tohir Mirzoalizoda, Deputy Rector, Tajik Agrarian University;
- Turkmenistan: Mr. Shamuhammet Shahyev, Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov;
- Uzbekistan: Mr. Abdulhakim Salokhiddinov, Vice-rector/professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University.
- Uzbekistan: “Developing Climate Knowledge hub and Education”, Dr. Jasur Salikhov, Rector, Central Asian University for the Study of Environment and Climate Change (Green University).

#### **Q&A session, open discussions involving universities’ representatives**

**Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB**

Moderator: **Ms Liliia Kachkinbaeva**, TVET, employment and labour market consultant explained the objective of Session VII. Participating agricultural universities (except Georgia) made a brief presentation (following earlier shared template) describing their role in solving agriculture-related/food security problems in the country, support they need to enhance the curriculum, exchange programs, student and faculty mobility, and strengthen the research. **All the presentations made by Agricultural universities are provided in a separate folder (for Session VII).**

Briefly, the following common areas were proposed for further joint collaboration/ exchange:

- ✓ Student/ faculty exchange,
- ✓ Improving the international ranking of agricultural higher education institutions,
- ✓ Improving the image of agricultural education;
- ✓ Methodology for integration of green skills into curricula,
- ✓ Joint research and improvement of scientific skills of the faculty, joint publications in international journals,
- ✓ Work-based learning (international benchmarks);
- ✓ Experience of European universities on delivery of short-term (non-degree) courses;
- ✓ Development of standards and curricula for newly emerging disciplines (for example, solar-powered irrigation systems, wind-energy applications, smart farming technologies, etc.);
- ✓ Peer-to-peer exchange guest lectures.

**Summary of areas of cooperation and required support is provided in Appendix 4.**

### **Session VIII: Expression of interest by participating Ministries and universities in signing joint agreements**

This session will help to identify key areas of collaboration and how universities can help in building capacity and skills for economic growth. Bilateral discussions will be fostered between selected universities for future discussion of agreement interventions

**Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB**

Moderator: **Ms Liliia Kachkinbaeva**, TVET, employment and labour market consultant thanked all the Agricultural universities for their presentations and summarized the key common challenges and areas for which the support is needed, and regional cooperation fostered.

*During the group work* representatives of agricultural universities reviewed draft Action Plan for 2024 (**Appendix 5**) and shared their ideas and recommendations during the panel discussion. The following comments were provided:

- As proposed activities are labour and time-consuming, timeframe shall be revisited.
- Action plan shall be revised in view of those areas which were mentioned by Agricultural universities (listed above) as they are of priority so far;
- The CAREC set of standards on development of occupational standards pertaining to agricultural disciplines can be developed and be of a recommendatory nature for further reference by HEIs;
- International benchmarks of proposed areas of cooperation are of a priority.

Meeting participants *supported an overarching need for creation of the CAREC Agricultural university network* as higher education institutions shall also drive climate change research, fostering innovation and developing cutting-edge solutions to address the challenges.

Under a wrap-up session, **Ms Liliia Kachkinbaeva**, TVET, employment and labour market consultant informed that all the relevant changes will be made into the Action plan for the CAREC Working group on Skills development and Action plan for the CAREC Agricultural universities' network and shared for countries' review. Proceedings and key highlights of a 2-day meeting will be furnished to participants along with PPTs.

List of participants of the First Meeting of the CAREC Working Group on Skills Development is provided in **Appendix 6**.



## AGENDA

## Day 1, 29 February 2024, Thursday - Inception of the CAREC Skills Development TA and launching the CAREC Working Group on Skills Development

Time	Activity
08:30-09:00	<b>Registration of participants, welcome coffee</b>
09:00-09:45	<p><b>Opening remarks:</b></p> <ul style="list-style-type: none"> <li>- Ms. Lyaziza Sabyrova, Regional Head, Regional Cooperation and Integration, Central and West Asia Department</li> <li>- Mr. Komilzhon Hamidovich Karimov, First Deputy Minister of Higher Education, Science and Innovations of the Republic of Uzbekistan</li> <li>- Ms. Kanokpan Lao-Araya, Country Director, Uzbekistan. Asian Development Bank Resident Mission</li> </ul> <p><b>Moderator: Ms. Altyнай Arapova, Economist, Regional Cooperation and Integration, ADB</b></p>
09:45-10:00	<p><b>Introduction of participants and key objectives of the meeting</b>  <i>Ms. Altyнай Arapova, Economist, Regional Cooperation and Integration, ADB</i></p>
10:00-10:15	<b>Group photo</b>
10:15-11:30	<p><b>Session I: Reinforcing Convergence to strengthen common regional standards</b></p> <p><b>How countries can benefit from harmonization of TVET systems: importance and need for convergence/ harmonization: missing opportunities and what could be achieved, Ms. Dovelyn Mendoza, Consultant, ADB</b></p> <p><i>Interventions: Representatives of Ministries of Education from Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan and Uzbekistan</i></p> <p><b>Mapping adherence to regional integration frameworks for the higher education sector in the CAREC region, Ms. Elizabeth Colucci, Consultant, ADB</b></p> <p><i>Interventions: Representatives of Ministries of Education of Azerbaijan, Georgia, PRC, Mongolia, Turkmenistan</i></p> <p><b>Moderator: Ms. Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p> <p><i>The session will present key findings of two above mentioned knowledge products, elaborate discussions on existing challenges in the TVET and HE systems of the CAREC participating countries (governance structures, reforms, integration aspects, skills gaps, skills anticipation, labour market needs, practices used for development of occupational standards, assessment tools, quality assurance, qualification frameworks, etc.). The session will result into defining a list of convergence areas in TVET and HE systems and selected CAREC participating countries that are closer in practices used and need peer-to-peer assistance.</i></p>
11:30 – 13:00	<b>Session II: Reinforcing convergence to develop regional standards – insights from policymakers and academia</b>

	<p><b>Short interventions: List of TVET and HE system areas that require improvements from regional perspective and expression of interest on the list of CAREC participating countries for joint cooperation (10 min per country):</b></p> <ul style="list-style-type: none"> <li>- <u>Azerbaijan</u>: Mr. Nicat Mammadli, Advisor to the Minister, Ministry of science education;</li> <li>- <u>PRC</u>: representative from the Ministry of education;</li> <li>- <u>Georgia</u>: Ms. Anna Baramia, Head, European Union Integration and International organizations division, Department of International Relations and Strategic Development, Ministry of Education; Ms. Nino Kakulia, Team leader, Skills and Partnership development Agency;</li> <li>- <u>Kazakhstan</u>: Ms. Rysgul Kudretullayeva, Head, Division for the Content of Higher and Postgraduate Education of the Committee for Higher and Postgraduate Education, Ministry of Science and Higher Education;</li> <li>- <u>Kyrgyzstan</u>: Mr. Azamat Naimanbaev, Head, Higher, Secondary Vocational and Postgraduate Education Department, Ministry of education and science;</li> <li>- <u>Mongolia</u>: Mr. Choisureen Erdene, Senior specialist, Department of Higher Education, Ms. Altanzul Ganbaatar, Department of Technical and Vocational Education and Training, Ministry of Education and Science;</li> <li>- <u>Pakistan</u>: Mr. Abdul Sattar Khokhar, Sr. Joint Secretary (HEC); Mr. Sohail Akhtar, Sr. Joint Secretary (PT), Ministry of Federal Education and Professional Training;</li> <li>- <u>Tajikistan</u>: Ms. Lutfiya Abdulkholiqzoda, Deputy Minister, Ministry of Education and Science</li> <li>- <u>Turkmenistan</u>: Mr. Azat Ataev, Deputy Minister of Education for Higher and Secondary Specialized Education</li> <li>- <u>Uzbekistan</u>: Mr. Farrukh Azimov, Head, Department for the Development of the Vocational Education System, Ministry of Higher Education, Science and Innovation of Uzbekistan.</li> </ul> <p><i>This Session will be focused on establishing partnership relations between CAREC participating countries and expression of interest and areas.</i></p> <p><b>Moderator: Ms. Dovelyn Mendoza, Consultant, ADB</b></p>
13:00-14:00	<p><b>Lunch break (Venue: Shosh Restaurant, 1<sup>st</sup> floor)</b></p>
14:00-15:30	<p><b>Session III: Launching the CAREC Working Group on Skills Development</b></p> <p><b>Opening remarks, Ms. Sofia Shakil, Director, Human and Social Development Sector Group, Asian Development Bank</b></p> <p><b>International best practices:</b> enhancing regional cooperation in skills development.</p> <ul style="list-style-type: none"> <li>- Mr. Kenji Mishima, JICA, Senior Representative, Tashkent,</li> <li>- Ms. Amanda Crowfoot, Secretary General, European University Network (online)</li> </ul> <p><b>Q&amp;A and Interventions:</b> Representatives of each participating CAREC country will express their ideas on potential tasks and functions of the CAREC Working Group on Skill Development (<i>draft Action Plan for discussion and TOR sent to all participants</i>). <i>To ensure participatory approach and high level of commitment, participants will be welcomed to propose tasks for the Working Group.</i></p> <p><i>Proposed order or as speakers express their interest:</i></p>

	<ul style="list-style-type: none"> <li>- <u>Azerbaijan</u>: Mr. Nicat Mammadli, Advisor to the Minister, Ministry of science and education;</li> <li>- <u>PRC</u>: representative from the Ministry of education;</li> <li>- <u>Georgia</u>: Ms. Anna Baramia, Head, European Union Integration and International organizations division, Department of International Relations and Strategic Development, Ministry of Education, Ms. Nino Kakulia, Team leader, Skills and Partnership development Agency</li> <li>- <u>Kazakhstan</u>: Ms. Rysgul Kudretullayeva, Head, Division for the Content of Higher and Postgraduate Education of the Committee for Higher and Postgraduate Education, Ministry of Science and Higher Education;</li> <li>- <u>Kyrgyzstan</u>: Mr. Azamat Naimanbaev, Head, Higher, Secondary Vocational and Postgraduate Education Department, Ministry of education and science</li> </ul> <p><b>Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p>
<b>15.30-15.45</b>	<b>Coffee break</b>
15.45-17.00	<p><b>Session III (continued):</b></p> <ul style="list-style-type: none"> <li>- <u>Mongolia</u>: Mr. Choisuren Erdene, Senior specialist, Department of Higher Education, Ms. Altanzul Ganbaatar, Department of Technical and Vocational Education and Training, Ministry of Education and Science;</li> <li>- <u>Pakistan</u>: Mr. Abdul Sattar Khokhar, Sr. Joint Secretary (HEC); Mr. Sohail Akhtar, Sr. Joint Secretary (PT), Ministry of Federal Education and Professional Training;</li> <li>- <u>Tajikistan</u>: Ms. Lutfiya Abdulkholiqzoda, Deputy Minister, Ministry of Education and Science;</li> <li>- <u>Turkmenistan</u>: Mr. Azat Ataev, Deputy Minister of Education for Higher and Secondary Specialized Education;</li> <li>- <u>Uzbekistan</u>: Mr. Farrukh Azimov, Head, Department for the Development of the Vocational Education System, Ministry of Higher Education, Science and Innovation of Uzbekistan.</li> </ul> <p><b>Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p>
17:00 – 17.15	<p><b>Wrap-up and summary of key findings of Day 1</b></p> <p><b>Moderator: Ms. Dovelyn Mendoza, Consultant, ADB</b></p>
<b>18:00- 19:30</b>	<b>Networking dinner (Hilton Hotel, “City 21” restaurant at the 21<sup>st</sup> floor)</b>

**Day 2, 01 March 2024, Friday – Skills for climate action, climate-smart agriculture and water resources management in the CAREC region**

Time	Activity
<b>08:30-09:00</b>	<b>Registration of participants, welcome coffee</b>
09:00-09:30	<p><b>Recap of Day 1 and objectives of Day 2</b></p> <ul style="list-style-type: none"> <li>- Ms. Altynay Arapova, Economist, Regional Cooperation and Integration, ADB</li> </ul>
09:30-10:30	<p><b>Session IV: Enhancing regional cooperation in skills needed for development of climate-smart agriculture, water resources management and green skills in the CAREC region</b></p> <p><b>Regional Cooperation in skills development for water resources management, Ms. Niloofar Sadeghi, Water Resources Specialist, ADB</b></p> <p><b>Water-Agriculture-Energy Nexus in Central Asia through the lens of climate change, Dr. Kuat Akizhanov, Deputy Director, CAREC Institute</b></p>

	<p><b>Q&amp;A session, open discussions involving universities' representatives</b></p> <p><i>The sessions IV-VII will review existing water recourses, climate change and environmental sustainability challenges in the CAREC region, perspective regional interventions in capacity building and strategic planning. The main objective of the session is to identify which skills are needed to respond to the emerging impacts of climate change on agriculture and water resources, how we can scale-up research and skills development and enhance regional cooperation. Meeting participants, including representatives from respective HE institutions will elaborate on the role of TVET and HE systems in sorting out existing regional challenges.</i></p> <p><b>Moderator: Mr. Md. Abul Basher, Senior Natural Resources and Agriculture Specialist, ADB</b></p>
10.30-11.30	<p><b>Session V: Skills needed to scale up climate-smart agriculture in the CAREC region: challenges and opportunities</b></p> <p><b>Climate change, agriculture and food security in the CAREC member countries, Mr.Md. Abul Basher, Senior Natural Resources and Agriculture Specialist, ADB</b></p> <p><b>Agricultural/ agribusiness development and strong market system analysis: perspective of Higher education institutions, Ms. Monika Sopov, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation</b></p> <p><b>Q&amp;A session, open discussions involving universities' representatives</b> <b>Moderator: Ms. Niloofer Sadeghi, Water Resources Specialist, ADB</b></p>
11:30 – 12:45	<p><b>Session VI: Supporting Green Skills Development in the CAREC region</b></p> <p><b>Capacity building strategy and green skills development, Dr. Iskandar Abdullaev, Visiting Professor Centre for International Development and Environmental Research, Justus Liebig University Giessen</b></p> <p><i>Interventions: Representatives of Ministries and universities of all participating countries</i></p> <p><b>Moderator: Ms. Monika Sopov, Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation</b></p>
<b>12:45 - 14:00</b>	<b>Lunch break (Venue: Shosh Restaurant, 1<sup>st</sup> floor)</b>
14:00-15:30	<p><b>Session VII: Role of the higher education system in building new skills for climate-smart agriculture and water resources in CAREC region</b></p> <ul style="list-style-type: none"> <li>- <u>Azerbaijan</u>: Mr.Nurali Yusifbayli, Vice-rector, Azerbaijan Technical University;</li> <li>- <u>PRC</u>: university representative;</li> <li>- <u>Kazakhstan</u>: Ms. Dani Sarsekova, Dean, Faculty of Water, Land and Forest Resources, Kazakh National Agrarian Research University;</li> <li>- <u>Kyrgyzstan</u>: Mr. Almazbek Ibrashev, First deputy rector, Kyrgyz National Agrarian University named after K.I.Skryabin;</li> </ul>

	<ul style="list-style-type: none"> <li>- <u>Mongolia</u>: Mr. Enkhbayar Gonchigdorj, Vice President, Mongolian University of Life sciences;</li> <li>- <u>Pakistan</u>: Mr. Iqrar Ahmad Khan, Vice chancellor, Faisalabad university of Agriculture</li> </ul> <p><b>Q&amp;A session, open discussions involving universities’ representatives</b></p> <p><i>The session will discuss issues of developing new skills in agriculture- new energy (renewables) for agriculture processing and operations, (ii) development of climate-sensitive cropping - agronomic skills, (iii) developing climate-proof water management- water expertise. The main aim would be to exchange current developments in higher education related to these focus areas, "best practices," gaps, and potential interventions.</i></p> <p><b>Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p>
<b>15:30 – 15:45</b>	<b>Coffee-break</b>
15:45 – 17:00	<p><b>Session VII (continued):</b></p> <ul style="list-style-type: none"> <li>- <u>Tajikistan</u>: Mr. Tohir Mirzoalizoda, Deputy Rector, Tajik Agrarian University;</li> <li>- <u>Turkmenistan</u>: Mr. Shamuhammet Shahyev, Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov;</li> <li>- <u>Uzbekistan</u>: Mr. Abdulhakim Salokhiddinov, Vice-rector/professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University.</li> <li>- <u>Uzbekistan</u>: “Developing Climate Knowledge hub and Education”, Dr. Jasur Salikhov, Rector, Central Asian University for the Study of Environment and Climate Change (Green University).</li> </ul> <p><b>Q&amp;A session, open discussions involving universities’ representatives</b></p> <p><b>Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p>
17:00-18:00	<p><b>Session VIII: Expression of interest by participating Ministries and universities in signing joint agreements</b></p> <p>This session will help to identify key areas of collaboration and how universities can help in building capacity and skills for economic growth. Bilateral discussions will be fostered between selected universities for future discussion of agreement interventions</p> <p><b>Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant, ADB</b></p>
18:00-18:15	<p><b>Wrap-up, discussion of next steps</b></p> <p><b>Ms. Altynay Arapova, Economist, Regional Cooperation and Integration, ADB</b></p>

## List of key achievements, challenges, areas of cooperation proposed by TVET and HE systems' officials

Name of country	Key achievements	Key challenges listed	Areas for cooperation	Countries for cooperation
<b>Azerbaijan</b>	<ul style="list-style-type: none"> <li>- Bologna process;</li> <li>- International integration</li> </ul>	<ul style="list-style-type: none"> <li>- Mismatch between the supply and demand in the labour market</li> </ul>	<ul style="list-style-type: none"> <li>- Skills needs matching practices/benchmarks and how TVET/HE institutions of other countries deal with</li> </ul>	All the CAREC participating countries
<b>China</b>	<ul style="list-style-type: none"> <li>- Lifelong learning opportunities for all;</li> <li>- Enhanced collaboration of the TVET/HE systems with the private sector.</li> </ul>	<ul style="list-style-type: none"> <li>- Conservative development path;</li> <li>- Insufficient supply of effective policies by local governments.</li> </ul>	<ul style="list-style-type: none"> <li>- Experience sharing on standards-oriented approach;</li> <li>- Improving the image of the VET system; Comparative studies on different aspects of TVET and HE systems.</li> </ul>	All the CAREC participating countries
<b>Georgia</b>	<ul style="list-style-type: none"> <li>- Membership in the Bologna process, EHEA, ESG;</li> <li>- Membership in the European association for quality assurance in HE and European quality assurance register;</li> </ul>	<ul style="list-style-type: none"> <li>- Link to labour market and skills mismatch;</li> <li>- Insufficient incentives for enhancing quality;</li> <li>- Practical component of TVET and HE systems is insufficient;</li> </ul>	<ul style="list-style-type: none"> <li>- Demand and supply analysis, mismatch between skills required by employers and provided by institutions (benchmarks);</li> <li>- Engagement of the industry sector;</li> <li>- Work-based learning component in TVET and HE institutions.</li> </ul>	All the CAREC participating countries (but mainly with Azerbaijan, Kazakhstan, China, Uzbekistan)
<b>Kazakhstan</b>	<ul style="list-style-type: none"> <li>- Human development is a priority;</li> <li>- Digital transformation;</li> <li>- Quality assurance.</li> </ul>	<ul style="list-style-type: none"> <li>- No issues listed</li> </ul>	<ul style="list-style-type: none"> <li>- Link to labour market and skills mismatch</li> </ul>	All the CAREC participating countries
<b>Kyrgyzstan</b>	<ul style="list-style-type: none"> <li>- Concept of NQS adopted, National qualification council established;</li> <li>- Methodology for development of occupational standards approved;</li> <li>- Lisbon convention ratified;</li> </ul>	<ul style="list-style-type: none"> <li>- No pathways between TVET and HE systems;</li> <li>- Poor engagement of the private sector/ industry;</li> <li>- Skills mismatch;</li> <li>- Lack of labor market analysis methodology;</li> <li>- Poor governance;</li> <li>- No flexibility of TVET and HE institutions.</li> </ul>	<ul style="list-style-type: none"> <li>- Digitalization of TVET and HE systems;</li> <li>- Benchmarks for labor market analysis, skills mismatch, work-based learning;</li> <li>- Labour market information system;</li> <li>- Procedure for recognizing non-formal education and skills;</li> <li>- Case studies from advanced systems/countries.</li> </ul>	All the CAREC participating countries

	<ul style="list-style-type: none"> <li>- Independent certification and validation center established;</li> <li>- Per-capita financing.</li> </ul>			
<b>Mongolia</b>	<ul style="list-style-type: none"> <li>- Digital transformation.</li> </ul>	<ul style="list-style-type: none"> <li>- Mismatch between graduates' skills and skills required by the labour market;</li> <li>- Quality assurance practices.</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher training and development,</li> <li>- Improvement of industry partnership in TVET and HE sector;</li> <li>- Labour market analysis and skills mismatch.</li> </ul>	All the CAREC participating countries
<b>Pakistan</b>	<ul style="list-style-type: none"> <li>- Qualification framework;</li> <li>- Skills development fund</li> </ul>	<ul style="list-style-type: none"> <li>- Poor Industry-Academia linkages;</li> <li>- Lack of Digitalization in TVET landscape;</li> <li>- Poor practical implementation of NQF.</li> </ul>	<ul style="list-style-type: none"> <li>- 2-3 weeks faculty trainings / exchanges;</li> <li>- Joint degree program in emerging fields (IT, physical and biological sciences);</li> <li>- Joint research projects in AI Robotics, Space sciences and agriculture;</li> <li>- Advancement in ICT for distance learning initiatives.</li> </ul>	All the CAREC participating countries
<b>Tajikistan</b>		<ul style="list-style-type: none"> <li>- Poor engagement of the industry sector in the TVET and HE sector</li> </ul>	<ul style="list-style-type: none"> <li>- Dual education (benchmarks from advanced TVET and HE systems);</li> <li>- Digitalization (benchmarks from advanced TVET and HE systems).</li> </ul>	All the CAREC participating countries
<b>Turkmenistan</b>	<ul style="list-style-type: none"> <li>- Updated legal framework;</li> <li>- Digitalization of the education system: establishment of education e-services, improvement of ICT competencies of teaching staff, provision of all the school children with laptops;</li> <li>- Ratification of the Lisbon Convention about recognition;</li> <li>- Integration into the international educational space.</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure the succession/ trajectory between different levels of education;</li> <li>- Rapid changes in the labour market; difficulties in forecasting required competencies and skills.</li> </ul>	<ul style="list-style-type: none"> <li>- Improvement of mechanisms of interaction between the labour market and TVET/ HEIs;</li> <li>- Dual education;</li> <li>- Validation procedures, certification of informal and non-formal education.</li> </ul>	All the CAREC participating countries

<b>Uzbekistan</b>	<ul style="list-style-type: none"> <li>- Dual education;</li> <li>- Competency-based training;</li> </ul>	<ul style="list-style-type: none"> <li>- Poor engagement of the industry sector;</li> <li>- Skills mismatch</li> </ul>	<ul style="list-style-type: none"> <li>- Dual education;</li> <li>- Curriculum development practices;</li> <li>- Practical training and short-term internships for students and teachers of technical schools;</li> <li>- Trainings and master classes for the teaching staff of TVET and HE institutions.</li> </ul>	All the CAREC participating countries
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## Terms of Reference - Proposed Central Asia Regional Economic Cooperation (CAREC) Working Group on Skills Development (WG SD)

### Introduction

On October 2017, the Central Asia Regional Economic Cooperation (CAREC) Program approved a new strategy, CAREC 2030, with the mission to be “a regional cooperation platform to connect people, policies, and projects for shared and sustainable development.” The revised operational framework for CAREC 2030 group’s activities in five clusters, including a new cluster on human development that covers education and health.

The scoping study of ADB “*Education and Skills Development under the CAREC program*” identifies important opportunities to harmonize education and skill standards, enhance student and worker mobility, strengthen labor market information and movement, and facilitate knowledge exchange. The report also highlights the benefits and provides examples of regional cooperation in education. Collaboration in the education sector will encompass instructional delivery initiatives, such as student exchanges and introduction of joint degree programs, and non-instructional initiatives such as faculty exchanges, research collaborations, mutual recognition of skills and qualifications, development of higher education and technical and vocational education and training institutions networks, and institutional twinning arrangements. CAREC will also help develop an integrated regional labor market.

### Proposed Terms of Reference (TOR) of the WG SD

The CAREC WG SD is expected to foster regional cooperation and integration in education and research. The WG SD will have the following main functions and responsibilities:

1. Promote policy dialogue and knowledge sharing on skills development among CAREC member countries and development partners, including the private sector.
2. Identify common challenges and opportunities for skills development in the region, such as labor market demand, quality assurance, accreditation, recognition of qualifications, and mobility of skilled workers.
3. Facilitate cross-border collaboration and exchange of good practices on skills development, such as joint programs, curriculum alignment, teacher training, student mobility, and research networks.
4. Support development of a CAREC Skills Development Regional Investment Framework, which would require:
  - Contributing to the development of CAREC regional skills development investment priorities as input to the CAREC Skills Development Regional Investment Framework for future activities of ADB to enhance regional cooperation.
  - Providing a forum for coordinating assistance plans and support of international development partners, including the private sector, on skills development.

### CAREC WG SD Composition

Each country designates at least two working group members (preferably high-level representatives from the education-related government agencies with higher education and TVETs sector expertise, leading academia, and research institutions) of which one shall be appointed as the WG SD focal point charged with the powers and responsibility to represent the country in the WG SD and bearing responsibility for day-to-day communications. The names of WG SD members will be communicated to the respective CAREC National Focal Point (NFP). It is preferable for SWG members (at minimum for the focal point) to serve as long term as possible, but not less than two years, to ensure continuity in inputs and approach.

For effective coordination of development partners, other members will include representatives of public universities and relevant educational institutions. Optional inclusion of other stakeholders such as the CAREC Institute, regional universities, and other international or regional organizations active in the field may be done with the concurrence of the CAREC Secretariat.

### **Functions of the CAREC Secretariat**

The WG SD is supported by the CAREC Secretariat, which is based at the ADB Headquarters and ADB resident missions. The Secretariat is responsible for scheduling and convening WG meetings, supporting communication between members, preparing meeting agendas and materials, coordinating WG activities, managing day-to-day operations, serving as a central contact point for information exchange, bringing together key stakeholders, and assisting in monitoring and reporting on the implementation of the SWG work plan.

### **Roles and Responsibilities of the CAREC WG SD Member**

WG members serve as representatives of their countries for the CAREC Skills Development initiatives. On a country level, they work closely and report to the sectoral ministry and contribute to the work led by the Senior Officials, representing the country in the CAREC Program. WG members bear the responsibilities for:

- Participating on behalf of the country in the online or physical meetings and conferences organized by the CAREC Secretariat.
- Representing the WG and the country in the regional events relevant to skills development and other relevant joint initiatives with other CAREC working groups.
- Reviewing the documents prepared for the WG meetings and formulating and presenting the country's position on various issues and proposals, reflected in the documents.
- Sharing and reporting information from WG meetings with respective national government authorities to acknowledge and approve issues and proposals. This includes regularly coordinating with and reporting to the CAREC National Focal Points.
- Actively contributing to discussions during strategic and annual planning sessions.
- Where necessary, tapping into national experts and organization(s) and other line ministries to provide necessary technical inputs required for WG activities.
- Coordinating and monitoring implementation of the activities (i.e., meetings and consultations) at the country level with support from the CAREC Secretariat, when necessary.
- Reviewing other relevant documents as appropriate before dissemination.
- Reviewing WG reports before submission to higher-level officials.

## 2024 Action plan for Skills Development Working Group

**Participating countries:** Azerbaijan, Georgia, Mongolia, Kazakhstan, Kyrgyzstan, Pakistan, PRC, Tajikistan, Turkmenistan, Uzbekistan

**Timeframe:** March – December 2024

The objective of the Skills Development Working Group is three-fold:

- To strengthen the dissemination of regional practices on skills development (TVET and HE) policies and programs;
- To enhance the exchange of experience and lessons learned among participating countries through the support of peer-to-peer cooperation, facilitation of relevant international and regional events;
- To strengthen research capacity of TVET and HE institutions of the CAREC participating countries and facilitate understanding of their role in solving skills gaps issues at the country level.

Major tasks supporting the implementation of Objectives:

- To sign country-to-country cooperation agreements and identify areas for exchange in each;
- To stock-take challenges in pathways between TVET and HE systems (in addition to those discussed at the workshop) in each CAREC country (by network members);
- To stock-take approaches used for development of learning plans, occupational standards and curricula used by TVET and HE systems of participating countries, identify common approaches and propose areas for harmonization/ joint cooperation;
- To improve TVET and HE institutions' cooperation with industry sector on addressing skills gaps.

No.	NAME OF AREA/ ACTIVITY	TIMEFRAME
<b>ORGANIZATIONAL ARRANGEMENTS</b>		
1	Discussion and agreement on the role and functions of the Skills development working group	29 February – 01 March 2024 (a 2-day meeting)
2	Finalization of the Terms of reference for the Working group based on suggestions received from workshop participants	March 2024
3	Participation in TA-development knowledge products' sharing meetings	upon request
<b>SIGNING JOINT AGREEMENTS BETWEEN SELECTED COUNTRIES</b>		
1	Based on the discussions on TVET and HE convergence areas, develop country-to-country cooperation agreements clearly specifying areas for collaboration, exchange of staff and practices	March 2024
2	Development of action plan on implementation of signed agreements (country-to-country online meetings)	April 2024
3	Bi-weekly meetings of partnering CAREC countries to update on implementation status	April-September 2024
4	Presentation of country-to-country cooperation (challenges, lessons learnt, etc.)	October 2024
<b>REVIEW OF MAJOR CHALLENGES IN PATHWAYS BETWEEN THE TVET AND HE SYSTEMS</b>		
1	Stock-taking of challenges in pathways between TVET and HE systems (in addition to those discussed at the workshop) in each CAREC country (by WG members)	March 2024
2	Peer-to-peer review and exchange of analysis results (meeting of the WG in its full membership)	April-May 2024

<b>CURRICULA REVIEW AND HARMONIZATION</b>		
1	Review of approaches used for development of learning plans, occupational standards and curricula used by TVET and HE systems of participating countries	March-April 2024 (consultants to be engaged)
2	Presentation of analysis results and identification of common approaches used by participating countries for further country-to-country cooperation	May 2024
3	Signing of cooperation agreements between selected TVET and HE institutions of participating countries for approaches and standards harmonization	May 2024
4	Development of CAREC set of standards for development of occupational standards and competency-based curricula (based on identified gaps or commonalities)	May-October 2024
5	Validation of CAREC set of standards for development of OSs and CBT curricula	October 2024
<b>SKILLS GAPS AND MATCHING FROM INDUSTRY PERSPECTIVE (FOR FOOD SECURITY DISCIPLINES ONLY PERTAINING TO UNIVERSITY NETWORK)</b>		
1	Desk review of skills gaps challenges enterprises are facing in each CAREC participating country	April-May 2024
2	Focus-group discussions with selected enterprises/ associations of each CAREC participating country to identify skills gaps (whether HE system provides workforce of required qualification)	April-June 2024
3	Stock-taking of HE-industry apprenticeship practices at country level (research by universities)	May-June 2024
4	Development of a road map for addressing skills gaps identified by industry sector (by each country)	July-October 2024

## List of areas of cooperation proposed by Agricultural universities

Name of country	Areas for cooperation	Countries for cooperation
<b>Azerbaijan</b>	<ul style="list-style-type: none"> <li>- Faculty Development; Student/ faculty Mobility Programs;</li> <li>- Technology Integration;</li> <li>- Work-based learning;</li> <li>- New standards for solar-powered irrigation systems, wind-energy applications, smart farming technologies (disciplines)</li> </ul>	All the CAREC participating agricultural universities
<b>China</b>	<ul style="list-style-type: none"> <li>- Application of automatic irrigation technologies</li> </ul>	-
<b>Kazakhstan</b>	<ul style="list-style-type: none"> <li>- Faculty/ student exchange;</li> <li>- Curriculum development for those disciplines that are not part of learning process (but which are available in participating universities)</li> </ul>	All the CAREC participating agricultural universities
<b>Kyrgyzstan</b>	<ul style="list-style-type: none"> <li>- Revision/ upgrading of curricula in agricultural disciplines;</li> <li>- Faculty/ student exchange;</li> <li>- Improving the research skills of the faculty;</li> <li>- Improving the international rating of universities;</li> <li>- Attracting highly qualified teachers and researchers from other partner universities to conduct training programs;</li> <li>- Exchange of experience and scientific cooperation on food security issues;</li> <li>- Joint publication of scientific articles in international journals</li> <li>- Joint PhD programs;</li> <li>- Flexibility of HEIs (short-term courses, micro-degree)</li> </ul>	All the CAREC participating agricultural universities
<b>Mongolia</b>	<ul style="list-style-type: none"> <li>- Work-based learning;</li> <li>- Faculty/ student exchange;</li> <li>- Digitalization;</li> <li>- Improving research skills of the faculty.</li> </ul>	All the CAREC participating agricultural universities
<b>Pakistan</b>	<ul style="list-style-type: none"> <li>- Managing Climate Smart Agriculture-CSA through TVET Programs harmonizing with HE;</li> <li>- Faculty/ student exchange.</li> </ul>	All the CAREC participating agricultural universities
<b>Tajikistan</b>	<ul style="list-style-type: none"> <li>- To improve scientific and pedagogical capacity both in the educational process and in the scientific dimension (mutual cooperation on the introduction of modern teaching methods, methodological and academic support, exchange of scientific achievements and their implementation in farming);</li> <li>- Academic mobility of students and teachers;</li> <li>- Dual education;</li> <li>- Joint research on issues linked to agriculture,</li> <li>- Organization of international scientific-practical conferences, round tables and other events aimed at improving the quality of education and efficiency of agricultural science.</li> </ul>	All the CAREC participating agricultural universities
<b>Turkmenistan</b>	<ul style="list-style-type: none"> <li>- Joint publication of articles and theses, with subsequent publication in peer-reviewed journals and platforms;</li> <li>- Joint hosting of international conferences and collections of scientific articles;</li> </ul>	All the CAREC participating agricultural universities

	<ul style="list-style-type: none"> <li>- Participation of faculty and students at international forums and events;</li> <li>- Student exchange</li> </ul>	
<b>Uzbekistan</b>	<ul style="list-style-type: none"> <li>- Student/ faculty exchange;</li> <li>- Development of educational materials, teacher training;</li> <li>- Establishing visiting/adjunct lecturer programs;</li> <li>- Joint research projects and publications;</li> <li>- Curriculum development.</li> </ul>	All the CAREC participating agricultural universities

### Key contours of the cooperation among CAREC Agriculture Universities for 2024

Participating countries: Azerbaijan, China, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan

The objective is to promote greater higher education cooperation in order to strengthen agricultural education in the region to narrow the development gap that exists, to prepare youth for regional leadership and to increase its competitiveness.

Tasks are as follows:

- To establish a platform for consultations among academic stakeholders and an exchange mechanism for collaborative initiatives in the agriculture higher education in the CAREC region;
- To facilitate knowledge sharing, research collaboration and student mobility.
- To drive progress by generating new ideas, and developing skilled workforce, while benefiting from the complementary strengths of the universities' partnership.

TA indicators to be achieved:

- A project agreement between two or more regional universities for degree, faculty or student exchange and/or qualification standardization program signed;
- Bilateral and/or regional framework on higher education standardization and harmonization prepared.

No.	NAME OF AREA/ ACTIVITY	TIMEFRAME
<b>ORGANIZATIONAL ARRANGEMENTS</b>		
1	Discussion and agreement on the role and functions of the Agriculture University Network	29 February – 01 March 2024 (a 2-day meeting)
2	Finalization of the Terms of reference for the Network based on suggestions received from agriculture university participants	March 2024
3	Participation in TA-developed knowledge products' sharing meetings	upon request
<b>REVIEW OF AGRICULTURE-RELATED CHALLENGES IN THE REGION</b>		
1	Stock-taking of challenges in the agriculture sector by HEIs in their respective countries (research by universities), including review of national agriculture development strategy	March -May 2024
2	Presentation of the research findings and discussion of the role of the HEIs in addressing the challenges from skills development perspective (knowledge sharing)	May-June 2024
<b>REVIEW OF MAJOR CHALLENGES IN PATHWAYS BETWEEN THE AGRICULTURE-RELATED TVET AND HE INSTITUTIONS</b>		
1	Stock-taking of challenges in pathways between agriculture TVET and HE systems (in addition to those discussed at the workshop) in each CAREC country (review of agricultural training plans and curricula taught in TVET institutions and those taught in HE institutions)	March-May 2024
2	Peer-to-peer review and exchange of analysis results	April-May 2024
3	Discussion of further steps and selection of countries for assistance in creating pathways between TVET and HE institutions	June 2024
4	Development of action plan for selected countries to institutionalize pathways between agriculture TVET and HE institutions	July-August 2024
5	Technical assistance in implementation of action plans	August-December 2024

<b>CURRICULA REVIEW AND HARMONIZATION</b>		
1	Review of approaches used for development of agriculture learning plans, occupational standards and curricula used by HE systems of participating countries	March-April 2024 (consultants to be engaged)
2	Presentation of analysis results and identification of common approaches used by participating countries for further country-to-country cooperation	May 2024
3	Signing of cooperation agreements between selected HE institutions of participating countries for approaches and standards harmonization	May 2024
4	Development of CAREC set of standards for development of occupational standards and competency-based curricula (based on identified gaps or commonalities)	May-October 2024
5	Validation of CAREC set of standards for development of OSs and CBT curricula	October 2024
<b>SKILLS GAPS AND MATCHING FROM INDUSTRY PERSPECTIVE (FOR AGRICULTURE DISCIPLINES)</b>		
1	Desk review of skills gaps challenges enterprises are facing in each CAREC participating country	April-May 2024
2	Focus-group discussions with selected agriculture enterprises/ associations of each CAREC participating country to identify skills gaps (whether HE system provides agriculture workforce of required qualification)	April-June 2024
3	Stock-taking of HE-industry apprenticeship practices at country level (research by universities)	May-June 2024
4	Development of a road map for addressing skills gaps identified by industry sector (by each country)	July-October 2024



**LIST OF PARTICIPANTS**  
**of the First Meeting of the CAREC Working Group on Skills Development**

№	Name	Position/ organization
<b>CAREC participating countries</b>		
1	Mr. Nicat Mammadli	Advisor to the Minister, Ministry of science education, Azerbaijan
2	Mr.Nurali Yusifbayli	Vice-rector, Azerbaijan Technical University, Azerbaijan
3	Ms. Qian Han (online)	Assistant Researcher, Office of Vocational and Continuing Education, National Institute of Education Sciences, China
4	Ms. Delan Zhu (online)	Professor, College of Water Resources and Architectural Engineering, Northwest A&F University, China
5	Mr. Fei Wang (online)	Director, Vocational School Management Division, Vocational Skills Development Department, Ministry of Human Resources and Social Security, China
6	Mr. Jianyu Wang (online)	Director, International Department, Ministry of Human Resources and Social Security, China
7	Ms. Anna Baramia	Head, European Union Integration and International organizations division, Department of International Relations and Strategic Development, Ministry of Education, Georgia
8	Ms. Rysgul Kudretullayeva	Head, Division for the Content of Higher and Postgraduate Education of the Committee for Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan
9	Ms. Dani Sarsekova	Dean, Faculty of Water, Land and Forest Resources, Kazakh National Agrarian Research University
10	Ms. Gulzat Isamatova	Advisor to the Minister, Ministry of education and science, Kyrgyzstan
11	Mr. Azamat Naimanbaev	Head, Higher, Secondary Vocational and Postgraduate Education Department, Ministry of education and science, Kyrgyzstan
12	Mr. Almazbek Ibrashev	First deputy rector, Kyrgyz National Agrarian University named after K.I.Skryabin
13	Mr.Choisuren Erdene	Senior specialist, Department of Higher Education, Ministry of Education and Science, Mongolia
14	Ms. Altanzul Ganbaatar	Department of Technical and Vocational Education and Training, Ministry of Education and Science, Mongolia
15	Mr. Enkhbayar Gonchigdorj	Vice President, Mongolian University of Life sciences
16	Mr. Abdul Sattar Khokhar	Sr. Joint Secretary (HEC), Ministry of Federal Education and Professional Training, Pakistan
17	Mr. Sohail Akhtar	Sr. Joint Secretary (PT), Ministry of Federal Education and Professional Training, Pakistan
18	Mr. Iqrar Ahmad Khan (online)	Vice chancellor, Faisalabad university of Agriculture, Pakistan
19	Ms. Lutfiya Abdulkholiqzoda	Deputy Minister, Ministry of Education and Science, Tajikistan
20	Mr. Tohir Mirzoalizoda	Deputy Rector, Tajik Agrarian University
21	Mr. Azat Ataev	Deputy Minister of Education for Higher and Secondary Specialized Education, Turkmenistan
22	Mr. Shamuhammet Shahyev	Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov

23	Mr. Komilzhon Hamidovich Karimov	First Deputy Minister of Higher Education, Science and Innovations of the Republic of Uzbekistan
24	Mr. Farrukh Azimov	Head, Department for the Development of the Vocational Education System, Ministry of Higher Education, Science and Innovations of Uzbekistan
25	Mr. Mirzaev Bahadir Suyunovich	Rector/ professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" National Research University
26	Mr. Abdulhakim Salokhiddinov	Vice-rector/professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University
27	Mr. Sherzod Rakhimov	Leading specialist, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers National Research University
28	Dr. Jasur Salikhov	Rector, Central Asian University for the Study of Environment and Climate Change (Green University)
29	Mr. Tulkin Farmanov	Doctor of Economics, Professor, Head of the Department, "Business Administration ", Tashkent State Agrarian University
30	Mr. Thomas Lux	Team leader, GIZ Project "Professional Education for Economic Growth Sectors in Central Asia"
31	Mr. Malik Mukhitdinov	Project Coordinator, KfW Regional Office Central Asia
32	Dr. Slawomir Wroblewski	Deputy Rector of the International Agriculture University of Uzbekistan
<b>ADB and Resource persons</b>		
33	Ms. Lyaziza Sabyrova	Regional Head, Regional Cooperation and Integration, Central and West Asia Department, ADB
34	Ms. Kanokpan Lao-Araya	Country Director, Uzbekistan Asian Development Bank Resident Mission
35	Ms. Alтынay Arapova	Economist, Regional Cooperation and Integration, ADB
36	Mr. Md. Abul Basher	Senior Natural Resources and Agriculture Specialist, ADB
37	Ms. Niloofar Sadeghi	Water Resources Specialist, ADB
38	Dr. Kuat Akizhanov	Deputy Director, CAREC Institute
39	Dr. Iskandar Abdullaev	Visiting Professor Centre for International Development and Environmental Research, Justus Liebig University Giessen
40	Mr. Kenji Mishima	JICA, Senior Representative, Tashkent
41	Ms. Dovelyn Mendoza	Consultant, ADB
42	Ms. Elizabeth Colucci (online)	Consultant, ADB
43	Ms. Amanda Crowfoot (online)	Secretary General, European University Association
44	Ms. Monika Sopov	Senior Advisor Sustainable Food Systems at Wageningen Centre for Development Innovation
45	Mr. Umid Khudoyberdiev	CAREC Regional coordinator, ADB
46	Ms. Liliia Kachkinbaeva	Consultant, ADB
47	Ms. Natalia Goncharova	Interpreter
48	Mr. Artur Ambartzumyan	Interpreter