







Strengthening Green Skills Development under the Central Asia Regional Economic Cooperation (CAREC) Program" (TA-6806)

KEY HIGHLIGHTS OF THE SECOND MEETING OF THE CAREC WORKING GROUP ON SKILLS DEVELOPMENT

3-5 April 2025, Hilton Baku Hotel (Firuze conference-hall, 2nd floor), Baku, Azerbaijan



A. Background information

Transitioning to a low-carbon economy comes with major policy challenges for many countries. These policy challenges span multiple sectors, including energy, transport, construction, industry, etc., affecting nearly every aspect of our lives. The transition to a low-carbon (green) economy requires a concerted effort to establish enabling policy frameworks, accessible green finance, and advance sustainable technologies.

All CAREC member countries are already experiencing severe effects of climate change, which are expected to worsen over time. While these countries differ in terms of land area, population size, geographic characteristics, natural resource endowment, per capita income, human capital

development, institutional capacity, contribution, and vulnerability to climate change, they must endure the impact of climate change as a 'lived reality.'

To transit to an inclusive green economy and reach net-zero emissions by 2050, a skilled workforce is needed to drive, implement, and sustain green practices. The workforce will need new skills and competencies integrating sustainability principles, ethical standards, values, attitudes, and behaviours across all fields and areas of applications. Education is critical for raising environmental awareness and promoting pro-environmental behaviour; equipping learners with the knowledge and skills to identify and address environmental challenges and opportunities.

Investment in skills development not only promotes economic growth and facilitates transition but also helps cushion the adverse effects of climate change. Skills attract investments, help green businesses, and enable the deployment of new technologies, including clean and digital ones. Training for greener jobs supports a just transition, improving worker employability and enterprise adaptability.

In response to these pressing global challenges, the ADB technical assistance project, "Strengthening Green Skills Development under the Central Asia Regional Economic Cooperation (CAREC) Program" is strategically designed to establish a sustainable mechanism for capacity building and ownership in the broader effort to green education and skills. Integrating green education and skills development is essential to the success of CAREC countries' initiatives supporting their climate change vision. Output 1 of the ADB project envisions the development of an Institutional framework for regional cooperation for green skills development, Output 2 focuses on the strengthening of climate-smart agriculture university education in the CAREC region, while Output 3 focuses on building awareness and capacity of governments, education institutions, and the private sector in the CAREC region on green skills, climate change, and just transition.

To promote regional multi-stakeholder dialogue towards collective actions, such as agenda setting, investments for projects with regional significance, policy coordination, capacity building and research, knowledge exchange, and technology transfer in HE and TVET among CAREC member countries, the CAREC Working Group on Skills Development (CAREC SDWG) has been established, whose first meeting was conducted on 29 February-01 March 2024 in Tashkent, Uzbekistan. Its second meeting took place on 3-5 April 2025, in Baku, with Azerbaijan as the Chair for 2025, recalling that as per Article 7, draft Memorandum of Understanding, the chairmanship of the working group rotates every year in alphabetical order.

Around **30 high-level officials** from among the CAREC participating countries¹ and regional agricultural universities² will take part in the meeting. The meeting will feature plenary sessions followed by interactive discussions and hands-on learning experiences. Participants are encouraged to share their opinions, knowledge, and insights to enrich the discussions. The Second Meeting of the CAREC Working Group on Skills Development comprised of **four parts**:

1) High-level meeting of Deputy Ministers of education of the CAREC participating countries, signing of the Memorandum of understanding

- ✓ To discuss the CAREC 2030 Strategic framework: Human development operational pillar
- ✓ To discuss the "Regional Action on Climate Change: A Vision for the CAREC program", including a regional platform for climate action
- ✓ To elaborate on the future role of Technical and Vocational Education and Training and Higher education systems in addressing the current climate change challenges

¹ 10 countries: Azerbaijan, China, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan

² 9 universities: Azerbaijan Technical University, Georgian Technical University (GTU), Kazakh National Agrarian Research University, Kyrgyz National Agrarian University named after K.I.Skryabin, Mongolian University of Life sciences, Faisalabad university of Agriculture, Pakistan, Tajik Agrarian University, Turkmen Agricultural University named after S.A. Niyazov, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University

- ✓ To review action taken to date under the green skills development project.
- ✓ To sign the Memorandum of Understanding "On strengthening regional cooperation in skills development among CAREC member countries."
- ✓ To discuss and approve the project action plan for 2025-2026.

2) Workshop on mainstreaming green skills and just transition (led by ITCILO)

- ✓ To build the capacity of the CAREC WGSD and regional agricultural universities on climate change and its social dimensions, link between skills development and just transition
- ✓ To launch the Agricultural university accelerator program.

3) Technical workshop on climate-smart agriculture for the CAREC region (led by Wageningen Social and Economic Research)

- ✓ To validate the needs assessment results of 9 public agricultural universities to be supported by Wageningen Social and Economic Research (Netherlands)
- ✓ To start developing local/ regional climate-smart agriculture demonstration projects.
- **4)** Site visits of TVET/ HE institutions: (1) SOCAR's Training-Education and Certification Department; (2) Baku Industry and Innovation State Vocational Education Center; (3) Azerbaijan Technical University for experience exchange in implementation of green skills courses, instructional and non-instructional components of training process

Detailed agenda of the Second 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 Second annual meeting of the CAREC working group on skills development supported by a technical assistance project "Strengthening Green Skills Development under the Central Asia Regional Economic Cooperation (CAREC) Program". She extended her gratitude to the Ministry of Science and Education of Azerbaijan for hosting the event and welcomed distinguished participants from Georgia, China, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Uzbekistan. In the CAREC Working Group on Skills Development meeting in Tashkent (29 Feb-1 Mar 2024), participants emphasized the need to enhance regional exchange of best practices in skills development, the importance of strengthening TVET and Higher Education institutions to address the skills gaps. The CAREC region is significantly affected by Climate Change, experiencing changes in temperature, shifting weather patterns, and various disasters such as floods, glacial lake outbursts, severe storms, and elevated pollution levels in cities making life challenging for extended periods. Ms. Lyaziza Sabyrova shared a couple of inspiring examples that underline the transformative power of regional cooperation. Recently, the CAREC region witnessed a remarkable progress in sustainable agriculture through joint efforts of several member countries: (i) Astrakhan's Green Fields Initiative, where farmers from Kazakhstan, Uzbekistan, and Kyrgyzstan collaborated to introduce cutting-edge irrigation techniques, significantly boosting crop yields while conserving water. This initiative not only strengthened food security but also created new employment opportunities, demonstrating the immense benefits of shared knowledge and resources. (ii) the Eco-Schools Program, supported by multiple CAREC nations, stands as a testament to the positive impact of cross-border educational collaboration. In Tajikistan, for instance, local schools adopted innovative green curricula developed collaboratively with experts from neighbouring countries. Such successful initiatives highlight the importance of signing of the Memorandum of Understanding. By fostering collaboration, sharing best practices, and building mutual trust, we promote open dialogue and address regional issues collectively. CAREC program brings people together to mobilize investments and resources for regional transformational projects and knowledge exchange. Ms. Lyaziza Sabyrova highlighted that based on the consultations and in order to improve the quality and relevance of project deliverables, address clients'

emerging requests, to increase project alignment with ADB's climate change agenda and sector operations in the region, a set of changes to the project scope, outputs, and implementation arrangements have been made. The Project is now focused on enhancing regional cooperation for the development of green skills within the CAREC region. It aims to equip relevant government entities and regional agricultural universities with the necessary mechanisms to collaborate effectively and strengthen their capacity to incorporate green and just transition elements. The signing ceremony of the Memorandum of Understanding "On strengthening regional cooperation in skills development among CAREC member countries" aims to serve as a milestone and provide an opportunity to leverage regional cooperation benefits. She mentioned about other CAREC events in Baku, including on integrating the Human Development and Climate Change agendas within the CAREC region. Ms. Lyaziza extended sincere appreciation to the Government of Japan for its ongoing support through the Japan Fund for Prosperous and Resilient Asia and the Pacific (JFPR). This initiative is dedicated to fostering a sustainable society and establishing a foundation for a prosperous future in our member countries and welcomed His Excellency Mr. Watanabe Katsuya, Ambassador of Japan to Azerbaijan. She thanked resource people from the Wageningen University, International Training Center of International Labour Organization for their active contribution of the meeting and further collaboration in improving regional cooperation and knowledge exchange.

Ms. Sofia Shakil, Director, Human and Social Development Sector Group, Asian Development Bank welcomed all the participants and highlighted that nowadays Governments all over the world face a major policy challenge in leading the transition to a low-carbon economy. This policy challenge spans across multiple sectors and requires a concerted policy effort that includes the development of conducive policy frameworks, access to green finance, and the promotion of sustainable technologies. CAREC countries are not an exception, it means that the transition to a green economy will require a skilled workforce to develop, implement and sustain green practices. This transition involves redesigning all sectors of the economy for sustainability, including production, distribution and decision making. Ms. Sofia highlighted that "greening" of education and skills is integral to the success of action CAREC countries are taking in support of the climate change vision. Worth highlighting, that investing in skills development not only facilitates economic growth and transition but also acts as a buffer against the adverse effects of climate change. Skills attract investments, help green businesses, and enable the deployment of new technologies, including clean and digital ones. Training for greener jobs supports an inclusive and just transition, improving worker employability and enterprise adaptability. The importance of green skills development in the CAREC region cannot be underscored. Regional collaboration is important not just for knowledge sharing, but also for pooling resources and solutions to create a robust framework that will ensure the youth is equipped with the skills needed. Education can be a powerful catalyst for climate action that is required. It can equip individuals with the knowledge and skills needed for green transition, while also fostering innovation. Asian Development Bank advocates inclusive and sustainable development of its member-countries and human capital development is key. Better educated people always build more effective and inclusive societies. Ms. Sofia Shakil reiterated that ADB is always ready to partner with member-countries and the whole region in addressing those changes and improving lives of people.

H.E. Mr. Watanabe Katsuya, Ambassador of Japan to Azerbaijan welcomed representatives from ADB, Governments and academic institutions of the CAREC region and expressed his gratitude for convening the Second annual meeting under the ADB's TA on Green skills development funded by the JFPR. The impacts of the climate change are no longer a distant concern as the CAREC region is facing environmental pressures. Just transition towards low carbon and green economy is essential. Green skills and knowledge are key for resilient and inclusive future. Human resources development is a cornerstone for effective and long-lasting international cooperation. H.E. Mr. Watanabe Katsuya mentioned that the Government of Japan supports capacity building efforts that empower individuals and communities, foster environmentally responsible knowledge economies and cooperation among nations.

The Second Annual Meeting objective is to move from vision to implementation through coordinated policy dialogue, institutional collaboration and action-oriented project planning. The significance of the MOU that provides a basis for regional cooperation, as well as of Agricultural university accelerator program, has been underscored. He highlighted that these efforts will foster creation of a skilled workforce to meet challenges of the climate change while supporting inclusive growth in the CAREC region.

Mr. Jeyhun Karamov, Director of State Agency on Vocational Education, Ministry of science and education, Azerbaijan welcomed all the participants and highlighted that in recent years Azerbaijan has been taking significant range of activities in transition to green economies embedding green technologies and promoting awareness of climate change and green skills. Green skills are a cornerstone of a transition towards sustainable future. Through such platforms like CAREC, countries can cooperate, share best practices, benefit from experience and achievements. Azerbaijan has adopted its 2030 Outlook and one of its key pillars is "establishing a country with clean environment and green growth", that sets concrete actions, including for the education and science. Last year Azerbaijan hosted COP29 and the liberated Karabakh and East Zangezur regions, as well as the Nakhchivan region, have been declared "green energy" zones. The Government of Azerbaijan highlights the importance of sustainable development, green growth, sustainable provision of energy resources. Education is a critical pillar for realizing the vision and activities underlined in key strategic documents. Ministry of science and education has taken specific activities in secondary vocational, technical, higher education, scientific and research areas. Azerbaijan focuses on STEM, content and physical infrastructure across the country. There are 400 schools with STEM programs with coverage of 250,000 students. In 2024 Azerbaijan hosted a green STEM conference attended by different countries. As for vocational and technical education, modules and programs on climate change, sustainable renewable energy have been developed. During the COP29 High-level Ministerial meeting Azerbaijan proposed to include climate change awareness and assessment of climate knowledge, green skills as part of the PISA as it might help societies, Governments to measure and to understand how such are working at different levels. There is an opportunity and necessity for collaboration on all these areas.

Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB welcomed all the participants and briefly dived into objectives of the Second Meeting of the CAREC Working Group on Skills Development (as mentioned on Pages 2-3 above).

Moderator of Opening remarks and Introduction session: Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and Social Development Department, Asian Development Bank

High-level meeting: Bridging the Human Development and Climate change agenda in the CAREC region

Presentation: Human development as a priority sector within the CAREC 2030 strategy, Ms. Sofia Shakil, Director, Human and Social Development Sector Group, ADB

Discussion of the Action plan for 2025-2026, *Ms. Zulfia Karimova*, Principal Regional Cooperation specialist, ADB

Discussions, questions and answers session

Moderator: Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education, Azerbaijan

Moderator of Session - Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education, Azerbaijan welcomed all the participants to *High-level meeting*:

Bridging the Human Development and Climate change agenda in the CAREC region. According to the CAREC 2030 strategy the region is taking some bold actions to become more integrated, more resilient and people-centred one. CAREC 2030 has five operational clusters, one of them is on Human development. CAREC has 5 broad and actionable frameworks for regional transformation. The human development cluster is crucial because it lays a foundation for long-term climate resilience. He highlighted that if we do not invest into education, skills and adaptability, we will not succeed in our climate goals.

In her presentation "Human development as a priority sector within the CAREC 2030 strategy" Ms. Sofia Shakil, Director, Human and Social Development Sector Group, ADB, mentioned that CAREC 2030 "Connecting the region shared and sustainable development" Strategy for consists of 5 operational priorities: Economic and financial, Trade, tourism, and economic, Infrastructure and economic; Agriculture and water; and Human development. Cross-cutting priorities: Climate change, Information and communications technology, Gender. The growing climate and other crises deeply impact poverty and well-being across the lifecycle: children, youth, women, older persons, people with disabilities and adverse health conditions. Ms. Sofia Shakil underscored that investing in education. health, social protection, and social development is crucial as climate change and other crises exacerbate poverty, inequality, and vulnerability, threatening human capital and overall well-being. Investing in green skills and smart agriculture touches upon all those dimensions throughout the life cycle by ensuring that people have access to adequate food security, chances of improving their livelihoods and plugging into the broader economic eco-system. ADB's Human & Social Development Sector Group covers such areas as health, education, social protection, social development (developing programs, promoting policies, strengthening of service delivery, access to education and heath, etc.) in the Asia and Pacific with a large portfolio of projects (loans and grants, technical assistance, 13.4 billion worth of investments across the region). Examples of latest initiatives were presented with a focus on skills for green economy, climate and health initiatives. The detailed presentation is provided in a separate folder (for Session I).

Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB, made the presentation: "Discussion of the Action plan for 2025-2026" and briefed workshop participants about planned interventions and key milestones, namely: (1) Third and Fourth Annual meetings of the CAREC Working Group on Skills Development (April 2026, September 2026); (2) ITCILO will deliver 4 trainings/ workshops for a cohort of 4 experts from each participating countries: (i) First distance learning course on the link between climate change and its social dimensions (5-16 May 2025, eCampus ITCILO); (ii) Second distance learning course on contextualized TVET/HE action planning, embedding just transition aspects (1-26 September 2025, eCampus ITCILO); (iii) First in-person training on the practical inclusion of just transition policies in their TVET/HE systems (14-16 July 2025, Turin, Italy); (iv) Second in-person training on country-specific action plans on mainstreaming green skills into TVET/HE policies (4-6 November 2025, Bishkek or Almaty); (3) WUR will finalize the needs assessment for 9 regional agricultural universities (academic and non-degree programs, research, micro-credential system, exchange and internship programs), provide technical assistance to agricultural universities in development and implementation of joint regional demonstration projects on coping with climate change and just transition challenges, among others. The detailed presentation is provided in a separate folder (for Session I).

During the Interventions session, the following reflections were received:

- <u>Azerbaijan:</u> Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education asked what are the key 3 aspects for putting emphasis on the green agenda during policy planning and implementation. Ms. Sofia Shakil highlighted that it is important (i) to promote evidence-based messaging, (ii) to develop shared responsibility among policy-makers, industry and academic institutions (iii) agricultural universities should start offering employment-oriented and innovation-driven training. Mr. Fariz Guliyev, Chief Adviser of International Projects Management Division, International Cooperation Department, State

- Agency on Science and Higher Education mentioned that farmers in villages, regions, communities should be provided with an opportunity to have access to vocational and green skills (through short courses, Al-driven apps, micro-modules, etc.).
- <u>Georgia:</u> Ms. Baya Kvitsiani, Deputy Minister, Ministry of education, science and youth underscored the importance of such platforms as the CAREC WGSD, specifically uniting countries facing the same challenges. Georgia has been investing into the vocational education since 2005 and learned that investing in the infrastructure or just in the vocational education does not work a holistic and systemic approach does matter. In 2021 Chamber of commerce and industry and the Ministry of education joined their forces and created Skills Agency aimed at improving the private-public partnership (there are successful examples in construction, food industry, etc.).

The signing ceremony of the Memorandum of Understanding "On strengthening regional cooperation in skills development among CAREC member countries" (Text and list of signatories are provided in Appendix 2)



Panel discussion: "The role of the TVET/ HE systems in addressing climate change challenges: status "quo" and future plans"

- *Mr. Jeyhun Karamov*, Director, State Agency on Vocational Education under the Ministry of Science and Education, Azerbaijan (5 mins)
- Ms. Baya Kvitsiani, Deputy Minister of Education, Science and Youth, Georgia (5 mins)
- *Ms. Gulzhan Jarassova*, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (5 mins)

- Mr. Azamat Naimanbaev, Advisor to the Minister of education and science, Kyrgyz Republic (5 mins)
- *Mr. Oyunaa Purevdorj*, Director-General of the Education Policy Planning Department, Ministry of education, Mongolia (5 mins)
- *Mr. Sohail Akhtar*, Senior Joint Secretary-IC, Ministry of Federal education and professional training, Pakistan (5 mins)
- Ms. Lutfiya Abdulkholiqzoda, Deputy Minister of Education and Science of the Republic of Tajikistan (5 mins)
- Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (5 mins)

Open discussion, questions and answers (10 mins.)

Moderator: Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and Social Development Department, ADB

After the MOU signing ceremony, moderator: **Ms. Hyun Joo Youn,** Senior Social Development Specialist, Human and Social Development Department, ADB introduced the objectives of the *Panel discussion: "The role of the TVET/ HE systems in addressing climate change challenges: status "quo" and future plans".* **All the presentations made by Ministries are provided in a separate folder (Panel discussion session).**

Azerbaijan: Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education mentioned that transition to climate change and green skills is envisioned in the Azerbaijan National Socio-economic Development Strategy for 2022-2026 and TVET/HE development strategy. Specific activities have been implemented through diversification of training programs, namely, (i) in 2019 the Ministry of science and education started incorporating occupational health and safety and environmental protection modules into TVET curricula (as one of the core modules), (ii) developed 3 new renewable energy programs: solar panel installation and servicing; wind turbines installation and servicing; alternative energy equipment and devices; hybrid and electric car operator (piloted in some TVET schools with plans to roll out across the country). Specific training programs fostering implementation of renewable energy projects have been developed and implemented in Karabakh as a green economic zone (in view of industry needs for the skilled labour force). Within next 2 years 5000 employed workers are planned to be re-skilled and up-skilled on green skills. As for higher education system, double degree programs on renewable energy have been implemented together with Warwick university, capacity building activities for teaching staff as driving force of changes in the education system are conducted regularly and a mandatory course on green skills is planned to be introduced for them. Higher education and TVET institutions have a strong partnership with Azerbaijan's largest energy companies.

<u>China:</u> Ms. Wang Jianyu, Director, Department of International Cooperation, Ministry of Human Resources and Social Security congratulated all the workshop participants with MOU signing ceremony and highlighted that China has been still reviewing it.

<u>Georgia:</u> Ms. Baya Kvitsiani, Deputy Minister of Education, Science and Youth highlighted that transition can be very challenging and costly policy-wise. 2022-2030 Unified National Strategy of Education and Science promotes green transition and development of green competencies. Green Growth Strategy of Georgia 2026-2030 is under development, which aims to integrate green economy principles into all sectors. By 2030 Georgia aims to align TVET curricula with green job market needs, develop new curricula for green occupations, enhance work-based learning in green sectors, strengthen collaboration

with the private sector (Skills agency created), increase investment in green training facilities. Ministry of education and Skills agency are engaged in various platforms at different levels, for instance, EEA Working Group on vocational education and training (VET) and the green transition. Green competencies are integrated into occupational and educational standards (occupational health and safety, environmental protection, waste management, basic principles of green buildings, green subjects, solar panels installation, etc.). Pre- and in-service training on green skills has been conducted for teaching staff.

<u>Kazakhstan:</u> Ms. Gulzhan Jarassova, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education informed that transition to green economy is a priority prescribed in the Kazakhstan development strategy 2050 and its sectorial programs. Concept for development of ecological culture "Taza Kazakhstan" for 2024-2029 is one of the recent adopted documents aimed at improving ecological thinking and behaviour, ecological education, information campaign and awareness raising, among others. The demand for specialities has been mapped for 9 regions and atlas of new occupations prepared with a regional focus. Over 500 new occupations have been identified for 45 sectors at TVET and HE levels. Regional HEIs will be transferred into Centres of academic and research excellence (in collaboration with international partners and industry sectors). She presented ongoing projects in AI, energy and sustainable development, agriculture, education, microqualifications development and implementation, etc.

Kyrgyzstan: Mr. Azamat Naimanbaev, Advisor to the Minister of education and science listed national strategic documents on green economy development, namely: Concept of green economy in the Kyrgyz Republic "Kyrgyzstan – the country of green economy", Program for the Development of Green Economy in the Kyrgyz Republic for 2019-2023, Draft program of green economy development for 2024-2028; National Development Strategy for 2018-2040, National Development Program until 2026. Currently, the Kyrgyz Republic does not have a well-established or widely recognized system for forecasting green skills. However, several initiatives and approaches can help build such a system: labour market analysis, collaboration with educational institutions, monitoring and evaluation, national initiatives, cooperation with international organizations. Some institutions have started developing programs that incorporate courses on ecology, sustainable development, and natural resource management. These programs aim to prepare professionals for careers in environmental protection and sustainability. Some vocational schools offer courses on renewable energy, energy efficiency, eco-design, and other topics that contribute to green jobs. The draft program for green economy development for 2024-2028 is focused on green energy, energy efficiency, green agriculture, subsoil use, low-emission transport, sustainable tourism, waste management as priority industry sectors. In support to the transition process to a green economy, it promotes sustainable financing, fiscal incentives, sustainable public procurement, capacity building and awareness raising.

Mongolia: Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education shared Mongolia's experience in green development. The following national documents promote green growth and green skills: Mongolia Vision 2050, TVET curriculum reform 2024-2028, HE programs accreditation, Guide for developing school curriculum in line with sustainable development, Education sector mid-term development plan until 2030, a 4-year Government plan, green transition national strategy. Compared with some advanced countries, Mongolia has been at its initial path to green development. For next 4 years Ministry of education plans (i) to equip TVET and HE students with green skills, (ii) to update standards for buildings for all types of educational institutions. As for measurement of green jobs, there is no specific tool for labour market assessment. Green loans have been provided through commercial banks.

<u>Pakistan:</u> Mr. Sohail Akhtar, Senior Joint Secretary-IC, Ministry of Federal education and professional training emphasized that Pakistan has been actively working towards integrating inclusive green growth

into its development strategies. Country has aligned its policies with sustainable development goals (SDGs) and frameworks like Vision 2025, which emphasize inclusive growth and environmental sustainability. Education plays a pivotal role in equipping individuals with the knowledge, skills, and values needed to support a green economy. Education policies in Pakistan, particularly through initiatives like Vision 2025 and SDG-aligned programs, aim to foster awareness of sustainability and inclusivity. Programs under the TVET sector have started incorporating green skills training, such as renewable energy technologies and sustainable agriculture practices. Pakistan has made strides in creating green jobs, particularly through initiatives like the Green Pakistan Program. Ministry of Climate Change reported creation of 200,000 green jobs as part of its tree plantation and climate resilience projects. However, a comprehensive system for measuring green jobs across all sectors is still developing. Efforts are underway to anticipate green skills through collaborations between government bodies, international organizations, and the private sector. TVET institutions and universities offer specialized courses on renewable energy, climate adaptation, and environmental management. Institutions like National Vocational & Technical Training Commission (NAVTTC) and Higher Education Commission (HEC) have introduced green skill programs. Climate change education is included in school, college, and university curricula.

<u>Tajikistan:</u> Ms. Lutfiya Abdulkholiqzoda, Deputy Minister of Education and Science mentioned that Tajikistan has initiated the adoption of 9 UN General Assembly resolutions aimed at resolving water and glacier melting issues, which have significantly contributed to a better understanding of water issues at the global level, with the goals of achieving socio-economic and sustainable development, ensuring environmental sustainability. Tajikistan has adopted the following strategic documents: the National Strategy on Climate Change Adaptation up to 2030; the Green Economy Development Strategy for 2023-2037, National Education sector development strategy until 2030. The National Climate Change Adaptation Strategy highlights the industry sectors most vulnerable to climate change, including energy, water, transport, and agriculture. It also addresses cross-cutting areas such as health, education, gender, youth, migration, environment, and emergency response. At the initiative of Tajikistan and France, the UN General Assembly adopted a resolution declaring 2025-2034 as the Decade of Action to Support Cryosphere Sciences (August 2024). A Regional Coordination Centre for Glaciology and Research Institute for Sustainable Green Economy Development have been established. A series of books on green jobs and green skills has been published. Professional education programs across various agricultural fields have been developed.

Uzbekistan: Mr. Begimkulov Uzokboy, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations highlighted that in the face of global climate change challenges, the international community recognizes the need for urgent and coordinated action for transition to inclusive green growth. Main objectives of the Uzbekistan's National Strategy for the "Green" Economy until 2030 are as follows: 30% reduction in energy consumption, increasing the share of renewable energy sources to 25%, reduction of greenhouse gas emissions by 10% (from the level of 2010). In Uzbekistan climate change aspects are being integrated into the education system through modules/ training courses in green energy, renewable energy, ecology, environment protection, ecological policies, etc. The share of green specialties has increased to 30% of the total number of Master's degree programs. 2025 was declared a Year of Environmental Protection and Green Economy. The Green University initiative will be implemented to improve the environmental sustainability of universities and their participation in the UI Green Metric international ranking. As for TVET system, the following general competencies have been incorporated into 50 professions and specialties: (i) implementation of measures to prevent environmental damage and waste disposal generated during production; (ii) compliance with the environmental culture of the industry. 14 TVET schools provide training in the field of ecology, environmental protection and climate change.

Session I: A Pathway towards sustainable learning and a just transition: laying a theoretical background

Opening remarks:

• *Ms. Sunniya Durrani-Jamal*, Country Director, Azerbaijan Resident Mission, Asian Development Bank

Presentation: Climate Education Playbook: Making Education Climate-Ready in Asia and the Pacific, Mr. Alexander Tsironis, Education Specialist, Human and Social Development Department, ADB (15 mins)

Presentation: Climate change and its social dimensions: framing the issue, defining challenges, overview of sustainable development, *Ms. Chandni Lanfranchi*, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (15 mins)

Presentation: Just transition to low-carbon economies and societies: concepts, entry points for action, case studies, *Ms. Chandni Lanfranchi*, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (15 mins)

Reflections to presented material:

- Ms. Baya Kvitsiani, Deputy Minister of Education, Science and Youth, Georgia (5 mins)
- Ms. Gulzhan Jarassova, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (5 mins)
- Mr. Azamat Naimanbaev, Advisor to the Minister of education and science, Kyrgyz Republic (5 mins)

Presentation: Jobs, environment and decent work: defining decent work and green jobs, *Ms. Chandni Lanfranchi*, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (20 mins)

Reflections to presented material:

- Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education, Mongolia (5 mins)
- *Mr. Sohail Akhtar*, Senior Joint Secretary-IC, Ministry of Federal education and professional training, Pakistan (5 mins)
- Ms. Lutfiya Abdulkholiqzoda, Deputy Minister of Education and Science of the Republic of Tajikistan, Tajikistan (5 mins)
- Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (5 mins)

Moderator: Ms. Liliia Kachkinbaeva, Consultant, ADB

Ms. Sunniya Durrani-Jamal, Country Director, Azerbaijan Resident Mission, ADB welcomed all the participants and highlighted that earlier sessions have allowed to collectively reflect on three aspects i.e. (i) the current skills development challenges, (ii) the progress made in developing policies, and implementing strategies, and (iii) understanding how we can help meaningfully address the climate change challenges we face through green jobs. It is evident that economies can enhance their

competitiveness by leveraging their human capital and particularly by strengthening their education and learning systems. Cooperation among CAREC countries, regional universities and industry is essential to produce a competent workforce equipped with new technical skills, strengthen expert, faculty, and student mobility, and invest in common research initiatives. Based on the analysis of CAREC countries it will become increasingly critical to (i) promote education and training for climate-smart agriculture and water management; (ii) enhance local expertise to develop and implement innovative technologies; (iii) cultivate awareness and behavioural change for sustainability; (iv) boost climate change awareness and sustainable practices through targeted educational programs and public campaigns. Investment in human capital will be crucial to adapting to climate change and ensuring sustainable agricultural and water systems in the region. Ms. Sunniya mentioned that the second half of the day will be dedicated to discussing climate change and its social dimensions, specifically the role of skills development for green jobs, as well as "greening" TVET and higher education systems. This presents a valuable opportunity for CAREC countries to share and learn from one another.

Moderator: Ms Liliia Kachkinbaeva, TVET, employment and labour market consultant welcomed all the participants to *Session I: A Pathway towards sustainable learning and a just transition: laying a theoretical background* and highlighted that Session will be dedicated to understanding the link between just transition, climate change, education and labour market.

In his presentation: Climate Education Playbook: Making Education Climate-Ready in Asia and the Pacific, Mr. Alexander Tsironis, Education Specialist, Human and Social Development Department, ADB informed that Climate Education playbook was launched during COP29 in Baku. Four pillars of climate ready education system include: (i) teach green skills and climate literacy (based on industry needs, environmental regulations); (ii) school facilities are adapted to climate risks; (iii) school facilities are resource efficient (climate mitigation); (iv) research, development and innovation system is climateoriented. Implementation should be context-specific. The following trends in the CAREC countries were described: Trend 1: Clean energy transition (hydro and wind are cheaper than gas, solar is cheaper than coal and gas, onshore wind will be as cheap as coal by 2030). It is important to introduce qualification standards for hydro, solar and wind jobs. Trend 2: Water scarcity: water use efficiency across selected industries, selected countries presented. There is a need to integrate water efficiency competencies, skills and qualifications related to water intensive sectors (agriculture, textile, water utilities, etc.). Trend 3: Droughts and floods risks. It is important to integrate drought resilient farming competencies and climate knowledge in agriculture qualification pillar to reduce food shortages leading to school leaving and lower educational attainment. Trend 4: Economic diversification to move away from the reliance on fossil fuel industries. It is important to do more research, development, innovation. Ranking of CAREC countries in the Global innovation index was presented. Introducing green skills will require the updating of occupational standards, ability to forecast future skills, updating TVET/HE institutes capacities, research and development on climate. Type of green skills to roll out: skills to operate green technologies, skills to provide sustainability services, skills to enhance the sustainability/ efficiency of natural assets. Three case studies in education for climate resilience supported by ADB: (i) Assam skills university in India. (ii) Science and technology HRD project in Sri-Lanka. (iii) Innovation through science technology project in Indonesia. The detailed presentation is provided in a separate folder (for Session I).

Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization in her presentation: *Climate change and its social dimensions: framing the issue, defining challenges, overview of sustainable development* provided some statistics: (i) some 1.2 billion jobs depend on healthy ecosystems. (ii) more than 2.4 billion workers likely to be exposed to heat stress. (iii) productivity loss equivalent to 80 million jobs due to heat stress by 2030. (iv) 130 million people could move into poverty within the next decade, undermining the achievement of SDGs. (v) Up to 216 million people could have to migrate internally by 2050. Recent data at global level concerning environmental and socio-economic challenges prove that the world is already suffering from

unsustainable modes of production and consumption, leading to resource depletion and social instability. Environmental challenges have an impact on societies and social crises are often linked to the unsustainable use of scarce planet's resources. In general, the overuse of natural resources, such as forests, fresh and clean water and the rising levels of pollution, including emissions of greenhouse gases, are increasingly exceeding our planetary boundaries. This leads in turn to an acceleration of the so-called ecological overshoot. Since the 19th century, human activities have been the main driver of climate change, mainly due to the burning of fossil fuels (such as coal, oil and gas), which produce heat-trapping gases. Energy, industry, transportation, buildings, agriculture and land use are among the main emitters. The planet is now approximately 1.2° C warmer than it was at the end of the 19th century. The last decade (2011-2020) was the warmest on record. Nine Planetary boundaries include Climate Change, Biosphere Integrity, Land-System Change, Biogeochemical Flows, Freshwater Use, Ocean Acidification, Atmospheric Aerosol Loading, Stratospheric Ozone Depletion, Introduction of Novel Entities (6 crossed in 2023). Ecological overshoot occurs when human demand exceeds the regenerative capacity of a natural ecosystem. Global overshoot occurs when humanity demands more than what the biosphere can renew. In other words, humanity's Ecological Footprint exceeds what the planet can regenerate. Nature and work are intrinsically connected. Our lives depend on the natural environment. Our jobs and businesses depend on a healthy planet. Climate change and environmental degradation are already disrupting millions of jobs and livelihoods. Our current economic model of production and consumption is not sustainable. We need to rethink the way we produce and consume goods and services, through gender-responsive and inclusive actions that leave no one behind. The detailed presentation is provided in a separate folder (for Session I).

During the Interventions session, the following reflections were received:

- <u>Azerbaijan</u>: Mr. Fariz Mammadov, Vice-rector for International affairs, Azerbaijan Technical University highlighted that increasing number of population in the cities creates problems with waste management. The country has been undertaking specific measures for improving the working and living conditions for women.
- <u>Georgia:</u> Ms. Nino Chkhartishvili, Professor, Georgian Technical University informed that Agency for food safety under the Ministry of Agriculture and Georgian Technical University have been making joint research of a bug causing damages in forests and agricultural products and soil it lives in. GTU has a special laboratory with high innovative technologies and methods, training courses and scientists in different areas.
- <u>Kazakhstan:</u> Ms. Gulzhan Jarassova, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education underlined women and men should have equal working conditions and access to robotics, Al, new green jobs. Five pedagogical HEIs will be upgraded into Centres of academic and research excellence. Scientific projects have been implemented in different areas, including efficient use of water and renewable energy resources.
- <u>Kyrgyzstan:</u> Ms. Gulnura Mamyrova, Head of primary vocational education department, Ministry of education and science highlighted that challenges are almost the same in all the CAREC countries: water scarcity, air pollution, droughts, waste management, etc. In September 2025 the Ministry of education and science plans to roll out a new training program in TVET schools titled "Installation and maintenance of solar panels". Lots of interventions have been implemented in the higher education system (academic, research, outreach). Women have an opportunity to get soft skills through 18 online courses (53% of enrolled women are in migration). There are 700 short courses available ranging from 2 weeks to 3 months.

Session II: Leveraging the link between skills development and a just transition: Country perspectives

Presentation: Skills development for green jobs and towards a just transition: skills development for green jobs in the framework of a brighter, greener and more inclusive future, financing mechanisms, social dialogue, greening TVET, Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (20 mins)

Presentation: The role of infrastructure projects in developing a climate-smart agriculture in the Aral Sea basin, *Ms. Saule Serikovna Shalmaganbetova*, Head of information and analytical unit, the International Fund for Saving the Aral Sea (15 mins)

Reflections to presented material:

- *Ms. Anna Bezhanishvili*, Head of Analysis Division, Vocational Education Development Department, Ministry of education, science and youth, Georgia (3 mins)
- Ms. Karlygash Abuova, Head of Division, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (3 mins)
- Ms. Gulnura Mamyrova, Head of primary vocational education department, Ministry of education and science, Kyrgyzstan (3 mins)
- *Mr. Enkhbayar Baatartsol,* Director-General of the External Cooperation Department, Ministry of education, Mongolia (3 mins)
- *Mr. Alisher Alizoda,* Deputy Chairman, Committee on Primary and Secondary Vocational Education, Tajikistan (3 mins)
- Mr. Begimkulov Uzokboy, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (3 mins)

Discussions, questions and answers session (25 mins)

Moderator: Mr. Mamatkalil Razaev, Social Sector Specialist, Human and Social Development Department, ADB

Moderator: Mr. Mamatkalil Razaev, Social Sector Specialist, Human and Social Development Department, ADB welcomed all the participants to Session II: Leveraging the link between skills development and a just transition: Country perspectives.

Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, ITCILO in her presentation: "Skills development for green jobs and towards a just transition: skills development for green jobs in the framework of a brighter, greener and more inclusive future, financing mechanisms, social dialogue, greening TVET", highlighted that Just transition is a sum of supporting climate ambition and environmental goals and delivering social justice and decent work. Just transition means "promoting environmentally sustainable economies in a way that is fair and inclusive to everyone concerned workers, enterprises and communities -by creating decent work opportunities and leaving no one behind". Just transition also means "maximizing the social and economic opportunities of climate and environmental action, while minimizing and carefully managing any challenges, including through effective social dialogue and stakeholder engagement and respect for the fundamental principles and rights at work". The gender-environment nexus still lacks attention by policymakers, especially regarding the world of work. Integrating gender and inclusion in climate and environmental action is crucial for establishing their links coherently in national policy, which together with effective institutional arrangements, furthers a common ground for action. An integrated approach should guarantee women's involvement in decision-making, so that policies and investment initiatives address both gender and environment considerations, as well as the promotion of decent work. Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency. The detailed presentation is provided in a separate folder (for Session II).

In her presentation: The role of infrastructure projects in developing a climate-smart agriculture in the Aral Sea basin, Ms. Saule Shalmaganbetova, Head of information and analytical unit, the International Fund for Saving the Aral Sea mentioned that climate change significantly affects agriculture, impacting food production, ecosystem resilience, and the well-being of rural communities. Rising temperatures, unpredictable rainfall, and extreme weather events create major challenges for farmers and their economic activities. Infrastructure projects are fundamental to sustainable agricultural development, enhancing water management, increasing land productivity, and mitigating climate-related risks. The Aral Sea basin has undergone one of the most severe environmental disasters in history. The unsustainable use of water resources has led to the near-total disappearance of the sea, triggering numerous challenges for the region. Today, climate change is further exacerbating these issues, posing ongoing threats to food security and agriculture by reducing productivity and sustainability. Water resources problems in the Aral Sea basin: (i) Water scarcity: over the past 35 years, per capita water availability in Central Asia has decreased by half, pushing the region to the brink of being classified as "under-served" in water resources. By 2050, it could face a state of "water scarcity"; (ii) High Agricultural Water Consumption: Agriculture accounts for 79% of total water usage across Central Asian countries. (iii) Deteriorating Infrastructure: The region's irrigation infrastructure is, in average, 50 years old, leading to high maintenance costs and significant water losses. (iv) Land Degradation and Salinization: The decline in soil quality due to degradation and salinization poses a serious threat to agricultural productivity and land fertility; (v) Outdated Technology and Insufficient Modernization: Existing irrigation systems are outdated, technically worn out, and lack sufficient modern technological upgrades to ensure efficient water management. Ms. Saule presented ongoing infrastructure projects in the Aral Sea Basin. The detailed presentation is provided in a separate folder (for Session II).

During the Interventions session, the following reflections were received:

- <u>Mongolia:</u> Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education noted that in Mongolia climate change is affecting significantly the rural population (46% of the population reside in rural areas pursuing the nomadic lifestyle) and their main livelihood income comes from pasture and animal breeding, agriculture. Ministry of agriculture and Ministry of environment initiated new infrastructure projects to make livelihoods more resilient and promote clean energy in remote areas.
- <u>Uzbekistan:</u> Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations informed that the population of Uzbekistan is 37 million people with annual growth of 1 million. Inclusive growth and green jobs/ skills should be promoted through the following 3 areas: (i) training of workforce on green economy, (ii) development of green skills; (iii) creation of green jobs, including in renewable energy, ecologically pure production, waste management and tourism, agriculture. Mr. Shukhrat Shokirov, Vice-Rector for Research and Innovation, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers mentioned that Uzbekistan is one of the countries severely affected by droughts. The university has been implementing different projects on water preservation, resource efficient technologies, water demand has been mapped by regions (under the "Water school" project along with Ministry of water and Agrobank), teaching staff and students of other universities get trained in hydropower and solar panel systems, among others.

- Pakistan: Mr. Sohail Akhtar, Senior Joint Secretary-IC, Ministry of Federal education and professional training mentioned that in 2010 and 2022 floods had a devastating affect over almost 30 million people, 26.2 million students were out of schools (international donors provide assistance in re-building the climate-resilient infrastructure). Floods resulted into reduced agricultural productivity, waterborne diseases, scarcity of water, lost jobs, displaced communities. Prof. Dr. Waqas Wakil, Director, Professional training and skills development, University of Agriculture, Faisalabad noted that its mission is to train a manpower in agriculture sector following international best practices (252 short courses ranging from 1 week to 6 months, degree programs). The University has been cooperating with many international universities (recently China funded scholarship for students to take Year 1 in the Faisalabad university and Year 2 in China to learn modern technologies in agriculture).
- <u>Tajikistan:</u> Ms. Lutfiya Abdulkholiqzoda, Deputy Minister, Ministry of education and science highlighted that according to the National Greening program by 2040 Tajikistan will plant around 2 billion seedlings. Ministry of education was tasked to plant such on 10 hectares. In 2024 Ministry of education together with Committee on Primary and Secondary Vocational Education reviewed the Classifier of specialties and revisited 176 specialists for primary vocational education, 558 for secondary vocational education, 220 for higher education (specialties partially or fully foster green economy development).
- <u>Kyrgyzstan:</u> Mr. Almazbek Irgashev, First vice-rector, Kyrgyz National Agrarian University informed that the university's mission is to prepare workforce ensuring food and ecological security (the only university with such mission in the country). In vitro laboratory for growing organic plants is planned to be built in Kyrgyzstan. It is noted that the main task of the in vitro laboratory will be the cultivation of seedlings free from various viruses and other diseases. It will also be possible to restore old plant varieties and increase their number by cloning. Global warming affects pastures (9 million), out of which 70% degraded affecting livestock breeding. Batken oblast is severely affected by climate change and drought-resistant crops are planned to be proposed in cooperation with Hungary. The University welcomed academic exchange, research and journal publications to be supported under the project.
- Georgia: Ms. Anna Bezhanishvili, Head of Analysis Division, Vocational Education Development Department, Ministry of education, science and youth noted that TVET system is very well positioned to develop green skills. In close cooperation with the private sector through the Skills agency Georgia updated qualifications framework, embedded green competencies into 50 qualifications (environmental protection, waste management, principles of green building), developed new TVET programs on renewable energy management. Center of excellence in logistics and construction will be built by 2027 based on green school concept (teaching, facilities, operations, etc.). By end of 2025 10 TVET institutions will install solar panels and train teaching staff. There are successful cases of the public-private partnership. It is important to raise awareness about green skills/ jobs among farmers, communities. Scholarship program on green agriculture has been implemented to motivate young HEI and VET students to get agricultural education. Distant learning and retraining courses are available for different groups of people.

During Wrap-up Session, **Ms. Zulfia Karimova**, Principal Regional Cooperation specialist, ADB highlighted that developing green skills is not only about new skills, but more about doing things in an environmentally sustainable way, ensuring both the process and the end result, understanding and gaining skills relevant for such efforts. Hearing from the panel presentations on Day 1, we learned that many CAREC member countries have strategies, programs and initiatives, and our collective knowledge could benefit each other. More exchange of knowledge and experience is needed, and this ADB project is well placed to facilitate such needs among CAREC countries.

C. Key highlights (Day 2)

Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB, recapped findings of Day 1:

- Memorandum of Understanding "On strengthening regional cooperation in skills development among CAREC member countries" that provides an opportunity to use multiple benefits of regional cooperation for creating networking opportunities for policymakers from CAREC countries was signed as an important milestone (two countries: China and Turkmenistan will sign after the event). The agenda and focus of the MOU might change depending from the countries' priorities (for example, next 2 years the focus will be on green skills). The Memorandum of understanding would encourage collaboration, sharing of best practices, building mutual trust for promoting open dialogue and communication to address regional issues collectively, aligning policies across CAREC nations to support economic integration and harmonize regulatory frameworks.
- ✓ Discussions conducted on **bridging the Human Development and Climate change agenda in the CAREC region**, the role of the skills development system in addressing climate change challenges:
- ✓ Climate Education Playbook: Making Education Climate-Ready in Asia and the Pacific presented that underscores that the transition to a low-carbon economy places new skill needs on education systems. With the introduction of climate technologies and sustainable business practices across industries, new job profiles and skill needs are emerging and will require right-on-time interventions and planning by educational authorities in the CAREC region.
- ✓ The importance of green skills development in the CAREC region is evolving and countries more and more dive into such news concepts as just transition. Education can be a powerful catalyst for climate action that is required.
- ✓ Action plan for 2025-2026 discussed
- ✓ ITCILO (Ms. Chandni) briefed participants about Climate change and its social dimensions.

Ms. Zulfia Karimova informed about objectives of Day 2, namely: (i) validation of the self-assessment results conducted in March among 9 agricultural universities and lessons learnt; (ii) sharing lessons learnt by 3 CAREC universities (Georgian, Kazakhstan and Pakistan universities) in previous projects in climate-smart agriculture and Just Transition Cooperation among CAREC countries, (iii) harvesting initial ideas for the concept note and discussion of template for concept note to be filled in by regional agricultural universities. Regional agricultural universities are very crucial to produce a competent workforce with new technical skills, strengthening mobility of experts, faculty and students and investing in common research initiatives.

Session III: Facilitating climate-smart agriculture in the region

Validation of the results of the assessment of ongoing green skills development projects, green skills development capabilities, gaps, needs and requirements of participating regional agricultural universities, *Dr. Irene Koomen*, Programme Manager and Senior Advisor Adaptive Agriculture, the Wageningen Social and Economic Research (30 mins)

Reflections to presented material:

- Mr. Fariz Mammadov, Vice rector for international affairs, Azerbaijan Technical University (3-4 mins)
- Ms. Nino Chkhartishvili, Professor, Georgian Technical University (3-4 mins)
- Mr. Primkul Ibragimov, First vice-rector, Kazakh National Agrarian Research University (3-4 mins)
- Mr. Almazbek Irgashev, First vice-rector, Kyrgyz National Agrarian University (3-4 mins)
- Mr. Baasansukh Badarch, President, Mongolian University of Life Sciences (3-4 mins)

- Prof. Dr. Waqas Wakil, Director, Professional training and skills development, University of Agriculture, Faisalabad (3-4 mins)
- Mr. Mahmadyorzoda Usmon Mamur, Rector, Tajik Agrarian University (3-4 mins)
- Mr. Shukhrat Shokirov, Vice-Rector for Research and Innovation, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (3-4 mins)
- *Mr. Shahymuhammet Shahyyev*, Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov (3-4 mins)

Moderator: Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research

Moderator: Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research welcomed the meeting participants to Session III and shared brief information about the WUR assignment under the TA, namely: (i) improving the climate smart agriculture university education, research and outreach; (ii) enhancing knowledge on just transition for climate smart agriculture. She presented three phases: Phase 1 - Preparatory phase: (i) Assessment of capabilities, needs and requirements of participating regional agricultural universities for launch of training programs, short courses, research activities, etc., to support green skills development and propose key areas for improvements; (ii) Capacity building workshops for the development of proposals by regional universities for implementation of i) academic and non-degree programs, ii) research, iii) demonstration projects, iv) workshops, etc. to support regional countries in coping with climate change and just transition challenges; (iv) Development of plans of activities to be directly implemented by the IARU for joint research, faculty and student exchange, micro-credentials for green skill development, and advocacy and support of just transition. Phase 2 - Regional Universities Selection and Support: (i) Signing of project agreements between the IARU and regional agriculture universities; (ii) Provision of technical assistance for the implementation of plans and programs of the regional universities to address identified needs in climate change and just transition; (iii) Approval of action plan of selected regional universities with timeframes, operational and monitoring regulations for activities to be carried out by them. Phase 3- Project implementation will include technical assistance by the WUR in project proposals implementation focused on academic programs, research and outreach. The detailed presentation is provided in a separate folder (for Session III).

In her presentation "Validation of the results of the assessment of ongoing green skills development projects, green skills development capabilities, gaps, needs and requirements of participating regional agricultural universities, Dr. Irene Koomen, Programme Manager and Senior Advisor Adaptive Agriculture, the Wageningen Social and Economic Research highlighted that the purpose of the self-assessment was to understand the needs of participating universities so that to strengthen universities' capacity to address climate change and just transitions. Self-assessment covered 4 different topics: academic education, research, outreach, motivation to join the program. Needs were assessed as per 2 major concepts: climate-smart agriculture (CSA) and just transition³. Most universities have some educational and sometimes also research activities in the areas of climate (varies from meteorology to ecology to renewable energy). Little reference to CSA. Just transition is still a difficult concept to apply to the current educational and research programmes for all universities. Academic education assessment: Wide range of focus – from agriculture to engineering. Most universities have, apart from BSc, also MSs and half of them PhD programmes. All have systems in place for course evaluations, sometimes by external parties. Research capacity assessment: Some universities focus on climate change – diverse aspects, limited on climate smart agriculture, very limited focus on just transitions. Outreach capacity

³ Climate-smart agriculture (CSA) is an integrated approach to achieving sustainable agricultural development for food security under climate change (FAO). Just transition refers to the process of moving towards a more sustainable and climate-resilient agricultural system in a way that is fair and inclusive for all stakeholders, especially those who are most vulnerable

<u>assessment:</u> Great variability between the universities, from no internships to a prerequisite for passing the course. In general, limited collaboration with the private and public sector. Inclusion of disadvantaged groups is lacking. <u>Next steps:</u> (i) By 14 April regional agricultural universities will develop the concept note; (ii) on 14 April WUR will arrange a consultation session; (iii) By 25 April agricultural universities will polish concepts based on feedback obtained. **The detailed presentation is provided in a separate folder (for Session III).**

During the Interventions session, the following reflections were received:

- <u>Mongolia:</u> *Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education* noted that skills development agenda is not only the responsibility of the education sector and it is very important to have robust discussions with Ministries in charge of employment and labour market. Labour sector should be engaged into identifying the skills needs.
- ADB: Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and Social Development Department reiterated that the project provides an opportunity for regional agricultural universities to deep dive into formulation of projects focused on addressing such transition, CSA and climate change issues. Ms. Zulfia Karimova, Principal Regional Cooperation specialist highlighted new concepts and ideas fostering regional connectivity and cooperation are most welcomed. Mr. Mamatkalil Razaev, Social Sector Specialist, Human and Social Development Department mentioned that matching skills demand and supply is a challenge and countries are trying to address through different interventions, including through engagement with the private sector (like Georgian Skills Agency), School advisory boards (like in Kyrgyzstan and Tajikistan). The main idea for project re-shuffling was to select and improve the capacity of the best agricultural universities and build their general understanding about their role in mitigation of climate change risks. Depending on the progress achieved under the project, additional technical assistance (beyond TA) can be further discussed with particular countries.
- Kazakhstan: Mr. Primkul Ibragimov. First vice-rector. Kazakh National Agrarian Research University informed there are 120 universities (public and private, public-private) in Kazakhstan. Development programs of 11 national universities go through approval by the Cabinet. In 2020 Governments of Netherlands and Kazakhstan agreed to establish the Institute on the work between the WUR and Kazakh National Agrarian University (institute is a copy of the WUR resources and infrastructure). An agreement was signed with the University of Wageningen on the exclusive partnership on training specialists in the educational programs: "Veterinary food safety and technology" and "Plant science and technology". These academic programs are very popular and student exchange with the WUR will start in 2025. The Intensive Garden Research Centre was established with Dutch Fruit Solutions, a Dutch company. The Kazakh-Korean Research Centre conducts trainings for managers and specialists involved in growing crops in greenhouses. Several ideas have been proposed for joint regional projects: (i) to develop training modules and micro-credentials on ecology, sustainable agriculture, forestry, biodiversity; (ii) to develop academic programs, for example, Master of business administration in agriculture; (iii) academic mobility (student and faculty exchange), joint webinars, trainings to raise awareness about green technologies; (iv) joint research projects on adaptation of agriculture to climate change, alternative energy sources, natural resources management, (v) creation of laboratory or research centres for analysis of green technologies, adjustment of educational and professional programs based on the needs of vulnerable groups of people. The University has close cooperation with (i) two Chinese agricultural universities (Branch of the Chinese agrarian university will be opened for water resources bachelor, master and PhD programs; (ii) Chinese companies. Digital laboratory was established to conduct experiments of water, soil and technologies. In 2024 China opened the Centre for smart agriculture comprising of 3 laboratories: big data laboratory, veterinary and food security laboratory, one health lab (in 2024 China invested 2,7 million USD).

- <u>Azerbaijan</u>: Mr. Fariz Mammadov, Vice-rector for International affairs, Azerbaijan Technical University informed that the University has been cooperating with the State agency for water resources on improving the irrigation system for agricultural fields (due to 30% of water losses) and drone surveillance system. Several ideas have been proposed for joint regional projects: (i) to implement drone surveillance system in fields, (ii) to conduct joint research on improving irrigation system for efficient use of water resources.
- <u>Kyrgyzstan:</u> Mr. Almazbek Irgashev, First vice-rector, Kyrgyz National Agrarian University informed that the University is ranked 7th among 80 HEIs in the country and is entitled to academic, financial and organizational autonomy. The university was tasked to create the Hub/ advanced centre for food and biological security (agriculture, plants and animals diseases). <u>Progress in 3 areas of interest:</u> (i) academic programs for agronomy, forestry, water use, melioration, zootechnology, ecology developed; (ii) 6 articles on climate changes published in Scopus journals. (iii) Kyrgyz-Hungary centre of innovations in agrarian education and science has been created (for drought-resistant crops in Batken oblast); (iv) academic mobility with Kazakhstan, Uzbekistan, China and other agrarian universities. The University has Japan laboratory for research of macro and micro-elements and soil, In vitro innovation laboratory (mentioned above on Page 16). Microcredentials on bio technologies, technology and veterinary medicine are available for students (certificate issued for such).
- <u>Georgia:</u> Ms. Nino Chkhartishvili, Professor, Georgian Technical University informed that bachelor, master and PhD programs have been developed in close collaboration with profile Ministries and private sector (needs and requirements are mapped and educational programs revisited).
- Pakistan: Prof. Dr. Waqas Wakil, Director, Professional training and skills development, University of Agriculture, Faisalabad mentioned that the university is organised into faculties of Agriculture, Agricultural Engineering and Technology, Food Nutrition and Home Economics, Social sciences, Animal Husbandry, Food Sciences, Biotechnology, Biochemistry, Plant and Animal Breeding, Veterinary Science, Doctor of Pharmacy, Mathematics, Statistics and Sciences. The Faculty of Social Sciences is divided into the following institutes: Institute of Agricultural and Resource Economics, Institute of Business Management Sciences (offers courses at undergraduate and postgraduate level), Institute of Agricultural Extension and Rural Development (offers courses at the undergraduate, postgraduate, and doctoral levels), Department of Rural Sociology (offers courses at the postgraduate level and a PhD programme). In 2024 Korean Government invested into establishment of the Nutrition centre under the University (infrastructure, resources, capacity building, etc.). Some gaps listed: limited resources, outdated curricula, weak industry partnership, among others. Certain training programs are provided by the university to civil servants engaged into agricultural issues and farmers.
- Tajikistan: Mr. Mahmadyorzoda Usmon Mamur, Rector, Tajik Agrarian University highlighted that it is one of the largest universities in Tajikistan, one of the centers for the development of the agro-industrial complex, education and science (70% of the population reside in rural areas and are engaged into agriculture). It has 10 faculties (53 bachelor programs, 35 master programs, 27-PhD ones in different areas, including ecology, agriculture, efficient use of water resources, organic, environmental protection, sustainable and climate-resilient agriculture, etc.). Retraining center trained over 40000 public and private farmers. The University locates Laboratory of hydraulic facilities and cooperates with 127 universities and 21 international organizations (for example, establishment of smart green house with the support of Korea, establishment of intensive garden by Turkey, implementation of hydrotechnical facilities with the assistance of the WB, etc.). Several ideas have been proposed for joint regional projects: (i) to strengthen the link between HEIs and industry; (ii) to develop academic programs for renewable energy, small hydropower and solar stations, water resources, climate-resilient agriculture, waste management, etc. (iii) to incorporate ecological/ green skills into educational programs, qualifications.

- <u>Uzbekistan:</u> Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations proposed to establish the Regional center for green competencies and/or Climate adaptation research center of the CAREC region to serve as a regional platform for knowledge exchange, retraining courses for the faculty and students, joint research projects. Mr. Shukhrat Shokirov, Vice-Rector for Research and Innovation, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers proposed to develop water saving and renewable energy technologies applicable for vulnerable groups of people.
- <u>Turkmenistan:</u> *Mr. Shahymuhammet Shahyyev, Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov* underscored the need for improvement of water use efficiency, implementation of waste management and processing technologies, development of transport infrastructure and green zones, digitalization.

Session IV: Building successful demonstration projects

Introduction of demonstration projects in climate smart agriculture and just transition from other projects (selected CAREC universities present projects each to inspire others on writing the concept notes in 3 trajectories: academia, research, outreach, including social sciences in Climatesmart agriculture and Just transition):

- Ms. Nino Chkhartishvili, Professor, Georgian Technical University (7 mins)
- *Dr. Rafis Abazov*, Vice President for International Relations and Director of the Institute for Green & Sustainable Development, Kazakh National Agrarian Research University (7 mins)
- *Dr. Abdul Wakeel*, Professor, Institute of Soil and Environmental Sciences, University of Agriculture, Faisalabad, Pakistan (7 mins)

Reflections by *Dr Thirze Hermans,* Senior Researcher, Just Transition, Wageningen Social and Economic Research (7 mins)

Review of the concept note template to be filled in by regional agricultural universities, *Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research* (10 mins)

Discussions, questions and answers session (7 mins)

Moderator: Ms. Liliia Kachkinbaeva, Consultant, ADB

Moderator: Ms. Liliia Kachkinbaeva, Consultant, ADB welcomed all the participants to *Session IV: Building successful demonstration projects* and highlighted that it will be dedicated to introduction of demonstration projects in climate smart agriculture and just transition from other projects to inspire others on writing the concept notes in 3 trajectories: academia, research, outreach, including social sciences in Climate-smart agriculture and Just transition. **All the presentations made are provided in a separate folder (for Session IV).**

In her presentation **Ms. Nino Chkhartishvili,** Professor, Georgian Technical University highlighted that the University provides training in 9 bachelor's degree programs (2 double degree), 10 master's degree programs (1 English language), 6 Ph.D. programs. There are double-degree bachelor's programs with French University René-1, the University of Milan, the French Montpellier "SupAgro". Ms Nino informed about the following successful projects: (i) *Eco2Wine project* aimed at providing a new generation of Ph.D. graduated employees for the wine sector who will be able to manage winemaking-associated ecosystems, protect and control biodiversity, and use this know-how to reduce unsustainable interventions in natural environments while improving wine sustainability and "natural wine" production;

(ii) Vita Global project aimed at developing a global university network, connecting diverse geographic regions with limited pre-existing cooperation, in order to enhance study programs that contribute to local development, specifically in food science and vini-viticulture; (iii) Joint societal challenge project focused at circular economy and energy education between Azerbaijan, Georgia, Greece, Moldova and Romania; (iv) REGROW project aimed to modernize and internationalize higher education in Georgia and Ukraine by creating a new joint Master of Science course in Precision Agriculture. Several ideas have been proposed for joint regional projects: (i) to integrate green skills into educational curricula; (ii) to build capacity of teaching staff on sustainable technologies; (iii) to enhance job mobility and workforce flexibility.

Dr. Rafis Abazov, Vice President for International Relations and Director of the Institute for Green & Sustainable Development, Kazakh National Agrarian Research University highlighted that the presentation uses the example of the Green Campus project at Kazakh National Agrarian Research University (KazNARU) to illustrate and discuss the innovative ways of involving students, young professionals, and young scholars in the process of using knowledge and research expertise for practical purposes and SDG actions. The entire university community – teachers, administrators, and students – have begun working together on the development of the concept of a 'Green Campus' by regularly brainstorming smart ideas for greening the campus and adopting smart technologies and innovations to make their campus greener and smarter. KazNARU's Climate Action plan envisions that every member of the community has his/her role to play in achieving the SDGs. The implementation of the Green Campus Concept is one of the ways to make a difference and contribute to building a sustainable KazNARU campus, introduce innovative approaches to developing healthier student life and to become a model for other universities in Kazakhstan.

In his presentation Dr. Abdul Wakeel, Professor, Institute of Soil and Environmental Sciences, University of Agriculture, Faisalabad, Pakistan shared experience about its membership in South Asia Nitrogen Hub with 32 leading research organizations and over 100 researchers. Briefly the work focused on the following areas: (i) building policy arena for effective nitrogen management; (ii) collection of existing policies relevant to Nitrogen; (iii) engagement of local farmers for sustainable agricultural practices; (iv) testing innovative solutions for crop management; (v) improving nitrogen and carbon budgeting in crops; (vi) enhancing residue management strategies. Few existing courses related to Social Sciences and Climate Change were named: Public health in changing climate, Economics of climate change and policy issues, Economics of environmental governance and policy, Environment and sustainable development. Achieving impactful outcomes requires early and continuous engagement of all stakeholders, ensuring their active involvement in key activities. Policymakers and farmers are the primary stakeholders in developing green skills. Therefore, fostering collaboration between them is essential for sustainable implementation. Several ideas have been proposed for joint regional projects: (i) to develop curriculum on green skills and just transition and incorporate such in degree programs, (ii) to empower rural-women through entrepreneurship i.e. waste to fertilizers through composting, textile from agricultural residues such as banana, hemp etc., (iii) to develop eco-friendly villages bringing crop and animal waste for energy and by-products to improve soil health, (iv) to improve capacity of small holders about green skills through Al based technologies.

Dr Thirze Hermans, Senior Researcher, Just Transition, Wageningen Social and Economic Research reflected that regional agricultural universities possess skills and abilities to promote just transition and climate-smart agriculture enabling to address climate change adaptation, mitigation and resilience needs. It is important to get engaged with different stakeholders and bring together socio-economic aspects in view of regional/ national context.

Afterwards, Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research presented Template of the concept note to be filled in by regional agricultural universities by 14 April (Appendix 3).

Session V: Building successful university linkages support faculty/student exchange and joint research

Presentation: Methodology and criteria for selection of regional agricultural universities for participation in the Acceleration Agricultural Universities' program", Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research (45 mins)

Discussions, questions and answers session (45 mins)

Brainstorming and writing workshop to identify ideas for the proposal development (group discussions, writing and presenting of initial ideas)

Moderator: *Ms. Monika Sopov*, Senior Advisor, Sustainable Food Systems at Wageningen Social and Economic Research

Under Session V: Building successful university linkages support faculty/student exchange and joint research **Ms. Monika Sopov** presented *Methodology and criteria for selection of regional agricultural universities for participation in the Acceleration Agricultural Universities' program"* (Appendix 4).

During the group work (45 mins) workshop participants came up with the following emerging ideas (for regional cooperation projects):

- ✓ Establish Climate Adaptation Research Center for CAREC, Regional Agricultural Innovation Center, Center for Green Competence to develop short courses
- ✓ Identify jointly research topics on *climate change, animal health, plant health, environmental health, human health, food safety, management of water resources, integrated pest management,* (Locust; Diseases: rust)
- ✓ Ensure link with *employment and labour market aspects* so that skills development is not separated from such
- ✓ Deliver *in-person training* (industry, academia, agri-business, manufacturing, waste management, transportation)
- ✓ Develop agricultural start-ups (incubation centers), curriculum on *Just Transition and green skills*
- ✓ Apply Al based technologies in climate-smart agriculture (for example, drone, satellite monitors for irrigation purposes);
- ✓ Develop *teaching modules* on sustainable agriculture and forestry, sustainable supply diversity; veterinary, food safety, forestry, business;
- ✓ Academic exchange between students and faculty, resulting into teaching publications about green technology
- Develop *local environmental projects*, involving the private sector.

Under a wrap-up session, **Ms. Zulfia Karimova**, Principal Regional Cooperation specialist, ADB, thanked all the workshop participants for fruitful discussions and informed that proceedings and key highlights of a 2-day meeting will be furnished to participants along with PPTs.

List of participants of the Second Meeting of the CAREC Working Group on Skills Development is provided in **Appendix 5**.

Day 3 (5 April) was dedicated to visiting (1) SOCAR's Training-Education and Certification Department; (2) Baku Industry and Innovation State Vocational Education Center; (3) Azerbaijan Technical University for experience exchange in implementation of green skills courses, instructional and non-instructional components of training process.

Appendix 1

AGENDA

Day 1: 3 April 2025, High-level meeting of Deputy Ministers of education of the CAREC participating countries, signing of the Memorandum of understanding

Time	Activity								
09:30-10:00	Registration of participants, welcome coffee								
10:00-10:30	Opening remarks:								
	 Ms. Lyaziza Sabyrova, Regional Head, Regional Cooperation and Integration, Central and West Asia Department, Asian Development Bank Ms. Sofia Shakil, Director, Human and Social Development Sector Group, Asian Development Bank H.E. Mr. Watanabe Katsuya, Ambassador, Embassy of Japan, Azerbaijan Mr. Jeyhun Karamov Director of State Agency on Vocational Education, Ministry of science and education, Azerbaijan 								
	Moderator: Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and Social Development Department, Asian Development Bank								
10:30-10.45	Introduction of participants and Key objectives of the High-level meeting								
	Ms. Altynay Arapova, Economist, Regional Cooperation and Integration, ADB Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB								
10.45-11:00	Group photo								

11:00-11:25	High-level meeting: Bridging the Human Development and Climate change agenda in the CAREC region Presentation: Human development as a priority sector within the CAREC 2030 strategy, Ms. Sofia Shakil, Director, Human and Social Development Sector Group, ADB (7 mins)									
	Discussion of the Action plan for 2025-2026, <i>Ms. Zulfia Karimova,</i> Principa Regional Cooperation specialist, ADB (7 mins)									
	Discussions, questions and answers session (5 mins)									
	Moderator: Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education, Azerbaijan									
11:25 - 11:40	Coffee-break									
11:40 – 12:00	The signing ceremony of the Memorandum of Understanding "On strengthening regional cooperation in skills development among CAREC member countries"									
12:00 – 13:00	Panel discussion: "The role of the TVET/ HE systems in addressing climate change challenges: status "quo" and future plans"									
	 Mr. Jeyhun Karamov, Director, State Agency on Vocational Education under the Ministry of Science and Education, Azerbaijan (5 mins) Ms. Baya Kvitsiani, Deputy Minister of Education, Science and Youth, Georgia (5 mins) Ms. Gulzhan Jarassova, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (5 mins) Mr. Azamat Naimanbaev, Advisor to the Minister of education and science, Kyrgyz Republic (5 mins) Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education, Mongolia (5 mins) Mr. Sohail Akhtar, Senior Joint Secretary-IC, Ministry of Federal education and professional training, Pakistan (5 mins) Ms. Lutfiya Abdulkholiqzoda, Deputy Minister of Education and Science of the Republic of Tajikistan, Tajikistan (5 mins) Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (5 mins) Open discussion, questions and answers (10 mins.) 									
	Moderator: Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and									
	Social Development Department, ADB									
13:00 – 14:00	Lunch break at Lazurit meeting room, 2 nd floor									

Day 1: 3 April 2025, Workshop on green skills, just transition and climate-smart agriculture (led by the International Training Centre of the International Labour Organization)

Time	Activity								
14:00-14:05	Opening remarks:								
	 Ms. Sunniya Durrani-Jamal, Country Director, Azerbaijan Resident Mission, Asian Development Bank 								
44.05.45.05	Moderator: Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB								
14:05-15:05	Session I: A Pathway towards sustainable learning and a just transition: la a theoretical background								
	Presentation: Climate Education Playbook: Making Education Climate-Ready in Asia and the Pacific, Mr. Alexander Tsironis, Education Specialist, Human and Social Development Department, ADB (15 mins)								
	Presentation: Climate change and its social dimensions: framing the issue, defining challenges, overview of sustainable development, Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (15 mins) Presentation: Just transition to low-carbon economies and societies: concepts, entry points for action, case studies, Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (15 mins)								
	 Reflections to presented material: Ms. Baya Kvitsiani, Deputy Minister of Education, Science and Youth, Georgia (5 mins) Ms. Gulzhan Jarassova, Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (5 mins) Mr. Azamat Naimanbaev, Advisor to the Minister of education and science, Kyrgyz Republic (5 mins) 								
	Presentation: Jobs, environment and decent work: defining decent work and green jobs, Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition, International Training Center of the International Labor Organization (20 mins)								
	 Reflections to presented material: Mr. Oyunaa Purevdorj, Director-General of the Education Policy Planning Department, Ministry of education, Mongolia (5 mins) Mr. Sohail Akhtar, Senior Joint Secretary-IC, Ministry of Federal education and professional training, Pakistan (5 mins) Ms. Lutfiya Abdulkholiqzoda, Deputy Minister of Education and Science of the Republic of Tajikistan, Tajikistan (5 mins) Mr. Begimkulov Uzokboy Shoimkulovich, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (5 mins) 								
45.05.45.00	Moderator: Ms. Liliia Kachkinbaeva, Consultant, ADB								
15:05-15:20	Coffee Break								

15:20-16:20	Session II: Leveraging the link between skills development and a just transition: Country perspectives								
	Presentation: Skills development for green jobs and towards a just transition skills development for green jobs in the framework of a brighter, greener are more inclusive future, financing mechanisms, social dialogue, greening TVE Ms. Chandni Lanfranchi, Programme officer on green jobs and just transition International Training Center of the International Labor Organization (20 mins)								
	 Presentation: The role of infrastructure projects in developing a climate-smart agriculture in the Aral Sea basin, Ms. Saule Serikovna Shalmaganbetova, Head of information and analytical unit, the International Fund for Saving the Aral Sea (15 mins) Reflections to presented material: Ms. Anna Bezhanishvili, Head of Analysis Division, Vocational Education Development Department, Ministry of education, science and youth, Georgia (3 mins) 								
	 Ms. Karlygash Abuova, Head of Division, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education, Kazakhstan (3 mins) Ms. Gulnura Mamyrova, Head of primary vocational education department, 								
	 Ministry of education and science, Kyrgyzstan (3 mins) Mr. Enkhbayar Baatartsol, Director-General of the External Cooperation Department, Ministry of education, Mongolia (3 mins) Mr. Alisher Alizoda, Deputy Chairman, Committee on Primary and Secondary 								
	Vocational Education, Tajikistan (3 mins) • Mr. Begimkulov Uzokboy, Director of the Institute for Retraining and Advanced Training of Personnel in the Higher Education System, Ministry of Higher Education, Science, and Innovations (3 mins)								
	Discussions, questions and answers session (25 mins)								
	Moderator: Mr. Mamatkalil Razaev, Social Sector Specialist, Human and Social Development Department, ADB								
16:20-16:30	Wrap-up and summary of key findings of Day 1 Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB								
18:00-20:30	Networking dinner at Sky Grill Restaurant, 24 th floor								

Day 2: 4 April 2025, Workshop on green skills and climate-smart agriculture (led by the Wageningen University for Social and Economic Research (Netherlands))

Time	Activity					
09:30-10:00	Registration of participants, welcome coffee					

10:00-10:05	Recap of Day 1 and objectives of Day 2								
	Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB								
10:05-11:00	Validation of the results of the assessment of ongoing green skills development projects, green skills development capabilities, gaps, needs and requirements of participating regional agricultural universities, Dr. Irene Koomen, Programme Manager and Senior Advisor Adaptive Agriculture, the Wageningen Social and Economic Research (30 mins) Reflections to presented material:								
	 Mr. Fariz Mammadov, Vice rector for international affairs, Azerbaijan Technical University (3-4 mins) 								
	 Ms. Nino Chkhartishvili, Professor, Georgian Technical University (3-4 mins) Mr. Primkul Ibragimov, First vice-rector, Kazakh National Agrarian Research University (3-4 mins) 								
	 Mr. Almazbek Irgashev, First vice-rector, Kyrgyz National Agrarian University (3-4 mins) Mr. Baasansukh Badarch, President, Mongolian University of Life Sciences 								
	(3-4 mins) • Prof. Dr. Waqas Wakil, Director, Professional training and skills development,								
	University of Agriculture, Faisalabad (3-4 mins)								
	Mr. Mahmadyorzoda Usmon Mamur, Rector, Tajik Agrarian University (3-4 mins)								
	 Mr. Shukhrat Shokirov, Vice-Rector for Research and Innovation, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (3-4 mins) Mr. Shahymuhammet Shahyyev, Vice-Rector for Research, Turkmen Agricultural University named after S.A. Niyazov (3-mins) 								
	Moderator: Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research								
11.00-11.15	Coffee-break								
11:15 – 12:00	Session IV: Building successful demonstration projects								
	Introduction of demonstration projects in climate smart agriculture and just transition from other projects (selected CAREC universities present projects each to inspire others on writing the concept notes in 3 trajectories: academia, research, outreach, including social sciences in Climate-smart agriculture and Just transition):								
	 Ms. Nino Chkhartishvili, Professor, Georgian Technical University (7 mins) Dr. Rafis Abazov, Vice President for International Relations and Director of the Institute for Green & Sustainable Development, Kazakh National Agrarian Research University (7 mins) Dr. Abdul Wakeel, Professor, Institute of Soil and Environmental Sciences, University of Agriculture, Faisalabad, Pakistan (7 mins) 								
	Reflections by Dr Thirze Hermans, Senior Researcher, Just Transition, Wageningen Social and Economic Research (7 mins)								

	Review of the concept note template to be filled in by regional agricultural universities, Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research (10 mins)							
	Discussions, questions and answers session (7 mins)							
	Moderator: Ms. Liliia Kachkinbaeva, Consultant, ADB							
12:15-13:00	Group work Reflections from the universities on how the current project adds value to the overall climate-smart agriculture strategy of the university, to manage expectations and to reflect on achieved results Group work presentations							
13:00 - 14:00	Lunch break at Cilantro Restaurant, 1st floor							
14:00 -15:00	Session V: Building successful university linkages support faculty/student exchange and joint research							
	Presentation: Methodology and criteria for selection of regional agricultural universities for participation in the Acceleration Agricultural Universities' program", Ms. Monika Sopov, Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research (45 mins)							
	Discussions, questions and answers session (45 mins)							
15:00 - 15:15	Coffee-break							
15:15-16:00	Brainstorming and writing workshop to identify ideas for the proposal development (group discussions, writing and presenting of initial ideas)							
	Moderator: <i>Ms. Monika Sopov</i> , Senior Advisor, Sustainable Food Systems at Wageningen Social and Economic Research							
16:00-16:30	 Closing remarks and discussion of next steps: Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB Ms. Hyun Joo Youn, Senior Social Development Specialist, Human and Social Development Department, ADB 							
	Moderator: Ms. Zulfia Karimova, Principal Regional Cooperation specialist, ADB							

Day 3: 5 April 2025. Site Visits

Time	Activity					
08:45 - 09:00	Departure from Hilton Hotel					
09:30 - 10:30	Visit of SOCAR's Training-Education and Certification Department					
	Address: 1 Azer Manafli Str., Nizami District, Baku					
10:30 – 11:00	Travel to Baku Industry and Innovation State Vocational Education Center					
11:00 – 12:00	Visit of Baku Industry and Innovation State Vocational Education Center,					
	Address: Koroglu Rahimov Street 76, Baku					
13:00 - 14:00	Lunch ("Kamelot" cafe)					
14:00 – 14:30	Travel to Azerbaijan Technical University					
14:30 - 15:30	Visit of Azerbaijan Technical University					

	Address: 25 Huseyn Javid Ave., Yasamal District, Baku
15:30 - 16:00	Departure to hotel

MEMORANDUM OF UNDERSTANDING

On strengthening regional cooperation in skills development among CAREC member countries

To establish and enhance the basic framework of regional cooperation in skill development in vocational and higher education, the Memorandum of Understanding (MOU), supported by the ADB, dated 3 April 2025, establishes the CAREC Working Group on Skills Development (hereinafter referred to as - WGSD) and is made by and between the relevant Government Ministries whose representatives constitute the WGSD, hereinafter collectively referred to as the WGSD members.

Introduction

A rapid increase in the number of youths joining the labour market in the CAREC countries each year increases the importance of skills development, both at technical and vocational (TVET) as well as higher education (HE) levels. Human development is a priority sector within the CAREC 2030 strategy. Effective regional cooperation in research and innovations in priority sectors will contribute to the economic development of the region and enhance each government's ability to address common challenges, including those caused by climate change.

Transitioning to a green economy and achieving net zero emissions by 2050 will require a skilled workforce to develop, implement, and sustain green practices. The workforce will need new skills and competencies integrating sustainability principles, ethical standards, values, attitudes, and behaviours across all forms of education and learning. Education is critical for raising environmental awareness and promoting pro-environmental behaviour by equipping learners with the knowledge and skills to identify and address environmental challenges.

The establishment of the CAREC Working Group on Skills Development (WGSD) was supported in principle at the first meeting held on 29 February–01 March 2024, in Tashkent, Uzbekistan, to address these needs.

Article I. The Partners

1.1. WGSD members can consider the participation of non-CAREC countries in the WGSD upon their respective request.

Article II. Purpose of the Memorandum of Understanding

- 2.1. The MOU establishes a framework for regional cooperation in green skills development.
- 2.2. The purpose of the MOU is to institutionalize the WGSD and define its scope, composition, and working arrangements.

Article III. Scope of the Working Group on Skills Development

- 3.1. The WGSD shall:
 - a. Facilitate implementation of the Human Capital Development pillar of the CAREC 2030 Strategy;
 - b. Facilitate dissemination of regional practices on skills development (TVET and HE) policies and programs;

- c. Support peer learning, the exchange of experience and lessons learned among participating countries, through the support of peer-to-peer cooperation and facilitation of relevant international and regional events;
- d. Provide a forum for coordinating the work of international development partners on regional skills development (TVET and HE) issues, working with them to identify and mobilise additional resources:
- e. Promote policy dialogue and knowledge sharing;
- f. Identify common challenges and opportunities and develop mechanisms to address them;
- g. Foster collaboration for mainstreaming green skills and just transition aspects into the TVET/HE policies and strategies;
- h. Facilitate the integration of environmental education into TVET/HE curricula, including environmental topics, conservation, climate change, and sustainability aspects.

Article IV. Composition of the Working group on Skills development

4.1. Each country shall designate at least two members for the CAREC Working Group on Skills Development: (1) at the deputy minister level, (2) a representative from the education-related government agencies with TVET and HE sector expertise. In cases where the TVET and HE sectors are affiliated with different ministries, countries are encouraged to include deputy ministers of each Ministry in the WG.

Article V: Roles and responsibilities of the Working Group on Skills Development

- 5.1. WGSD members shall bear the responsibilities for:
 - a. Participating on behalf of the country in the online or physical meetings and conferences organized by the CAREC Secretariat;
 - b. Supporting information exchange activities focused on priority issues and needs and promoting knowledge sharing through all channels;
 - c. Representing the WGSD and the country at the regional events relevant to skills development;
 - d. Reviewing documents prepared for the WGSD meetings, formulating and presenting the country's position on various issues and proposals.
 - e. Sharing and reporting information from WGSD meetings with their respective national government authorities to acknowledge and approve issues and proposals.
 - f. Contributing to the development of detailed work plans supported by the Secretariat and identifying concrete outputs;
 - g. Actively contributing to discussions during strategic and annual planning sessions and suggesting priority focus areas for research, reviews, assessments, and surveys;
 - h. Reviewing other relevant documents as appropriate before dissemination;
 - i. Coordinating and monitoring the implementation of the work plan and other deliverables.
- 5.2. When there is a change in the person in charge of contact, the CAREC Secretariat shall be

Article VI. Secretariat of the CAREC Working Group on Skills Development

- 6.1. The CAREC Secretariat shall support the WGSD and its chair. Responsibilities of the Secretariat shall be as follows:
 - a. scheduling and convening WGSD meetings and supporting communications between ADB members and other development partners;
 - b. preparing meeting agendas and materials, delivering them to the WGSD members at least 20 days before the meeting;

- c. coordinating WGSD activities and managing day-to-day operations through e-mail and other means of remote communication and serving as the central contact point for information collection and exchange;
- d. coordinating the work of the WG with regional development partners and working with them to identify and mobilize additional resources to support the implementation of the annual plan;
- e. bringing together key stakeholders, technical experts and consultants, and
- f. assisting in monitoring and reporting on the implementation of the WGSD work plan.

Article VII. Governance of the Working Group on Skills Development

- 7.1. The WGSD shall execute its operations in accordance with the agreed work plan. Work plans for subsequent years are subject to development based on monitoring results and consultations (annually).
- 7.2. The CAREC WGSD shall be chaired by countries in alphabetic order, rotating for one year.
- 7.3. The chairman is responsible for convening the WGSD's annual meeting and approving the minutes, action plans, and decisions made at that meeting.
- 7.4. The Ministry of Education, Innovation, and Science of the Republic of Uzbekistan chaired the working group in 2024 as a host country of its first meeting (29 February-01 March 2024).

Article VIII. Mechanisms of Supporting Operations and Accountability

- 8.1. The WGSD, supported by the CAREC Secretariat, shall conduct the following activities throughout the year:
 - a. An annual meeting is held in the first or third quarter of each year. The WGSD meeting shall serve as a forum for strategic discussion and strategic and operational planning;
 - b. Operational meetings could be convened on an as-needed basis throughout the year, on-site or virtually, to address emerging administrative and operational issues;
 - c. The Secretariat will organize and facilitate the organization of on-site or virtual thematic meetings or workshops on a need basis;
 - d. In-country or virtual coordination and cross-border meetings will be organized when needed;
 - e. The WGSD will prepare and approve an annual plan to guide activity implementation and monitoring based on the comprehensive work plan of the CAREC WGSD for 2024-2026.
 - f. The plans will focus on mainstreaming green skills and just transition aspects into the TVET and HE policies and strategy

Article IX. Character of the Memorandum of Understanding

- 9.1. The MOU shall not constitute any legal or financial obligation between the WGSD members. This Memorandum of Understanding is not an international treaty.
- 9.2. The WGSD members maintain their full independent decision-making autonomy with regard to their own respective affairs and operations.

Article X. Dispute resolution

- 10.1. Disputes arising during the implementation of the Memorandum of Understanding shall be resolved through negotiations and consultations between the relevant ministries whose representatives are members of the WGSD.
- 10.2. In case of failure to resolve disputes, the relevant ministries whose representatives are members of the WGSD may seek mediation from a third party agreed upon by all partners.

Article XI. Changes and amendments

- 11.1. The MOU may be amended and changed only upon mutual agreement of all the relevant Ministries whose representatives are members of the WGSD.
- 11.2. Changes and additions to the MOU shall become effective upon signing of additional minutes by all the partners.

For the CAREC Working Group on Skills Development:

	Signature
Azerbaijan	
Mr. Jeyhun Karamov	
Director, State Agency for Vocational Education	
Georgia	
Ms. Baya Kvitsiani	
Deputy Minister, Ministry of Education, Science and Youth	
Kazakhstan	
Ms. Gulzhan Jarassova	
Deputy Chairman, Committee of Higher and Postgraduate	
Education, Ministry of Science and Higher Education	
Kyrgyzstan	
Mr. Azamat Naimanbaev	
Advisor to the Minister, Ministry of Education and Science	
Mongolia	
Ms. Oyunaa Purevdorj	
Director General of Education Policy Planning Department,	
Ministry of Education	
Pakistan	
Mr. Sohail Akhtar	
Senior Joint Secretary-IC, Ministry of Federal Education and	
Professional Training	
Tajikistan	
Ms. Lutfiya Abdulkholiqzoda	
Deputy Minister, Ministry of Education and Science	
Turkmenistan	
Mr. Azat Ataev	
Deputy Minister, Ministry of Education	
Uzbekistan	
Mr. Shakhrukh Daliev	
First Deputy Minister, Ministry of Higher Education, Science	
and Innovation	

For Asian Development Bank:

	Signature:
Mr. Yevgeniy Zhukov	
Director General, Central and West Asia Department	
Ms. Ayako Inagaki	
Senior Director, Human and Social Development Department	

Appendix 3



(Template): Concept note to provide information about the prioritized areas that the university wants to work on

Use the provided format below. Other documents will not be taken into account for the evaluation.

The Asian Development Bank is supporting the strengthening of agriculture university education, training and research in the CAREC region through the "Strengthening Green Skills Development" activities under the CAREC program. This initiative aims to address impacts of climate change and environmental challenges through cooperative and capacity building programs that integrate green and just transition into skills development. This project contributes to output 2 Climate-smart agriculture university education in the CAREC region strengthened, of the Strengthening Green Skills Development of the CAREC program. The main objectives of this output are:

- Improving the climate smart agriculture university education, research and outreach in the CAREC region strengthened.
- Enhancing knowledge on just transitions for climate smart agriculture

Nine universities have taken part in an initial self-assessment survey that was designed to assess:

- 1. What motivates universities to participate in this program.
- 2. What is required to strengthen universities' capacity to address climate change and just transitions.
- 3. How the interests and focus of the universities align with the program objectives; and
- 4. The willingness and ability of universities to contribute with their own resources and invest in capacity strengthening

The self-assessment has provided insights into the current offering of the universities in terms of education, research, and outreach on i) Climate Smart Agriculture (CSA) and ii) Just Transitions (JT). In addition, the assessment provided high level insights into the future aspirations of the universities and their needs in the two domains and the three areas mentioned.

The universities that have gone through the preliminary selection, have shown interest to participate in the program, have a strong motivation, and show commitment to invest in capacity strengthening will be asked to use the following "Concept Note" template to provide more details on the development trajectories, products and elements that the universities want to work on, within the scope and context of this project.

The concept note template asks universities to <u>specify</u> the different work- streams that they want to focus on throughout the project and to provide details on the knowledge, skills, competences and products are that they want to strengthen.

The three work streams that will run in parallel throughout the project are:

- 1) Academic and non-degree programs
- 2) Research
- 3) Outreach

The concept notes will be used as input to identify and select the universities that will take part in the project. The selection procedure will be based on how the proposed activities and related concept note adhere to the following SMART principles:

- Specific: specific and clear objectives
- Measurable: clear activity planning, and output-based planning
- Achievable:
 - Realistic ambitions that can be accomplished within the project's context and time frame (1 year)
 - Pilot during the project; but cannot go beyond the project
 - Goes beyond 1 year, but identifying need for support (soft skills)
- Relevant: goal and aspirations aligned to university strategy and long-term objectives
- Time-based Realistic and clear planning, with time-based tasks and roadmap

The concept note contains three parts

- 1) A detailed description of the different workstreams, specific aspired outputs, composition of teams, contributions of the university
- 2) A summary overview indicating how different outputs contribute to the offering of the university and its strategic plan and their societal relevance.
- 3) Signatures from the person, who filled in the concept note, and from the person who is leading international cooperation

PART 1: Detailed description

Provided a description (**max 300 words**) of the workstreams and specific outputs you would like to work on within this project. Your description which includes a reference to:

- i) The specific workstreams, outputs, products and deliverables that you want to generate within the scope of this project
- ii) The team of people that will be working within the project (including their specific roles and responsibilities in relation to specific workstreams, products and deliverables)
- iii) If you are planning to work with another university, include their specific roles and responsibilities in relation to specific workstreams, products and deliverables (to promote regional collaboration)
- iv)A commitment regarding the contribution of the university to this project (contribution in kind and financially)

Please note that your proposals can include and integrate multiple workstreams

PART 2: Overview of your focus and aspired outputs if you are selected to be part of the project:

Building on the ideas in part 1 and the ideas from the self-assessment, please use the table below to provide a summarized overview of you ambitions within the context of this project.

		Focus domain (CSA/ JT)	Focus stream	work	Aspired output	Contribution to the strategy of the university	Societal relevance
Academic non-degree programs	&						
Research							
Outreach							

PART 3: Signatures

The above information is correct and corresponds to the vision of the university and those that are signing below.
person/ department/ faculty handing in the concept note.
person responsible for international partnerships at the university.



Criteria for evaluation of the in-depth self-assessment

The self-assessment serves as a first input to assess the status of the universities to take part in the program supported by the Asian Development Bank, aimed at strengthening of agriculture university education, training and research in the CAREC region. The universities are in different stages of development when it comes to Climate Smart Agriculture (CSA) and Just Transition. We need to identify the baseline where the different universities stand in those fields.

This program aims to address impacts of climate change and environmental challenges through cooperative and capacity building programs that integrate green and just transition into skills development.

Please, use the provided template

Objectives for evaluation of the self-assessment by universities and related criteria

The self-assessment was geared towards understanding the needs of participating universities and their current activities in relation to the objectives and goals of the program. The survey results will additionally serve as a baseline input.

The criteria through which the survey results will be assessed are not intended to exclusively evaluate the universities on their current and ongoing educational, research and outreach activities but also aim to assess:

- 1. What motivates universities to participate in this program.
- 2. What is required to strengthen universities' capacity to address climate change and just transitions
- 3. How the interests and focus of the universities align with the program objectives; and
- 4. The willingness and ability of universities to contribute with their own resources and invest in capacity strengthening

First level of evaluation criteria

	YES	NO
Self-assessment has been filled in and is complete		
· ·		If not complete what is missing
Self-assessment describes a future focus		
Self-assessment describes required future needs, skills,		
competencies		

Second level of evaluation criteria ongoing activities related to

1) Climate Smart Agriculture / Climate Change

2) Just Transitions / Sustainability Transitions Three work streams:

- 1. Academic
- 2. Research
- 3. Outreach
- 1. Academic: Current educational offering CSA

	Yes	No	Scores 1 CSA is very much in infancy; hardly present 2 There are many things to improve, and overall strategic alignment is not there; limited CSA in curriculum 3 Developed, overall alignment can be detected 4 Well developed and in line with overall strategy	Observation
 Degree programmes in the field of just transition and climate change (diploma, BSc, MSc, PhD); 				
- Alignment with CSA / JT topics				
- Theoretical and practical knowledge and application				
- Exposure to real life scenarios through field work and excursions				
- Feedback and evaluation systems				
- Current exchange programs	ı	-		-
- Aspired future exchange programs	-	-	-	-
- Graduate tracer studies	-	-	-	-
- # of staff	-	-	-	-
- Diversity and inclusivity regarding staff	-	-	-	-
- # of students	-	-	-	-
- Diversity and inclusivity regarding students	-	-	-	-
-	-	-	-	-
	_	_	_	_

Current educational offering JUST TRANSITION

Current educational oliening 3031 Trv-			
Yes	No	1 JT is very much in infancy; hardly	Observation
		present	
		2 There are many things to improve,	
		and overall strategic alignment is not	
		there; limited CSA in curriculum	
		3 Developed, overall alignment can	
		be detected	
		4 Well developed and in line with	ļ
		overall strategy	

	1				
- Degree programmes in the					
field of just transition and					
climate change (diploma,					
BSc, MSc, PhD);					
- Alignment with CSA / JT					
topics					
- Theoretical and practical					
knowledge and application					
- Exposure to real life	_				
scenarios through field work					
and excursions					
- Feedback and evaluation					
systems					
- Current exchange programs	-	-	-		-
- Aspired future exchange	-	-	-		-
programs					
- Graduate tracer studies	-	-	-		-
- # of staff	-	-	-		-
- Diversity and inclusivity	-	-	-		-
regarding staff					
- # of students	_	_			_
- Diversity and inclusivity	-	-	-		-
regarding students					
-	-	-	-		-
	-	-	-		-

<u>Track record & current research focus</u>

Maximum top 20 current and past research topics and projects (2020-, including reference) related to i) Climate smart agriculture and ii) Just Transitions? Please, list top 20

ornare agriculturo arre	illy duct Transitionio. I loade	,		
	#Research topics	# Specific project(s)	Funding (Type of	Budget (EUR)
		(since 2020)	funders and diversity	
			of funders)	Total
Climate Smart				
Agriculture				
XXXXXXXXXXX				
Just Transitions				
XXXXXXXXXXX				

Future aspirations for research (where highlighted in the self-assessment survey)

TOPIC	RESEARCH TOPICS	POTENTIAL FUNDERS
Climate Smart Agriculture		
Just Transitions		

Key publications from last years: Climate Smart Agriculture

1 CSA is very much in infancy; hardly present	Observation
2 There are many things to improve, and overall strategic alignment is not there;	
limited CSA in curriculum	
3 Developed, overall alignment can be detected	
4 Well developed and in line with overall strategy	

Key publications from last years: Just Transitions

1 JT is very much in infancy; hardly present 2 There are many things to improve, and overall s limited CSA in curriculum 3 Developed, overall alignment can be detected 4 Well developed and in line with overall strategy		Observation
Outreach activities in last 5 years Current Outreach activities	Observation & Score 1 Outreach is very much in in and JT; hardly present 2 There are many things to strategic alignment is not to curriculum 3 Developed, overall alignment 4 Well developed and in line with	improve, and overall here; limited CSA in can be detected
Examples: Policy-making and advisory role Community engagement Public engagement activities, such as workshops, seminars, and community projects. Success stories and case studies of climate-smart agriculture/just transition implementation Inclusion of marginalized and vulnerable communities in research and decision-making processes.		
Aspired future outreach activities		
Short courses in last 5 years		
	Observation & Score 1 CSA/JT is very much in infan 2 There are many things to strategic alignment is not the curriculum 3 Developed, overall alignment 4 Well developed and in line with	improve, and overall here; limited CSA in can be detected
Short courses currently		
Aspired short courses in future		

Score (1 program is very much in infancy; hardly present; 2 There are many things to improve, and overall strategic alignment is not there; limited CSA in curriculum; 3 Developed, overall alignment can be detected; 4 Well developed and in line with overall strategy); clarity on needs and link to above

Aspired additional capacities lecturers	Aligned with program focus	Attainable within program duration

Final assessment of reviewer

- A) Ongoing activities related to
 - 1) Climate Smart Agriculture / Climate Change:
 - 2) Just Transitions / Sustainability Transitions
- B) Future aspirations related to
 - 1) Climate Smart Agriculture / Climate Change
 - 2) Just Transitions / Sustainability Transitions
- C) Alignment with project objectives
- D) Consideration needs and demands private sector / future employers
- E) Assessment of motivation to join programme
- F) Institution able, willing and committed to put in own resources

Appendix 5

of the Second Meeting of the CAREC Working Group on Skills Development

No.	Name	Position, organization
		Azerbaijan
1	Mr. Jeyhun Karamov	Director of State Agency on Vocational Education, Ministry of science and education, Azerbaijan
2	Mr. Fariz Guliyev	Chief Adviser of International Projects Management Division, International Cooperation Department, State Agency on Science and Higher Education
3	H.E. Mr. Watanabe Katsuya	Ambassador, Embassy of Japan in the Republic of Azerbaijan
4	Mr. Nizami Huseynli	Head of Development of Workforce Skills Division, Employment Policy and Demographic Development Department, Ministry of labor and social protection of population, Azerbaijan
5	Mr. Elsevar Guliyev	National Coordinator, GIZ Eastern Partnership for Trade and Transport – EasTnT Project, Azerbaijan
6	Mr. Nurali Yusifbayli	Vice-Rector for Academic Affairs, Azerbaijan Technical University
7	Mr. Fariz Mammadov	Vice-rector for International affairs, Azerbaijan Technical University
8	Mr. Mahir Mammadzade	Director of International Cooperation and Foreign Students Department, Azerbaijan State Agrarian University
9	Mr. Elchin Nasirov	Director of Science Department, Azerbaijan State Agrarian University
		China (online)
10	Ms. Yu Shengnan	Deputy director, Department of International Cooperation and Exchanges, Ministry of Education
11	Ms. Zhang Jingyi	Department of International Cooperation and Exchanges, Ministry of Education
12	Mr. Wang Jianyu,	Director, Department of International Cooperation, Ministry of Human Resources and Social Security
		Georgia
13	Ms. Baya Kvitsiani	Deputy Minister, Ministry of education, science and youth, Georgia
14	Ms. Anna Bezhanishvili	Head of Analysis Division, Vocational Education Development Department, Ministry of education, science and youth, Georgia
15	Ms. Nino Chkhartishvili	Professor, Georgian Technical University
		Kazakhstan
16	Ms. Gulzhan Jarassova	Deputy Chairman, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education
17	Ms. Karlygash Abuova	Head of Division, Committee of Higher and Postgraduate Education, Ministry of Science and Higher Education
18	Ms. Saule Serikovna Shalmaganbetova	Head of information and analytical unit, the International Fund for Saving the Aral Sea
19	Mr. Primkul Ibragimov	First vice-rector, Kazakh National Agrarian Research University
		Kyrgyzstan
20	Mr. Azamat Naimanbaev	Advisor to the Minister, Ministry of education and science, Kyrgyzstan

Ms. Gulnura Mamyrova Head of primary vocational education department, Minis education and science, Kyrgyzstan	rersity Ing Department, In Department, es education and development, ence, Tajikistan
Pakistan Prof. Dr. Waqas Wakil Director, Professional training and skills developed to the training and science, Tajik stan Director, Tajik Agrarian University of Primary and Secondary Coachieva (Postor, Tajik Agrarian University) Director, Tajik Agrarian University of Primary and Secondary Coachieva (Postor, Tajik Agrarian University) Director, Tajik Agrarian University Director, Professional Agrarian University Director, Professional Agrarian University Director, Professional Agrarian University Director, Mongolia Director, Mongolia Director, Professional Agrarian University Director, Mongolia Director	education and development,
Mongolia Director-General of Education Policy Planning Depart Ministry of education, Mongolia	education and development,
Ministry of education, Mongolia 24 Mr. Enkhbayar Baatartsol 25 Mr. Baasansukh Badarch Pakistan 26 Mr. Sohail Akhtar 27 Prof. Dr. Waqas Wakil 28 Ms. Lutfiya Abdulkholiqzoda 28 Ms. Lutfiya Abdulkholiqzoda 29 Mr. Alisher Alizoda Ministry of education, Mongolia President, Mongolian University of Life Sciences Pakistan Senior Joint Secretary-IC, Ministry of Federal education professional training, Pakistan Director, Professional training and skills develop University of Agriculture, Faisalabad Tajikistan Deputy Minister, Ministry of education and science, Tajik Deputy Chairman, Committee on Primary and Second Vocational Education, Tajikistan Mr. Mahmadyorzoda Usmon Rector, Tajik Agrarian University	es education and development, ence, Tajikistan
Director-General of the External Cooperation Depart Ministry of education, Mongolia	education and development,
Ministry of education, Mongolia 25 Mr. Baasansukh Badarch Pakistan 26 Mr. Sohail Akhtar Senior Joint Secretary-IC, Ministry of Federal education professional training, Pakistan 27 Prof. Dr. Waqas Wakil Director, Professional training and skills developed University of Agriculture, Faisalabad Tajikistan 28 Ms. Lutfiya Abdulkholiqzoda Deputy Minister, Ministry of education and science, Tajik Deputy Chairman, Committee on Primary and Second Vocational Education, Tajikistan Mr. Mahmadyorzoda Usmon Rector, Tajik Agrarian University	education and development,
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31 Mr. Begimkulov Uzokboy Director of the Institute for Retraining and Advanced Tra	
Shoimkulovich of Personnel in the Higher Education System, Minist	em, wimstry or
Higher Education, Science, and Innovations 32 Mr. Nazarov Shokhrukh Chief Specialist of the International Cooperation and Ra	on and Datings
Shukhrat ugli Department, Ministry of Higher Education, Science,	
Innovations, Uzbekistan	
33 Mr. Shukhrat Shokirov Vice-Rector for Research and Innovation, Tashkent Instit	
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45	Mr. Ashraf Kuliyev	CAREC National Focal Point Advisor
46	Ms. Sabina Yusifova	Senior project officer, Azerbaijan Resident Mission, ADB
47	Mr. Khagani Karimov	Senior Economics Officer, Azerbaijan Resident Mission, ADB
48	Mr. Orkhan Rzayev	External Relations Consultant, Azerbaijan Resident Mission, ADB
49	Ms. Liliia Kachkinbaeva	Consultant, ADB
50	Ms. Chandni Lanfranchi	Program officer on green jobs and just transition, International Training Center of the International Labor Organization
51	Ms. Monika Sopov	Senior Advisor, Sustainable Food Systems, Wageningen Social and Economic Research
52	Mr. Hafiz Qayib	Interpreter
53	Mr. Anar Akhmadov	Interpreter
54	Mr. Ramil Davidzade	Assistant
55	Ms. Venera Mastanova	Assistant