









## **Summary of Meeting of the Network of Academic Societies**

# Strategic Partnership of Higher Education Institutions as a Key Factor for Development of a Collaborative Educational Space in Central Asia

Venue:	Hotel Hayat Regency Dushanbe, Dushanbe, Tajikistan					
Date:	October 18-19, 2021					
Organizers:	The Regional Environmental Centre for Central Asia (CAREC) within framework of SDC Blue Peace in Central Asia project jointly with USAID Regional Water and Vulnerable Environment Activity and European Union project "Central Asia Nexus Dialogue Project: Foster Water, Energy And Food Security Nexus And Multi-sector Investm (Phase II)"					
Aim of the meeting	i) discuss options for formalizing the Network and create a roadmap for further development of the network; ii) present to members the most recent materials developed since the previous meeting (2020-2021); iii) identify the procedures to introduce changes in educational programs related to the integration of integrated water resources management (IWRM) and water-energy-food-environment nexus approaches (WEFE nexus), Sustainable Development Goals, and other global trends.					
Day 1 Institutional aspects and opportunities for the Network development Short content of the meeting: Opening, welcome words	The meeting was opened with welcoming words by the Regional Environment Specialist, USAID Central Asia Regional Mission, Mr. Kevin Adkin, who noted the important role of the academic society in promotion and building the capacity of the new generation of young specialists in the water sector. Mr. Adkin highly praised the importance of academia's cooperation in achieving regional sustainability, as well as the overall adaptation to climate change. WAVE project funded by USAID will provide strong support any cooperative initiatives on the reginal level.  Further, Project Officer, EU Delegation to Kazakhstan Ms. Snejana Popova in her welcoming speech as a coordinator of the EU Nexus project has also noted the role of water as s key driver for regional integration in Central Asia. Population growth, migration, demand for resources, an increase of irrigation areas will inevitably lead the pressure on water resources. Experts predict that global demand for water will have increased by 30-50% and for food - by 60% by 2030. She especially emphasized necessity to develop inter-sectoral coordination. To improve resource efficiency and protect ecosystems the EU as a global leader in green economy is willing to share its expertise by promoting NEXUS approach. WEFE Nexus is a cornerstone in social and economic development. The academic community is a facilitator in shifting a society to a new paradigm.					

	Further, Ms. Lisa Marina Gump, Regional Adviser on Water and					
Session 1. Presentation of	Climate Change, Swiss Agency for Development (SDC) and Cooperation for Central Asia, has emphasized that the education sector of CA requires significant changes in line with ongoing global trends (WEFE NEXUS, IWRM) in order to better prepare the next generation of water professionals. The Blue Peace CA initiative is focused on strengthening the water education, where youth is a main proponent of reforms addressing the complex challenges. SDC supports students studying on the water related specialties at the Kazakh German university and provides new learning modules into CA universities.  Further Ms. Ekaterina Strikeleva introduced the participants to the program of the meeting and recorded the presence of 5 CA countries (Turkmenistan - online).  • Review of best practices of Regional Networking in the					
implemented and existing						
joint projects between Central Asian universities						
in the field of water	• • • • • • • • • • • • • • • • • • • •					
resources and climate	, , , , , , , , , , , , , , , , , , , ,					
change.	Ormukov, AUCA);					
	• Strengthening human capacity building in the water and environmental sectors: from coaching civil society actors to					
	training water diplomats (Mr. Marton Krasznai, Corvinus					
	University)					
	Lunch					
Session 2. <b>Presentation of</b>	Presentation of the Assessment Results of the USAID Regional Water					
the WAVE project's	and Vulnerable Environment Activity (Ms. Ekaterina Strikeleva,					
interim results	Capacity Development and Education Lead) Presentation of the WEAP and LEAP modelling process within the USAID Regional Water and Vulnerable Environment Activity (Ms. Anna Inozemtseva, IWRM Lead)					
	Coffee break					
Session 3. SDC Modules' presentation	After one-by-one presentation of the modules universities generally discussed the content of the modules. Teachers who were not familiar with the modules tried to understand the formats and administrative processes of how modules can be internalized in universities. Then, they were asked to demonstrate their intentions to adopt the modules. As the next step it was suggested to take a part as universities representatives responsible for modules decentralization in ToTs with the authors of the modules. More detailed conclusions were expected to be made during the session 4 of Day 2.					
Session 4. Presentation of	Presentation of WEF nexus approach (Ms. Aksulu Kushanova, CAREC)					
EU-NEXUS project (phase II)						
Wrapping up the first day of the meeting						
Day 2 Practical Examples and New Opportunities Session 1. Training on the Interactive Nexus Game	<ul> <li>(Ms. Assel Amit, Ms. Aksulu Kushanova)</li> <li>Introductory presentation</li> <li>Division into groups</li> <li>Explanation of instructions, scenarios and roles</li> </ul>					

### Group work

The Nexus Game was played by two equally divided groups and took about 5 hours with simulation of up to five different scenarios: rainy and dry season simulations followed by investment decisions made respectively by upstream and downstream countries. The participants quickly picked up the rules and were actively engaged in heated discussion on how to allocated available resources. The game illustrated well-known issues and conflicts between upstream and downstream countries. For instance, the downstream countries were not ready to put up with the pollution from the upstream countries. This resulted in tensions, even between the players during the simulation game.

When taking the roles of Ministers of Agriculture, Energy and Water, the participants faced the need to compromise between the water, energy and food sectors in order to make effective decisions. In most cases, they fell into the common pattern of considering only one sector. However, this was not a good strategy to win the game, as it was necessary to use the Nexus approach to find multi-sectoral solutions.

The first group managed to focus on open-minded negotiation, proposed joint construction and management solutions of transboundary water facilities, and found ways to benefit from the comparative advantages of upstream and downstream countries. While the members of the second group were a bit more conservative during negotiations and decision making, which took them more time to come to mutually beneficial results.

Overall, the participants experienced the interdependence between the sectors and effectiveness of synergies between competing uses of water, land and energy-related resources in practice.

### **Feedbacks**

The game aroused the interest of the teachers. The participants noted the need to introduce this simulation game for managers, economists, financiers at the master's level. It was noted by the Kyrgyz Academy of Civil Service under the President of the Kyrgyz Republic that there is no need to introduce the game as a separate subject, it is better to apply it as an elective course in the form of a business game in the study of disciplines such as project management, strategic planning. The game will be especially in demand at the Department of Water Diplomacy (Academy of Civil Service under the President of the Republic of Tajikistan).

For engineers (Taraz State University), revision is required in the translation of professional terminology, as well as to make the game more realistic, therefore, detailed (to work out the map relief, convert from a flat 2D format to a 3D format, revise the location of the hydroelectric power station, add resources and distribute them based on the population of the downstream and upstream countries, etc.). It was proposed to play the first 2 years as a dry period in order to create an immediate adaptation of the participants to difficult critical situations.

The session discussed the possibilities of conducting trainings on the NEXUS game for teachers. The city of Almaty was named the best venue, the time is the end of March - April.

### Coffee break

Session 2. Development of a roadmap of activities of the Network for strengthening academic interaction and

### **Module: Water Diplomacy**

This module has attracted great interest from the Public Administration Academies in Tajikistan and Kyrgyzstan. Possible languages of delivery are Russian, English. CAREC staff also expressed a great desire to attend improving the educational system on water resources management, climate change and environmental protection for 2022 the training along with the teachers. It is tentatively determined that the physical training could take place at the Tajik Academy of Public Administration in Dushanbe in March-April 2022. To assign a more precise time the Prof. Brethaut's response on his mobility in this period is required.

Kyrgyz National University expressed its willingness to introduce this module as part of the discipline Political Geography and Geopolitics or as an elective course, but after the attending of ToTs of Prof. Brethaut to better understand the aims and objectives of the course, as well as the teaching methodology.

All participants agreed that the regional format of the training is more effective as there is an opportunity to exchange experiences with teachers from other countries and to make the format of negotiations on water sharing between riparian countries as close to real as possible.

### **Module: WASH**

The WASH module also evoked response from teachers of different water specialties (water supply and sanitation, geography, ecology and tourism, hydraulic engineering and water protection). The East Kazakhstan State University after Serikbayev committed to adopt WASH module as a part of variative component of "Water supply and wastewater disposal" educational program as a course "Introduction to specialty". The Eurasian National University is planning to follow the same principle, as the course is fully in line with the academic direction of the department and will be included in the existing course on water and sanitation.

In terms of ToTs, it was noted that Kazakhstani HEIs are ready to conduct training in the period from 15 to 19 November in Almaty, at the DKU, or 15-21 June in Eurasian National University (NuSultan) or Kazakh National Agrarian University (Almaty). Regional training for HEIs in Tajikistan, Uzbekistan and Turkmenistan could be held at Khujand University (did not participate in the NAS meeting, but agreed to provide a venue for ToT at the bilateral online meeting) or Technical University after Osimi (Dushanbe). Logistical issues need to be thought out - which facilities (wastewater treatment plants, municipal wastewater systems, schools) will be visited during the workshops.

Maximum group size is 20 persons.

Teachers noted the need for course certificates signed by Prof. Peter.

### **Module: Hydromodelling**

The Hydromodelling module had the highest number of interested participants (LoPs enclosed) as the course offers a wide range of modern GIS tools with the possibility of using them free of charge. The Project Institute of the Committee of Water Management of Turkmenistan also expressed its willingness to participate in the training even in the online format.

During the discussion it was decided to hold a two-week course in April in any format (per country, regional). KazNARU is ready to provide computer lab space for the training in Almaty. In Dushanbe, there is a possibility to conduct the training at Technical University after Osimi, in Bishkek - at the AUCA, but it needs to be agreed with the universities' management as soon as the date of training is known.

The need for certificates from Prof. Siegfried's University was also noted. The possibility of applying **the WEAP and LEAP hydromodelling** module (WAVE-USAID) was discussed. However, some questions remained open as they can be answered by the developers of this software who will come to Kazakhstan at the beginning of November to meet with the universities. Teachers asked whether the proposed software would be

purchased by the universities themselves or will be provided by donors at no cost as WEAP and LEAP software is paid. This issue has not yet been resolved by WAVE due to the lack of a determined work plan on the module promotion and the certain number of interested universities. ToTs are planned for April 2022.

After the session the participants were asked to fill the questionnaire developed by **Ms. Irina Yugay** to officially confirm their intention to be involved to the process of modules' adoption.

# Session 3. Institutional aspects and opportunities for the development

Based on the presentation of the best cases of Regional Networking in Developing Countries (presented by Ms. Irina Yugay), the participants were invited to discuss possibilities for institutionalization of the NAS: what lessons can be learnt, what can be emulated (structure, differentiated membership, grouping into thematic groups, forms and mechanisms of cooperation, etc.).

The following questions were discussed and answered in the session:

Which format of formalisation of the Network is most acceptable: membership by application, free participation, written nomination from the rector or free participation of different members.

The participants agreed on the necessity of adopting the Charter or the Statute of the Network to ensure that people interested in the Network's activity and cooperation with other HEIs join the Network. Ideas were put forward to create a structure similar to the Parliamentarian one - "upper" and "lower" chambers to involve not only heads of structural units (deans, heads of departments), but also rectors, who could increase the opportunities for cooperation and promote the Network into a higher level of cooperation.

Participants from Tajikistan and Uzbekistan stressed the need to send a letter to the rector requesting nomination of a particular faculty member in order to avoid "random" nominees, and a copy of the same letter to the mail of the nominee. All agreed to officially accept the membership of the Network.

**Mr. Alim Pulatov**, Secretary of CASCADE Network of Agricultural Universities at TIIAME (Uzbekistan), suggested the idea of uniting the NAS with CASCADE Network and, hence, to join under one umbrella not only universities but also training centres, research institutes, etc., i.e. to form so-called "community of practice". He noted that creating a new Network requires more effort than merging with an existing one.

The potential group structure of the Network should be in line with the SDGs.

### The benefits of personal participation in the Network for everyone

Further **Ms. Aina Mamytova** (Academy of Civil Service under the President of the Kyrgyz Republic) provided answers to all questions. She noted the importance role of the Network for academic cooperation. There is no other alternative platform for teachers to meet at regional level and exchange experiences and knowledge, therefore, the Network needs to be actively developed and extended by motivated participants who are able to act in their countries.

## Readiness to sign in the future documents such as the Network Members Code, Network Regulations, etc.

In the first phase it would make sense to adopt a Network Charter to formalize the Network and make membership practices sustainable. Participants expressed their willingness to sign any documents for formalizing their membership.

The Network Secretariat and its role. Is there a need for it? Should it be regional or have representatives in each country? What functions

#### should the secretariat have?

The secretariat is also needed to coordinate the Network and provide technical support to its activities. Having a secretariat in each country or country representatives in a common regional secretariat – both options are acceptable. It can be decided by majority choice.

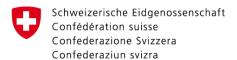
Possibility of financial participation of the institutions in the Network In the initial phase of institutionalization, it was suggested that admission into the Network and the membership would be without financial contribution from the participants. This would provide an opportunity to attract more universities with different capacities. Once the Network is functioning as a formal association, membership fees can be introduced. The experience of the CASCADE Network in introducing membership fees was noted, which has proven to be a failure. CASCADE members "invest" their own time and effort (voluntarism) to the development of the Network without financial input. For example, during the pandemic, the universities developed on voluntary basis joint MOOCs and Summer School programs on various topics.

Readiness to participate in a single virtual platform for communication? What topics are relevant for discussion? What materials should be posted.

This meeting was devoted to discussing the introduction of new modules in the curricula of higher education institutions. The exchange of experiences between countries on the integration of modules could be a topic for discussion at future meetings on the regional platform. Posting of adapted training materials on a regional database also has prospects to be the first joint initiative of the Network.

In conclusion, the results of the meeting were summarized, the work plans for 2021-2022 were approved. The participants expressed their gratitude to WAVE-USAID and SDC-NEXUS-CAREC, and also stressed the importance of continuing the initiatives launched.













### Meeting of members of the Network of Academic Societies

## Strategic Partnership of Higher Education Institutions as a Key Factor for Development of a Collaborative Educational Space in Central Asia

**Organizers:** The USAID Regional Water and Vulnerable Environment Activity jointly with the Regional Environmental Centre for Central Asia (CAREC) within the framework of SDC Blue Peace in Central Asia project and the European Union project "Central Asia Nexus Dialogue Project: Fostering Water, Energy And Food Security Nexus And Multi-sector Investment (Phase II)".

Date: 18-19 October 2021

**Venue:** Hotel "Hyatt Regency Dushanbe", Dushanbe, Tajikistan

Zoom link:

 $\frac{https://us06web.zoom.us/j/82054194389?pwd=dktLd0tJQUYyNlhaYlVBdGYvRzRqZz0}{9}$ 

**Format:** Hybrid format combining offline participation and Zoom platform for participants from Turkmenistan and other universities. The language of the meeting is Russian. English-Russian-English simultaneous translation is provided.

Participation in the Nexus Game on the second day of the meeting will be available offline only.

**Context:** All Central Asian (CA) countries are currently undergoing various water sector reforms, paying great attention to the development of agriculture, introduction of new technologies and adaptation to climate change. In this regard, the education sector of CA requires significant changes that will reflect these ongoing reforms, development strategies, and global trends in order to better prepare the next generation of water professionals.

The Central Asian Network of Academic Societies was established in 2012 and has been actively functioning with the support of various development partners, including the World Bank, USAID, SDC and the European Union. Initially, the Network was created to share experience and knowledge and gradually develop cooperation between universities in Central Asia. The Network has achieved a number of results over the past years, including memoranda of cooperation (under the Smart Waters project), unification of educational standards in three

disciplines (under CAWDP), development of three syllabuses (with the support of SDC), etc. However, the Network has not been formalized, and is only supported with funding from international donor projects.

Currently, there is a need for further development of the Network to ensure its operational efficiency and sustainability. At the same time, the library of knowledge accumulated over the past 10 years in various fields, electronic materials, and online courses has not yet been placed in one location that is accessible to all members of the network. Thus, the establishment of a sustainable platform for the exchange of knowledge and experience, an electronic library of knowledge, and the formalization of the Network of Academic Societies are tasks to be completed in the near future.

Goals and objectives of the meeting: i) discuss options for formalizing the Network and create a roadmap for further development of the network; ii) present to members the most recent materials developed since the previous meeting (2020-2021); iii) identify the procedures to introduce changes in educational programs related to the integration of integrated water resources management (IWRM) and water-energy-food-environment nexus approaches (WEFE nexus), Sustainable Development Goals, and other global trends.

### **Participants:**

- NAS members and representatives of universities in Central Asia;
- Representatives of the European Union Delegations in Tajikistan;
- Representatives of the Swiss Agency for Development and Cooperation (SDC);
- USAID Regional Water and Vulnerable Environment Activity team;
- CAREC team.

### Agenda of the meeting

Time	Description		
Day 1: Institutional aspects and opportunities for network development  Moderator: Ms. Ekaterina Strikeleva, Capacity Development and Education Lead, USAID Regional Water and Vulnerable Environment Activity			
$09^{30} - 10^{00}$	Registration		
10 <sup>00</sup> – 10 <sup>15</sup>	<ul> <li>Opening remarks</li> <li>Mr. Kevin Adkin, Regional Environment Specialist, USAID Central Asia Regional Mission</li> <li>Ms. Snejana Popova, Project Officer, EU Delegation to Kazakhstan</li> <li>Ms. Lisa Marina Gump, Regional Adviser on Water and Climate Change, Swiss Agency for Development (SDC) and Cooperation for Central Asia</li> </ul>		
10 <sup>15</sup> – 11 <sup>30</sup>	Overview of the Network activities in 2020-2021  • CAREC (Ms. Tais Reznikova, CAREC)  • UNESCO (Ms. Kristine Tovmasyan, UNESCO)  • World bank – unification of standards (Ms. Julia Komagaeva, World Bank)  • SDC – syllabuses (Ms. Irina Yugay, CAREC)  • TIIAME – CASCADE network international school (Mr. Alim Pulatov, CASCADE network)		
$11^{30} - 12^{00}$	Coffee-break		
$12^{00} - 13^{00}$	Presentation of implemented and existing joint projects between Central Asian universities in the field of water resources and climate change.		
	<ul> <li>Review of best practices of Regional Networking in the Academic Environment in Developing Countries (Ms. Irina Yugay, CAREC);</li> <li>Case of Kazakh-German University (Ms. Barbara Janusz-Pawletta, Ms. Marhabo Yodalieva, DKU);</li> <li>Case of the American University of Central Asia (Mr. Cholponbek Ormukov, AUCA);</li> <li>Strengthening human capacity building in the water and environmental sectors: from coaching civil society actors to training water diplomats (Mr. Marton Krasznai, Corvinus University)</li> </ul>		
$13^{00} - 14^{00}$	Lunch		
Moderator: Tais Reznikova, Manager of the Water Initiatives Support Programme			
1400 - 1420	Presentation of the Assessment Results of the USAID Regional Water and Vulnerable Environment Activity (Ms. Ekaterina Strikeleva, Capacity Development and Education Lead)		
14 <sup>20</sup> – 14 <sup>40</sup>	Presentation of the WEAP and LEAP modelling process within the USAID Regional Water and Vulnerable Environment Activity (Ms. Anna Inozemtseva, IWRM Lead)		

$14^{40} - 15^{10}$	General discussion of the institutional aspects of the Network				
$15^{10} - 16^{10}$	Modules' presentation:				
	<ul> <li>Applied hydromodelling</li> <li>Hydropolitics and Water diplomacy</li> <li>Water, sanitation, hygiene and health</li> </ul> Q&A				
$16^{10} - 16^{40}$	Coffee-break				
$16^{40} - 17^{00}$	Presentation of WEF nexus approach (Ms. Aksulu Kushanova, CAREC)				
$17^{00} - 17^{30}$	Wrapping up the first day of the meeting				
$17^{30} - 19^{00}$	Break				
1900	Welcome reception				

Time	Description				
Day 2: Practica	Day 2: Practical Examples and New Opportunities				
$10^{00} - 10^{30}$	Registration				
$10^{30} - 11^{30}$	<ul> <li>Training on the Interactive Nexus Game (Ms. Assel Amit, Ms. Aksulu Kushanova)</li> <li>Introductory presentation</li> <li>Division into groups</li> <li>Explanation of instructions, scenarios and roles</li> <li>Group work</li> </ul>				
$11^{30} - 12^{00}$	Coffee-break				
$12^{00} - 13^{00}$	Training on the Interactive Nexus Game (Ms. Assel Amit, Ms. Aksulu Kushanova)  • Group work				
$13^{00} - 14^{00}$	Lunch				
14 <sup>00</sup> – 15 <sup>00</sup>	Training on the Interactive Nexus Game (Ms. Assel Amit, Ms. Aksulu Kushanova)  • Group work				
$15^{00} - 15^{30}$	Coffee-break				
15 <sup>30</sup> – 16 <sup>30</sup>	Training on the Interactive Nexus Game (Ms. Assel Amit, Ms. Aksulu Kushanova)  • Group work  • Summing up the results				

**Moderator:** Ms. Ekaterina Strikeleva, Capacity Development and Education Lead, USAID Regional Water and Vulnerable Environment Activity

$16^{30} - 17^{45}$	Development of a roadmap of activities of the Network for strengthening academic interaction and improving the educational system on water resources management, climate change and environmental protection for 2022			
	<ul> <li>Group work in 3 directions:</li> <li>Development of syllabuses – identification of thematic areas, development of implementation mechanisms;</li> <li>Professional development of teaching staff – topics, terms, formats;</li> <li>Involvement of youth in the work of the Network – activities of the network for the involvement of young teachers, scientific activities</li> </ul>			
	<ol> <li>Thematic areas:</li> <li>WEFE Nexus - moderators: Assel Amit, Aksulu Kushanova</li> <li>Regional cooperation and water diplomacy - moderator: Ekaterina Strikeleva</li> <li>WASH (Water, Sanitation, Hygiene and Health) - moderator: Irina Yugay</li> <li>Hydromodelling - moderator: Anna Inozemtseva</li> </ol>			
	Group discussions, general discussion to finalize the plan			
17 <sup>45</sup> – 18 <sup>00</sup>	<ul> <li>Wrapping up the second day of the meeting</li> <li>Mr. Kevin Adkin, Regional Environment Specialist, USAID Central Asia Regional Mission</li> <li>Ms. Snejana Popova, Project Officer, EU Delegation to Kazakhstan</li> <li>Ms. Lisa Marina Gump, Regional Adviser on Water and Climate Change, Swiss Agency for Development (SDC) and Cooperation for Central Asia</li> </ul>			