Funded by the European Union

Central Asia Nexus Dialogue Project: Fostering Water, Energy and Food Security Nexus and Multi-Sector Investment (Phase II)

Third Meeting of the Regional Steering Committee

16 November 2021| 14:00-20:00| Holiday Inn, "Aport Ballroom", Almaty, Kazakhstan

MINUTES

The third meeting of the Regional Steering Committee (RSC) of the EU-funded " Central Asia Nexus Dialogue Project: Fostering Water, Energy and Food Security Nexus and Multi-Sector Investment (Phase II) (hereinafter−Project Nexus or the Project) was dedicated to discussing the results of the Project achieved in the last six months (see Concept and Agenda in Annex 1).

The meeting was attended by RSC members nominated by the five beneficiary countries, the European Union (EU) Delegations and international partners in Central Asia with whom the Nexus Project is already cooperating or plans to cooperate in the future. The meeting was held in a hybrid format in Almaty, Kazakhstan (*See* List of participants in Annex 2).

Opening remarks were delivered by **Zafar Makhmudov**, Executive Director of the Regional Environmental Centre for Central Asia (CAREC), **Johannes Stenbaek Madsen,** Head of Cooperation, EU Delegation to Kazakhstan, and **Yulia Komagaeva**, World Bank Central Asia Knowledge Network Coordinator.

Mr. Makhmudov noted that the Project achieved all its objectives according to the work plan despite working online due to the pandemic. Mr. Makhmudov also shared the outcomes of COP26 in Glasgow, UK from 1-12 November 2021 where for the first time in the history of this

international conference CA countries were represented in a single "Central Asia Pavilion" under the common slogan "Central Asia 5-1-1" (5 countries - 1 region - 1 voice). The pavilion and its events were initiated, organized and conducted by CAREC with the support of various development projects and organizations.

Johannes Stenbaek Madsen confirmed that under the EU Strategy for Central Asia the EU is ready to continue supporting the region on transboundary resource management and the transition to a green economy. Mr Madsen stressed the need to change the practices of human interaction with nature and to take action to transform economic activities into more environmentally friendly and resource-saving ones, while fulfilling all climate commitments.

Yulia Komagaeva congratulated the participants for holding the first meeting partially off-line and highlighted the fruitful cooperation of the Nexus Project with the Central Asia Water Innovations Programme (CAWEP) Water and Energy Laboratory for Central Asia (CAWEP) project on the implementation of the Tajikistan Pumping Stations Demonstration Project as well as the transboundary project at the Tuyamuyun hydroscheme. Yulia Komagaeva assured that the World Bank is ready to continue supporting the implementation of demonstration projects taking into account their relevance for the region. Thus, an international consultant is currently being selected to study siltation treatment practices in other countries of the world.

Lyudmila Kiktenko, Nexus Project Manager, in her **introductory speech,** outlined the progress in achieving the target indicators of the Project Logical Framework. The monitoring shows that the project team are working systematically on all targets to achieve the overall objective of the Project (*see* Annex 3). The Project Work Plan for the next 6 months (December 2021 - May 2022) was then presented and agreed at the end of the meeting (see Work Plan in Annex 4).

Session 1 was dedicated to discussing the progress of the 4 demonstration projects and presenting the final drafts of the expert reports. In particular, the following results were presented:

Institutionalisation of the Nexus approach at national level: technical support in the preparation of strategic documents of the Ministry of Agriculture of the Kyrgyz Republic.

Emilbek Kydykmanov, Head of Strategic Planning and Analysis Department of the Ministry of Agriculture of the Kyrgyz Republic informed that the "Strategy for Agricultural Development of the Kyrgyz Republic for 2021-2025", which was updated and amended with support of the Project in early 2021 upon request of the Ministry, was redrafted into the Concept of Agricultural Development of the Kyrgyz Republic for 2021-2031 as recommended by the Cabinet of Ministers of the Kyrgyz Republic. The draft Concept has been agreed by the ministries and agencies concerned and is currently being sent to the Government of the Kyrgyz Republic. It is expected that the Concept will be approved in December 2021. The Ministry assured that the multi-sectoral approach proposed by the project team in updating the Strategy has been taken into account in the Concept. The final draft Concept has been handed over to the project team for review.

Nexus Demonstration Project in Kazakhstan: "Deforestation of the Aral Sea dried seabed: Piloting a closed root system"

Abay Djabasov, representative of the Executive Directorate of the International Fund for Saving the Aral Sea in the Republic of Kazakhstan (IFAS ED), presented a report on the current status of black saxaul seed multiplication in closed root system in 2 saxaul greenhouses and a shadehouse constructed at the STC "Eco-Aral" in Aral district of Kyzylorda region, Kazakhstan, with support from the Nexus Project.

2,000 black saxaul seeds were planted in April 2021. Seed germination was high; however, the early onset of the warm season, with extremely hot weather in late April in the area (air temperatures rising to 36 degrees Celsius), negatively affected germination and growth of saxaul seeds. Due to the catastrophic decrease of water flow in the Syrdarya River, the salinity of Kamystybas Lake (from where water for seed irrigation was used) increased to 6.6 g/l, which is multiple of the usual salinity of 2.5 g/l. The polystyrene greenhouses, which were supposed to protect the seedlings from the ravages of dry weather and cold, have become a 'choke point', with temperatures inside reaching 40 degrees Celsius or more from the increased solar radiation.

In order to adapt to the climatic conditions that have arisen, the IFAS staff took the bags of seeds out of the greenhouse into the shadehouse and into the open ground. Drinking water, which was delivered by water trucks and stored in a separate container, was used to irrigate the plants. The salinity level was 1 g/l. As a result of all the measures taken, seed germination was 12%.

The sprouted saxaul seeds will be planted on the dried seabed of the Aral Sea in spring 2022. The planting sites have been identified by the IFAS ID staff.

In conclusion, the specialist summarized that the traditional scheme of planting saxaul, which usually takes place in late autumn, should also be applied when planting seeds to avoid the damaging effects of strong UV rays on newly emerged seedlings. The purchase of French-made hydrogel, the use of which would improve seedling survival under the extreme climatic conditions of the Aral Sea region, is under consideration.

Nexus Demonstration Project in Tajikistan: "Improvement of the system for control and monitoring of electricity consumption at pumping stations and modernisation of a large pumping station in Sughd Region"

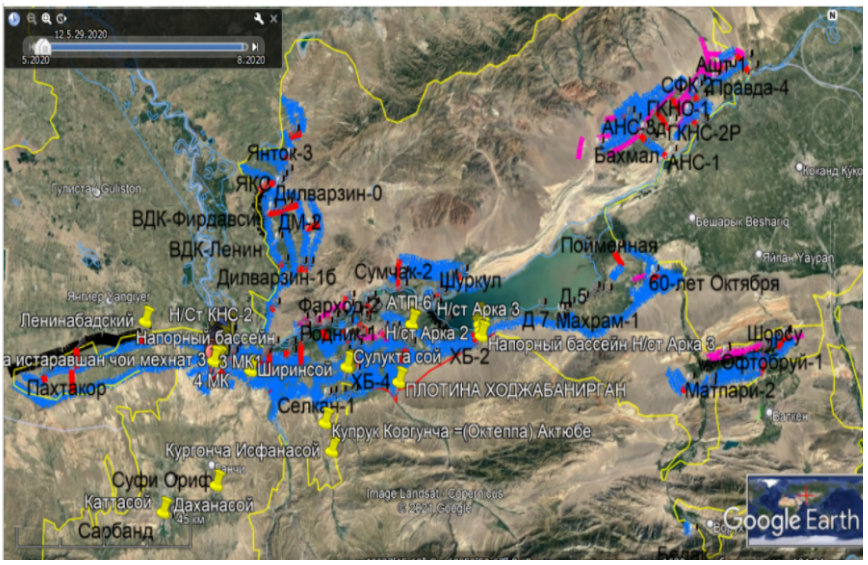
Bakhrom Gaforzoda, Consultant to the Agency for Land Reclamation and Irrigation under the Government of the Republic of Tajikistan (AMI), reported that the experts had done a lot of work on two main tasks of the demo-project: (i) automation of control and monitoring of electricity consumption at pumping stations in Sughd Region; and (ii) modernisation of the Golodnostepskaya pumping station (HPS) in Zafarabad District of Sughd Region.

In particular, experts developed a draft socio-economic analysis at the level of Sughd Region and Zafarabad District on the operation of pumping stations, which includes a description of the institutional and legislative framework, development of dekhan farms, climate change adaptation issues, irrigation infrastructure status, tariff analysis, financial status of the State Department of Reclamation and Irrigation of Zafarabad District, etc. The final draft will be presented to AMI and the Ministry of Energy and Water Resources of the Republic of Tajikistan in December 2021. This work will be used in the preparation of an investment proposal as part of the demonstration project.

In the first task (i) experts completed a tour of 173 pumping stations and took technical parameters and meter readings at each pumping station in Sughd region. The location of the pumping stations has been digitised and formatted into a GIS map. At present the experts are finalising the draft concept for the automation of pumping stations in Sughd. This task is expected to be completed in December 2021.

In the second task (ii), the experts completed a technical audit of GTS-1 and GTS-2 and drew up a list of equipment to be upgraded and/or replaced. The experts walked around all outlets in Zafarobod district and overlaid the location of the pumping stations on a GIS map (see Figure 1).

Figure 1. Developed GIS map of the location of pumping stations in Zafarabad district



Currently, AMI has started a dialogue with potential suppliers of pumping units. This work will be completed in early 2022.

Bakhrom Gaforzoda also informed the participants that AMI plans to hold a meeting of the National Commission on Irrigation and Drainage in early December this year, where the results of the demonstration project and draft regulations on the Water Code of Tajikistan, developed by experts of the OSCE Programme Office in Dushanbe, will be discussed.

The project team engaged the technical expertise of the international pump manufacturer Grundfos to co-finance the demonstration project. The Grundfos experts completed their work over a period of 4 months. The results of this work were presented during the meeting.

Khurshed Pirov, Specialist of Grundfos Representation in Tajikistan, presented the results of the technical audit of the pumping stations which was conducted by Grundfos specialists with the support of national experts and the State Land Reclamation and Irrigation Department of Zafarabad district in September 2021. The technical audit included determination of full efficiency and actual flow/water supply and conducting an energy audit on operating pump units 1 and 2 of Farhod-2 and GTS-1 pumping stations. The experts also explained that they had chosen the Farhod-2 pumping station because similar pumps are universally operated throughout Central Asia and have approximately the same problems.

The audit revealed that the pumps are actually pumping less water than declared and stated on the certificate, while consuming more electricity to produce 1m ^{3}of water. According to preliminary estimates, on average 30% less water is pumped for irrigation than the planned water production. The possibility of saving electricity when adapted to the actual operating parameters of irrigation plants is tentatively estimated at 37-40%. With proper selection and replacement of existing pumps with energy efficient pumps, it is possible to increase water supply by 30% (to the stated data), multiplying the irrigated area, but at the same time reducing energy consumption by 15%.

The experts also shared that given the physical condition of the pumping stations (large pipe diameters at GNS-1 and large deposits on the pipes at Farkhod 2) standard energy audits or ultrasonic flow meters are hardly suitable and innovative methods should be considered. For example, Grundfos used a new auditing method, pumpthermography, to carry out its work.

Finally, Grundfos experts recommended that pump audits should be carried out for all irrigation plants in Sughd to optimise costs and select the right equipment for the pumping station head.

Uzbekistan-Turkmenistan Transboundary Demonstration Project "Tuyamuyun Hydroscheme" (TMHS)

In 2021, there are 3 major tasks involving international and national consultants, which are scheduled to be completed in December 2021-January 2022:

Task 1: Conducting a comprehensive assessment (completed). The national experts **Georgiy Kurtovezov** (Turkmenistan) and **Kamol Kuchkarov** (Uzbekistan) completed a comprehensive assessment of the TMHS and the areas supported by the facility. In their work, the experts analysed the socio-economic impact of the facility on the Dashoguz province of Turkmenistan, the Republic of Karakalpakstan and the Khorezm province of Uzbekistan. The experts provided detailed statistics and examined end-user activities by district and economic sector. The integrated assessment quantified the number of beneficiaries and sectors supported by the TMGU. The final report of the integrated assessment for Turkmenistan and Uzbekistan will be sent to the RSC members in the coming weeks and subsequently used by the project team in preparation of the investment proposal for sludge treatment at the channel reservoir and its further use/disposal.

Task 2: Conduct siltation measurement work on the TMHS Channel Reservoir (in progress, expected to be completed in January 2022)

Andrey Petrov, Hydraulic Structures Safety Specialist, Research Institute of Irrigation and Water Problems under the Ministry of Water Resources of the Republic of Uzbekistan, presented the results of the Interim Report on the Assessment of Silting of the Rush Reservoir.

The expert presented the treatment of all measurements of the TMHS channel reservoir, which were taken in 2021 at levels at the dam at 126 m (Turkmen side) and at levels at the dam at 125 m (Uzbek side). The experts calculated the sediment volume along the bowl length of the channel reservoir, which revealed that the full capacity of the channel reservoir had decreased from the design capacity of 2340 million m ^{3}to **863 million m** at the time of ^{3}measurements. Accordingly, the values of mirror area at different horizons have changed, with the capacity at

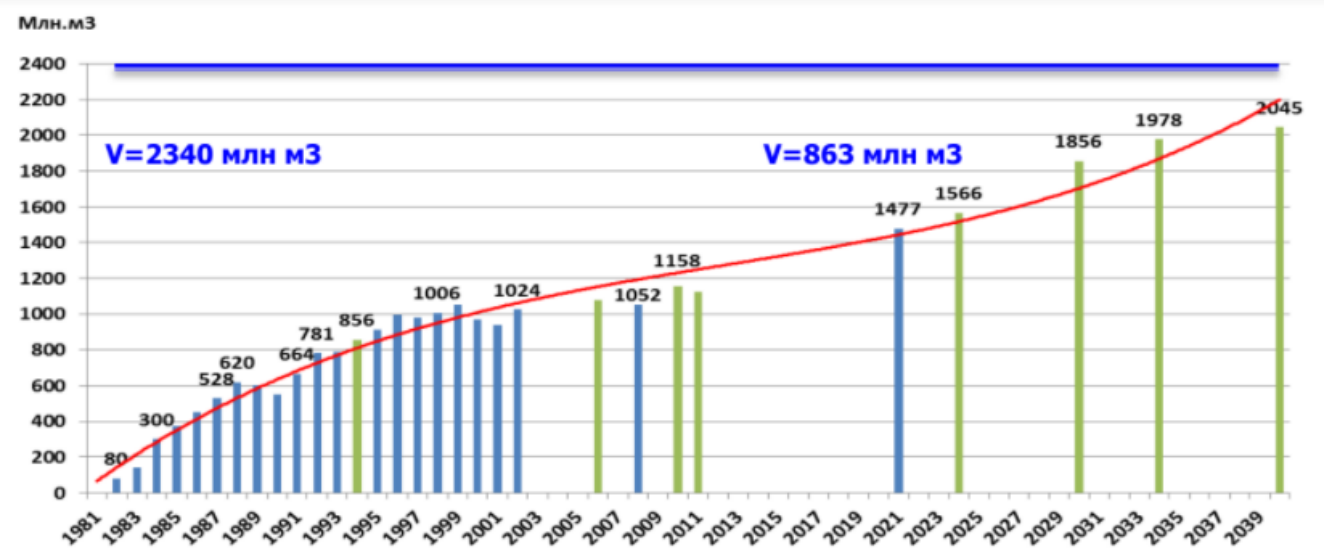
130 m being **247.8 km** ^{2}. Thus, during the operation of the TMHS, **the volume of the channel reservoir has decreased by 1,477 million m** ^{3}. The average slope of the channel bottom of the reservoir is ***i=0.00004*** against the planned slope *i=0.0002.*

Distribution of sediment volumes were provided by elevation, site length (m), span width (m), average bottom elevation (m) and average sediment thickness (m) of the reservoir by elevation.

Useful volumes of available water resources in the channel reservoir including all losses (evaporation, filtration, dead zones of floods in the reservoir bowl) were determined, which amounted to 680 million m3 to be used for irrigation of agricultural crops and in other sectors of the national economy.

Andrey Petrov also presented a draft forecast of the growth of the channel reservoir siltation. Initially, the objective was to carry out a growth forecast until 2050; however, according to preliminary expert projections, siltation growth will reach its maximum in the 2040s, resulting in a total loss of the Ruslovoye Reservoir. The current silt height is 10-15 meters (*see* Figure 2).

Figure 2. Forecast of sedimentation dynamics of the TMHS channel reservoir until 2045. If nothing is done



In conclusion, the specialist stressed the need to analyze the operation of the TMHS in a comprehensive manner, including the operation of the other 3 storage reservoirs. According to the work plan, the specialists are considering technical possibilities to preserve and increase the reservoir's capacity and methods of siltation calculation by means of information technologies.

Task 3: Climate vulnerability and risk assessment (completed)

Aksulu Kushanova, Energy Investment Specialist at CAREC, presented the final results of the climate vulnerability assessment at TMHS and the areas the facility supports in terms of climate impacts on irrigated land, evaporation at TMHS reservoirs and water flow changes in the upper Amudarya basin. The report was prepared by an international consortium of consultants (SIM, HYDRO, HydroNova) under the World Bank project "Climate Change Adaptation and

Mitigation Programme in the Aral Sea Basin (CAMP4ASB)". This report will be sent to the RSC members in the coming weeks.

Experts predict an increase in the duration of droughts and heavy precipitation, a shift of precipitation to spring, an increase in heat waves, and water scarcity/drought risk in the next 30 years. In terms of climatic and geographical risks in the Amu Darya River Basin, it is expected that: (i) a 20% increase in maximum flow rates; (ii) increased siltation and flood risks in the Amu Darya basin due to land degradation and extreme precipitation; and (iii) reduced water storage due to glacier melt.

Experts pointed out that water losses due to evaporation depend strongly on the average depth of the reservoir. For the Amu Darya, average losses as a percentage of their volume are estimated at about 8.5%. At an average depth of 7.5 metres, evaporation losses would be 10-14%. Thus, the experts have provided a forecast of evaporation losses of the TMHS reservoirs by month as a percentage.

More details on the above results can be found in the expert presentations (*see* Appendix 5).

Comments on Session 1

- **Serik Bekmaganbetov**, Authorised Representative of the Republic of Kazakhstan to EC IFAS, drew attention to the need to also consider water quality in the TMHS reservoirs and to identify siltation levels also in the fill reservoirs for a comprehensive understanding of the TMHS condition;
- **Shuhrat Talipov**, representative of JSC "Uzbekhydroenergo", asked to provide draft documents developed under the transboundary demonstration project for study and elaboration of proposals. In addition to technogenic factors, there are also natural factors that need to be taken into account when assessing the condition of the site and its prospective development. Shuhrat Talipov praised the high level of cooperation between Uzbekistan and Turkmenistan. To date, 6 intergovernmental agreements on key strategic directions, including water relations, water resources management, joint financing and development of agriculture were signed between the 2 riparian countries.

Session 2 was dedicated to discussing capacity building on the multisectoral Nexus approach among the academic community and synergies between the Nexus projects, the USAID regional water and environment project WAVE and IKI on the Nexus strand.

Asel Amit, PR specialist of CAREC, informed the participants about the activities of the Project to increase understanding of the Nexus approach, in particular about the planned series of trainings to be held among university teachers in CA countries offline in early 2022 and organized by the Nexus Project, Global Nexus Secretariat, USAID Regional Water and Environment Project (WAVE) and Swiss Development Agency (SDC) Blue Peace Project:

- Global Nexus Secretariat training modules on "Institutional aspects of managing the Nexus approach" and "Ecosystem-based solutions and adaptation" (January-February 2022);
- Nexus Business Game Training for Teachers (March-April 2022);

- A full-scale Nexus education module will be developed by September 2022. It will be based on the water-energy-food-ecosystems nexus, take into account parts of the Global Nexus Secretariat module, include a Nexus business game and examples of Nexus projects in CA as a practical exercise. The education module will be a collaborative effort between the Nexus Project and the USAID Water and Environment Project (WAVE).

A list of universities for the trainings was generated during the Academic Community Network meeting held offline on 18-19 October 2021 in Dushanbe, Tajikistan (*see* Annex 6).

Figure 3. Nexus Business Game presented by the Academic Community Network in Dushanbe, Tajikistan in October this year.

Asel Amit also informed participants that Global Nexus Secretariat engaged international company Adelphi to conduct a capacity building needs assessment among beneficiaries of the Nexus Project. Based on the results of the assessment, the consultants plan to update and adapt the Global Nexus Secretariat's training modules on the multisectoral Nexus approach and supplement them with new modules based on the needs identified. The expert asked RAC members to actively participate in the evaluation and provide suggestions on the modules.

Ekaterina Strikeleva, Capacity Development and Education Coordinator of the USAID Regional Water and Environment Project, presented the goals and objectives of the project. The Coordinator highlighted the close cooperation between the Nexus projects, USAID Regional Project and IKI project to combine common actions to promote the Nexus approach in order to coordinate efforts and achieve greater results. An informal technical group has now been established to coordinate project activities and a matrix of planned activities of all 3 projects is being developed and can also be made available to RSC members.

The coordinator noted that the training on promotion of the Nexus approach being developed is proposed to be initially introduced into the educational process as optional programmes or as a separate lesson to existing courses, which would not require additional approval from ministries of education. In the longer term, the Project plans to develop a full course to promote the Nexus approach. Ekaterina Strikeleva also talked about organizing monthly online meetings to promote the Nexus approach and various aspects of promotion of the approach. To date, 5 lectures have

been held, one of which was organised jointly with CAREC as part of the Nexus project. All lectures are recorded and can be made available to interested parties on request.

The coordinator presented a list of planned activities, including a WEAP/LEAP water-energy modelling exercise. The project team is planning to carry out modelling for the Syrdarya River Basin.

The Project also plans to hold a separate session within the framework of the international conference "Decade of Water for Sustainable Development" to be held in Dushanbe (Tajikistan) in June 2022. In case of interest, this session could be dedicated to multi-sectoral development issues.

Takayoshi Kato from the Organisation for Economic Co-operation and Development (OECD) presented the aims and objectives of the IKI project, which is funded by the Government of the Federal Republic of Germany. The project is in its start-up phase and aims to develop practical tools for applying the Nexus approach in practice. Takayoshi Kato shared that the IKI project supported an extended high-level meeting to discuss the energy-water-land-use nexus in Central Asia that took place in Tashkent, Uzbekistan in July this year. During the conference, government policy makers expressed their needs which could be addressed by the IKI project.

Feedback from participants

RSC members thanked CAREC for organising the meeting and noted the great effectiveness of working offline to discuss and solve project problems. RSC members from the countries shared their general impressions from the 3rd meeting of the RSC:

- Kazakhstan: all demonstration projects cover important and relevant topics for the whole region (siltation of reservoirs, afforestation of Aralkum, efficiency of pumping stations). In the future the results of the demonstration projects can be jointly studied by the countries.

- Kyrgyzstan: as new members of RSC received information about the Project and noted the relevance of the Nexus approach and its relationship with the environment. Showed interest in the closed system of saxaul cultivation and use of silt as a raw material.

- Tajikistan: pointed out that there were important issues related to siltation and declining efficiency of pumping stations, which needed to be addressed by joint efforts in the region.

- Uzbekistan: confirmed its intention to continue cooperation in the framework of the Project for the benefit of the region.

In conclusion, **Lyudmila Kiktenko** thanked RSC members and partners for their contribution to the implementation of the Project. **Snezhana Popova**, Project Coordinator from the EU Delegation in Kazakhstan, underlined that the overall objective of the Nexus Project – is to promote the institutionalisation of a multi-sectoral approach at national and regional levels. The role of RSC members is very important in promoting the Nexus approach, taking into account their knowledge of the current legislation and conditions on the ground. Introducing the Nexus approach in policy documents and demonstrating it through practical examples is important. However, there is a lack of "middle ground" in the promotion of the Nexus approach in public administration. There is a need to include the approach in working procedures (e.g. EIA procedures). The Coordinator noted that the RSC established under the Nexus Project could serve as an excellent regional platform to bring together all CA countries with donors and international development partners to promote and operationalise the WEF Nexus approach.

The results of the meeting:

- Approved Minutes of the 2nd Nexus Project RSC meeting dated 28 July 2021;
- The Logical Framework of the Project was reviewed and its target indicators endorsed;
- Approved the report of the project team on the interim results of the Project over the last six months;
- A work plan for the Project has been agreed for the period December 2021 to May 2022;
- The relevance of the ongoing Nexus demonstration projects and their contribution to the understanding and application of the VEP Nexus approach in CA was reaffirmed;
- It is recommended that expert reports be sent to the members of the GAC and other relevant agencies for their information and feedback as they are finalised. In particular, the following reports are awaited by the RSC members and were reported on at the meeting:
    1. Comprehensive, socio-economic assessment of the territory of TMHS (Uzbekistan-Turkmenistan);
    2. Assessment of siltation of the TMHS Channel Reservoir;
    3. Climate vulnerability and risk assessment of the TMHS and the areas the facility supports;

4. Socio-economic analysis on the operation of pumping stations in Sughd province of Tajikistan.

- The efforts of the project team to promote cooperation, synergy and coordination with other development projects that also promote cross-sectoral synergy and mainstreaming of the water-energy-food-environment nexus in Central Asia, in particular CAWEP/S4W Living Lab, OECD/IKI Nexus, USAID/WAVE) are endorsed.

List of applications:

Annex 1: 3rd RSC meeting - Concept and agenda
Annex 2: 3rd RSC meeting - List of participants
Appendix 3: Nexus Project Logbook
Annex 4: Work plan for the period December 2021 to May 2022
Annex 5: Expert presentations
Annex 6: List of potential universities for cooperation

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Central Asia Nexus Dialogue Project: Fostering Water, Energy and Food Security Nexus and Multi-Sector Investment (Phase II)

Third Meeting of the Regional Steering Committee

16 November 2021| 14:00-20:00| Holiday Inn, Aport Ballroom, Almaty, Kazakhstan

Background

The project "Central Asia Nexus Dialogue Project: Fostering Water, Energy and Food Security Nexus and Multi-Sector Investment" (the "Project") in its Phase II (June 2020 – June 2023) aims to institutionalise the water, energy and food (WEF) Nexus approach in national and regional governance structures and in the process of making investment decisions to contribute to achieving WEF security in Central Asia.

The project is funded by the European Union and implemented by the Regional Environmental Centre for Central Asia (CAREC) in partnership with government authorities from the water, energy and food sectors and interested development partners.

The Project has three main areas of activities:

i. Enhancing the WEF Nexus dialogue;
ii. Building capacity of the Project's beneficiaries; and
iii. Implementing demonstration projects to showcase the multisectoral approach.

The Nexus demonstration projects are supported by two projects implemented by the World Bank experts: "Laboratory of Innovative Solutions for the Water Sector of Central Asia" under the Central Asia Water and Energy Program (CAWEP)", and "Climate Change Adaptation and Mitigation Program in the Aral Sea Basin" (CAMP4ASB). To ensure the synergy, the Project also cooperates with the USAID Regional Water and Vulnerable Environment Activity (WAVE) and the Swiss Blue Peace Central Asia Initiative.

Goal of the meeting

The Regional Steering Committee (RSC), established under the Project, consists of 17 members nominated by the relevant agencies from the five Central Asian countries to ensure awareness of the Project's activities, coordination with national priorities and smooth implementation in the beneficiary countries.

The RSC meeting aims to discuss the Project's deliverables achieved over the last 6 months, agree on the Work Plan for the next 6 months, and present new opportunities to apply the Nexus approach in Central Asia. In particular, the following will be presented at the meeting:

1. The holistic assessments carried out under the demonstration projects;
2. The feedback on the draft deliverables to be incorporated in the final reports;
3. The Project's activities and new opportunities for the capacity-building;
4. The Work Plan for the period December 2021-May 2022.

Format

In light of the COVID travel restrictions, the meeting will be carried out in a hybrid format. Some participants will join the meeting online and some in person in Almaty, Kazakhstan (venue: Holiday Inn, conference hall "Aport Ballroom" at 2D, Timiryazeva Street.

Zoom:
https://zoom.us/j/92378774072?pwd=U0FRN2ZKWHVJRENpODRBVTM1ZDRHUT09
Zoom Access Code: 805051; **Meeting ID:** 923 7877 4072
Meeting time and date: 16 November 2021 at 14:00 Almaty time.

Location	Local time
Almaty (Kazakhstan) Bishkek (Kyrgyzstan)	14:00
Ashgabat (Turkmenistan) Dushanbe (Tajikistan) Tashkent (Uzbekistan)	13:00
Moscow (Russian Federation)	11:00

To facilitate networking, the Project will organize a joint lunch and dinner at the meeting venue on 16 November 2021 at 13:00 and 20:00, respectively.

Language of the meeting

Russian and English are the working languages of the meeting. Simultaneous interpretation will be provided.

Participants

- RSC members (nominated representatives of WEF related line ministries);
- EU Delegations to Central Asian countries;
- International and regional development partners;
- Global Nexus Secretariat representative(s);
- CAREC.

Agenda

Third Meeting of the Regional Steering Committee

16 November 2021| 14:00-20:00| Holiday Inn, Aport Ballroom, Almaty, Kazakhstan

Time	Description
OPENING SESSION *Moderator: Ludmila Kiktenko, Programme Manager, CAREC*	
14:00-14:10	• Technical remarks on online meeting rules; • Introduction of the participants (Tour-de-table); • Approval of the minutes of the 2nd RSC meeting; • Approval of the agenda for the 3d RSC meeting. **Group Photo**
14:10-14:30	**Welcome Remarks:** • **Zafar Makhmudov**, Executive Director, CAREC • **Johannes Stenbaek Madsen,** Head of Cooperation, Delegation of the European Union to Kazakhstan • **Julia Komagaeva,** Coordinator of the Central Asian Knowledge Network, World Bank
INTRODUCTION: OVERVIEW OF THE PROJECT's LOGICAL FRAMEWORK	
14:30-14:40	• The Project's objectives, expected results and progress achieved to date; • Working Plan for the next 6 months. ***Ludmilla Kiktenko,*** *Nexus Project Manager, RECCA*
SESSION 1: DEMONSTRATION PROJECTS *Moderator: Aksulu Kushanova, Energy Investment Specialist, CAREC*	
14:40 – 16:25	**Transboundary demonstration project at Tuyamuyun hydroelectric complex (THC) (Turkmenistan – Uzbekistan)** **TASK 1: Holistic assessment at THC** • The facility's social and economic importance for the nearby settlements ***Kamol Kuchkarov,*** *National expert from Uzbekistan,* *and* ***Georgiy Kurtovezov,*** *National expert from Turkmenistan* – **15 min** **TASK 2: Assessment of the sedimentation volume at Ruslovoe reservoir** • Measurement of the cross sections at Ruslovoe reservoir; • Finding and analysis of the current sedimentation volume; • Sedimentation growth forecast for the next 50 years.

	Andrey Petrov, *Hydraulic Structures Safety Specialist, Research Institute of Irrigation and Water Problems under the Ministry of Water Resources of the Republic of Uzbekistan* ***(60 min)*** **TASK 3: Climate risk and vulnerability assessment at THC and the territories it supports – 15 min** ● Final study findings. ***Aksulu Kushanova****, Energy Investment Specialist, CAREC* **Q&A – 15 min**
16:25-16:40	**Short break**
16:40-17:00	**Kazakhstan: "Afforestation of the dried bottom of the Aral Sea: piloting a closed root system"** ● Implementation progress since the planting of seedlings (April 2021); ● Challenges met; ● Preliminary scientific conclusion made and the next steps. ***Abay Jabassov,*** *Specialist of the Executive Directorate of the International Fund for Saving the Aral Sea in the Republic of Kazakhstan.* **Q&A – 5 min**
17:00-18:20	**Tajikistan: "Improvement of the system of control and monitoring of electricity consumption in pumping stations and to prepare proposals for the modernization of a large pumping station using energy-saving technologies in the Sughd Province in the Republic of Tajikistan"** **TASK 1: Automatisation of the electricity consumption metering at the pumping stations in the Sughd Province – 30 min** ● Results of the technical audit of 173 pumping stations; ● Technical capacity of the existing metering for automatization. **TASK 2: Preparation of investment proposals for the modernization of Golodnostep pumping station – 40 min** ● Results of the technical audit of the Golodnostep pumping station; ● Opportunities to increase energy efficiency; ● Preliminary investment needs and the required equipment. ***Bakhrom Gaforzoda,*** *Consultant, Agency of Land Reclamation and Irrigation under the Government of Tajikistan* **Q&A – 10 min**

18:20-18:50	**Expertise from world's leading pump manufacturers Grundfos**[1] ● Results of energy audit and measurement of water losses at Golodnostep pumping station; ● Potential water and energy savings; ● Technical recommendations on improving energy efficiency. ***Khurshed Pirov**, Sales Manager for Central Asia*
SESSION 2: CAPACITY BUILDING ***Moderator: Ludmilla Kiktenko, Programme Manager, CAREC***	
18:50-19:50	**Ongoing dialogue on the capacity-building through Nexus Game** ● Agreement reached with some universities from the beneficiary countries; ● Methodological approach and expectations; ● Timetable of the Nexus Game training in the beneficiary countries. ***Assel Amit,** PR Specialist, CAREC* **Cooperation opportunities within the WAVE and IKI projects** ● Synergy in the implementation of the joint activities; ● Exchange of experience between the project's implementation; ● Joint implementation of the Nexus approach in CA countries. **Takayoshi Kato,** Organisation for Economic Co-operation and Development (OECD), IKI project **Ekaterina Strikileva**, Capacity Development and Education Lead, USAID Regional Water and Vulnerable Environment Activity (WAVE) **Q&A – 5 min**
CLOSING	
19:50-20:00	● **Snejana Popova,** Project Officer, Delegation of the European Union to Kazakhstan ● **Ludmila Kiktenko,** Programme Manager, CAREC
20:00	**Dinner**

******The meeting's conclusions will be detailed in the Minutes to be shared with the participants.*

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Central Asia Dialogue on Promoting Intersectoral Finance through the Water-Energy-Food Nexus (Phase II)

Third meeting of the Regional Coordination Committee

16 November 2021| 14:00-20:00| Holiday Inn, Aport Ballroom, Almaty, Kazakhstan

List of participants

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OTHER PARTICIPANTS			
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Appendix 3: Nexus Project Logbook

	The logic of intervention	Indicators	Baseline indicators (2019)	Aims (2023)	Current values (November 2021)
Overall objective (Impact)	Institutionalisation of the Nexus approach at national and regional levels in **governance structures** and **investment decisions** for water, energy and food security	Number of countries that have established a governance structure to integrate the NEXUS approach into national or regional decision-making	CA has not established a governance structure for the Nexus	Creation of publicly funded and sustainable institutional structures for effective multi-sectoral decision-making in line with the Nexus approach.	The technical structures are in place: 1) RKK; 2) TWG on Tuyamuyun transboundary waterworks (UZB-TKM); 3) Intersectoral Working Group in TW (MEWR, AMI)
Specific objective (outcome)1	Broader application of the Nexus approach in planning, policy development and implementation of government programmes	Number of strategies/plans/programmes revised/developed and approved by the relevant authority	0 supported by Phase II	1	0
		Number of institutions applying NEXUS **tools, methods and approaches** after the end of EU-funded support	0 supported by Phase II	1	Working with 12 universities to incorporate the Nexus approach into educational programmes
		Number **of NEXUS demonstration projects** in Central Asia	0 supported by Phase II	3	4 demonstration projects: 1 cross-border and 3 national projects under active implementation

Specific objective (result) 2	Increased interest from public and private investors (e.g. financial institutions, private sector, multilateral and bilateral organisations, national treasuries) in projects based on the NEXUS approach	Number of **project proposals** selected by the potential investor for funding	0 supported by Phase II	2	The deadline for attainment has not yet arrived
Output 1.1	Increased opportunities for regional policy dialogue and investment under the NEXUS approach to improve natural resource efficiency in the water, energy and agriculture sectors	Number of government representatives and other stakeholders participating in NEXUS dialogues by country, sector (water/energy/food/other) and gender	0 supported by Phase II	300 unique people	Total number of unique: 735 (men 449/women 279). *By country:* KAZ: 195 (m 98/w 97), KYR: 68 (m 34/m 34), TAD: 94 (m 78/w 16), TKM: 68 (m 46/j 22), UZB: 96 (m 78/w 18) *by sector:* water: 55, energy: 25, food: 22, climate change: 49, NGOs: 131, finance: 35, academia: 127, environment: 67, development: 141, others: 76
		Number of dialogues, by country	0 supported by Phase II	14 activities	22 activities: 16 Nexus projects + 2 co-funding

Output 1.2	Strengthening the capacity of national and regional stakeholders to plan, develop and implement policies in line with the NEXUS approach	Number of policies and/or technical guidance documents developed/updated	0 supported by Phase II	1	KYR: Nexus approach included: 1) Draft Development Strategy C\H 2021-2025, 2) Draft Water Strategy 2040
		Percentage of training participants who reported that the content of the training was relevant to their work (disaggregated by gender, region)	85% from 12/2019	At least 80 %	20 out of 27 participants (74%)
		Number of civil servants, project planners and academics trained in the NEXUS approach or as ToT, by country, gender, sector (water/energy/food/other) and topic	0 supported by Phase II (300 trained in Phase I)	100 people	27 representatives of academic circles (20 m, 7 g): 7 - Kazakhstan 4 - Kyrgyzstan 10 - Tajikistan 3 - Uzbekistan 3 - Turkmenistan
		Number of trainings on the Nexus approach (by level and country)	0 in phase II	3	1 regional workshop for universities from KAZ, KGZ, TAJ, TKM, UZ
Output 1.3	Raising awareness among government and bi-/multilateral officials and investors of the NEXUS approach and added value	Number of communication products on the Nexus approach produced under the action (by region and level)	0 in phase II	3	0. Will be based on grades

		Number of events at which the Nexus approach is communicated	0 in phase II	9 (3 per year)	5 joint activities with partners (co-financing) 11 partner events (without Nexus funding)
		Number of demonstration project **documents** confirming **added value** Nexus	0 in phase II	2	0. Will be based on grades
Output 2.1	Project proposals that better reflect and demonstrate the added value of the NEXUS approach	Number of project proposals (by country and type of support: feasibility study contribution, analysis, political support, pilot implementation, other)	NEXUS portfolio of project ideas from Phase I	2	The deadline has not yet come
		Number of project proposals submitted to public and private investors	0 in phase II	5	The deadline has not yet come
		Number of stakeholders involved in project development by sector, gender and country	0 in phase II	For each project, 4 types of parties will be involved (water, energy and agriculture sectors as well as a potential investor)	The deadline has not yet come

EVENTS	2021	2022				
	December	January	February	March	April	May
PROJECT ADMINISTRATION						
RSC Global Nexus Secretariat meeting						
Grant application to PFAN for 2 demo projects						
4th RSC meeting						
Coordination with EC delegations and partners						
IMPLEMENTATION OF DEMO PROJECTS						
Tuyamuyun hydroscheme transboundary demo project						
Plotting a 50-year time horizon for the expected capacity loss in the channel reservoir (projections)						
Assessment of the impact of siltation and its growth on the allocation of water resources for energy and irrigation purposes in Turkmenistan and Uzbekistan (projections)						
Recommendations to reduce siltation in the channel reservoir						
Final integrated assessment report						
Conducting a cost-benefit analysis on TICH (supported by the Global Nexus Secretariat)						
Study of international experience on the treatment of siltation in the Channel Reservoir, with technical support from CAWEP						
4th meeting of the Technical Working Group						
Demo project in Kazakhstan on afforestation of the dried Aral Sea bed						
Final integrated assessment report						
Planting saxaul seedlings on the dried seabed of the Aral Sea						
Monitoring of seedling survival on the dried seabed of the Aral Sea						
Demo project in Tajikistan on pumping stations in Sughd						
Development of a concept for an automated system for monitoring electricity consumption in pumping stations						

Development of a handbook on data transmission, monitoring and analysis of collected data						
List of recommended activities to launch the AMISOM-NS based on AMI						
Preparation of a draft investment proposal for the implementation of an automated system						
NCID meeting to present the results of the project demo						
Final draft investment proposal for the modernisation of the GTN in Zafarabad district of Sughd Region						
Demo project in Kyrgyzstan to institutionalise the Nexus approach at national level						
Study of the draft Agrarian Development Concept of the Kyrgyz Republic 2021-2031 by the project team and the EU Delegation to the Kyrgyz Republic						
Monitoring the approval process of the Agrarian Development Concept of the Kyrgyz Republic 2021-2031						
Discuss and agree on further potential support for the Project to implement the Agricultural Development Concept of the Kyrgyz Republic 2021-2031						
Institutionalisation of the Nexus approach						
Participation in the Global Nexus Secretariat Training of Trainers on "Institutional aspects of governance of the Nexus approach"						
Capacity building under the Nexus approach						
Carry out a capacity building needs assessment in CA (with support from the Global Nexus Secretariat)						
Participation in the Global Nexus Secretariat Training of Trainers on the Global Nexus Modules on "Ecosystem-based solutions and adaptation"						
Holding a Nexus Game training for university teachers in CA						
Information support						
Updating news and posting on the Nexus Global Nexus Secretariat and CAREC website						
Development of articles/articles for CAREC and Global Nexus Secretariat sites and other sources						

KAZAKHSTAN

- Academy of Public Administration under the President of the Republic of Kazakhstan;
- Kazakh National Agrarian Research University;
- L.N. Gumilev Eurasian National University;
- Kazakh-German University;
- Taraz Regional University named after M.H. Dulati. M.H. Dulati;
- D. Serikbayev East Kazakhstan Technical University. D. Serikbayev.

KYRGYZSTAN

- Academy of Public Administration under the President of the Kyrgyz Republic;
- American University of Central Asia (AUCA);
- Jusup Balasagyn Kyrgyz National University;
- Kyrgyz National Agrarian University named after K.I. Skryabin. K.I. Skryabin.

TADJIKISTAN

- Academy of Public Administration under the President of Tajikistan;
- Shirinsho Shotemur Tajik Agrarian University;
- Tajik National University;
- Tajik Technical University named after Osi; and Osimi;
- Institute of Water Problems, Hydropower and Ecology of the National Academy of Sciences of Tajikistan.

TURKMENISTAN is

- Academy of Sciences of Turkmenistan;
- National Institute of Education of Turkmenistan;
- Turkmen Agricultural University named after S. A. Niyazov. S.A. Niyazov;
- Institute of International Relations of the Ministry of Foreign Affairs of Turkmenistan;
- State Energy Institute of Turkmenistan.

UZBEKISTAN

- The Academy of Public Administration under the President of the Republic of Uzbekistan;
- Tashkent Institute of Irrigation and Agricultural Mechanisation Engineers;
- Karshi Institute of Engineering and Economics, Karshi;
- Tashkent State Agrarian University.