INTERNATIONAL FUND FOR SAVING THE ARAL SEA

INTERSTATE COMMISSION FOR WATER COORDINATION
OF CENTRAL ASIA

BULLETIN ICWC of Central Asia

September 2025

№ 6 (111)

Scientific-Information Center of Interstate Commission for Water Coordination
of Central Asia

Interstate Commission for Water Coordination of Central Asia	**BULLETIN № 6 (111)**	September 2025

CONTENT

Meetings of the Heads of State of Central Asia

The 25th Meeting of the Council of Heads of Member States of the Shanghai Cooperation Organization[1]

On 1 September 2025, the 25th Meeting of the SCO Council of Heads of State was held under the chairmanship of Xi Jinping, President of the People's Republic of China in Tianjin, China.

The meeting was attended by the presidents and heads of government of member states, including: Alexander Lukashenko, President of the Republic of Belarus; Narendra Modi, Prime Minister of the Republic of India; Masoud Pezeshkian, President of the Islamic Republic of Iran; Kassym- Jomart Tokayev, President of the Republic of Kazakhstan, Sadyr Japarov, President of the Kyrgyz Republic, Shehbaz Sharif, Prime-Minister of the Islamic Republic of Pakistan, Vladimir Putin, President of the Russian Federation, Emomali Rahmon, President of the Republic of Tajikistan, Shavkat Mirziyoyev, President of the Republic of Uzbekistan.

Also in attendance were SCO Secretary-General Nurlan Yermekbayev and Ularbek Sharsheev, Director of the Executive Committee of the SCO Regional Anti-Terrorism Structure.

According to an SCO press release, the leaders held in-depth discussions on the prospects for expanding multilateral cooperation across the full range of the Shanghai Cooperation Organization's (SCO) activities. The topics included politics, security, trade, investment, energy, industry, sustainable development, emerging technologies, international and regional issues, and measures to enhance the Organization's effectiveness.

Following the summit, 24 documents were adopted, focusing on strengthening security and enhancing cooperation in the economic, cultural, and humanitarian spheres. Key documents among them were the Tianjin Declaration, the Shanghai Cooperation Organization Development Strategy until 2035, and the Statement of the Council of Heads of Member States on the 80th Anniversary of the End of World War II and the Founding of the United Nations. In addition, a number of statements were also adopted.

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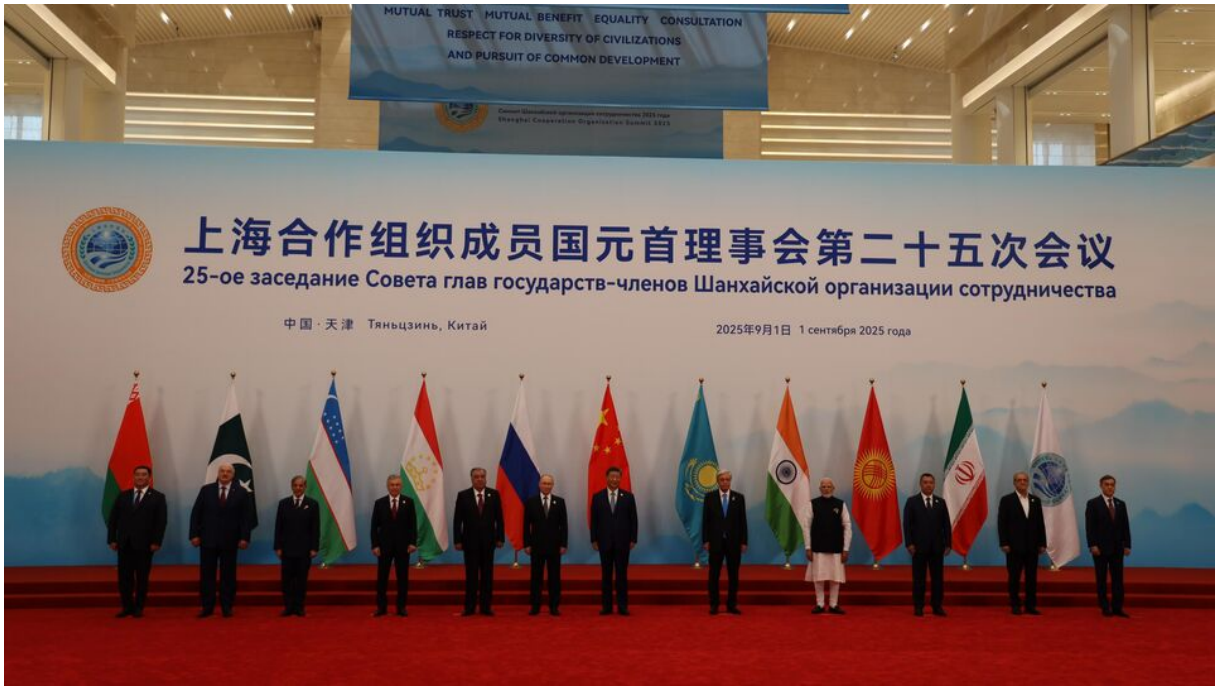
[1] Source:
https://www.newscentralasia.net/2025/09/01/summit-sco-in-tianjin-ru/
https://www.newscentralasia.net/2025/09/01/tyantszinskaya-deklaratsiya-shos-zakrepila-kurs-na-mnogopolyarnyy-mir-i-usileniye-integratsii/



The Tianjin Declaration, consisting of five sections, addresses a broad spectrum of issues ranging from global security and counterterrorism to economic cooperation, infrastructure development, and the strengthening of cultural and humanitarian ties.

The document also outlines key decisions regarding the future development of the Organization itself, including the adoption of the SCO Development Strategy until 2035 and the establishment of new institutions, such as the proposed SCO Development Bank.

Key highlights of the Declaration include:

- Expansion of energy cooperation, focusing on energy security, protection of critical infrastructure, and a fair energy transition. The Roadmap for the Implementation of the Energy Cooperation Development Strategy until 2030 was also approved.
- Enhanced collaboration in agriculture and food security.
- Strengthening scientific, technical, and innovative cooperation, with an emphasis on recognizing the equal rights of all countries to develop and use artificial intelligence.
- Strengthening cooperation towards sustainable development, environmental protection, combating desertification, and preserving biodiversity.

- Support for the 2026 Regional Climate Summit in Kazakhstan, to be held under the auspices of the United Nations.

President of Kazakhstan Proposed Establishing a SCO Water Research Center[2]

President of Kazakhstan Kassym-Jomart Tokayev emphasized the importance of environmental cooperation as a priority during the SCO Heads of State Council meeting.

"Climate challenges know no borders and cause damage to many countries and regions across the world. It is crucial to jointly develop effective strategies to tackle real threats such as desertification, droughts, shrinking water bodies, melting glaciers, and other ecological problems. Therefore, we propose establishing a SCO Water Research Center in Kazakhstan", – said President Tokayev.

[2] Source: https://ecfs.msu.ru/news/prezident-kazaxstana-predlozhil-sozdat-czentr-vodnyix-problem-shos

Work Meetings of ICWC Members

Meeting of the Heads of Water Agencies of Tajikistan, Uzbekistan and Kazakhstan[3]

On 1 August 2025, a trilateral work meeting of the heads of water agencies of Tajikistan, Uzbekistan and Kazakhstan was held in the city of Guliston.

Mr. Daler Juma, Minister of Energy and Water Resources of the Republic of Tajikistan, Mr. Shavkat Khamraev, Minister of Water Management of the Republic of Uzbekistan, and Mr. Nurjan Nurjigitov, Minister of Water Resources and Irrigation of the Republic of Kazakhstan and national delegations of all three countries took part in the meeting.

[3] Source: https://www.mewr.tj/?p=5445

During the meeting, participants addressed key issues of regional cooperation on the use of water resources in the Syr Darya River basin, including the implementation of the Trilateral Protocol on operation regime of the Bakhri Tojik reservoir for the period of June to August 2025, as well as other topics related to water management.

Following the discussions, the participants visited the Bakhri Tojik reservoir and inspected operation of the “Somgor-1” pumping station located in Bobodjon-Gafurov district. The station supplies irrigation water to over 6,000 ha of agricultural land.

On the same day, the ministers held a meeting with Rajab Ahmadzoda, head of Sughd province.[4]

During the meeting, the parties agreed to take concrete measures to ensure effective water use, especially during the planting season. They also emphasized the importance of enhancing information exchange between relevant sectoral agencies and improving coordination of actions at the regional level. These steps are aimed to solve emerging problems in timely manner and ensure farmers' access to irrigation water.

Meeting of Water Management High-Level Officials of Kazakhstan, Kyrgyzstan and Uzbekistan[5]

On 7 September 2025, a meeting of representatives of the energy and water agencies of Kazakhstan, Kyrgyzstan, and Uzbekistan was held in Cholpon-Ata. The meeting resulted in the signing of several protocols regulating the water and energy balance.

One of the key documents setting forth the parties' commitments on water releases from the Toktogul reservoir in exchange for electricity supplies from Kazakhstan and Uzbekistan to Kyrgyzstan.

[4] Source: https://www.mewr.tj/?p=5437
[5] Source: www.tazabek.kg/news:2324602

The parties also agreed on the terms of energy transit from Russia to Kyrgyzstan through Kazakhstan’s power grid. These arrangements are aimed to maintain water level in the reservoir and ensure supply of irrigation water to south provinces in Kazakhstan during the upcoming growing season.

In addition, the Uzbekistani and Kazakhstani parties signed a protocol on the supply of approximately 900 million kWh of electricity to Kazakhstan between March and December 2026. This measure is intended to offset electricity shortages in Kazakhstan’s south energy zone during scheduled maintenance at power plants.

International and Regional Events

Work Meeting on the National Strategy on the Ramsar Convention for Uzbekistan

On 8 July 2025, SIC ICWC represented by Ms. Zulfiya Yarullina took part in discussion event on the draft 2026-2030 Strategy on Ramsar Convention for Uzbekistan.

The meeting was organized by the Ministry of Ecology, Environmental Protection and Climate Change of Uzbekistan, with the support of the Succow Foundation. The event brought together leading experts from the Ministry of Ecology, Environmental Protection, and Climate Change, research institutes, NGOs, the IFAS Agency in Uzbekistan, and other relevant organizations.

The Convention on Wetlands of International Importance, especially as waterfowl habitat (Ramsar Convention), is an intergovernmental treaty providing the framework for the conservation and wise use of wetlands and their resources.

Uzbekistan became a Party to the Ramsar Convention in 2001, with the Convention entering into force for the country on February 8, 2002. This commitment obliges Uzbekistan to adhere to the Convention's main objectives: the conservation and wise use of all wetlands to achieve sustainable development. In 2020, Uzbekistan joined the Ramsar Regional Initiative for Central Asia.

Currently, the Ramsar List includes six wetland sites in Uzbekistan: Lake Dengizkul (October 8, 2001), Aidar-Arnasay Lake System (October 20, 2008), Tudakul and Kuyimazar Reservoirs (August 19, 2020), Sudochye Lake System (May 30, 2022), and Lake Zhyltyrbas (August 8, 2022).

The Ramsar Strategy of Uzbekistan is developed in line with Article 3.1 of the Convention, which states: "The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory."

The need for adopting a National Strategy was also highlighted in the National Report on the Implementation of the Ramsar Convention (2018) as one of the priorities.

Therefore, the development and implementation of the Ramsar Strategy of Uzbekistan is a timely and strategically important undertaking. This is driven by

both pressing internal environmental issues and the country's international commitments.

The list of actions included in the strategy consists of 4 objectives:

- Eliminate factors causing wetland loss and degradation;
- Manage the network of Ramsar sites;
- Promote the wise use of all wetlands;
- Improve implementation.

For each objective, specific tools, actions, resources, implementers, and indicators have been defined.

During the discussion of the draft document, Ms. Yarullina presented comments and proposals from SIC ICWC, which were accepted by the document's developers.

Fourth Meeting of the Regional Working Group on Mutually Beneficial Water-Energy Mechanism

The Fourth Meeting of the Regional Working Group on developing a mutually beneficial water-energy mechanism in Central Asia was held in Astana on July 10, 2025. The event was organized as part of the Green Central Asia Initiative and the IKI project "Regional mechanisms for a low-carbon and climate-resilient transformation of the energy-water-land Nexus in Central Asia" jointly implemented by OECD, SIC ICWC, and UNECE. The Regional Working Group aims to promote dialogue among the Central Asian countries on opportunities for further cooperation to ensure more efficient and sustainable management of water and energy resources.

This fourth meeting focused on facilitating discussions and gathering expert opinions to further strengthen expert capacity and communications, collect new evidence and ideas to support cooperation dialogue between the water and energy sectors, and develop and agree on policy briefs for policymakers. The event was attended by representatives of foreign ministries and relevant agencies of Central Asian countries, EC IFAS, SIC ICWC, as well as international organizations including GIZ, UNECE, the World Bank, ADB, the Swiss Agency for Development, and others.

Key discussion topics included:

- Modeling joint water-energy management;
- Environmental sustainability in the context of water-energy cooperation;
- Current developments in Afghanistan and their impact on the region;
- Opportunities for the improvement of institutional mechanisms to deepen cooperation between the water and energy sectors.

The SIC ICWC delegation, comprising Dinara Ziganshina, Anatoliy Sorokin, and Aurika Galustyan, participated in the meeting

SIC ICWC Director Dr. Ziganshina moderated key sessions and presented an analytical report on the prospects for institutional strengthening of water-energy cooperation. Her presentation focused on the concept of a hybrid management model combining elements of hierarchy, network structures, and market instruments.

Mr. Sorokin delivered a presentation titled "Modeling framework for assessing benefits of regional water-energy cooperation and conclusions from capacity building activities." This presentation highlighted the results of the IKI project "Regional mechanisms for a low-carbon and climate-resilient transformation of the energy-water-land Nexus in Central Asia."

Ms. Galustyan in her presentation "Key findings from current research on Amu Darya aquatic ecosystems and climate-resilient infrastructure in Syr Darya" outlined preliminary results from two areas of work: “Joint work to preserve ecosystems of the Amu Darya River Basin, including zones of flow formation and dispersion” and “Infrastructure issues, resilience to climate change (Nexus approach) in the Syr Darya basin”. These studies are carried out jointly with the region’s national experts as part of the GIZ project " Studies on priority issues in the field of water, energy and environment in the Amu Darya and Syr Darya basins."

In conclusion, the main directions for further activities of the Regional Working Group were defined.

Seminar at Green University: “Hydrology from Space” under the CAHYSPA Project

From 16-18, July 2025, Green University in Tashkent, Uzbekistan, hosted a regional scientific and educational seminar titled “Hydrology from Space”, held as part of the international project Central Asian HYdrology from SPace Analysis (CAHYSPA). The seminar focused on advanced methods for monitoring and analyzing water resources in Central Asia through satellite data and remote sensing technologies.

A central focus of the event was the SWOT (Surface Water and Ocean Topography) satellite mission — the latest satellite developed jointly by NASA, CNES, the Canadian Space Agency, and the UK Space Agency. SWOT delivers regular, high-precision observations of surface water bodies — including rivers, lakes, reservoirs, and oceans — opening up new frontiers for scientific analysis, sustainable water management, and climate research.

The seminar brought together representatives from research institutes, scientific centers, space agencies across Central Asia, and specialists in hydrometeorology, geoinformation technologies, and other water-related fields.

During the opening session, welcoming remarks were given by representatives of Green University, the CAHYSPA international consortium, CNES, EnviroVision, and the Ministry of Ecology, Environmental Protection, and Climate Change of the Republic of Uzbekistan, as well as other government agencies.

International experts delivered reports on a range of topics, including spatial analysis, water modeling, satellite-based measurements, and data integration in sustainable water management: Prof. Jida Wang (University of Illinois, USA) presented on the SWOT mission and the LaRiC model; Dr. Jean-François Crétaux (CNES/LEGOS, France) discussed the SCO program, the CAHYSPA project and data-sharing challenges; Dr. Jacques Verron (Hydromatters, France) explored the use of satellite data and Earth observation platforms; Dr. Ben Jarihani (EnviroVision, Australia) shared insights on space-based hydrology and reservoir management strategies.

The seminar also included speeches from Central Asian partners — representatives from Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan — who presented their research and initiatives on transboundary water issues, irrigation practices, climate change, and surface water management. Participants engaged in discussions on ongoing scientific projects and the most pressing water challenges in the region. Key topics included transboundary cooperation, water diplomacy, data sharing for decision-making at national and regional levels, the use of satellite technologies for efficient water management, strategies to combat drought, and the impact of glacier and snowfield melt on

water supply.

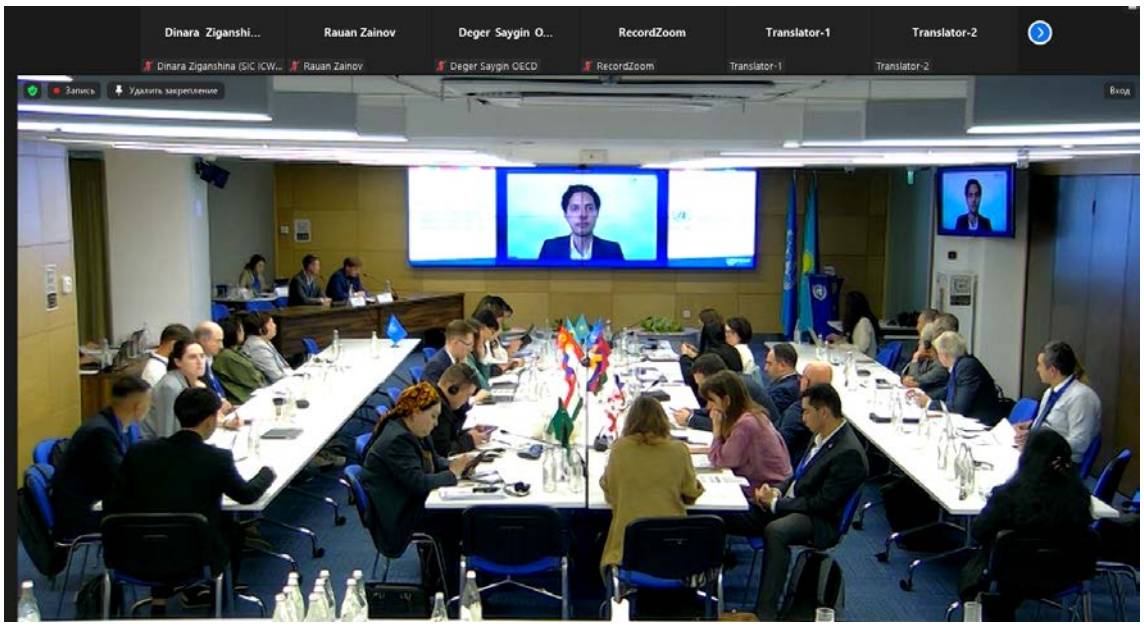
The session explored the technical capabilities of the SWOT satellite, which was launched in 2022. For the first time, SWOT provides highly accurate, spatially detailed data on water levels in rivers, large lakes, reservoirs, and coastal ocean areas. This breakthrough allows scientists to monitor water level variations, estimate flow, and assess the influence of climate dynamics on water systems. Examples of the practical application of SWOT in hydrological research were discussed, particularly in areas where traditional monitoring methods are limited.

The seminar served as a platform for constructive dialogue among academic institutions, experts, and government agencies, emphasizing the need for collaborative efforts in science, technology, and diplomacy to address water challenges facing Central Asia.

Water-Energy Nexus Tops Agenda at the 2025 SDG Forum

On 4–5 September 2025, the Ninth North and Central Asia Multi-Stakeholder Forum on the Implementation of the Sustainable Development Goals was held in Almaty. The Forum was organized by UNESCAP and its partners and brought together representatives of governments, international organizations, academia, and the business community to discuss transformative, innovative and coordinated actions in support of the Sustainable Development Goals.

The Forum's agenda covered key SDG areas, including sustainable water management and sanitation (SDG 6), access to affordable and clean energy (SDG 7), industrialization and innovation (SDG 9), sustainable cities and settlements (SDG 11), as well as strengthening regional partnerships (SDG 17). Discussions focused on such issues as investment in water infrastructure, transboundary water sharing, transition to clean energy and green technologies, smart cities, and new mechanisms for regional cooperation.



During the panel discussion "Leveraging synergies in the water-energy nexus for the implementation of Goal 6 and Goal 7", Dr. Dinara Ziganshina, Director of SIC ICWC Central Asia delivered a presentation.

In her presentation ‘Water-Energy Cooperation in the Syr Darya River Basin: Hierarchies, Networks and Markets” based on the IKI Nexus project’s results, Dr. Ziganishina underlined that future sustainable water management in the region should rely on hybrid coordination models combining hierarchical mechanisms, partnerships and market incentives. She cited examples of institutional and financial transformations in the water and energy sectors, emphasizing the need to bridge the sectors through tariff reforms, digitalization, joint investments, and long-term contracts. Dr. Ziganshina paid particular attention to the Kambarata HPP-1 project, which is seen as a ‘laboratory of a hybrid model’ as it demonstrates how joint ownership, shared financing, and interstate agreements can contribute to mutually beneficial development.

The Forum in Almaty served as an important platform for knowledge and experience sharing, strengthening regional cooperation, and exploring innovative solutions for achieving the SDGs in the region.

Workshop on the Baseline Assessment of Water Supply, Sanitation, Hygiene, and Health in Uzbekistan

On 10 September 2025, a technical workshop was held in Tashkent to discuss the results of the baseline assessment in the areas of water supply, sanitation, hygiene, and health in Uzbekistan, as well as the next steps for the development of draft national target indicators under the Protocol on Water and Health.

The workshop was organized by the Committee for Sanitary and Epidemiological Welfare and Public Health under the Ministry of Health of the Republic of Uzbekistan, in cooperation with the UNECE-WHO/Europe Protocol on Water and Health, and with the financial support from the Swiss Agency for Development and Cooperation (SDC).

The event brought together representatives of relevant ministries and government agencies, non-governmental organizations, and other stakeholders. Zulfiya Yarullina and Matluba Rakhimova participated on behalf of the SIC ICWC.

Objectives of the workshop:

- present the baseline assessment of water supply, sanitation, hygiene, and health, and discuss the main findings and conclusions related to the target areas outlined in Article 6 of the Protocol on Water and Health;
- discuss priorities and specific proposals for draft target indicators to be developed for Uzbekistan based on the results of the baseline assessment;
- consider an initiative to develop cross-sectoral target indicators in water supply, sanitation, hygiene, and health through a consultative process involving multiple stakeholders, aligned with Uzbekistan’s needs and capacities;
- familiarize stakeholders with the relevant provisions of the Protocol on Water and Health related to setting target indicators, as well as Uzbekistan’s legal obligations as a Party to the Protocol;
- refine the next steps and coordination mechanisms for developing and establishing national target indicators in Uzbekistan.

Welcoming remarks were delivered by:

- Nurmat Atabekov, Deputy Chairman of the Committee for Sanitary and Epidemiological Welfare and Public Health of the Republic of Uzbekistan;
- Sabine Machl, United Nations Resident Coordinator in Uzbekistan;
- Shohrukh Avazov, National Program Officer for Water, Infrastructure, and Climate Change, Embassy of Switzerland in Uzbekistan.

Introductory presentations were given by Mr. Leonid Kalashnik, International Consultant to the United Nations Economic Commission for Europe and Ms. Elena Drozdova, Deputy Director for Scientific Work at the Research Institute of Hygiene, Toxicology, Epidemiology, Virology, and Microbiology (Belarus). The presentations covered the obligations under the Protocol and provided an overview of the relevant target areas.

The session focused on presenting the baseline assessment of water supply, sanitation, hygiene, and health in Uzbekistan and its findings. Participants were provided with a brief overview of the current situation and were invited to discuss the assessment results for each target area outlined in the

Protocol.

Following the discussion, workshop participants put forward a number of recommendations and additions to be included in the baseline assessment and the list of target indicators.

4th World Irrigation Forum[6]

The 4th World Irrigation Forum and the 76th Meeting of the ICID International Executive Council were held in Kuala Lumpur, Malaysia, from September 7 to 10, 2025.

Organized under the auspices of the International Commission on Irrigation and Drainage (ICID), the World Irrigation Forum is convened every three years since 2013 to bring together experts in irrigation, drainage, and other spheres of water management. The Forum fosters dialogue and collaboration among a diverse range of participants, including ICID member country governments, policymakers, multilateral and bilateral organizations, civil society organizations, farmers, and private sector. Each edition of the Forum attracts experienced professionals, experts, renowned researchers, and scientists who present and discuss pressing challenges and proposed solutions within the sector.

The main theme of the 4th Forum – “Is Irrigation a Sunset Industry?” – was explored through four key topics:

1. Challenges of irrigation and drainage for food security in the changing world.
2. Technology and modernization in the agricultural sector towards food security.
3. Innovative policy, service delivery, and financing mechanisms to meet the challenges of the Future.
4. Nature-based solutions in agriculture to foster ecological resilience.

The Forum continued with a series of thematic sessions.

The closing ceremony of the 4th World Irrigation Forum featured the

[6] Source:
https://aral.uz/wp/2025/09/12/в-столице-малайзии-куала-лумпуре-в-пер/
https://aral.uz/wp/2025/09/14/в-столице-малайзии-куала-лумпуре-в-пер-2/

presentation of prizes and awards, along with the adoption of a formal declaration.

A ceremony for recognition of World Heritage Irrigation Structures (WHIS) for 2025, inspired by the concept of UNESCO World Heritage Sites was also held.

This initiative was launched by ICID in 2012. To qualify for inclusion in the ICID World Heritage Irrigation Structures, a structure shall meet several criteria: be more than 100 years old; be unique or innovative at the time of its construction; be an example of engineering marvel; bear the stamp of a cultural tradition of past; demonstrate long-term sustainability, etc.

Until 2025, 177 structures were included in the ICID World Heritage Irrigation Structures. The majority of these are located in: Japan (54 structures, including land reclamation systems with ancient canals, reservoirs), China (38 structures: terraces, spillways, irrigation systems, barrages, water conservation systems), and India (22 structures, including dams, irrigation systems). Among the countries of the former Soviet Union, only one structure—a 19th-century ceramic drainage system in the Novgorod region of Russia—has been recognized to date.

In 2025, 23 nominations from nine countries were submitted for recognition as World Heritage Irrigation Structures.

List of 2025 structures recognized as WHIS

China

1 Chishan Lake Irrigation System

2 Yuanyang Hani Terraces

3 Jianjiangyan Irrigation System

4 Mentougou Ancient Canals of Yongding River

India

1 Cheyyar Anicut, Tamil Nadu

2 Noyyal River System Tanks, Tamil Nadu

3 Kodiveri Anicut and Channel System, Tamil Nadu

4 Ekrukh Medium Project, Maharashtra

Italy

1 Sportone di Maderno
2 The Hydraulic Axis of the Clitunno
3 Marmore Falls
4 Monte Pacciano Reservoir

Japan

1 Yunokuchi Tameike Irrigation System
2 Taketa Irrigation System

Malaysia

1 Bukit Merah Dam (BMD)

South Africa

1 Darlington Dam
2 Hartbeespoort Dam
3 Koppies Dam
4 Woodhead Dam

Thailand

1 Rama VI BarragE

Türkiye

1 Beyshehir Regulator (Stone Bridge);

Uzbekistan

1 Dustlik Canal
2 Eski Tuyatortar Canal

The Dustlik Canal in the Syr Darya River basin has been operating steadily for over 100 years. It is the largest transboundary main canal in the region, flowing through both Uzbekistan and Kazakhstan. Since its commissioning, the Dustlik Canal has become a key water management infrastructure facility in Uzbekistan and Kazakhstan, supporting irrigation, advancing agricultural productivity, and strengthening intergovernmental cooperation over shared water resources.

Estimated to be nearly 2,000 years old, the Eski Tuyatortar Canal in the Zeravshan River Valley stands as a remarkable testament to ancient hydraulic engineering. Notable not only for its scale and technical sophistication, it also represents one of the earliest known examples of inter-basin water transfer in Central Asia — a concept that was centuries ahead of its time.

The nomination for the canal was prepared by the SIC ICWC and the Expert Platform on Water Security, Sustainable Development and Future Studies and submitted on behalf of the Uzbek National Committee on Irrigation and Drainage (UzNCID). Efforts are currently underway to prepare similar nominations for historic irrigation structures in Tajikistan, to be submitted for next year's World Heritage Irrigation Structures (WHIS) award.

This research initiative aims to highlight the significance of Central Asia's water heritage — encompassing its technological, socio-economic, and cultural dimensions — and to demonstrate its continued relevance in addressing today's and tomorrow's water challenges. The work is supported by the IKI project *"Regional mechanisms a low-carbon and climate-resilient transformation of the energy-water-land Nexus in Central Asia"* implemented by the OECD in partnership with UNECE and SIC ICWC.

The official ceremony for awarding WHIS Plaque was held during the 4th World Irrigation Forum and the 76th Meeting of the ICID International Executive Council in Kuala Lumpur, Malaysia on 10 September 2025. The plaque is to be handed over to the responsible operating authorities, who are expected to display them prominently on the structure itself.

Old headworks of the Dustlik Canal

Eski Tuyatortar Canal

The signing ceremony for the Memorandum of Cooperation between the International Commission on Irrigation and Drainage (ICID) and the Executive Committee of the International Fund for Saving the Aral Sea (IFAS) was held during the Forum on 9 September. The memorandum was signed by the President of ICID Mr. Marco Archieri on behalf of the ICID and by the Chairman of IFAS Executive Committee Mr. Askhat Orazbay on behalf of the

IFAS Executive Committee. The memorandum provides for the development of cooperation through the ICID platform and its members in support of the Aral Sea Basin Development Program.

The 76th IEC Meeting was held on 10-13 September 2025.

The International Executive Council is the highest governing body of the International Commission on Irrigation and Drainage (ICID), responsible for overseeing and managing the organization's affairs. Policy matters may be initiated or sponsored by any member of the National Committees, ICID officials, or the ICID Board. The Executive Council is empowered to initiate, determine, and advise on policies and decisions of strategic importance to ICID. It also has final authority over all matters related to the organization’s executive functions and financial obligations. The ICID Central Office, located in India, serves as the administrative arm, responsible for implementing all decisions of the Council.

Declaration of the Fourth World Irrigation Forum

Preamble

Recognizing the critical importance of sustainable water management in agriculture, and with the aim of elevating this issue on the global agenda, the International Commission on Irrigation and Drainage (ICID) has convened the World Irrigation Forum (WIF) every three years since 2013. The aim of the Forum is to bring stakeholders together under one roof, including policymakers, experts, researchers, scientists, non-governmental organizations and farmers.

It provides a platform for the global irrigation and drainage community and interested development professionals to find solutions to water management challenges in agriculture. These challenges are exacerbated by rapidly changing demographics and food habits, the irrational use of water resources and the depletion of freshwater supplies resulting from climate change and extreme weather events.

The Fourth World Irrigation Forum (WIF4) focused on the theme “Is Irrigation a Sunset Industry?”

WIF4 was organized by ICID in collaboration with its host, the Malaysian National Committee on Irrigation and Drainage (MANCID). Key partners

included the Food and Agriculture Organization of the United Nations (FAO), the Asian Development Bank (ADB), the World Bank, the International Water Management Institute (IWMI), along with other strategic partners.

Four key sub-themes were explored under the overarching theme of the Forum:

Sub-theme 1. Challenges of irrigation and drainage for food security in the changing world

Sub-theme 2. Technology and modernization in the agricultural sector towards food security

Sub-theme 3. Innovative policy, service delivery, and financing mechanisms to meet the challenges of the Future.

Sub-theme 4. Nature-based solutions in agriculture to foster ecological resilience

In addition to the main sessions, a meeting of the High-Level Advisory Group (HLAG) was held, bringing together more than 50 ministers and senior officials from ICID member and non-member countries alike. The Forum also featured a dynamic programme comprising four thematic workshops, sixteen side events and an exhibition. These events included keynote addresses and individual presentations.

In total, the Forum welcomed more than 750 international and local participants representing 39 countries, including delegates from six international organizations. Based on the discussions held throughout the event, the following statements were formulated and formally endorsed by participants during the closing session.

Key provisions

WIF4 emphasized the role of irrigation, drainage, and flood management in achieving sustainable global food security, poverty reduction, and environmental protection. These goals must be pursued through the economically and socially viable development, operation, maintenance, management, and modernization of water infrastructure. *In this context, we:*

- **Recognize** the growing challenges posed by global population growth, rapid urbanization, climate change — including increased frequency and severity of droughts and floods and environmental degradation.
- **Affirm** that the sustainable development and effective management of available water resources are essential for ensuring food security, alleviating poverty, and promoting rural development.

- **Acknowledge** the significant opportunities presented by emerging technologies and innovations — such as remote sensing, artificial intelligence, and digital tools.

Shared Opinions of WIF4 Participants

The participants of the Fourth World Irrigation Forum (WIF4) expressed the following shared perspectives:

- While the Forum was held under the main theme “Is Irrigation a Sunset Industry?”, there was broad consensus that irrigation remains an expanding sector.
- There is a common set of challenges facing irrigation and drainage systems worldwide. These include ageing infrastructure, declining investment, increasing competition for land and water due to urbanization, the impact of climate change and mounting economic and environmental pressures.
- There is clear and growing evidence that certain aspects of global climate change are now irreversible. Accordingly, participants stressed the urgency of adapting to this new reality.
- For the sustainable development and management of water resources, there is an importance of strengthening transboundary cooperation among riparian states, particularly in river basins experiencing water scarcity, rapid irrigation expansion, or urbanization. Examples highlighted include the Aral Sea Basin, the Lake Chad Basin, and various river systems in arid and semi-arid regions, densely populated valleys, coastal zones, and delta areas.
- International cooperation is increasingly vital for the successful introduction of new technologies, the effective exchange and transfer of knowledge, and the modernization of irrigation and drainage systems worldwide.
- The application of modern technologies — including advanced mapping, automated control systems, digital platforms, remote sensing, and system modeling can contribute to the modernization of irrigation and drainage systems.
- Youth as catalysts for change: Empowering young leaders to drive socio-technical transformations is essential. This includes actively involving farmers in system design, integrating local water use traditions, and addressing gender inequality. Such approaches will help build a more resilient and sustainable future for agricultural water management.
- People-centered and gender-responsive approaches within the framework of inclusive development through the active participation of women and

local communities will increase the success of future irrigation and drainage initiatives;

- Empowering women is not merely a moral imperative, but a strategic necessity. Women's involvement is critical for achieving water security, improving household livelihoods, building resilient communities, and ensuring the health of ecosystems. It is time to dismantle barriers, address existing gaps, and enable women’s full and active participation at all levels of decision-making and implementation.
- The private sector is increasingly recognized as a key driver of innovation and growth in the development and delivery of irrigation and drainage technologies and services.

These key statements reflect the collective insights and outcomes of the various sessions held during the Fourth World Irrigation Forum. A detailed account of the discussions and findings is provided in the attached Appendix.

The participants extend their sincere appreciation to the organizers, partners, and donors for their dedicated efforts in preparing, hosting, and supporting this timely, forward-looking, and highly successful event.

Kuala Lumpur, Malaysia

10 September 2025

Project Activities

Project “Facilitating Region-Specific Approaches to Addressing Climate and Environment-related Risks for Socio-Economic Stability” in Central Asia

Training of Trainers on the Tailored Methods and Tools for Climate Risk Analysis

SIC ICWC experts organized and conducted Trainings of Trainers (TOT) on a UNEP package of tailored methods and tools as part of the project "Facilitating region-specific approaches to addressing climate and environment-related risks for socio-economic stability" in Central Asia in: 25 June 2025 in Osh (Kyrgyz Republic), 26 June in Fergana (Uzbekistan), and 3 July in Guliston (Tajikistan),

The aim of the training was to disseminate the adapted UNEP tools and approaches in the analysis of climate-related risks and work with local communities in Central Asian countries

Sherzod Muminov, Boris Gojenko and Alexandr Dolidudko delivered the training on behalf of SIC ICWC.

The following individuals attended the training sessions:

Mirzali Asatov – national project coordinator from the Kyrgyz Republic and Nurgul Sydykova – gender and environmental expert from the Kyrgyz Republic.

Djurabek Saimatov – national project coordinator from the Republic of Uzbekistan and Odinakhon Yakubova – gender and environmental expert from the Republic of Uzbekistan

Abdulatif Sultonov – national project coordinator and Nurbibi Khodjaeva – gender and environmental expert from the Republic of Tajikistan.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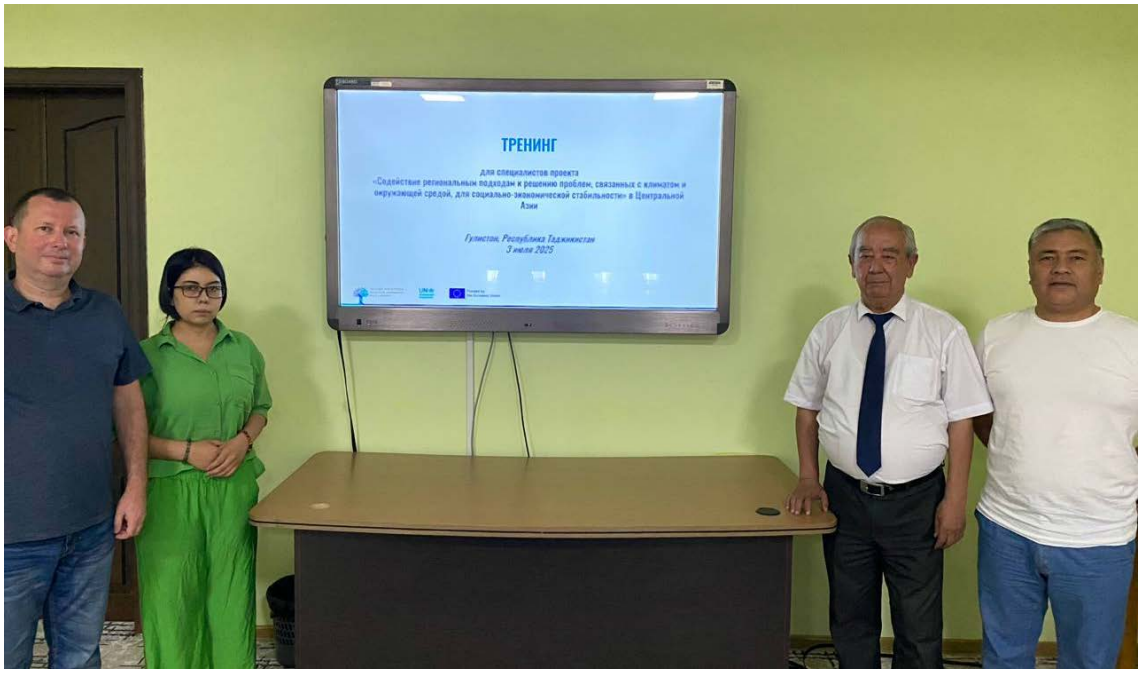


During the training, appropriate additions and modifications were made to the UNEP methods and tools training package to reflect the specific conditions of the three countries.

As a result, local trainers have acquired the technical skills and knowledge necessary to implement and scale up project interventions at both national and regional levels.

Launch of the Central Asian Regional Initiative on Climate, Environment, and Peace

On 25 August 2025, as part of the EU–UNEP Partnership on Climate, Environment and Peace, a regional initiative for Central Asia was launched by SIC ICWC. The initiative will support local communities in Kyrgyzstan, Tajikistan and Uzbekistan to design and implement locally led adaptation actions, with a focus on nature-based solutions that address climate risks to socioeconomic stability and development.

The meeting held in Fergana (Uzbekistan) brought together representatives of national and local authorities, civil society organizations, and experts to launch the EU-UNEP partnership in Central Asia. The meeting also provided an opportunity to bring together eight local civil society organizations, which were recently selected through an open and competitive call for proposals.

In the opening session, Ms. Jana Kurpisa, Programme Manager at the Delegation of the European Union to Uzbekistan, emphasized the EU's commitment to supporting climate adaptation as a pathway to peace and sustainable socio-economic development. Dr. Sherzod Muminov, Deputy Director of SIC ICWC, emphasized the exceptional relevance and importance of cooperation as part of the project among the countries of the region.

Eight local grantees announced

During the meeting, eight local community organizations were officially announced to receive grants and technical support to design and implement locally led adaptation actions in climate hotspots across the Ferghana Valley.

In close partnership with their communities, the grantees will determine and implement nature-based solutions aimed at reducing risks, enhancing climate resilience, fostering social cohesion and promoting socioeconomic stability. To formalize their commitment, all eight organizations signed grant agreements with SIC ICWC as part of the broader regional initiative in Central Asia.

The selected organizations are:

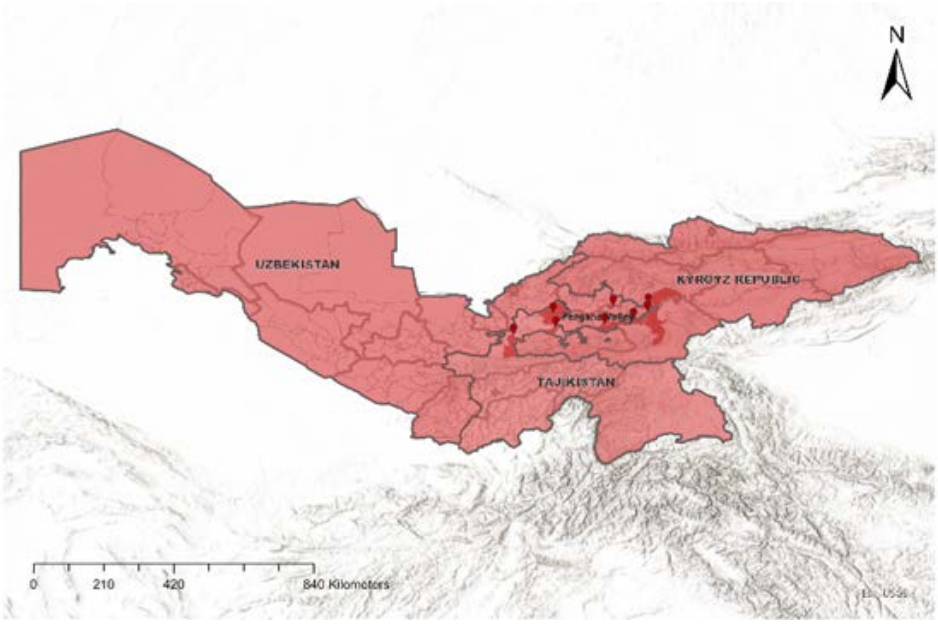
- **Central Asian Alliance for Water and Ecology (CAAWE)** – Kyrgyz Republic, Osh (Aravan)
- **New Rhythm** – Kyrgyz Republic, Osh (Karasuu)
- **Orchun / Independent Ecological Expertise** – Kyrgyz Republic, Jalal-Abad (Suzak)
- **Youth Group on Protection of Environment (YGPE**) – Tajikistan, Soghd (Kanibadam)
- **Safi / Subhi Tandurusti** – Tajikistan, Soghd (Asht)
- **Agency for Rural Society Development** – Tajikistan, Soghd (Jabbar-Rasulov)
- **Ho'qandi Latif Kelajagi / Ferghana Branch of NGOs Association** – Uzbekistan, Ferghana (Ferghana)
- **Salomatlik plus Ecologiya / Hamroh** – Uzbekistan, Andijan (Pakhtaabad)

Following the kick-off meeting, a study tour was organized to one of the selected “hotspots” in Fergana province, where participants were able to directly observe the impacts of climate change. Then, an excursion was organized to a pilot solar photovoltaic station to learn about climate adaptation solutions used in the region. The visit concluded at the Water Worker School in Ferghana City to learn about water challenges in the region.

Partnership background

The EU–UNEP Partnership on Climate, Environment and Peace was first launched in 2017 to test nature-based solutions for building resilience linked to environment, climate and social challenges across the globe. Having completed a successful first phase (2017–2022), with pilot projects in Nepal and Sudan, the partnership entered Phase II (2022–2027) with expanded coverage in seven regions: Horn of Africa, West Africa, Middle East, Central and South Asia, and South and Central America.

In Central Asia, the focus is on the Ferghana Valley, one of the most climate-vulnerable regions in the world, where millions depend on irrigated agriculture and livestock for their livelihoods. With changing precipitation patterns and mounting water scarcity, as a result of climate change, the valley faces increasing risks of poverty, competition over natural resources, and social tension. By empowering local actors with knowledge, networks and resources, the partnership aims to build resilience, strengthen cooperation, and ensure that community voices inform national and regional policymaking.



Looking ahead

Over the next 2 years (2025-2027), the Central Asia programme will:

- Support local organizations to design and implement context-specific, locally led climate adaptation action, with a focus on nature-based solutions.
- Facilitate a regional Community of Practice, connecting grantees and stakeholders across borders.
- Feed lessons learned into policy processes at national, regional and international levels.

The kick-off meeting in Fergana marks an important step in the joint efforts of the EU and UNEP to turn climate and environmental risks into opportunities for cooperation, socio-economic stability, and, more broadly, sustainable development in Central Asia.

Tailored Training of Trainers of the Selected Grantees in UNEP Tools and Approaches

On 6 September, SIC ICWC held tailored Training of Trainers (TOT) of the selected grantees in the UNEP training package for community environmental action planning. The training took place in the city of Fergana, Uzbekistan. This training was organized as part of the project "Facilitating region-specific approaches to addressing climate and environment-related risks for socio-economic stability" in Central Asia.

The aim of the training was to disseminate the adapted UNEP tools and approaches in the analysis of climate-related risks and work with local communities in the Republic of Uzbekistan.

Trainers included Boris Gojenko and Alexandr Dolidudko from SIC ICWC, national project coordinator from Uzbekistan Djurabek Saimatov, and gender and environmental expert from Uzbekistan Odinakhon Yakubova.

Trainees were represented by two consortia of NGOs selected as sub-grantees in Uzbekistan:

- **Ho'qandi Latif Kelajagi / Fergana branch of NGOs' Association**
- **Salomatlik plus Ecologiya / Hamroh**

The training was organized in the form of interactive discussion given that the UNEP approaches should be tailored to conditions of Uzbekistan.

The training included both theory and practical exercises.

The first theoretical part addressed the following topics:

- Key concepts and linkages
- Presentation of the Strata platform
- Nature-based solutions: case studies from Africa, Asia and Latin America
- Mobilization of local communities in adaptation planning and decision making
- Adoption of participatory approaches
- Advancing and realizing ideas

The second practical part included:

- Joint problem analysis and brainstorming
- Familiarizing with problem analysis tools, such as:
  - Connectors and dividers
  - Problem tree
  - Solution tree
  - Seasonal calendar
  - Linkage Charts
- Familiarizing with decision making tools, such as:

  - Feasibility matrix
  - Prioritization matrix
  - Analysis of scenarios
- Discussion of adaptation methods at the level of target regions in Uzbekistan
- Practicing concepts and methods for collection of opinions on adaptation to changing climate and its effects at community level
- Exercises in data and information collection and analysis at community level

During the training, participants actively discussed approaches to identifying climate-related risks, adaptation, and nature-based solutions in priority regions and project areas.

By the end of the training, they had acquired the technical skills and knowledge needed to effectively implement and scale up project activities at the community level.

Project “Correction of hydromodule zoning of the Syr Darya River basin using remote sensing data and satellite mapping technologies for correction of crop water requirements and irrigation regimes for agricultural crops cultivated in the region”

The project is implemented under an agreement between the Executive Committee of IFAS and SIC ICWC, with financial support from the French Development Agency (AFD), as part of the Fourth Aral Sea Basin Program (ASBP-4) for 2020-2030 approved by the IFAS Board Decision of June 29, 2021, in Dushanbe.

As part of the project, the field work was organized in Andijan, Namangan, and Fergana provinces of the Republic of Uzbekistan by SIC’s staff from June 24 to 27, 2027.

The main objective of the field work was the selection of pilot plots (polygons) for further study, as well as signing contracts with national experts of Andijan, Namangan and Fergana provinces.

Field work was started in Andijan province.

Javlon Ishanov took part on behalf of SIC ICWC in the organization and coordination of the selection of pilot sites. He also directly selected pilot sites for further study in Andijan province.

Shukhratjon Ergashev and Mukhamadsoliq Khidoyatov took part in the selection of pilot sites as national experts from Andijan province. Based on the

results of the field trips, an experimental polygon of the "Suvchillar maktabi (School of Water Workers) at the Andijan Institute of Agriculture and Agrotechnologies was selected as a pilot site. The total area of the pilot site is 4 ha, of which 2 ha are planted with wheat and 2 ha with cotton.

Further work on the organization of the study and selection of pilot sites was continued in Namangan province.

Alisher Baymirzaev and Abdujalil Mirzaev took part in the selection of pilot sites as national experts from Namangan province. Based on the results of the field trips, the experimental field of the "School of Water Workers" at the Namanagan Scientific Experimental Station of the Research Institute of Breeding, Seed Production and Agrotechnology of Cotton Growing was selected as a pilot site. The total area of the pilot site is 14 ha, of which 4 ha are planted with wheat and 10 ha with cotton.

Work on organization and selection of pilot sites was completed in Fergana province.

Zhuraboy Saymatov and Kadir Kabilov took part in the selection process as national experts from Fergana province. Based on the results of the field trips, the field of the "School of Water Workers" at Syrdarya-Sokh BISA were selected as a pilot site. The total area of the pilot site is 12.2 ha, of which 5.2 ha are planted with wheat and 7 ha with cotton.

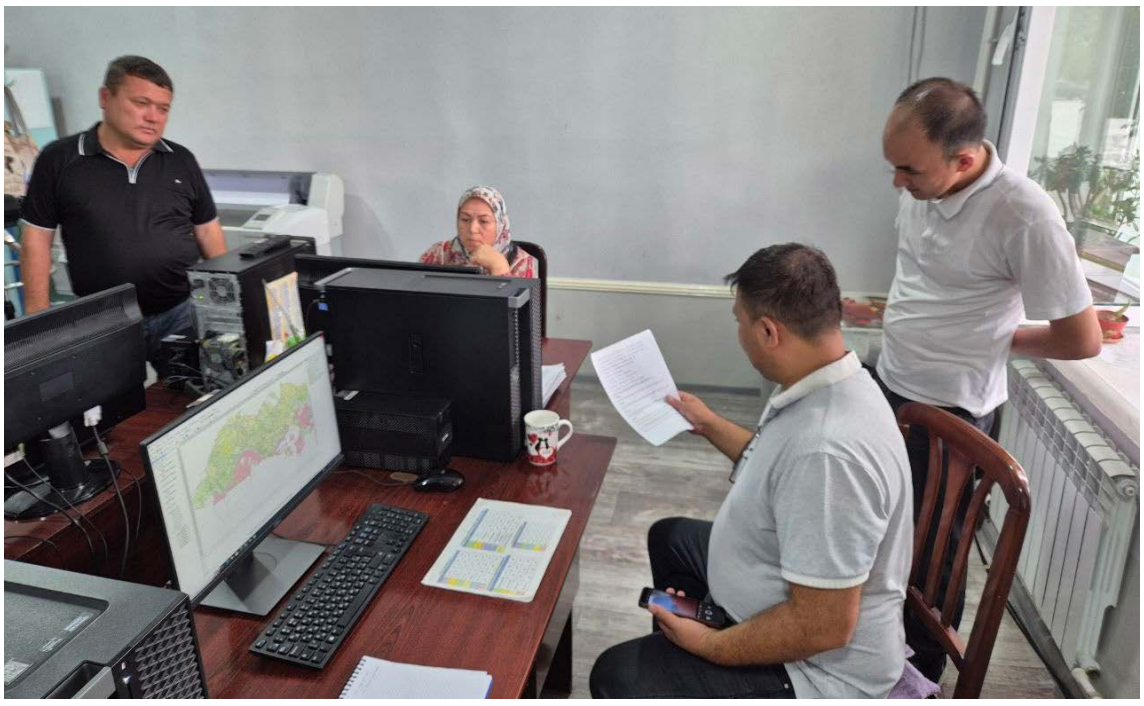
The project experts used the "Canopy cover" application in their field studies to have the information on crop phenology. This model helps to determine the area covered by green mass and record phenological phases.

As a part of the project, a field trip was undertaken from 14 to 16 August to Andijan, Namangan, and Fergana provinces of the Republic of Uzbekistan by project executors.

The main objective of this field trip was to carry out comprehensive ground- and RS-based research to develop a database on water availability and use, irrigated land areas and their expandability, soil conditions, cropping patterns, as well as to update the data on water tables for hydromodule zoning and the correction of crop irrigation depths and dates.

As part of the trip, field studies were conducted within the selected pilot sites in each hydromodule zone across the three provinces of the Fergana Valley. These sites were represented by agricultural fields under both traditional irrigation methods (furrow irrigation) and water-saving technologies (drip and sprinkler irrigation). The team conducted phenological observations, recorded water delivery to the fields, gathered data on cotton irrigation regime, and measured soil salinity.

In addition, the team worked jointly with GIS specialists from the Land Reclamation Field offices of Andijan, Namangan, and Fergana provinces. The methodology for collecting data on groundwater level and salinity and techniques of their processing were reviewed and discussed. As a result of consultations, the project team has got valuable data and provided key recommendations for the improvement of activities of GIS divisions at the Land Reclamation Field offices in the three provinces.



“Water-Energy Nexus Systems Modeling” project

The project “Water-Energy Nexus Systems Modeling” is implemented by SIC ICWC with the support of the World Bank.

Project Objectives:

1. Development and improvement of a regional integrated model for water and energy management in the Aral Sea Basin.

2. Facilitate stakeholder participation in model development, scenario analysis and policy evaluation;

3. Stakeholder engagement to inform coherent management of water-energy systems and promote regional cooperation in Central Asia.

Implementation period**:**17.01.2025–30.09.2025

1st Practical Workshop

On 7 July, 2025, the Training Center of SIC ICWC welcomed the participants of the one-day workshop organized in collaboration with the World Bank Group as part of the project "Water-Energy Nexus Systems Modeling".

The workshop is a part of the project's second stage, which is focused on energy component. The key theme was the LEAP model and its application for analysis of energy scenarios in water-energy nexus.

The key workshop objectives include:

1. Modeling energy systems in LEAP

- Introductory lecture: how to start the application, basic navigation
- Handling the analysis results
- Building and modeling scenarios and emissions
- Forecasting energy demand
- Modeling energy supply
- How to launch, run and analyze existing LEAP models

2. Integrated water-energy system modeling (Central Asia)

- Exploring LEAP's capabilities for Central Asia
- Demonstrating WEAP-LEAP combined operation
- Reviewing current policies in the region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The LEAP model helps to assess the energy system sustainability and compare different scenarios while considering emissions and resource constraints. It is helpful for searching the soundest policy and investment strategies, reducing uncertainty and providing a cross-sectoral approach to the energy-water nexus.

In the second part of the workshop, the participants gained practical experience in building data structure. This laid the groundwork for future independent work with the LEAP model and its usage in analyzing water-energy nexus.

The workshop was attended by representatives of Technical Group No. 2, which includes national energy and water experts from Tajikistan, Kazakhstan, Kyrgyzstan, and Uzbekistan.

The workshop was a crucial step in the second stage of the project, which aims to develop expert skills in modeling the energy system and its integration with the water sector. The workshop not only provided a foundation for future work but also served as a platform for dialogue and fostering a common language between representatives of the water and energy sectors. The knowledge and skills gained will form a solid foundation for subsequent project stages and for the development of an integrated approach to resource management in Central Asia.

Practical workshop on “Introduction to Energy Supply”

On 24 July 2025, a one-day workshop titled “Introduction to Energy Supply” was held at the Training Center of SIC ICWC. The event was organized in collaboration with the World Bank Group and the Stockholm Environment Institute (SEI) as part of the “Water-Energy Nexus Systems Modeling” project.

This workshop marked a continuation of the project’s second phase, which focuses on the energy component. The main topic of the meeting was an introduction to energy supply modeling within the LEAP system.

The objective of the workshop was to introduce participants to the capabilities of the LEAP platform for modeling energy production and distribution. Key topics covered included:

1. Fundamental principles of energy supply modeling — from resource extraction to end-use consumption.
2. Configuration of energy transformation models (e.g., electricity generation, fuel processing).
3. Methods for defining production capacities (both fixed and optimizable).
4. Use of different dispatching strategies (based on historical data, priority levels, and costs).
5. Introduction of time-based breakdowns, accounting for seasonality and hourly demand variations.
6. Modeling hydropower in the context of climate change, water availability, and alternative water-use scenarios.

The workshop combined theoretical instruction with hands-on exercises. Participants worked with a hypothetical country, “Fridonia,” to develop energy scenarios, including the modeling of hydropower generation under conditions of climate change and seasonal water variability.

This event was an important step toward enhancing participants’ understanding of the interlinkages between water and energy. Participants gained practical experience with LEAP tools, deepened their understanding of

energy transformation concepts, and learned how to develop generation scenarios—particularly in relation to hydropower.

Expeditions

Expedition to the South Aral Sea Region

Experts from SIC ICWC conducted an expedition to the South Aral Sea region from May 12 to 19, 2025. The primary goal was to study the current state of water bodies in the area, including their salinity, environmental conditions, and the ongoing processes within the lake system of the Aral Sea region. The key tasks were to analyze hydrological regimes of Mezhdurechie, Rybachy, Sudochie, Muynak, and Zhyltyrbas lake systems and make preliminary assessment of the ecological state of these water bodies. The expedition also was to collect data for predicting dynamics of salinity in these water bodies.

Water sampling

View of the Mezhdurechie Reservoir

Before the field studies, the expedition team met with heads of the Amu Darya Delta Authority, the Karakalpak Land Reclamation Field Office, and the Nukus branch of the IFAS Executive Committee

Meeting between the Head of the Delta Authority
and the SIC ICWC expedition team

SIC ICWC expedition team in front
of the Karakalpak Land Reclamation Field Office

Meeting between the SIC ICWC expedition team
and the Head of the Nukus branch
of the IFAS Executive Committee

Following these meetings, the survey route was developed. For each water body the chemical analysis was made using a portable ProCheck data recorder and environmental conditions were documented.

Based on the collected data, it is planned to:

- conduct satellite monitoring covering a 10-year period to trace changes in the surface area of the lakes.
- prepare an analytical report, including recommendations for sustainable water management in the region.

Expedition to the Amu Darya Ecosystems

From 27 to 29 July 2025, SIC ICWC conducted a scientific expedition to key natural and water management sites in the middle and lower reaches of the Amu Darya River. The expedition focused on the Bukhara province and the Republic of Karakalpakstan— the regions where the linkage between the status of water resources and the ecosystem sustainability is particularly evident.

The expedition was organized as part of the GIZ project “Studies on priority issues in the field of water, energy and environment in the Amu Darya and Syr Darya basins” and contributed to the regional program “Climate-sensitive water resources management in Central Asia” (Green Central Asia initiative).

What was the focus?

The aim of the expedition was to assess the current state of water-dependent ecosystems, including delta, tugai, and lake landscapes, and to identify opportunities for their sustainable water supply. Particular attention was paid to practical coordination between water management (in particular, the Amu-Bukhara Main Canal — ABMC) and protected natural territories, such as the Jayran Nursery and the Lower Amu Darya Biosphere Reserve.

Key points along the route:

Amu-Bukhara Main Canal (ABMC): A source of life for Bukhara and its ecosystems. ABMC is a strategic facility that supplies water not only to cities and agricultural land, but also to nature reserves. During the expedition, the participants visited the ABMC headquarters and the Kuyimazar pumping station and observed the canal cleaning efforts. The team also visited the Kuyimazar and Tudakul reservoirs included in the Ramsar List, which support the drinking water supply and biodiversity, including rare bird species

Head of the ABMC Authority, R.M. Ostanov explains pump modernization efforts

Dredging machine (Zemsnaryad) at the ABMC bed

Access to the Kuyimazar Reservoir, a source of drinking water, is strictly guarded.

The Jayran Nursery. Lakes of the nursery's ecosystem depend on a water diversion canal from ABMC. Due to low water levels, one of the four lakes — critical sources for protected species such as jayran, marhur, and other animals—has almost completely dried up. One of the expedition's main conclusions is to prioritize the nursery's water supply within regional water allocation limits.

Deputy Director of the Jayran nursery discusses the center's reliance on ABMC water.

The Badai-Tugay Nature Reserve: Tugay forests under threat. Thanks to the construction of a new canal and pumps, water from the Amu Darya River feeds the floodplain forests of the reserve. To ensure sustainable water supply for the reserve, it is necessary to include in its budget the costs of electricity for the operation of pumping equipment, as well as to consider the possibility of drilling additional artesian wells to create local ponds around the perimeter of the protected area. The possibility of relocating Bukhara deer to less crowded areas was also discussed. Due to water shortages and overpopulation, the food supply and vegetation for Bukhara deer are deteriorating.

Entrance to the Lower Amu Darya biosphere reserve, Badai-Tugay nature reserve

With the management and staff of the reserve on the banks of the Amu Darya River

New canal and pumps to replenish the reserve's ecosystems

Critical point: The Amu Darya delta. The expedition concluded on the shores of the Mezhdurechye Reservoir, which directly supplies water to Muynak and its surrounding areas. The water level in the reservoir is significantly below its design capacity, once again underscoring the importance of prioritizing water delivery to this body during low-water years.

Director of the Nukus branch of IFAS, A.M. Mambetkarimov, and Head of the Delta Administration discuss the second phase of construction of the Mezhdurechye Reservoir.

Field observations confirmed the urgent need to enhance coordination between water management and environmental agencies. Reliable water supply for ecosystems is only possible through systemic planning and maintenance of infrastructure. Ongoing declines in water availability, compounded by climate change, threaten the fragile ecosystems of the Amu Darya basin—natural filters for air and water and critical habitats for endangered species.

What's next?

Based on the results of the expedition, a detailed analytical report with recommendations for national and international partners is under preparation. Among the key proposals are:

- Consideration of the needs of protected natural territories in annual water quotas;
- Establishment of mechanisms for financing operational costs of ecosystem irrigation;
- Improved coordination between water managers and environmentalists in water planning;

- Strengthening the role of ecological reserves in regional water policy, as well as exploring opportunities of partnership with the private sector.

Photos and videos taken along the route will be used to produce a film to raise awareness about the current status and future of the Amu Darya ecosystems.

The expedition was led by Director of SIC ICWC, Dr. Dinara Ziganshina. The team included experts in biodiversity (T.Sh. Khalikov), water (A.G. Galustyan, Z.R. Yarullina, M.N. Rakhimova), and the media (N.V. Shulepina and O.V. Veryakin).

The expedition was organized with the support of the Ministry of Ecology, Environmental Protection, and Climate Change of the Republic of Uzbekistan and its territorial divisions.

Expedition to the Aidar-Arnasoy Lake System

From July 28 to August 3, 2025, SIC ICWC organized an expedition to the Aidar-Arnasoy Lake System (AALS). The expedition was conducted within Lake Aidarkul in Navoiy province.

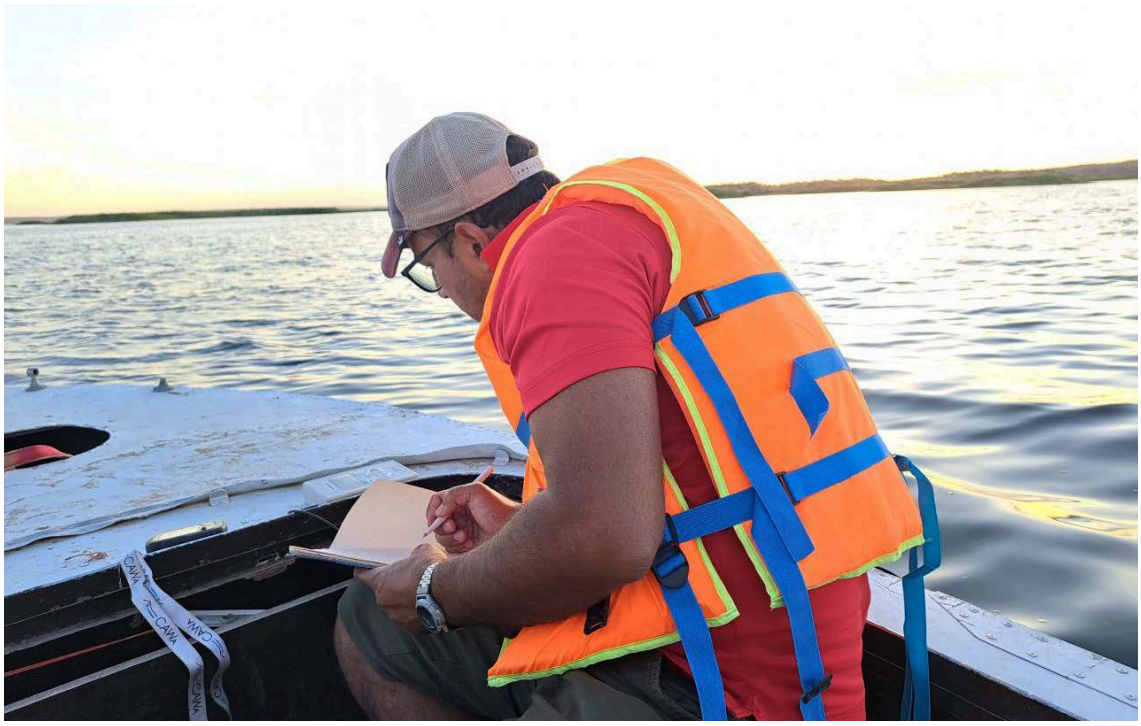
Lake Aidarkul

Prior to the survey, meetings and consultations were held with the head and responsible staff of the Navoiy Province Department of Ecology and Environmental Protection.

Meeting between the head of the Navoiy Province Department of Ecology and Environmental Protection and the SIC ICWC team

Meeting between the head of the Navoiy Province Department of Ecology and Environmental Protection and the SIC ICWC team

As a result of the meetings, a survey route was outlined. At each water body, measurements of water chemistry were taken using the portable data logger “ProCheck,” along with a comprehensive assessment of the state of the environment.



Water sampling

Key Route Points:

Lake Aidarkul – a large artificial water body in the Aidar-Arnasay Lake System, located eastward and southeastward along the foothills of the Nuratau Ridge, stretching for more than 130 km and gradually transitioning into the Tuzkan Lake basin. The lake was formed in 1969 in the place of the Arnasay lowland during catastrophic spring floods.

Lake Aidarkul

View of the shoreline from the side of Lake Aidarkul

Environmental posts (monitoring points for air and water quality, and biodiversity preservation). The Navoiy province is rich in mineral and raw material resources, which has contributed to the development of mining,

chemical, and metallurgical industries that may have a negative impact on the environment. There are two environmental posts in the Navoiy province located in the settlements of Kushkuduk and Boymurad.

Environmental post in Kushkuduk

Tailing dump of Hydrometallurgical Plant No. 7 (HMP-7) - the largest industrial complex for the safe storage of waste (tailings) from metal extraction process. The designated area is 468 ha, with the tailings pond itself covering 308 ha. The sludge pipeline stretches for 10 km (PK - 100).

Shallow bays of Lake Aidarkul represent coastal areas with shallow depths, where water gradually transitions into land. They are part of the vast Arnasay Lake System and are characterized by calm waters, abundant fish, and picturesque landscapes.

Shallow bays of Lake Aydarkul

Field studies confirmed a rapid decline in the water level of Lake Aidarkul, along with a change in salinity levels from the eastern to the western part — from 8.0–10.0 to 14.0–16.0 g/l. Consequently, the water is becoming unsuitable for ichthyofauna, having a detrimental impact on the surrounding flora and fauna.

If the observed reduction in water volume continues, it may lead to the complete degradation and drying up of the lake. This would result in significant environmental, social, and economic problems in the adjacent areas of the Aidar-Arnasay Lake System (AALS).

Following the expedition, an analytical report with recommendations for relevant government agencies is being prepared. The expedition was led by Iskander Ruziev. The team included Rustam Masumov, Fazillat Abdullaeva, Alexandr Dolidudko, and Islom Ruziev.

The expedition was organized with the support from the Ministry of Ecology, Environmental Protection, and Climate Change of the Republic of Uzbekistan and its territorial divisions.

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