



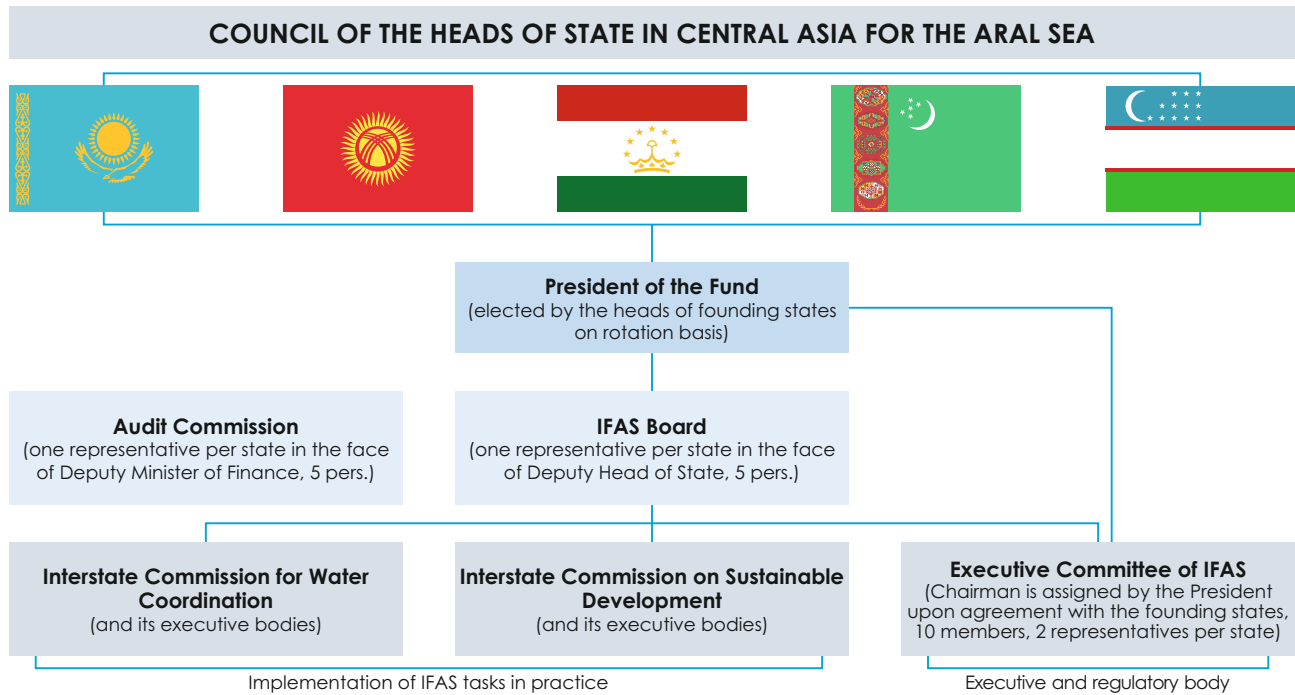
# Section 3

IFAS and Other  
Regional Organizations  
in Central Asia

### 3.1. International Fund for Saving the Aral Sea



The [International Fund for Saving the Aral Sea](#) (IFAS) was established by a decision of the Heads of CA states on the 4<sup>th</sup> of January 1993 with the aim of developing and funding environmental and applied research projects and programs in order to improve ecological situation in the areas affected by the Aral Sea catastrophe and address the socioeconomic issues in the region. The organizational setup of IFAS is shown below.



The chairmanship in IFAS is rotated among the CA countries every three years.

President Gurbanguly Berdymukhamedov chaired IFAS during [Turkmenistan chairmanship](#) in 2017-2019.

The Executive Committee of IFAS (EC IFAS) was based in Ashgabat. The mission of Turkmenistan's chairmanship in IFAS was to further de-

velop and strengthen cooperation among the countries in Central Asia for socio-economic and ecological improvement in the Aral Sea basin.

Tajikistan took over the IFAS chairmanship for the period of 2019-2022 according to a decision of the Second Consultative Meeting of the Heads of CA State (November 29, Tashkent). President Emomali Rahmon will be chairing IFAS over that time.

#### 3.1.1. Initiatives of the Presidents of CA states voiced at XII Summit of the Heads of IFAS Founder-States

[XII Summit of the Founder-States](#) was held in the city of Turkmenbashi on the 24<sup>th</sup> of August 2018. The Presidents of CA states has addressed a range of topical issues and proposed important initiatives. Following the Summit, a [Joint Communiqué](#) was adopted.

The Heads of State have highlighted their view of IFAS as a universal platform for coopera-

tion of the countries in the region to solve the entire complex of issues of regional importance.

The Presidents have put forward the following initiatives:

- Kazakhstan: automation, establishment of an international water and energy consortium for CA;

- Kyrgyzstan: consideration of hydropower interests, shift in paradigm of IFAS, compensation mechanism for water storage, revisiting of water allocation limits;
- Turkmenistan: water diplomacy, adoption of a Special UN Program for the Aral Sea Basin;
- Tajikistan: drinking water supply from Lake Sarez, adaptation measures;

- Uzbekistan: environmental innovations, afforestation, protected zones in the Aral Sea region, water conservation, and scientific cooperation.

The information on implementation of the Presidents' initiatives in 2019 is provided in the sections dedicated to activities of executive bodies of [ICWC](#), [ICSD](#) and in "[Key Water Developments in Countries of Central Asia](#)".

### 3.1.2. UN-IFAS Cooperation

The [85<sup>th</sup> plenary meeting](#) of the UN GA 73<sup>rd</sup> session have adopted unanimously Resolution A/RES/73/297 "Cooperation between the United Nations and the International Fund for Saving the Aral Sea" (May 28, New York). Twenty one countries co-authored this document.

The UN GA in its Resolution:

«1. Notes the need for further improvement of the activities of the International Fund for Saving the Aral Sea to strengthen regional cooperation ...;

2. Also notes the importance of strengthening cooperation and coordination between the United Nations system and the International Fund for Saving the Aral Sea, and invites the Secretary-General to hold for that purpose regular consultations with the Chair of the Executive Committee of the International Fund...;

3. Further notes the proposal on the need to consider the possibility of developing a Uni-

ted Nations special programme for the Aral Sea basin and in this regard to hold consultations in 2019 with the Executive Committee of the International Fund for Saving the Aral Sea, Member States and relevant United Nations agencies;

...

6. Requests the Secretary-General to report to the General Assembly at its seventy-fifth session on the implementation of the present resolution;

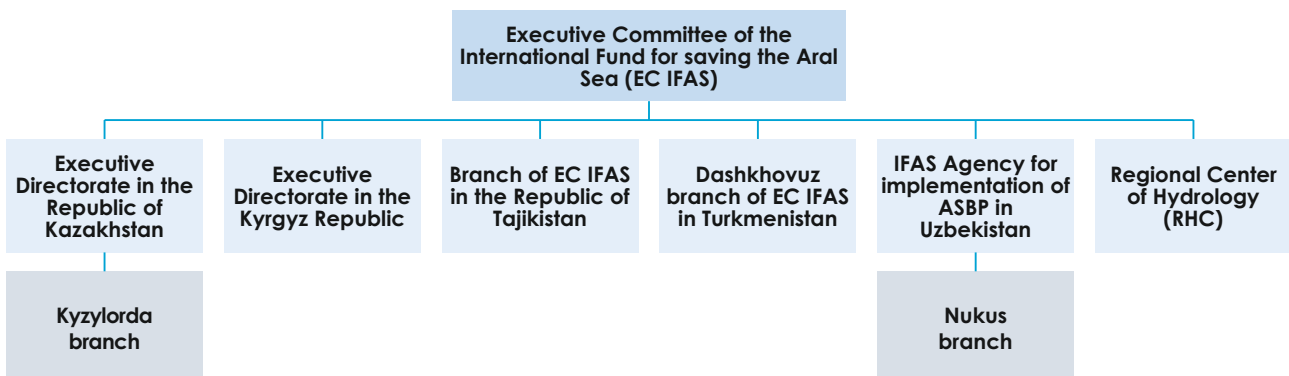
7. Decides to include in the provisional agenda of its seventy-fifth session, under the item entitled "Cooperation between the United Nations and regional and other organizations", the sub-item entitled "Cooperation between the United Nations and the International Fund for Saving the Aral Sea".

The full text of the document is available on <https://undocs.org/en/A/RES/73/297>.

## 3.2. Executive Committee of IFAS and its National Branches

### 3.2.1. Executive Committee of IFAS

**The Executive Committee of the International Fund for Saving the Aral Sea (EC IFAS)** was formed by a decision of the Interstate Council of 13 July 1993. It serves as a platform for dialogue between the CA countries and the international community. According to the decision of the President of Turkmenistan G. Berdymukhammedov, EC IFAS was established in Turkmenistan to operate from 2017 to 2019.



## Location of EC IFAS by Country and Year



### Activity of EC IFAS in 2019

**Development of ASBP-4 and the institutional and legal improvement of IFAS.** In 2019 the development of ASBP-4 comprised of four directions (integrated use of water resources; environment; socio-economic; and, improvement of institutional and legal mechanisms) continued.

Two meetings of Regional work groups (RWG) were held in Ashgabat:

- At the [2<sup>nd</sup> meeting](#) (July 30-31) (1) **as part of the development of ASBP-4**, proposals submitted by countries were considered and a list of 34 projects was adopted for further development by EC IFAS together with experts and members of RWG (July 30); (2) **as part of the improvement of IFAS**, proposals from the countries were considered and next steps were approved (July 31).

- At the [3<sup>rd</sup> meeting](#) (November 25-27) (1) **as part of the development of ASBP-4**, 34 project proposals were considered and approved (November 25-26). A package of projects for ASBP-4 was composed to disseminate among the countries for approval and adoption by the Board of IFAS. EC IFAS and representatives of international organizations and donors held a meeting to identify concrete areas of cooperation in implementation of ASBP-4 (November 27); (2) **as part of the improvement of IFAS**, next steps were discussed and proposals on IFAS improvement from Kazakhstan and Uzbekistan were considered. Members of RWG were requested to submit their proposals to EC IFAS in a previously agreed format. The meeting participants also discussed modalities of joining to the Framework Convention on Environmental Protection for Sustainable Development in Central Asia (November 27).

**The UN Special Program for the Aral Sea Basin (UN SPAS) and multilateral consultations for its development.** During a special session of the International Conference “The Role of Water Diplomacy in achieving Sustainable Development in Central Asia” a preliminary meeting was con-

vened to discuss organization of consultations on the concept of the UN SPAS (June 5, Ashgabat). The UN SPAS was initiated by the President of Turkmenistan and presented in several meetings, including a side event “[Environment and Disasters: Closing the gap in the Asia and the Pacific region](#)” during the Sixth Session of the Committee on Disaster Risk Reduction, when main steps to prepare multilateral consultations in the UN-IFAS format and launch a pilot project on the UN SPAS were demonstrated (August 29, UN ESCAP Headquarters); [Ministerial meeting](#) as part of the XIV Conference of the Parties to the United Nations Convention to Combat Desertification (September 9, New Delhi, India); [Regional conference](#) “Innovative approaches and solutions in the system of sustainable water resources management and the possibility of their use in Central Asia” (December 18-19, Almaty).

[Multilateral consultations](#) on the development of the UN SPAS were organized within the framework of UN GA Resolution 73/297 of 28 May 2019 and following the decisions made by the Council of the Heads of IFAS Founder-States on 24 August 2018 (December 18, Ashgabat). Representatives of EC IFAS, UN agencies and specialized institutions, other international organizations and embassies accredited in Turkmenistan, and experts of relevant institutions of CA countries took part in this event. The delegations discussed problems of inland waters and their solution at the national, regional and global levels, while focusing on the main elements of the Program. They also considered possibilities and prospects of developing UN-IFAS cooperation in the future, supported the establishment of the UN Multi-Partner Human Security Trust Fund for the Aral Sea region, called upon relevant UN agencies to consider possibilities to conduct an independent feasibility study on the modalities for strengthening regional coordination and cooperation to study, mitigate and minimize the consequences of natural disasters in inland water basins such as the Aral Sea and

to assess, in this context, the viability of establishing the United Nations Special Program for the Aral Sea basin.

A thematic event “Cooperation of international institutions for sustainable development in Central Asia: the UN-IFAS model” was held by the Turkmen side at the UN Headquarters (July 17, New York). An urgent need of strengthening collaboration in resolving the problem of the Aral Sea was stressed. In this context, the upcoming multilateral consultations would contribute to the establishment of a multifaceted international mechanism in resolution of the ecological catastrophe of the Aral Sea region.

**The outcomes of the Turkmenistan’s chairmanship in IFAS over 2017-2019.** Activities of Turkmenistan under its chairmanship in IFAS and country contribution to the development of ASBP-4, establishment of cooperation between the United Nations and IFAS, and development of UN SPAS were discussed at [UNESCO International Water Conference](#) (May 13-14, Paris); [briefing](#)

on the adoption by the UN GA of the Resolution “Cooperation between the United Nations and the International Fund for Saving the Aral Sea” (May 29, MFA of Turkmenistan); and, [International Conference](#) on the “Role of Water Diplomacy in achieving the Sustainable Development in Central Asia” (June 5, Ashgabat).

The outcomes of the chairmanship were summarized at the briefing, where representatives of different agencies, heads of diplomatic missions and representative offices of Turkmenistan abroad, local and foreign mass media, academia and students took part (December 28, Ashgabat). New [publications](#) “The International Fund for Saving the Aral Sea” and “The Caspian Sea: Advantages of Developing International Economic Cooperation” were launched. Summarizing its chairmanship, the Turkmen side published a special collection of information materials and documents dedicated to the establishment and development of the International Fund for Saving the Aral Sea.

### 3.2.2. Regional Center of Hydrology

The Regional Center of Hydrology (RCH) at EC IFAS was established on the 23<sup>rd</sup> of August 2002 in line with a decision of the IFAS Board to improve the system of hydrometeorological forecasts, environmental monitoring and data exchange between the national hydrometeorological services in the region.

### 3.2.3. Executive Directorate of IFAS in Kazakhstan

ED IFAS renders assistance in addressing topical issues and coordinating measures to improve water-related, socio-economic and environmental situation in the Kazakh part of the Aral Sea basin.

#### Activity of ED IFAS in Kazakhstan in 2019

**On development of ASBP-4 and institutional and legal improvement of IFAS.** Based on the projects that were included but not implemented within the framework of ASBP-3, the Executive Directorate drafted the regional project proposals for their inclusion into ASBP-4 and submitted them to the Kazakh Ministry of Agriculture. Representatives of the Executive Directorate took part in the 3<sup>rd</sup> meeting of RWG on the development of ASBP-4 and the improvement of IFAS and in a coordination meeting of EC IFAS with donors (November 26-27, Ashgabat).

**Project activity.** ED IFAS implements international grant projects for a total amount of \$655,000.

- The WB-supported Skills and Jobs project together with DKU and other Kazakh universities,

as well as the National chamber of entrepreneurs “Atameken”;

- The project “Equipment and plants for organization of forest nursery to demonstrate rehabilitation of desert in the Aral Sea region”, as part of which a pilot site was organized around the administrative building of the Barsakelmes national nature reserve to demonstrate and popularize resource-saving methods for development of degraded and subjected to desertification land and to develop further methodological and scientific recommendations for efficient organization of green belts;

- The project “Fodder base for wild ungulate animals in the Barsakelmes national nature reserve”, for implementation of which a cont-

ract was signed with the Republican NGO “Association for the Conservation of Biodiversity of Kazakhstan” (April 15). Full assessment and mapping of pastures in the nature reserve will be undertaken to estimate the fodder resources available for wild ungulate animals (Asiatic wild ass, saiga antelope, Persian gazelle), the yields of main plant communities in the reserve and the fodder value of natural pastures;

- UNECE Regional Project “Dam safety in Central Asia: capacity building and regional cooperation”. As part of the project, a meeting was held with the delegation of the Slovakian state enterprise “[Vodohospodarska Vystavba](#)” (meaning Water Management) (April 24, Nur-Sultan); a Memorandum of Cooperation was signed between the “[Vodohospodarska Vystavba](#)” and the International Training Center for the Safety of Hydrotechnical Facilities; study-tours were organized for representatives of “[Vodohospodarska Vystavba](#)” to mud dams in Medeu and Almarasan gorges, the cascade of 11 diversion power stations, the hydraulic structure of Large Almaty lake and the spaceport (October 23-24). ED IFAS took part in a regional meeting on cooperation on dam safety in Central Asia (May 1-3, Tashkent) and workshop “Exchange of experiences on dams and water structure systems safety” (October 7-11, Bratislava, Slovakia), with a study-tour to Gabčíkovo waterworks;

- The project “Ensuring security, conservation and development of fish stocks in the Northern Aral Sea region. Capacity building of the Aral-Syrdarya Basin Council” as part of TWM CA. A tripartite memorandum of cooperation was signed between the ED IFAS, GIZ, and the Akimat (Local Government) of the Kyzylorda Oblast’ (July 13, Kyzylorda). Under this memorandum the Executive Directorate installed fish saving technology at the Kok-Aral Dam. Several meetings of the Aral-Syrdarya Basin Council were held (May 17; October 24-25, Shymkent), the work for ensuring wider access to clean drinking water of remote rural communities of the Aral Sea region was undertaken, and the targeted socio-economic support for most vulnerable population groups was provided.

To raise funds ED IFAS had meetings with potential donors and prepared a project portfolio for an amount of \$2,910,890. In particular,

- a working meeting was held with managers of the WB Project “Program for regional development and revitalization of the Aral Sea basin in Kazakhstan” and as a follow up several project proposals were developed: (1) Deve-

lopment of the “green belt” along the eastern coast of the Aral Sea and human settlements, (2) Paleo-ecology of the Aral Sea region and the issues of ancient cultural landscape changes, (3) Well-grounded rationale for rehabilitation of environmental system in the Large Aral Sea (March 14, Almaty);

- “Program of international cooperation and sharing of water resources in the Syr Darya River between Kazakhstan and Uzbekistan” was developed as part of the US Department of State Program on international transboundary water cooperation;

- ED IFAS took part in an international conference on water security, new technologies, strategies, policies and institutions (September 16-18, Beijing). In turn, scientists from the Chinese Academy of Sciences visited the office of ED IFAS, the Kazakh National Water Research Institute (Taraz), the Kyzylorda waterworks facility (Kyzylorda), Aralsk, the Kok-Aral Dam, and the Research and Touristic Center “Aral” on the coast of Kamystybas Lake. Following work meetings with the representatives of the Chinese Academy of Sciences, Chinese Green Fund, UNDP, UNEP, GEF and other international organizations, project proposals were prepared: (1) Development of plantations of cost-effective plants in the Aral Sea region; (2) Improvement of biodiversity and pastoralism on the dried bed of the Aral Sea through the restoration of aquatic ecosystems; (3) Mitigation of land degradation in the Aral Sea region by fixing soil through trees and bushes grown in greenhouses.

- As part of the [Central Asia Nexus Dialogue Project: fostering water, energy, and food security nexus dialogue and multi-sector investment \(NEXUS\)](#), the Director of ED IFAS presented reports on the [regional investment projects](#) developed for the second phase of the NEXUS Project at the [4<sup>th</sup> Executive Committee meeting](#) (June 18-19, Dushanbe) and at the Closing conference (November 28, Ashgabat).

**Capacity building and education.** As part of its youth outreach activities, ED IFAS:

- supervised on-the-job training and writing of the diploma paper on sustainable water consumption and crop production in the Aral-Syrdarya basin of the two students from the [Narxoz University](#);

- organized, jointly with DKU, the First Aral Sea Summer School for master's students from CA, Afghanistan and Europe (August 10-18). The Summer School was organized in the area of the Syrdarya River's wet-

lands, the dried bed of the Aral Sea, and the Research and Touristic Center “Aral” at Kamystybas Lake. The work was organized around lectures on transboundary basin management, water cooperation, innovative approaches to IWRM, climate change, disaster risk reduction, ecosystems and biodiversity, as well as group work and exchanges;

- presented the report on “The role of the first Kazakh President – Yel Basy – in the development of the International Fund for saving the Aral Sea” during the plenary session of the [International scientific-practical conference](#) “The Role of the President of Tajikistan in Solving Global Problems: Water is the Source of Life”, which was held at the Al-Farabi KazNU (December 13, Almaty).

**Organized events.** Raising awareness of the world community about the Aral Sea problems and promotion of environmental friendliness are among the focus areas of ED IFAS. In particular, the Executive Directorate

- carried out an environmental sport campaign (February 23, Kamystybas Lake);
- organized, jointly with the branch office of the Kairat Football Club Academy and the Segizbaev Sports Club, the International football competition “The Aral Sea Cup” among children teams (March 19-24, Segizbaev Sports Club stadium);

- as part of the Aral Sea Day celebrations in Kyzylorda province and in Nur-Sultan, organized a number of thematic events: meetings at universities and colleges in the capital and in Kyzylorda; the Conference dedicated to Russian scientists’ contribution to saving the Aral Sea; campaigns for cleaning of the sea coast and planting of trees; the gala evening, including demonstration of a film about the Aral Sea, thematic exhibition and concert (March 26);
- jointly with UNDP in Kazakhstan, held the [Regional Central Asian Conference](#) “Innovative approaches and solutions in the system of sustainable water resources management and opportunities for their use in Central Asia” and issued follow-up recommendations for further cooperation (December 18-19, Almaty).

**Participation in national, regional and international events.** ED IFAS takes part in law-making process of the Kazakh Parliament, provides recommendations and background assessments for meetings of decision makers, actively participates in all international water commissions, and is a member of working groups at the Water Convention. In the course of the year, the leadership and experts of the Executive Directorate made reports and presentations on topical issues in the Kazakh part of the Aral Sea region at different national and international events.

*Source:* ED IFAS in Kazakhstan, [www.kazaral.org](http://www.kazaral.org)

### 3.2.4. IFAS Agency for Implementation of the Aral Sea Basin and GEF Projects

The [GEF Agency of IFAS](#) established in 1998 is a working body of IFAS. It has the status of international organization and accreditation at the MFA of Uzbekistan as a representative body of EC IFAS in Uzbekistan.

#### Activity of the GEF Agency of IFAS in 2019

**On development of ASBP-4 and institutional and legal improvement of IFAS.** As a member of the Uzbekistan’s national work group, the Agency took part in: drafting project proposals for ASBP-4 and proposals on the institutional and legal improvement of IFAS; 2<sup>nd</sup> (July 30-31, Ashgabat) and 3<sup>rd</sup> (November 25-26, Ashgabat) meetings of RWG on the development of ASBP-4 and the improvement of IFAS. Following this work, the composition of ASBP-4 including 34 regional projects was approved.

The **project activities** are carried out together with the Nukus branch of EC IFAS through the state budget of Uzbekistan as its contribution to IFAS and the donor’s grants.

The work was continued on the Project [“Construction of small local water bodies in the Amu Darya Delta. Phase II”](#). The Nukus branch of EC IFAS signed the contractor agreements with the “Kuprikkurilish” Trust for implementation of work on the “Reconstruction of a road dam along Maipost Lake and construction of an over-

flow structure on the Amu Darya River (Akdarya) together with measures to prevent canyon formation processes in Domalak Lake". 140.7 billion soum (about 30% of the total cost of structures) were utilized in 2019.

In line with Resolution 37 of the Cabinet of Ministers of 16.01.2019 "On measures for comprehensive socio-economic development of Muynak district in the Republic of Karakalpastan", the Nukus branch of EC IFAS implements the following projects:

- "Reconstruction of the Muynak Canal" as part of the "Construction of small local water bodies in the Amu Darya Delta. Phase II". It is planned to reconstruct the existing 21.3 km long earthen channel and construct a new section of the channel 3 km long to pass 44.3 m<sup>3</sup>/s;
- "Provision of irrigation water for the homestead plots (65 ha) of the Muynak city through a pressure pipeline network composed of 250 mm diameter polyethylene pipes";
- "Construction of a protective dam at the Muynak airport and the subsurface horizontal drainage".

The work was continued also on the following projects:

- "Protective afforestation in Akhantai site" and "Protective afforestation in Akkum ridge" using local trees and shrubs;
- "Monitoring of wetland biodiversity in the South Aral region". Two expeditions were organized (in August and September) to wetlands in the South Aral region with a view of assessing biota trends. The environmental monitoring of biodiversity was conducted in lakes Sarbas, Sudochie and Domalak;
- "National water resources management in Uzbekistan" (SDC). The target training was conducted to build capacities of the Information-Analytical and Resource Center at the Ministry of Water Management of Uzbekistan; ICT-based tools (website, online water monitoring portal and mobile application "Tomchi" (in Uzbek, meaning drop) were launched, and construction of water measuring and regulating structures was completed in 6 plots of

field farmer schools and laser leveling was made; additionally, the training for managers of 152 district irrigation divisions was held together with the Ministry of Water Management. Negotiations on Project Phase II were started.

**Requests from the Government of Uzbekistan and the republican ministries and departments.**

Assistance was provided for preparation of documents, policy briefs, notes and reports, also regarding the Aral Sea problem. Proposals were drafted on the promotion and implementation of the initiatives put forward by the Republic of Uzbekistan at the SCO Summit (June 14, Bishkek) and information was prepared on progress of the Road Map for implementation of initiatives voiced by the President of Uzbekistan at XII Summit of the Heads of IFAS Founder-States. The Agency also rendered assistance to the MPHSTF for the Aral Sea region.

**Political participation.** The Constitutive Congress of the Ecological Party of Uzbekistan was held in Tashkent on the 8<sup>th</sup> of January to endorse the party program, charter and logo and elect the party's governing body. The Head of the GEF Agency of IFAS Mr. Sokolov was elected a member of the Political Council. Seven representatives of the Agency also entered the membership of the Ecological Party.

**Charity.** The GEF Agency of IFAS provided grants for events organized by the Ecological Party. Those included festive events for the Day of Nature Protection (June 4, Gafur Gulyam recreation park) and the 40<sup>th</sup> Festival of songs (June 15, Chimgan). The Agency also allocated funds to Uzbekkino (national film studio) for production of a documentary titled "The Aral Sea is the pain of mine", including contribution to the scenario concept (together with OOO "Sintez Film", director M. Abdukhalikov) and assistance in film production ranging from expert consultations, provision of relevant materials to the support in field visits to the Aral Sea region and the exposed bed of the Aral Sea.

**Public outreach.** Answers were prepared to citizen appeals submitted to the virtual office of the President of Uzbekistan concerning the problems of the Aral Sea and meetings were held to discuss proposals offered by the authors of appeals.

**Capacity building and education.** The Agency rendered assistance in compilation of a questionnaire for a competition on IWRM as part of



cooperation with DKU, took part in the judging panel at the initial stage at TIIAME. The presentation “Scientific grounds of ecosystem recreation around the western body of the Aral Sea and pre-feasibility study of tourism promotion in this zone” was made on behalf of the Agency during the International youth forum “100 Ideas for the CIS” (November 14-15, Baku).

Experts of the Agency A. Tulyaganov and A. Abzalov took part in the training course “Integrated approach to climate change policy development and financing for effective implementation of SDG goals” organized by the Environment Protection Training and Research Institute of India with the support of the MFA of India (March 18-30, Hyderabad, India).

**Regional and international cooperation.** The Agency took efforts to attract attention of representatives of the international community and donors to the water and environmental problems in the region, the initiative of the President of Uzbekistan on declaring the Aral Sea region as a zone of environmental innovations and technology, and the regional water conservation program in Central Asia.

**GWP – GEF Agency of IFAS.** The Agency hosts the National Water Partnership of Uzbekistan and assists in organization of joint events. Two roundtables were held on the progress in implementation of integrated water resources management in Uzbekistan (March 29, Tashkent) and on the results of the International High-Level Conference “Aral Sea Region – Zone of Environmental Innovations and Technologies” (December 5, Tashkent).

**Asia Water Council (AWC).** During the 3<sup>rd</sup> AWC General Assembly the Head of the Agency V. Sokolov was elected the Chairman of the Council's Special Committee on Water-Energy-Food Nexus and the member of the new AWC Board for 2019-2021 (March 14, Manila, Philippines). At the 10<sup>th</sup> meeting of the Board of Council the GEF Agency of IFAS presented new initiatives for the Aral Sea put forward by the President of Uzbekistan (September 23-24, Wuhan, PRC). Thanks to active involvement of the Agency in the Board of Council, one of thematic sessions

of the 2<sup>nd</sup> International Asia Water Week to be held on 12-15 October 2020 in Bali, Indonesia will be dedicated to innovations in the Aral Sea basin.

The Agency held numerous meetings with the experts of international agencies and organizations (SDC, KOICA, etc.), UNECE delegation, group of young specialists from Afghanistan, the ADB mission on the new Climate Adaptive Water Resources Management in the Aral Sea Basin Project, the Director of UNDP Representative Office in Uzbekistan Ms. Matilda Dimovska, representative of EIB Mr. Umberto Del Panta, representative of the Spanish company “Ambienta Engineering Services Ltd.” and others.

**Republican and international events.** Jointly with partners, the Agency held a number of international and regional events that attracted attention of the world community to the problems of the Aral Sea and the Central Asia as a whole.

**Media outreach.** Events organized by the Agency were covered in media and Internet. These included in particular: an interview on the further strategy for rehabilitation of the Aral Sea region in Karakalpakstan (January 6); video-review<sup>3</sup>: students plant trees to save what's left of the Aral Sea (April 9); interview on the current situation on the exposed bed of the Aral Sea and in the Aral Sea region and the Uzbekistan's initiatives (May 8, news-portal “Habar 24”<sup>4</sup>); interview on the measures taken in Uzbekistan to overcome the Aral Sea problem<sup>5</sup> (July 19, newspaper and Internet edition “Ishonch-Doverie”), etc. The efforts undertaken were also covered by republican channels, such as “Uzbekistan 24”, “Yoshlar”, “Sreda.uz”, etc., as well as by channels of Karakalpak and Khorezm TV.

The Agency's website [www.aral.uz](http://www.aral.uz) is updated regularly, and a number of research papers, reports, brochures and books were published (<https://aral.uz/wp/category/newspaper/>; <https://aral.uz/wp/publications/p3/>).

*Source:* GEF Agency of IFAS; <https://aral.uz/wp/about/>

<sup>3</sup> Euronews: <https://www.euronews.com/2019/04/08/watch-students-plant-trees-to-save-what-s-left-of-the-aral-sea>

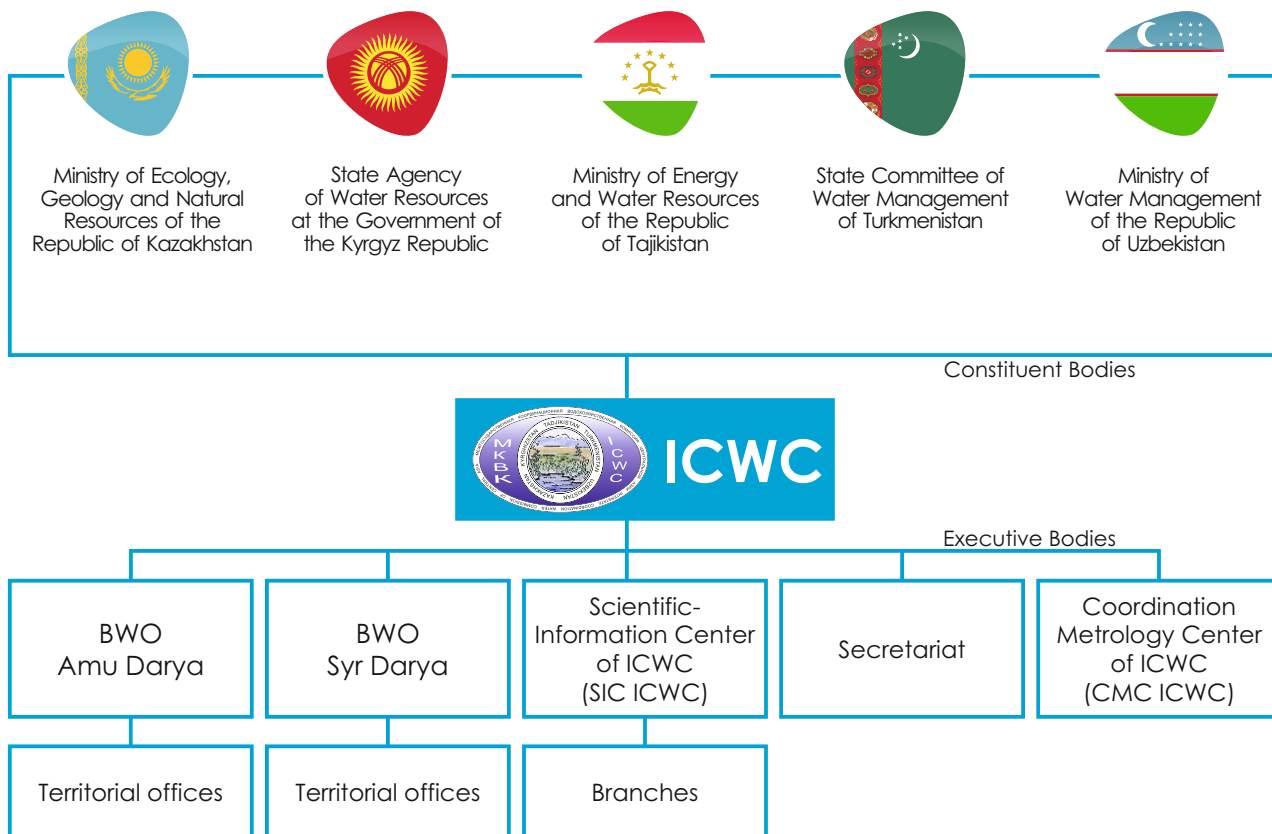
<sup>4</sup> <https://24.kz/ru/news/in-the-world/item/313566-k-realizatsii-programmy-po-spaseniyu-aralskogo-morya-pristupili-v-uzbekistane>

<sup>5</sup> <http://ishonch.uz/ru/2019/07/19/не-оставаться-равнодушными-к-катастро>

### 3.3. ICWC of Central Asia



The Interstate Commission for Water Coordination in Central Asia (ICWC) is a regional body of the CA states that deals with the issues related to control, efficient use and protection of water from the interstate sources of the Aral Sea basin and implements jointly developed programs on the basis of cooperation and mutual respect for the parties' interests. The Commission was formed on 18 February 1992. The organizational set-up of ICWC is shown in the figure below.



#### 3.3.1. ICWC meetings

In 2019, ICWC held two meetings: 76<sup>th</sup> (April 19) in Tashkent and 77<sup>th</sup> (November 5) in Almaty. ICWC members from Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan<sup>6</sup>, as well as executive bodies (SIC ICWC, Secretariat of ICWC, BWO Amu Darya and BWO Syr Darya) and invited persons took part in those meetings.

##### Issues addressed

The main items on the agenda of the meetings were the **limits of water withdrawals and the operation regimes of reservoir cascades in the Syr Darya and the Amu Darya basins**. The Commission summarized the results on the abo-

ve items in the non-growing season 2018-2019 and the growing season 2019.

The limits of water withdrawals for both river basins and the forecast operation regimes of reservoirs in the Amu Darya basin were approved for the **growing season 2019**. On the Syr Darya basin, representatives of Uzbekistan, Kazakhstan and Tajikistan agreed on a joint meeting in early June to make a decision on provision of needed inflow at the Akjar gauging station and water releases from the Bakhri Tojik reservoir in summer 2019. Before the meeting, the parties should have to consider the receipt of electricity from Kyrgyzstan and Tajikistan in June-August.

<sup>6</sup> Since the 68<sup>th</sup> meeting, representatives of the Kyrgyz Republic have not taken part in ICWC activity

### Reforming national water agencies in 2018-2019



**Ministry of Agriculture  
of the Republic  
of Kazakhstan**

Decree of the  
Government  
No.17  
of 17.06.2019

**Ministry of Ecology,  
Geology and Natural  
Resources of the  
Republic of Kazakhstan**



**Ministry of Agriculture,  
Food Industry and  
Land Reclamation  
of the Kyrgyz Republic**  
*Department of  
Water Resources and  
Land Reclamation*

Resolution of  
the Government  
No.383  
of 30.07.2019

**State Agency  
of Water Resources  
at the Government  
of the Kyrgyz  
Republic**



**Ministry of Agriculture  
and Water Management  
of Turkmenistan**

Decree of the  
Government  
of 29.01.2019

**State Committee  
of Water Management  
of Turkmenistan**



**Ministry of Agriculture  
and Water Management  
of the Republic  
of Uzbekistan**

Decree of the  
Government  
No.UP-5330  
of 12.02.2018

**Ministry of  
Water Management  
of the Republic  
of Uzbekistan**

### ICWC members in 2019



**Yerlan  
N. Nysanbayev,**  
Vice-minister  
of Agriculture

**Sergey  
N. Gromov,**  
*(since August 14, 2019)*  
Vice-minister  
of Ecology,  
Geology and  
Natural Resources



**Sulton  
N. Rakhimzoda,**  
First Deputy  
Minister of Energy  
and Water Resources

**Usmonali  
Yu. Usmonzoda,**  
*(since May 6, 2019)*  
Minister of Energy  
and Water Resources



**Magtymguly  
Bairamdurdiyev,**  
Deputy Minister  
of Agriculture  
and Water Management

**Annageldy  
O. Yazmyradov,**  
*(since February 1, 2019)*  
Chairman of the  
State Committee  
of Water Management



**Shavkat  
R. Khamraev,**  
Minister  
of Water  
Management

**Joshmyrat  
Sedekov,**  
*(since September 23, 2019)*  
Acting Chairman  
of the State  
Committee of  
Water Management  
*(temporary appointed)*

During the meeting aimed at discussion of operation regimes of the Bakhri Tojik reservoir for July-August 2019, the parties have agreed on (1) dates, volume and procedures for energy supplies from Tajikistan to Kazakhstan and back; (2) dates and volumes of water releases from the Bakhri Tojik reservoir to be provided by the Tajik party; (3) amount of inflow to be provided by the Uzbek party to the Bakhri Tojik reservoir from NFC [Northern Fergana Canal] and BFC [Big Fergana Canal] and maintenance of water level in the Farkhad reservoir.

The Kazakh and Uzbek parties have also agreed on water supply along the Dustlik Canal to Kazakhstan.

Read more in the [Minutes of the working meeting \(June 5\)](#).

were approved for the **non-growing season 2019-2020**.

The 76<sup>th</sup> meeting of ICWC considered **participation of the members and executive bodies of ICWC in the development of ASBP-4**. It was recommended to EC IFAS to include project proposals finalized by SIC ICWC in line with the comments of ICWC members into the list of ASBP-4 regional projects. The executive bodies were tasked to take part in the 2<sup>nd</sup> meeting of RWG on the development of ASBP-4 and the legal and institutional improvement of IFAS.

At the 77<sup>th</sup> meeting, SIC ICWC presented **information on implementation of the proposals and initiatives of the Heads of IFAS founder-states voiced at the XII Summit of the Heads of IFAS Founder-States**. It was decided that ICWC members and its executive bodies should take necessary measures at the national and regional levels for more active implementation of the proposals and initiatives of the Heads of State as reflected in the joint Communiqué.

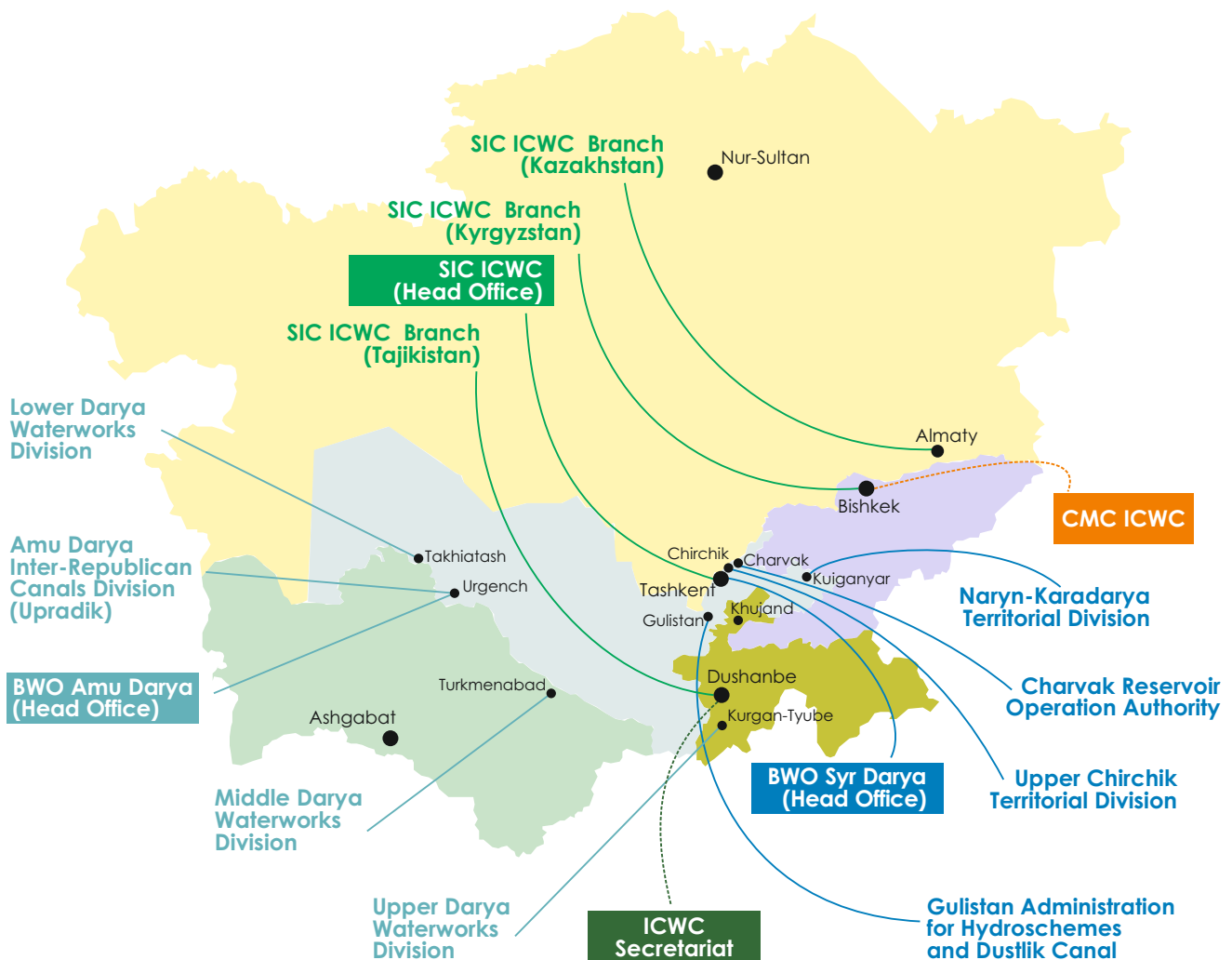
The forecast limits of water withdrawals and operation regimes of the reservoir cascades

### 3.3.2. Activities of ICWC Executive Bodies in 2019

#### Executive bodies of ICWC

<p><b>BWO Amu Darya</b></p>	<p>Responsible for routine management and distribution of water resources among the riparian states, timely and reliable delivery of water, according to the agreed limits, to users, and provision of sanitary and environmental flow for Prearalie and the Aral Sea. Established in September 1, 1987, with the headquarters in Urgench and four territorial divisions.</p>
<p><b>BWO Syr Darya</b></p>	<p>Responsible for routine management and distribution of water resources among the riparian states, timely and reliable delivery of water, according to the agreed limits, to users, and provision of sanitary and environmental flow for Prearalie and the Aral Sea. Established in September 1, 1987, with the headquarters in Tashkent and four territorial divisions.</p>
<p><b>ICWC Secretariat</b></p>	<p>Responsible for fulfillment of ICWC assignments, preparation, together with other executive bodies, of programs, measures and draft decisions for ICWC meetings, control over the flow of funds from ICWC founding states for financing of ICWC executive bodies (allocated for field operations, capital repairs, etc.), and coordination of international contacts. Established by the decision of the 6<sup>th</sup> ICWC meeting on the 10<sup>th</sup> of October 1993 in Dushanbe.</p>
<p><b>SIC ICWC</b></p>	<p>Responsible for backstopping of ICWC activities on regional and global stages. Contributes to transboundary water cooperation and sustainable water management in Central Asia through information support, training, networking, research, and expertise. Established on the 5<sup>th</sup> of December 1992, with the headquarters in Tashkent and 3 branches.</p>
<p><b>CMC ICWC</b></p>	<p>Coordinates and implements technological policy in the field of metrological support to ICWC programs and decisions on the use, protection and accounting of water resources in sources and systems. Established on the 23<sup>rd</sup> October 1999, with the headquarters in Bishkek.</p>

## Location of Executive Bodies



## BWO Amu Darya

### Activity of BWO Amu Darya in 2019

In 2019, BWO Amu Darya continued working on interstate water allocation and real-time control over observance of the established water withdrawal limits approved at the ICWC meeting (see "[Water management situation in the basins of the Amu Darya and the Syr Darya](#)"), on modernization and operation of waterworks facilities that are under responsibility of BWO, and prepared materials for and participated in two ICWC meetings (see "[ICWC meetings](#)") and 12 meetings of water management organizations responsible for the river's lower reaches on the issues of water allocation.

BWO Amu Darya maintained cooperation with EC IFAS, national water agencies of Turkmenistan, Tajikistan and Uzbekistan, national hydrometeorological services, SIC ICWC,

CAREC, GIZ and IWMI. Representatives of BWO Amu Darya and its territorial branches took part in regional programs, conferences, and training workshops. In particular, with the support of GIZ, training was organized for BWO's staff on how to handle the web-site of BWO Amu Darya and the software for evaluation of snow cover in the catchment area of the Amu Darya.

As part of the [Central Asia Nexus Dialogue Project: Fostering Water, Energy and Food Security Nexus Dialogue and Multi-Sector Investment](#) (NEXUS), specialists of BWO Amu Darya took part in the development of project proposals for ASBP-4 and in a study tour "Management of the transboundary water resources in Danube and Sava River Basins" to learn more about the water, energy and food security nexus (May 13-17, Vienna, Austria and Zagreb, Croatia).

Source: BWO Amu Darya, <http://amudarya-bwo.org/>

## BWO Syr Darya

### Activity of BWO Syr Darya in 2019

**ICWC meetings.** BWO Syr Darya took active part in organization of the two ICWC meetings (see "[ICWC meetings](#)"), fulfillment of decisions and assignments of ICWC. The reports on forecast and actual operation regimes of the Naryn-Syrdarya cascade of reservoirs and the limits of country water withdrawals for the non-growing season 2018-2019 and the growing season 2019 were submitted for consideration and approval.

**Development of ASBP-4.** The regional project proposals were drafted for consideration at the 4<sup>th</sup> Executive Committee meeting under the NEXUS Project (June 18-19, Dushanbe). Finally, the Project "Modernization and automation of water management system and sustainable operation of interstate waterworks facilities in the Syr Darya basin" and the Project "Safety of dams and other waterworks facilities in Central Asia: capacity building and regional cooperation" were selected and included into ASBP-4.

**Repair and rehabilitation operations.** The following structures were repaired: two gates at the head structure of the Lower Dalverzin canal; gates at 26 km (offtake) and 39 km of the Dustlik canal; gates of lift mechanisms at the structure of the Lower Big Andizhan canal. The slopes of the Dustlik canal were rehabilitated; canals and structures were mechanically cleaned.

**Reconstruction and modernization.** The following operations were completed: construction of the spillway face, concrete coating of right and left slopes of the head-water of Kuyganiar hydroscheme<sup>7</sup>; dolosses were installed and 11 gates at the dam were replaced. Construction of a protection structure downstream of the dam is planned for 2020. As a result of reconstruction of Kuyganiar hydroscheme, irrigation of 230,000 ha in the Fergana Valley will be improved.

Construction operations were completed as part of the "Protection measures at BWO's structures of Upper Chirchik hydroscheme".

Surveys were completed, design specifications and estimates were made and expertise was finished on the "Reconstruction of the tail-water of the head structure at Northern Fergana canal in Uchkurgan district, Namangan provin-

ce", "Reconstruction and modernization of the head structure at DP 145+00 of South Golodnostepskiy canal in Shirin town, Syrdarya province", "Reconstruction and modernization of mechanical equipment of Kuyganiar hydroscheme", and "Reconstruction and modernization of the head structure of Dustlik canal".

**Automation of gauging stations in the Syr Darya basin.** As a follow-up to initiatives of the President of Uzbekistan voiced during XII Summit of the Heads of IFAS Founder-States, BWO Syr Darya jointly with SIC ICWC, UzHydromet and other concerned organizations developed terms of reference and completed examination of structures in upper and middle reaches of the Syr Darya River, the results of which served as an input for recommendations on the feasibility study and the detailed design for implementation of the SCADA system.

**"Smart Water" system.** With the financial support of KOICA and assistance of the Uzbek Ministry of Water Management the Smart Water system's equipment was installed at 11 structures to measure water discharge and quantity and transmit the data online. The territorial branches of BWO made ground work for installation of the Smart Water system and energy supply of the structures.

*Source:* BWO Syr Darya, [http://www.icwc-aral.uz/bwosyr\\_ru.htm](http://www.icwc-aral.uz/bwosyr_ru.htm)

## ICWC Secretariat

### Activity of the Secretariat in 2019

In 2019, the Secretariat together with other executive bodies took part in organization of the two meetings of ICWC (see "[ICWC meetings](#)"), fulfillment of decisions and assignments of ICWC.

The Secretariat's staff also assisted in organization of events held by the Tajik Ministry of Energy and Water Resources. In particular, the training workshop "Empowering women in water and sanitation in the Republic of Tajikistan" was organized (September 4-5, Dushanbe). The workshop brought together the representatives of the Ministry of Energy and Water Resources, the Agency of Land Reclamation and Irrigation at the Government of Tajikistan, the Nature Conservation Committee, and the Committee for Women and Family Affairs.

*Source:* ICWC Secretariat

<sup>7</sup> Kuyganiar hydroscheme was built at the Karadarya River in 1939. The carrying capacity is 1,210 m<sup>3</sup>/s. The hydroscheme was damaged as a result of strong flood in 2010

## Scientific-Information Center of ICWC

### Activity of SIC ICWC in 2019

**Evaluation of ASBP-3 performance, development of ASBP-4 and institutional and legal improvement of IFAS.** SIC has recommended developing ASBP-4 based on the activities that were not fully implemented in ASBP-3. During chairmanship of Kazakhstan (2008-2013) and Uzbekistan (2013-2016) in IFAS, only 14 regional projects were completed or launched out of 50 ones envisaged in ASBP-3. By the moment when EC IFAS moved to Turkmenistan, the Government of Uzbekistan had approved and got financial support from ADB for the Amu Darya Water Resources Management Project. However, the opportunity was missed and the project proposal was not included into the ASBP-4 package.

As part of preparation of ASBP-4, SIC submitted the regional projects that got approval of ICWC members and the key water management issues as the focus areas to guide selection of projects for ASBP-4 to EC IFAS. SIC took part in the 2<sup>nd</sup> meeting of RWG on the development of ASBP-4 and the improvement of IFAS (July 30-31, Ashgabat). As a follow-up to the 2<sup>nd</sup> meeting, the feedback was submitted to EC IFAS concerning (1) the project proposals of ASBP-4 prepared by RWG members and (2) the institutional and legal improvement of IFAS.

**ICWC Working Groups.** According to a decision of the 73<sup>rd</sup> meeting of ICWC, the Kazakh Ministry of Agriculture, BWO Amu Darya, BWO Syr Darya and SIC ICWC have set the list of actions to be done as part of the “2018-2019 Work plan of ICWC working groups” and updated the membership in the working groups.

In 2019, SIC ICWC worked in the following four directions:

**1 Water conservation.** Prepared and published “Methodology for scheduling of water use and water delivery for farms”.

**2 Implementation of integrated water resource management and adaptation to climate change.** Prepared “Proposals on further development of basin councils at BWO Amu Darya and BWO Syr Darya and their territorial branches” and disseminated among the members of the working group from BWO Amu Darya, BWO Syr Darya and the Kazakh Ministry of Agriculture for the feedback. Published “Review of basin councils in the world and their prospects for Central Asia” (SIC ICWC Research Papers, issue 2).

**3 Improvement of water accounting quality and accuracy.** (1) Jointly with the member of the working group from BWO Syr Darya, completed examination of the technical conditions of structures in upper and lower reaches of the Syr Darya, including the Chirchik River basin. Accordingly, proposals for the development of feasibility study for automation and for the detailed design of implementation of the SCADA system in middle reaches of the Syr Darya in the Uzbek territory were drafted; (2) The analysis of discharge measurements at gauging stations of BWO Amu Darya was made and showed that all stations have more than 5% measurement error. The causes are the high turbidity of the Amu Darya and siltation of level gauges and the gaps in calibration of gauging stations (more than 25-30 years), with consequent huge discrepancies in water balance. The terms of reference was prepared for examination of the set of structures at the Tuyamuyun reservoir for the following development of a feasibility study on automation of this waterworks facility.

**4 Building capacity of regional and national organizations.** The following brochures were prepared: “Water resources management in Israel, India and Iran”, “Experience of regulation of water relations among the EU countries”, and “Enhancement of water cooperation between regional and national organizations in Central Asia” (SIC ICWC Research Papers, issue 5).

**Organizational and technical activity.** SIC together with other bodies of ICWC took part in organization of the two meetings of ICWC (see “[ICWC meetings](#)”), fulfillment of decisions and assignments of ICWC. SIC has developed analytical reports on the water-related situation in the region for growing and non-growing seasons. The work was continued on the analysis of the status in the South Aral region and the Aral Sea, including monthly estimations of the inflow from the Amu Darya River and collecting drains and the changes in the water surface and wetland area in Eastern and Western parts of the Aral Sea and lake systems of the Amu Darya Delta using Landsat 8 OLI imagery ([http://www.cawater-info.net/araldata/monitoring\\_amu.htm](http://www.cawater-info.net/araldata/monitoring_amu.htm)) (see “[Monitoring of Changes in the Water Surface and Wetland Area of the Large Aral Sea and the Amu Darya Delta](#)”).

SIC ICWC took part in the follow-up activity to the Joint Communiqué adopted at the Summit of the Heads of IFAS Founder-States, implementation of the CA country presidents' initiatives. Technical, information and expert assistance was rendered to **national and regional organizations** through timely provision of relevant

materials on their request. In particular, the following information and analytical contributions were made to:

- **fulfillment of decrees of the President and the Cabinet of Ministers of Uzbekistan:** “On measures for further improvement of the water management system” (PP-4486 of 09.10.2019), “On approval of the concept of environmental education in the Republic of Uzbekistan” (Decree of CM RUz No. 434 of 27.05.2019, Instruction of CM RUz on implementation of initiatives and proposals of the President of Uzbekistan voiced at XII Summit of the Heads of State (965-F of 16.11.2018);

- **draft documents:** WB’s Concept on the strategy of agricultural development modernization in Uzbekistan by 2030; State Program “The Year of active investments and social development”; “The concept of water development in the Republic of Uzbekistan for the period up to 2030”; Law of RUz on land reclamation; Decree of the President of Uzbekistan “On the improvement of provision of water services to users and consumers”; “National concept of environmental conservation in the Republic of Uzbekistan for the period up to 2030”; “Concept of the SPECA Strategy on water, energy and environment” (UNECE); draft Concept of the State Program of Water Resources Management in Kazakhstan for 2020-2030;

- **organization of water accounting in the basins of the Amu Darya and the Syr Darya** and ensuring of sustainable water supply for the Amu Darya delta and all its lakes;

- **issue related to transfer of a portion of the Siberian river flow to CA:** opinion of SIC ICWC regarding the viability of the topic of the flow transfer project; note on prospects of the project, given the interests of Russia, Europe and CA; paper of Prof. V.A. Dukhovniy “Concerning redistribution of a portion of the Siberian river flow to the Aral Sea basin”. Prof. Dukhovniy made a report on flow transfer at the International Conference of EECCA NWO “[Science and Innovations for Water Security](#)” (September 23-27, Yekaterinburg) and at the Regional Central Asian Conference on “[Innovative Approaches and Solutions in the System of Sustainable Water Resources Management and Opportunities for their Use in Central Asia](#)” (December 18-19, Almaty);

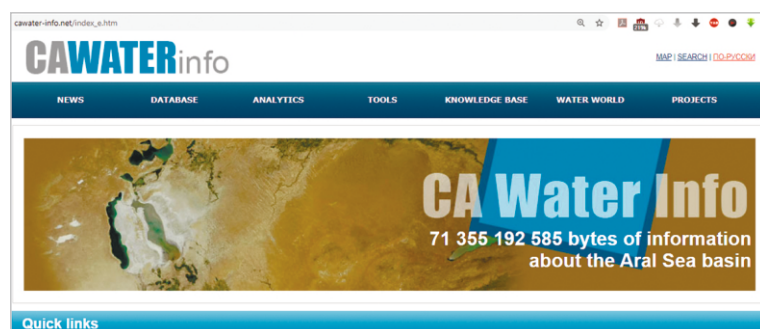
- **issue related to the development of cooperation between CA countries and Afghanistan:** a note regarding a potential increase in water withdrawals by Afghanistan in the near

future and the development of water cooperation between the CA countries and Afghanistan for the improvement of general awareness, searching consensus and mutual benefits.

**Information and analytical activity.** The regional database is populated with the key information on all countries of the Aral Sea basin up to 2018. The databases on the Amu Darya and the Syr Darya basins were updated on ten-day basis (jointly with BWO Amu Darya and BWO Syr Darya); the database on the Surkhandarya River basin and access to the knowledge bases on the Amu Darya ([www.cawater-info.net/amudarya-knowledge-base/](http://www.cawater-info.net/amudarya-knowledge-base/)) and the Syr Darya basins ([www.cawater-info.net/syrdarya-knowledge-base/](http://www.cawater-info.net/syrdarya-knowledge-base/)) were opened. The assessment of the forecast inflow to Toktogul, Andizhan and Charvak reservoirs and to Kelif gauging station was published for the growing season 2019. The morphometric characteristics of the Aral Sea over 2007-2018 were added to the database. The analysis of the current water development in the Amu Darya River basin was published on the website as well.

**Information and publications.** In 2019, the information support of activities of ICWC and its executive bodies was further provided through publications and the Regional Information System on Water and Land Use in ASB (CAWater-Info), analytical tools and models, data and knowledge bases, regional web-resources, including the CA water and environment knowledge portal ([CAWater-Info](http://CAWater-Info)), [ICWC](http://ICWC), [SIC](http://SIC) [ICWC](http://ICWC), and [EECCA](http://EECCA) [NWO](http://NWO) web-sites, as well as the ASB management model ([ASBmm](http://ASBmm)) and the [WUEMoCA](http://WUEMoCA) tool.

The knowledge base “Water in Central Asia” was populated with 1,324 new entries, such as monographs, research papers, manuals, references and other publications ([www.cawater-info.net/bk/](http://www.cawater-info.net/bk/)). Atlas of water-management and environmental organizations in the EECCA countries was updated.



<http://www.cawater-info.net/>



27 [publications](#) on water management and law were issued and disseminated in paper- and e-format (see "[Publications in 2019](#)"). A new series of publications - "SIC ICWC Research Papers" (issues 1-4) - describing research made by SIC's experts and partners was launched.

**Project activity.** In 2019, SIC:

- Continued work on the project "[Support to the Network of Russian speaking water management organizations](#)" with the support of UNECE. SIC organized the International EECCA NWO Conference "Science and Innovations for Water Security" (September 23-24, Yekaterinburg). Collections of scientific papers titled "Science and Innovations for Water Security" (volumes 1 and 2) and "Selected transboundary water agreements signed between European and Asian states over 1992-2019" were issued; the knowledge base of the CAWater-Info portal as one of the sources of knowledge of EECCA NWO was populated, including in English.

- Completed the CAWA-3 (Regional Research Network "Water in Central Asia") Project. In particular, the yield forecast model was adapted for the Fergana Valley conditions and validation of RS-based data was made. The monthly data on actual water delivery to irrigated land was collected at district level of ASB (19 districts in Kazakhstan, 11 districts in Kyrgyzstan, 33 districts in Tajikistan, 37 districts in Turkmenistan, and 157 districts in Uzbekistan) over 2018 in CAREWIB database. The data on 156 Uzbek districts and provinces over 2000-2017 were validated. The validation showed that the RS-based data fit the actual data. The ten-day data on irrigation water delivery were collected and analyzed for the growing seasons (April-September) on 154 districts of Uzbekistan. The comparison of crop acreages for all provinces in the Aral Sea basin was made with WUEMoCA model results for 2000-2018. Finally, the second WUEMoCA ("Water Use Efficiency Monitor in Central Asia") [User Forum](#) and the WUEMoCA hands-on training were held (November 7-8, Tashkent).

- Issued four Aral Sea Basin Transboundary Water Early Warning Bulletins (March-July) as part of the UNRCCA project. The Early Warning Bulletins show the actual situation in the Amu Darya and the Syr Darya basins for the current month and the forecast for the next month. The Bulletin is a resource, which provides all the Central Asian states and their international partners with improved capacity to monitor regularly the status of transboundary rivers and warn early of potential issues that require attention.

- Compiled and published, with the support of UNRCCA, the Water Yearbook: Central Asia and around the Globe in Russian and English. The 2018<sup>th</sup> edition contained summary of key water developments in CA and all over the world. OSCE provided financial support for publication of additional copies of the Yearbook.

- Completed "Evaluation of farming activities supported by climate sub-loans in Tajikistan and Uzbekistan" as part of the contract with CAREC under the "Climate Adaptation and Mitigation Program for the Aral Sea Basin" (CAMP4ASB). A simple and quite reliable form of preliminary quantitative assessment of farming activity resilience to climate change was developed and can be used by national coordination groups (NCG), local banks and farmers in Tajikistan and Uzbekistan. The concept of regional online database on climate-smart farming methods and technologies was developed. Based on the project results, the training workshops were held for experts of NCGs, credit specialists of local banks and farmers on the methodology of quantitative assessment of resilience to climate change ([Tajikistan](#) – June 18-19; [Uzbekistan](#) – June 26-27).

- Implemented the project "Studies for clarification of the river balance items of the Syr Darya and its main tributaries and development of a computer program" (upon contract with BWO Syr Darya). The relevant input information was collected and analyzed for the periods of 1975-1985 and 1991-2018. The methodology for calculation of river balance items was developed and tested in the pilot reach from the tailwater of Bakhri Tojik reservoir to Farkhad waterworks facility.

- Prepared the Diagnostic Report on Rational Use of Water Resources in Central Asia for the assessment of progress made in implementation of the 1998 Central Asia Regional Water Strategy and the provision of recommendations for a future strategy. The database containing key indicators and information was developed as well (contract with OECD).

- Updated the publication "Aral Sea and the Aral Region" (by the data and information over 2015-2018) and translated into English as part of the contract with UNESCO.

- Jointly with the International Innovation Center of the Aral Sea Region, undertook the scientific expedition (September 20-October 20) to study conditions of the salinized land in the Aral Sea region and the exposed bed of the Aral Sea as part of the contract with UNDP under the

MPHSTF Project “Addressing the Urgent Human Insecurities in the Aral Sea” (see “[UNDP in Uzbekistan](#)”). The study area covered 600,000 ha: from Ustyurt cliff to the channel of the Amu Darya, from the historical water level of 53 m BSL to the current water edge. The expedition traveled 7,500 km and described 1,580 points for identification of satellite images. The following work was done: soil description by 35 profiles, with identification of soil types; monitoring of the operational hydrological network; measurement of water table; environmental assessment of the territory. The scale of self-organized vegetation was assessed. The second expedition is planned for spring along the route from the channel of the Amu Darya to Kokdarya. The expedition’s results are described in the “[Results of the expedition to the exposed bed of the Aral Sea in September-October 2019](#)”.

### Capacity building and training

**Lecturing.** SIC’s experts were invited as lecturers to: vocational training courses for managers of Basin irrigation system administrations, with the support of the Ministry of Water Management of Uzbekistan (January 14-18, TIAME); lectures “Transboundary water management in the Aral Sea basin” for master students of the Nazarbayev University Graduate School of Public Policy (August 29, videoconference); workshops for the staff of WUAs and water-management organizations organized by the EXPERT INFO Consulting agency as part of the Horticultural Support Project in the Republic of Uzbekistan (October 21-30, Surkhandarya province).

In the course of the academic year, SIC’s experts delivered lectures and hands-on training on the following subjects: “Statistical methods in hydrology and the basics of mathematical modeling”, “Hydrology of irrigated land”, and “Reclamative hydrology” for students of the Uzbek National University’s Geography and Natural Resources Faculty; “Hydraulics (hydrostatics and hydrodynamics)” for students of the Hydrotechnical Melioration Faculty and “International and national water relations and law” for master students of the Ecology and Water Management Division at TIAME.

SIC ICWC organized and held (1) the International Conference of EECCA NWO “[Science and Innovations for Water Security](#)” (September 23-27, Yekaterinburg); (2) WUEMoCA (“Water Use Efficiency Monitor in Central Asia”) [User Forum and hands-on training](#) for the specialists of water

agencies of CA countries and BISAs of Uzbekistan (November 7-8, Tashkent).

The expert of SIC ICWC Mr. I. Ergashev was a member of the State Examination Board of TIAME on thesis protection for bachelor’s degree on “Water Management and Land Reclamation” (June 12-24). The Deputy Director of SIC ICWC Dr. D. Ziganshina chaired the Graduate Admissions Office of TIAME, took part in organization of the national academic competition “Integrated water resources management” (May 20), and participated in a meeting with master students on the program “Water cooperation and diplomacy”, which was delivered in three universities: University for Peace in Costa Rica, Oregon University in USA, and IHE-UNESCO in the Netherlands (February, Delft). She also participated in the workshop “Water and Diplomacy” organized by the Embassy of Canada in Uzbekistan and the University of World Economy and Diplomacy (November 22, Tashkent). The Director of SIC ICWC Prof. V. Dukhovniy took part in a meeting with students from TIAME and other universities in Tashkent dedicated to “Water in Central Asia” (November 20, Navoiy National library of Uzbekistan).

**Training courses.** The curriculum of vocational training in GIS and RS was developed for the staff of land reclamation field offices and got approval by the Land reclamation department of the Uzbek Ministry of Water Management. The online training course “Water management at the level of WUA and farm” was developed as well (<http://mooc/tuit.uz>).

**Web-site of the ICWC Training Center.** The web-site developed by SIC in 2018 was further developed and populated with the materials of training courses, reports and publications (<http://www.cawater-info.net/training/index.htm>).

**Internship at SIC ICWC.** As part of capacity building, the 3<sup>rd</sup> year students of the Geography and Natural Resources Faculty at the National University of Uzbekistan (22.07.19-16.08.19) and a master student on “Environmental security aspects in the water sector” of TIAME (27.08.19-27.09.19) have got practical training at the Center.

**SIC staff improved its qualifications** through different courses, workshops, and trainings. SIC’s experts published 24 papers.

**International cooperation.** SIC kept maintaining cooperation with embassies, international organizations and financing institutions and took part in activities of UNECE, WWC, ICID, GWP, INBO and IWRA.

In 2019, SIC ICWC signed the Memorandum of Understanding with the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR CAS) (September 17) and the Memorandum of Cooperation for support of research in the area of water use and protection regulation, ecology, water management and agriculture with the International Innovation Center of the Aral Sea Region (October 25). SIC had a number of work meetings, including with the Ambassador of Germany in Uzbekistan, the representatives of ADB, the US Embassy in Kazakhstan, the group of experts from IGSNRR CAS, GIZ, the experts of EBRD, the National Forestry and Grassland Administration of China, specialists of Spanish com-

panies Ambienta Engineering & Services Agrarios y Forestales S. L. and TYPSA, etc.

SIC took an active part in activities of working groups, preparation of discussion notes, reports, and presentations and in organization of international events and publication of materials.

SIC continued disseminating the Russian versions of materials of WWC and INBO in the EECCA countries (INBO Newsletter, International News of IOWater); maintained the [web-site](#) of the EECCA NWO and Russian versions of [WWC](#), [INBO](#), and [IOWater](#).

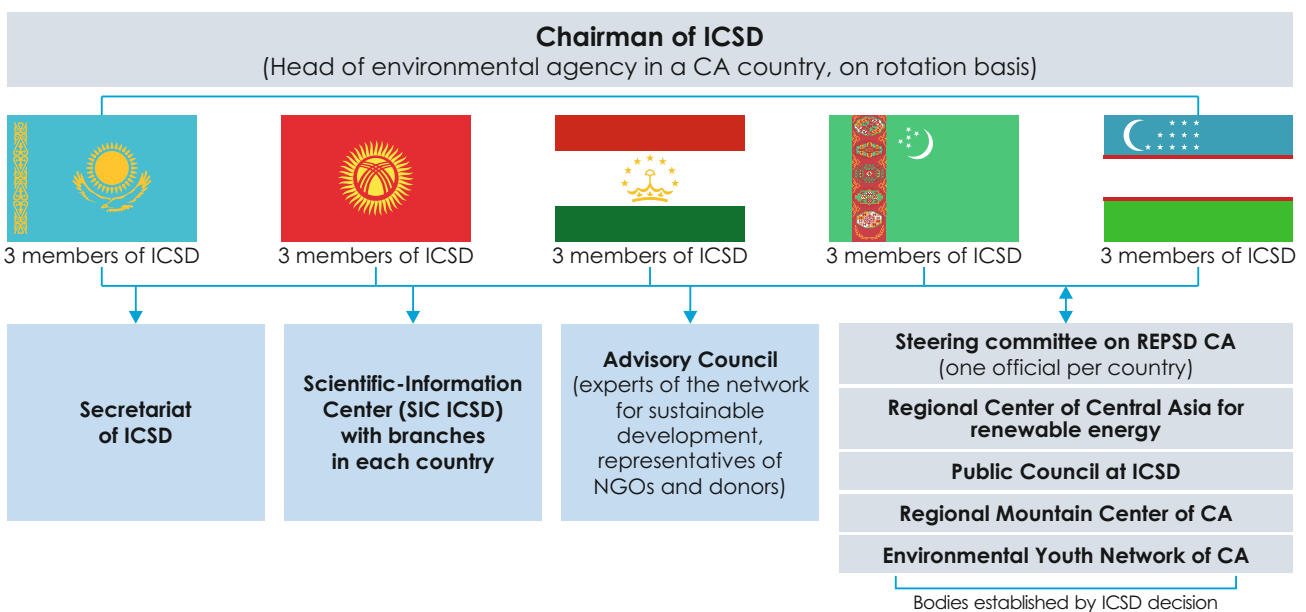
The Center also keeps playing a coordinating role in the activity of ICID working group for the countries under socio-economic transformation.

Source: SIC ICWC

### 3.4. ICSD of Central Asia



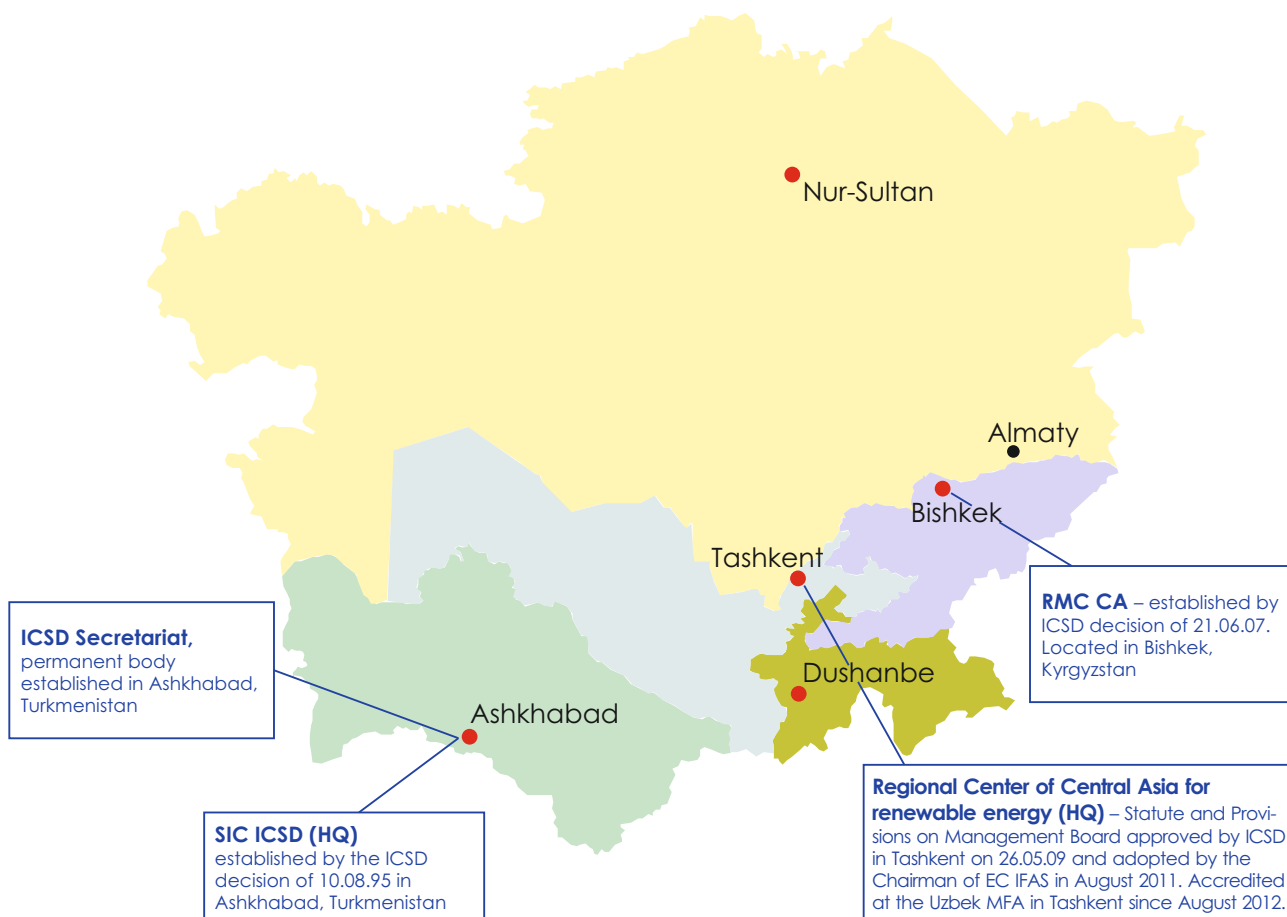
The Interstate Commission on Sustainable Development (ICSD) was established by the decision of the Interstate Council for the Aral Sea Basin in 1993. It is entrusted with the mission of coordination and management of regional cooperation in the field of environmental protection and sustainable development of the CA states. The organizational setup of ICSD and location of its executive bodies are shown in the figures below.



#### 3.4.1. ICSD meetings

The 30<sup>th</sup> meeting of ICSD that brought together the delegations from Kazakhstan, Uzbekistan, Tajikistan and Turkmenistan was held in Nukus on the 24<sup>th</sup> of October. The meeting reviewed the

progress report of ICSD over the period of Turkmenistan's chairmanship in ICSD (2015-2019) and approved the draft REPSD CA for 2020-2030. It was decided to ensure further institutional and



legal improvement of ICSD and its bodies, particularly, through the adoption of the “Procedure for preparation and holding of ICSD meetings” and the Provision on the Advisory Council of ICSD that would coordinate implementation of REPSD CA. Also, the decision was made to submit the Regional Program to the IFAS Board for consideration and start national procedures for

reaching agreement on the draft REPSD CA in the Central Asian countries.

The focus areas of partnership with UNECE and FAO were determined and a Memorandum of Understanding was signed with UNECE during the meeting. Finally, the chairmanship of ICSD was passed from Turkmenistan to the Republic of Uzbekistan for the period of 2019-2021.

### 3.4.2. Activity of ICSD in 2019

**Development of REPSD CA.** The work plan on the program development for 2019 and the schedule of work meetings were approved at the first meeting of RWG in Almaty on December 10-11, 2018. During the 2<sup>nd</sup> meeting of RWG organized with the support of the GIZ Program for sustainable and climate sensitive land use for economic development in Central Asia and CAREC as part of the [Central Asia Climate Change Conference \(CACCC-2019\)](#), the draft REPSD CA was approved for finalization (April 4, Tashkent). The draft Program was finalized and the Roadmap on the development and negotiation of the final version of the Program was adopted at a technical meeting of RWG. The procedure for preparation and holding of ICSD meetings and the Provision on the ICSD Advisory Council were

determined at this meeting as well (April 22-25, Almaty).

The 3<sup>rd</sup> meeting of RWG and international partners approved the finalized draft (May). Then, the draft Program was submitted to the CA countries for approval by NWGs and ICSD members (June). The draft REPSD CA finalized on the basis of the feedback received is to be presented at the next meeting of ICSD.

**Capacity building and training.** In 2019, as part of the Memo signed with CAREC, a series of webinars was organized between water specialists of Turkmenistan and teaching staff of TIAME on: advanced methods of drafting on-farm and system-based water use plans; water saving

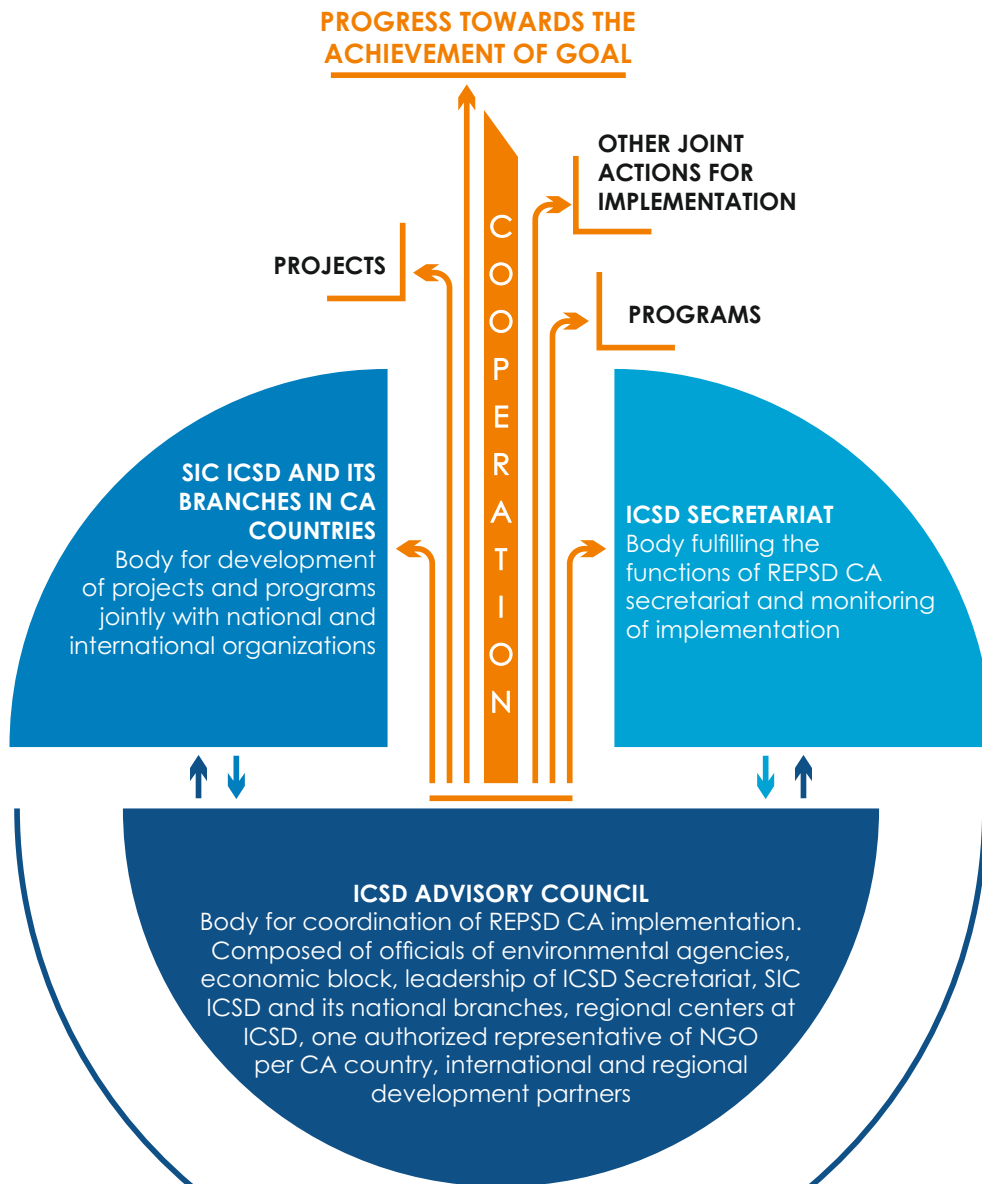
technologies and efficient irrigation water use methods adapted for Uzbek and Turkmen conditions.

**Publications.** International Journal of Research and Practice “Desert Development Problems”: Babaev A.G. Studying desertification processes in the Aral Sea basin and ways of prevention (Issue

1-2/2019); Babaev A.G. Anthropogenic ecology of Kara Kum (Issue 3-4/2019); Esenov P. Problems of geo-ecology in the irrigated area of Turkmenistan (Issue 3-4/2019); Muradov Ch.O. Information support of sustainable development in the Aral Sea basin (Issue 3-4/2019).

Source: Secretariat and SIC ICSD

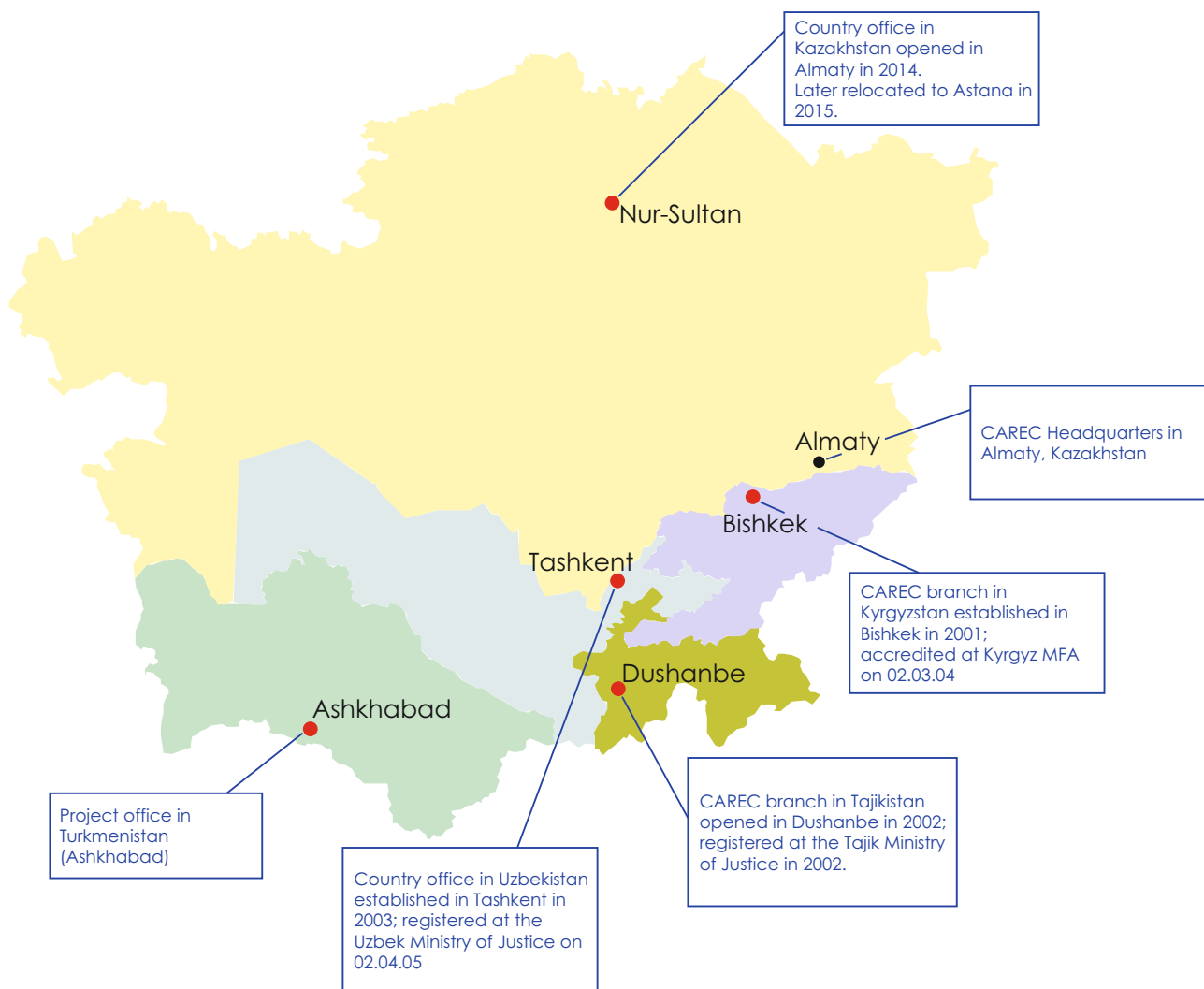
### Graphical presentation of REPSD CA implementation



### 3.5. Regional Environmental Center for Central Asia



CAREC is an independent, non-profit, nonpolitical international organization, which assists the Central Asian governments, regional and international stakeholders and partners in addressing their environmental and sustainable development issues in Central Asia. The headquarters is located in Almaty, with the country offices operational in five Central Asian states.



### Activity of CAREC in 2019

For CAREC, the year 2019 turned to be a successful start of new initiatives and a year of ongoing work on the key projects region-wide. It was a year of furthering partnerships and strengthening trust between the countries in order to address common environmental problems.

**Water-energy-food security.** Phase I of the regional EU-funded project “Central Asia Nexus Dialogue: Fostering Water, Energy and Food Security Nexus Dialogue and Multi-Sector Investment” ([NEXUS](#)) has been completed. The participating countries have endorsed eight project ideas aimed at addressing problems in transboundary water resource management.

A number of events were held: the [3<sup>rd</sup> Executive Committee Meeting of the Nexus Regional Dialogues Program](#) to review the results of the Program Phase I implementation in five regions of the world (Niger River Basin and Senegal River Basin, Middle East and North Africa (MENA), South Africa (SADC), Latin America and Central Asia) and to discuss proposals for the Phase II of the Glo-

bal Nexus Program (June 5-6, Bonn); [study tour](#) to the Danube and Sava River Commissions (May 13-18); [4<sup>th</sup> Executive Committee Meeting](#) to review the current results of the project implementation (June 18-19, Dushanbe); [Closing conference](#) and an exhibition to present the results of the project (November 28, Ashgabat).

**Activity on water quality.** One of the few regional initiatives on the topic is a Regional Working Group on Water Quality (RGW-WQ), which was established in 2009 by UNECE and CAREC. Since 2019 the RWG-WQ is supported by the [Blue Peace Central Asia \(BPCA\) initiative](#) of SDC, where CAREC is acting as a Secretariat of the BPCA Dialogue Platform. The project aims to promote evidence-based dialogue at the political level and to ensure support of effective and sustainable transboundary water management in Central Asia. Water quality is one of the thematic directions of the work of the platform. The spotlight of the regular [meeting of RWG-WQ](#) was the presentation on the transition of Kazakhstan to the Unified System of Classification

of Water Quality in water bodies. The new classification system allows assessing the actual ecological state of the watercourse as well as setting the “targets” to achieve better water quality in a watercourse than its current state. The members of RWG-WQ have visited the new water pumping station constructed instead of the old one in order to provide water to the residents of Beshbulok and the villages in the surrounding area<sup>8</sup> and were introduced with the results of the “Rural Water Supply and Sanitation” Project<sup>9</sup> (November 11-12, Tashkent). At the [second meeting](#) the water quality experts of the two countries have reached agreement on sampling points, measurement procedures and regular exchange of results, summarized the results of implementation of the work plan for 2019 and approved a work plan for 2020-2021 (November 7-8, Nur-Sultan).

In 2019, the [Central Asian Leadership Program on Environment for Sustainable Development](#) (CALP) focused on environmental innovation and was designed for advanced mid-level professionals from Central Asian countries and Afghanistan, representing the state, non-governmental, academic and business sectors. The [10<sup>th</sup> Anniversary CALP](#) was organized together with partners in Almaty (September 16-22). The OSCE-SIWI [Regional training on water diplomacy with a special emphasis on gender-sensitive negotiation and mediation skills](#) (September 23-25) and a training seminar on legal framework of climate change adaptation and mitigation in Central Asia (September 26-28, GKU, Almaty) were organized as a follow-up to the 10<sup>th</sup> anniversary. From 2010 to 2019, about 280 people graduated from the Leadership Program.

Graduates of the CALP make significant contributions to the promotion of regional cooperation and sustainability in various sectors throughout the region.

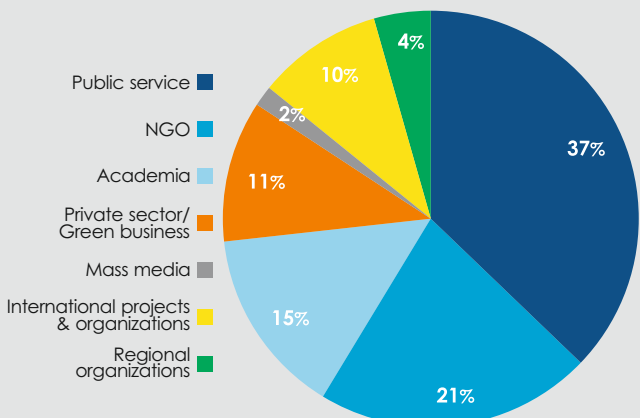
**The Network of Academic Societies (NAS)** is formed in the CA countries under CAREC’s initiative to provide exchange of academic knowledge, research development, modern methods and technologies in the field of integrated water resources management. The network includes representatives of universities and research institutes working on water management, climate change and cross-sectoral issues. In 2019, within the framework of the [Smart Waters Project](#), two meetings of NAS were organized with the support of USAID (April 2, Tashkent; November 27, Ashgabat). As a result of the meetings and group discussions, practical steps were proposed by members to strengthen the academic capacity in CA and Afghanistan: create an expert working group, which will develop an updated draft curriculum for training engineers in the field of water sector; on the basis of existing interactive map, create an online database of experts specialized in the development of academic potential in the region; finally create an electronic online library containing already existing teaching aids.

**Activity on small transboundary rivers in CA.** The establishment and support of the Small Basin Councils (SBC) on small transboundary rivers is among priority directions of CAREC. As part of the [Smart Waters](#) project, the following events were organized:

- the [second joint meeting of SBCs](#) of the Uzbek and Kyrgyz parts of the Padshaata River. The participants discussed concrete issues on water resources management of the Padshaata River. In particular, the joint repair of bearing post on the Kyrgyz side of the river, as well as installation of water measurement devices for effective and accurate data. During the demotour, representatives of SBC of the river’s Kyrgyz part learned about water management experience in Uzbekistan and support given by the government to the farmers who apply water-saving technologies (April 22-23, Namangan);

- an extended workshop of SBCs of Central Asia and Afghanistan in partnership with EC IFAS (June 25, Mary, Turkmenistan). 13 members of SBCs established under the project took part in the workshop. The participants discussed the ro-

**CALP ALUMNI NETWORK, 2010-2019**



<sup>8</sup> The [Syrdarya Water Supply Project](#) financed by the State Secretariat for Economic Affairs (SECO) of Switzerland

<sup>9</sup> SDC Project [Rural Water Supply and Sanitation](#)

le of SBC in water management and their influence on territorial development, their legal and institutional status in the countries, networking of the Councils and prospective cooperation with international partners;

- [festive event](#) dedicated to the Aspara River Day. The event aimed at strengthening the interstate cooperation, friendship, good-neighborliness and mutual trust of the riparian parties (July 4-5, Merke village, Southern Kazakhstan);

- the first joint Tajik-Kyrgyz meeting of SBCs of the Isfana River and the Aksu River (September 12, Guliston, Sogd province, Tajikistan). The aim of the meeting was to present the newly established Small Basin Councils in Tajikistan and Kyrgyzstan, discuss their activity and strengthen the interstate cooperation, good-neighborliness and mutual trust;

- the festival “Isfara River – the River of Friendship” as a celebration of the Isfara River Day and a joint Tajik-Kyrgyz meeting of the small basin councils (November 5, Isfara, Tajikistan).

In 2019, **dialogues on climate change between representatives of the MFA and CA parliamentarians** continued as part of the project [CAMP4ASB](#). In particular: the 2<sup>nd</sup> Central Asia Climate Change Conference (April 3-4, Tashkent) to discuss next steps in developing the dialogue; a meeting to learn about the results of the advanced research, exchange experience and maintain the regional dialogue on climate change adaptation and mitigation (August). A delegation from the Intergovernmental Panel on Climate Change (IPCC) informed the participants on conclusions of the Fifth Assessment Report, the Special Report on Global Warming of 1.5°C, and the Special Report on Climate Change and Land.

**Building capacities of national hydrometeorological services.** Huge capacity building efforts are made to improve the quality of meteorological, hydrological and agrometeorological forecasts. Different tools and methodologies were adapted and tested for that in the region, with following trainings and adoption of tools in routine practices of hydrometeorological centers in the CA countries. A roundtable among the heads of relevant departments of hydrometeorological centers was held and identified an urgent need in improving the forecast quality. As part of the CAMP4ASB project, a capacity building program was organized for the specialists of the CA country hydromets. Based on the trainings, the KazHydromet specialists were able to adapt a hydrological model for ten-day forecasting with good reliability (up to 86% in some rivers).

Source: CAREC







