













Regional Workshop "International experience related to transboundary water allocation and prospects for the development of cooperation on the joint use of water resources in Central Asia"

2-3 November 2022, Astana, Kazakhstan

OUTCOME DOCUMENT

On November 2-3, 2022, Regional Workshop "International experience related to transboundary water allocation and prospects for the development of cooperation on the joint use of water resources in Central Asia" was held in Astana. The workshop was organized by the International Water Assessment Centre (IWAC) and the Finnish Environment Institute (SYKE) under the auspices of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan and with the financial support of the Ministry of Agriculture and Forestry of Finland, the Swiss Blue Peace Central Asia initiative.

The purpose of the workshop was to assist in the study and application of international experience in transboundary water allocation, summarized in the Handbook on Water Allocation in a Transboundary Context ¹(hereinafter referred to as the Handbook), to discuss the possibility of applying this international experience and the principles discussed in it in Central Asia, as well as to identify prospects for the development of cooperation on the joint use of water resources in the region.

The workshop was attended by officials representing the water sector and the environment, national experts involved in the process of water resources management in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, as well as representatives of regional and international organizations.

The workshop program consisted of an opening session, five thematic sessions, group discussions and a final session. The first part of the workshop was devoted to the study and application of experience of water allocation in a transboundary context, the second part was devoted to the discussion of issues of strengthening regional cooperation on the joint use of water resources in Central Asia, including cross-sectoral opportunities (water-food-energyecosystems nexus).

Mr. Serikkali Mukatayev, Vice Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, Ms. Soili Mäkeläinen-Buhanist, Ambassador of Finland to Kazakhstan, Mr. David Grichting, Ambassador of Switzerland to Kazakhstan, and, in the form of a video message, Ms. Terkhi Hakala, Special Representative of the European Union in Central Asia addressed the participants of the workshop with welcoming words.

In the first part of the workshop, the participants listened to and discussed the following presentations:

Session 1. Sustainable and Equitable Water Allocation in Transboundary Context

- Global Handbook on Water Allocation in Transboundary Context, Ms. Iulia Trombitcaia, Environmental Affairs Officer, UNECE Environment Officer;

¹ The Handbook on Water Allocation in a Transboundary Context (UNECE, 2021), available at: https://unece.org/info/publications/pub/363010

- Possibilities and limitations of water allocation, linkages to broader alternative approaches, Ms. Annukka Lipponen, Chief Specialist on Water Resources Management, Ministry of Agriculture and Forestry, Finland;
- Mechanisms and tools for water allocation and operationalizing arrangements, Ms. Suvi Sojamo, Senior Scientists, Finnish Environment Institute SYKE, Finland;

Session 2. Existing practice of water allocation in Central Asia

- Existing practice in the sphere of the joint use of transboundary waters in Central Asia and common approaches to water allocation, Ms. Mehrangez Safarova, Specialist of the Analytical Department of the IFAS Executive Committee;
- Mr. Daniyar Sharip, Head of the Division of Transboundary Rivers of the Department of Transboundary Rivers of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan;
- Ms. Gulmira Satymkulova, Head of the Kyrgyz part of the Secretariat of the Chu-Talas Water Commission of the Water Resources Service of the Kyrgyz Republic;
- Mr. Idibek Mahmayusufzoda, Head of the Department of Water Resources and Cadastre of the State Institution "TajikNiGiM" under the Ministry of Energy and Water Resources of the Republic of Tajikistan;
- Mr. Amansahedov Merdan, Chief Specialist of the Water Use Department of the Department of Digital Technologies and Information Security of the State Committee for Water Resources of Turkmenistan.

Session 3. International practice of water allocation in transboundary basins: case studies

- Hungary's cooperation and the Danube Basin: water balance, progressive work on water scarcity, Mr. Péter Kovács, Head, River Basin Management and Water Protection Department, Ministry of Interior, Hungary;
- Dispute resolution mechanism, Ms. Iulia Trombitcaia, Environmental Affairs Officer, UNECE;
- Ecological-reproductive release on the Dniester, Ms.Tamara Kutonova, Environmental Affairs Officer, UNECE;
- Finland's transboundary water cooperation, Ms. Annukka Lipponen, Chief Specialist on Water Resources Management, Ministry of Agriculture and Forestry, Finland.

Session 4. "Group discussions: international practice and lessons learned in the field of water allocation in a transboundary context"

The workshop participants were divided into groups and discussed the situation and possibilities for improving water management cooperation in Central Asia in the light of international practice and lessons learned in the field of water allocation in a transboundary context, using the main findings of the Handbook on water allocation in a transboundary context and Brochure on water allocation in a transboundary context of the Eurasian region². The conclusion of the group discussions are in the annex 2.

In the second part of the seminar, the participants heard and discussed the following reports:

Session 5. Application of water-food-energy-ecosystems nexus approach to use of water resources in Central Asia

- Promotion of nexus approach in the Central Asian region, Ms. Tais Reznikova, CAREC Water Initiatives Support Program Manager;

² Water resources allocation in a transboundary context to strengthen water cooperation between the countries of Eurasia (Nursultan, Kazakhstan, 2021), available at: https://www.iwac.kz/index.php/en/news/216-brochure-on-water-resources-allocation-in-a-transboundary-context

- A water-food-energy-ecosystems nexus approach to water management and transboundary cooperation the UNECE activities, Ms. Iulia Trombitcaia, UNECE Environment Officer, with input on Syrdarya assessment by Ms. Annukka Lipponen, Chief Specialist on Water Resources Management, Ministry of Agriculture and Forestry, Finland;
- "Energy, Water and Land-use Nexus approach for strengthening resource security in Central Asia An overview of the upcoming IKI programme", Mr. Matthew Griffiths, Senior Program Manager, OECD Environment Directorate;

Session 6. Strengthening regional cooperation on joint use of water resources in Central Asia between different sectors

- Blue Peace Central Asia Initiative, Ms. Tais Reznikova, Project Manager, Blue Peace Central Asia Secretariat, CAREC;
- Organizational forms and financial mechanisms of coordination of interaction on water and energy in Central Asia: history, current state and best practices, Mr. Sherzod Muminov, Head of Scientific and Analytical Department of Regional Water Management, SIC ICWC;
- Innovative approaches to promote the WEFE Nexus to strengthen regional cooperation, Ms. Ekaterina Strikeleva, Head of the Capacity Development and Education Program of the USAID Regional Water and Environment Project;
- Central Asia: Shared Water Resources, Mr. William Young, Lead Water Specialist of the World Bank.

At the final session "Needs and Opportunities for Strengthening Cooperation in Central Asia", plenary discussions were held on useful directions and actions for the development of regional cross-border cooperation in Central Asia.

As a result of the discussions, the participants of the workshop concluded the following:

- 1. expressed gratitude to the Ministry of Agriculture and Forestry of Finland, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, the Finnish Environment Institute, the Swiss Agency for Development and Cooperation, the United Nations Economic Commission for Europe and the International Water Assessment Center for holding the Regional workshop;
- 2. recognized the relevance of studying international experience in water resources allocation for the development of joint actions and a common vision for the use of water resources in Central Asia;
- 3. noted, firstly, changes in hydrological conditions and water needs that require a joint assessment of their dynamics; secondly, the need to develop transparent data and information exchange, automated monitoring and modeling; thirdly, the need to develop joint scenarios for the likely future, taking into account climate change;
- 4. recommended the governments of the countries of Central Asia to begin joint development of an intersectoral strategy that provides for the rational and efficient use of water resources in the region, taking into account international experience in the field of water resources allocation, economic mechanisms, as well as an intersectoral nexus approach, socioeconomic and environmental needs for water;
- 5. noted the need to use the Handbook on Water Allocation in a Transboundary Context to the Water Convention as a methodological tool for the development and complementing/improving of transboundary level allocation or broader cooperation arrangements;
- 6. emphasized the need to take into account various national and regional water management and energy interests of the countries of Central Asia when developing new agreements;
- 7. noted the need to conduct capacity building activities on financial instruments and mechanisms of transboundary (interstate) water and energy cooperation;

- 8. noted the need to implement climate change adaptation measures in Central Asia, including at the river basin scale;
- 9. invited the governments to consider and explore possibilities of climate financing and other innovative financing for climate relevant measures in water management and use;
- 10. requested international organizations and partner countries to assist the countries of Central Asia in developing a joint mechanism for the use of water and energy resources, including holding a series of technical meetings for countries with the participation of representatives from the water and agriculture, economics and finance, environment, and energy sectors, as well as other stakeholders.

List of Participants

№	Participant		
	Kazakhstan		
1.	Mr. Serikali Mukatayev		
	Vice-Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan		
2.	Mr. Daniar Sharip		
	Head of Division for Transboundary Rivers, Transboundary Rivers Department, Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan		
3.	Ms. Dana Agybaeva		
	Chief Expert of the Department of State Metrology and Analytical Control, Committee for		
	Environmental Regulation and Control of the Ministry of Ecology, Geology and Natural		
1	Resources of the Republic of Kazakhstan		
4.	Ms. Kalamkas Duzbaeva Head, of Division, for Transhoundary Piyara, International Legal Department of the		
	Head of Division for Transboundary Rivers, International Legal Department of the Ministry of Foreign Affairs of the Republic of Kazakhstan		
5.	Mr. Mukhtar Zhakenov		
J.	Head of Transboundary Rivers Division, JSC Foreign Policy Research Institute under the		
	Ministry of Foreign Affairs of the Republic of Kazakhstan		
6.	Mr. Nurlan Atshabarov		
	Chairman of the Association of Legal Entities «Association of Water Management of		
	Kazakhstan»		
	Kyrgyzstan		
7.	Ms. Gulmira Satymkulova		
	Head of the Kyrgyz part of the Secretariat of the Chu-Talas Water Management		
_	Commission of the Water Management Service of the Kyrgyz Republic		
8.	Mr. Bekzhan Mamytov		
	Chief Specialist of the Department of Water Resources of the Ministry of Agriculture of		
9.	the Kyrgyz Republic Ms. Asel Raimkulova		
9.	Head of the Department of Water Resources Protection,		
	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz		
	Republic		
10.	Mr. Taalaibek Bozgunchiev		
	Chief Specialist of the Department of Water Resources Protection, Ministry of Natural		
	Resources, Ecology and Technical Supervision of the Kyrgyz Republic		
	Tajikistan		
11.	Mr. Idibeg Makhmayusufzoda		
	Head of Water Resources and cadaster Department in the State Institution of		
	"TajikNiiGiM" under the Ministry of Energy and Water Resources of the Republic of		
	Tajikistan		
12.	Mr. Yarash Pulatov		
	National Expert, Institute of Water Problems, Hydropower and Ecology of the Academy		
12	of Sciences of the Republic of Tajikistan		
13.	Mr. Khairullo Ibodzoda		
	Ambassador Extraordinary and Plenipotentiary of the Republic of Tajikistan to the		
	Republic of Kazakhstan		

14.	Ms. Gulbonui Fazliddin Third Secretary of the Embassy of the Republic of Tajikistan in the Republic of	
	Kazakhstan	
Turkmenistan		
15.	Mr. Amansakhedov Merdan	
	Chief Specialist of the Water Management Department of Digital Technologies and Information Security, State Committee of Water Management of Turkmenistan	
Uzbekistan		
16.	Mr. Khamza Aminov	
	Deputy Director of the Research Institute of Ecology and Environmental Technologies at the State Committee of Ecology of Uzbekistan	
	Finland	
17.	Ms. Soili Mäkeläinen-Buhanist	
	Finland's Ambassador in Kazakhstan	
18.	Mr. Antti Rautavaara	
	Special Envoy for Water at Ministry for Foreign Affairs of Finland	
19.	Ms. Annukka Lipponen	
	Chief Specialist on Water Resources Management Ministry of Agriculture and Forestry of Finland	
20.	Ms. Suvi Sojamo,	
20.	Senior Scientists, Finnish Environment Institute SYKE, Finland	
21.	Ms. Emma Hakala	
	Senior Research Fellow,	
	Finnish Institute of International Affairs, FIIA	
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22.	Mr. Péter Kovács	
	Head of the River Basin Management and Water Protection Department of the Ministry of Interior of Hungary	
	Switzerland	
23.	Mr. David Grichting	
	Ambassador of Switzerland in Kazakhstan	
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24.	Mr. Sherzod Muminov	
	Head of the Scientific and Analytical Department of the Regional Water Management of	
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25.	Ms. Mehrangez Safarova	
26.	Specialist of the Analytical Department of the IFAS Executive Committee	
20.	Mr. Bolat Bekniyaz Director of the Ecxecutive Directorate of the International Fund for saving Aral Sea in the	
	Republic of Kazakhstan	
27.	Ms. Tais Reznikova	
	CAREC Water Initiatives Support (WIS) Program Manager	
International Organizations		
28.	Ms. Terhi Hakala	
	European Union's Special Representative to Central Asia	

29.	Ms. Iulia Trombitcaia	
	Environmental Affairs Officer, UNECE	
30.	Ms.Tamara Kutonova	
	Environmental Affairs Officer, UNECE	
31.	Mr. Matthew Griffiths	
	Senior Program Adviser, Green Growth and Global Relations Division, OECD's	
	Environment Directorate	
32.	Mr. Alexandr Nikolayenko	
	Senior Regional Adviser, Green Central Asia - Transboundary dialogue on climate,	
	environment and security in Central Asia and Afghanistan	
33.	Mr. William Young	
	Lead Water Resources Specialist, World Bank	
34.	Ms. Yekaterina Strikeleva	
	Chief of Party at USAID Regional Water and Vulnerable Environment Activity	
35.	Mr. Lenka Thamae	
	Executive Secretary of the Orange-Senqu River Commission (ORASECOM)	
36.	Mr. Kenzhekhan Abuov	
	Project Officer, ADB in Kazakhstan	
37.	Ms. Bibigul Isbair	
	Senior Project Assistant, Department of Economics and Ecology OSCE Program Office	
	in Astana	
Organizers		
20		
38.	Ms. Tea Törnroos,	
20	Finnish Environment Institute SYKE, Finland	
39.	Ms. Zhanar Mautanova	
40	Director of the International Water Assessment Centre	
40.	Mr. Serik Akhmetov	
4.4	Deputy Director of the International Water Assessment Centre	
41.	Ms. Kulpash Zhaken	
40	Chief Expert of the International Water Assessment Centre	
42.	Ms. Arailym Alimusina	
	PR and Administration Specialist of the International Water Assessment Centre	

Conclusions of the group discussions

Group 1. Legal and institutional framework of water allocation and joint use of water resources in Central Asia:

Question 1. What reforms are needed to improve the functioning of the existing institutions of regional cooperation in the Aral Sea basin to guarantee the participation of all countries in their work and to effectively engage with the energy sector?

Financing of transboundary water cooperation in Central Asia faces serious challenges. In this regard, it is necessary:

- to consider the possibility of reforms that provide for sustainable funding of activities and the work of the commission in the Chu-Talas Basin,;
- to introduce new mechanisms for financing water cooperation, attract public-private partnerships, consider the possibilities of innovative financing and the use of environmental compensation mechanisms;
- to consider the introduction of market and economic mechanisms for financing cooperation,
- to consider the introduction of a more complete water-energy exchange between countries, which is already being implemented on the example of some countries;
 - to increase the political will of the countries to increase cooperation in the region;
- to achieve the required level of cooperation, it is necessary to apply the principle of mutual benefit;
- to develop cooperation on the basis of international experience and in accordance with international water law.

Question 2. What is the current status of functioning of the basin water organizations (BWO) for the Amudarya and Syrdarya and does their functioning need to be improved? What role the BWOs can play in operationalizing the IWRM at the transboundary level?

- Since the BWOs functioning as executive bodies are only funded by shared budget of the countries, the creation of a project management center within the BWOs could be considered, which could attract additional funding to the available resources;
- The problem of water allocation and implementation of the nexus approach should be considered in developing the participation of the energy and industry sectors.

Question 3. How to increase the effectiveness of the implementation of agreements on the protection and use of water resources in Central Asia? How to ensure their implementation?

- different models of formalization could be considered, for example, in the Sava River Basin, where one agreement with several protocols is applied, or the possibility of developing one long-term agreement covering all aspects of cooperation;
- it is necessary to develop and adopt new rules for the operation of reservoirs and other structures in the region, which could solve the existing problems;
- it is necessary to work on improving the existing agreements in the region in order to overcome the existing obstacles in regional cooperation.

Question 4. What regional strategies/strategy documents can contribute to long-term planning of water resources management in Central Asia? What other measures may be required?

- consider the possibility of developing a modern unified water balance of the main river basins of Central Asia based on the current and future development of the economy;
 - consider the possibility of concluding agreements on each cascade of reservoirs;
- when discussing issues of cooperation on water and energy resources in long-term planning, it is necessary to take into account the role of hydropower as a non-fossil energy source in the context of the climate commitments of the countries of Central Asia, as well as the possibility of establishing a single electric power grid in Central Asia.

Group 2. Technical aspects of water allocation and joint use of water resources in Central Asia:

Question 1. How to strengthen cooperation on the use of the regional information system on water resources of the Aral Sea Basin?

There are various information systems in the region that contain official data from the countries, however, for systematic cooperation in this area, it is necessary to develop and conclude an interstate agreement on the exchange of information in the basin of the Amudarya and Syrdarya rivers;

- it is necessary to modernize hydrological stations and posts, replace worn-out systems with new ones, and introduce automated water accounting to ensure the collection and transmission of information, the exchange of reliable information.

Question 2. How to improve methods for assessing and forecasting future water needs, taking into account climate change?

- it is necessary to solve the problem of assessing and forecasting the use of water resources using reliable and up-to-date-data, new technologies, modern models, and innovative approaches;
- it is necessary to develop a unified regional methodology, water quality standards and norms, to develop an optimal and acceptable forecasting model for all countries.

Question 3. How to better incorporate management of climate variability and include measures to ensure adaptation to climate change in planning and allocation of water resources at the regional level?

- based on the national reports and plans of countries on climate change, it is necessary to develop regional measures for climate change adaptation, including at river basin scale, which will help harmonizing national assessments and assessing the current situation in the region;

Question 4. How do the Amudarya and Syrdarya basin water management organizations function? Is it necessary to improve their work? What role can BWOs play in the implementation of IWRM at the transboundary level?

- it is necessary to solve the problem of financing BWOs, improve their technical base and improve their institutional framework;
- it is necessary to revise the tariffs for paying for water services based on different sector/user approaches.