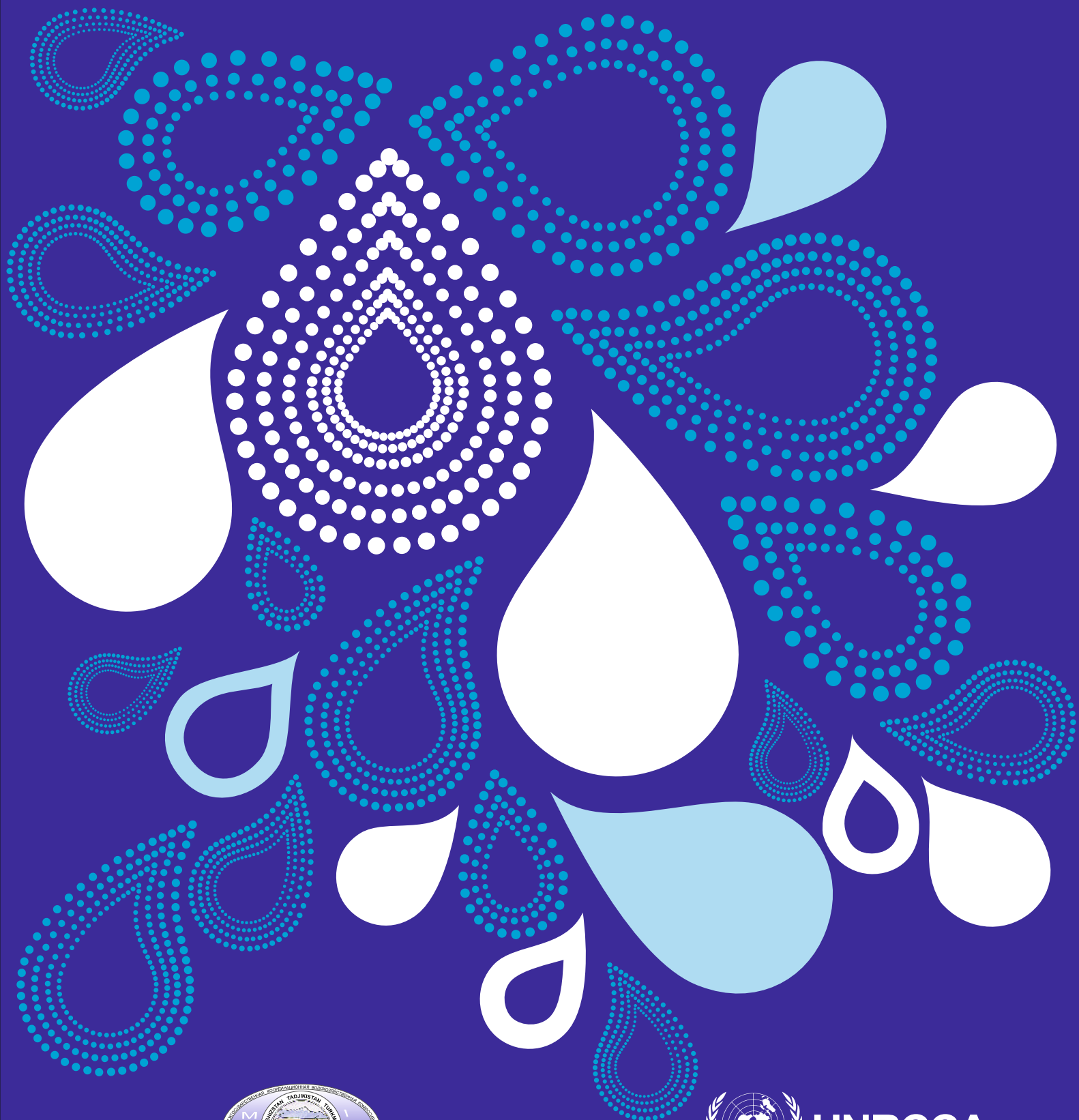


2017 WATER YEARBOOK: CENTRAL ASIA AND AROUND THE GLOBE



Tashkent 2018



UNRCCA



WATER YEARBOOK:

CENTRAL ASIA AND
AROUND THE GLOBE

2017

Under the general editorship of prof. Viktor Dukhovniy and Dinara Ziganshina

Team of authors

D.Abbasova, I.Beglov, I.Belikov, O.Borovkova, A.Galustyan, B.Gojenko, A. Degtyareva, V.Dukhovniy, D.Ziganshina, A.Nasimova, R.Sagdullaev, A.Rysbekov, Yu.Rysbekov, O.Usmanova, O.Eshchanov

Drafting group

D.Abbasova, I.Beglov, A.Nasimova, O.Usmanova

English version editing and proofreading

E.Marsakova, D.Ziganshina

Design

A. Degtyareva

Acknowledgements

This Yearbook was published thanks to contributions from numerous agencies, organizations and individuals. Special thanks are due to:

Ministries and agencies: Ministry of Agriculture of the Republic of Kazakhstan (Ye.Nysanbayev, M.Zhienbaev, D. Sagadiev), Ministry of Water Resources of the Republic of Uzbekistan (Sh.Kuchkarov, Z.Ishpulatov).

Regional organizations of Central Asia: BWO Amudarya (M.Makhramov, G.Tilyavova), BWO Syrdarya (O.Kholkhudjaev, F.Irmatov), ICSD Secretariat (B.Mamedov), Executive Directorate of IFAS in Kazakhstan (A.Kenshimov, D.Nurbaturov), Agency GEF of IFAS in Uzbekistan (V.I.Sokolov), Regional Center of Hydrology at IFAS (S.P.Shivaryova), Regional Mountain Center (I.Dairov).

Joint Commissions: CTWC Secretariat, Ministry of Agriculture of Kazakhstan (I.Akbozova), International Commission for the Protection of the Rhine (Adrian Schmid-Breton and Anna Schulte-Wuelwer-Leidig), Mekong River Commission Secretariat (Le Thi Huong Lien), Amazon Cooperation Treaty Organization (M.Apostolova).

Higher Education Institutions and Research Institutes: KazNAU (E.Kalybekova), International Education Center on safety of hydrotechnical facilities in Taraz (S.Ibatullin), KazNIIVH (T.Ibraev), Al-Farabi Kazakh National University (D.Zhusupbekov), Kazakh-German University (B.Janusz-Pawletta, A.Kumeiko), Kyrgyz-Russian Slavic University (G.Loginov), American University of Central Asia in Bishkek (Zh.Kulenbekov), National University of Uzbekistan named after Mirzo Ulugbek (G.Umurzakov), TIAME (T.Sultonov), Tajik Agrarian University (A.Salimzoda, Z.Bobokhonova), University of Central Asia (N.Pirani, M.Lalzhebaev), and Federal State Budgetary Institution "Russian Research Institute of Integrated Water Management and Protection" (N.Prokhorova).

International partners: OSCE (R. Ernst, Hans-Ulrich Ihm), UNECE (F.Bernardini, P.Mardiste), GIZ (K.Milow), SDC (A.Wehrli), World Bank (Ch.Leb), Geneva Water Hub and University of Geneva (M.Tignino), UNRCCA (N.Khudayberganov), ICID (I.Bondarik), EU-CA Platform (A.Pichugin), International Groundwater Resources Assessment Center (N.Kukurik), International Water Resources Association (C.Lattore), Rivers Without Boundaries Coalition (E.Simonov).

You can share your comments and proposals to the address: Karasu-4/11, Tashkent, Republic of Uzbekistan, 100187, or via e-mail to iskander.beglov@gmail.com

© SIC ICWC

**Published with support of the United Nations Regional Center
for Preventive Diplomacy for Central Asia**

Content

Introduction	10
Section 1. 2017 Calendar of Events	13
Section 2. Water Management Situation in the Aral Sea Basin	21
2.1. Water Management Situation in the Basins of the Amu Darya and the Syr Darya ...	22
2.2. Dynamics of Changes in the Water Surface Area of Large Aral Sea and South Preatalie	23
Section 3. IFAS and Other Regional Organizations in Central Asia	27
3.1. Executive Committee of IFAS and its Country Branches	28
3.1.1. Regional Center of Hydrology	29
3.1.2. Executive Directorate of IFAS in Kazakhstan	30
3.1.3. IFAS Agency for implementation of the Aral Sea Basin and GEF projects. ...	31
3.2. ICWC of Central Asia	32
3.2.1. ICWC meetings	32
3.2.2. Jubilee events on the occasion of 25 th Anniversary of ICWC	33
3.2.3. ICWC working groups	34
3.2.4. Activities of ICWC executive bodies in 2017	34
3.3. ICSD of Central Asia	39
3.3.1. ICSD meetings and activities of executive bodies in 2017	40
3.4. Regional Environmental Center for Central Asia (CAREC)	41
3.5. The platform of interaction between regional organizations	42
3.5.1. Meetings of regional organizations in 2017	42
3.5.2. Assessment of opportunities and needs of the CA regional organizations for capacity building activities.	43
Section 4. Bilateral water cooperation between the states in Central Asia	45
4.1. Kazakhstan – Kyrgyzstan	46
4.2. Kazakhstan – Turkmenistan	47
4.3. Kazakhstan – Uzbekistan	47
4.4. Kyrgyzstan – Tajikistan	48

4.5. Kyrgyzstan – Uzbekistan	48
4.6. Tajikistan – Turkmenistan	49
4.7. Tajikistan – Uzbekistan	49
4.8. Turkmenistan – Uzbekistan	49
Section 5. Key water developments in the countries of Central Asia	51
5.1. Kazakhstan Overview	52
5.2. Kyrgyzstan Overview	57
5.3. Tajikistan Overview	64
5.4. Turkmenistan Overview	70
5.5. Uzbekistan Overview	77
Section 6. United Nations and Its Specialized Agencies	85
6.1. General Assembly	86
6.2. Security Council	89
6.3. Secretariat	91
6.4. UN Development Program	91
6.5. UN-Water	93
6.6. Economic Commission for Europe	94
6.7. Economic and Social Commission for Asia and the Pacific	95
6.8. World Meteorological Organization	95
6.9. International Fund for Agricultural Development	96
6.10. United Nations Educational, Scientific and Cultural Organization	97
6.11. Food and Agriculture Organization	97
6.12. United Nations Regional Center for Preventive Diplomacy for Central Asia	98
6.13. International Law Commission	99
6.14. International Court of Justice	99
Section 7. International Water Organizations and Initiatives	103
7.1. World Water Council	104
7.2. International Commission on Irrigation and Drainage	104

7.3. International Network of Basin Organizations	105
7.4. Global Water Partnership	106
7.5. International Water Resources Association.....	107
7.6. Stockholm International Water institute and World Water Week	108
7.7. High Level Panel on Water	108
7.8. Global High-level Panel on Water and Peace	110
7.9. Geneva Water Hub	111
7.10. OECD Initiative on Water Governance	112
Section 8. Activity of International Partners in Central Asia	115
8.1. World Bank	116
8.2. German Society for International Cooperation	116
8.3. Swiss Agency for Development and Cooperation	117
8.4. United State Agency for International Development	117
8.5. Organization for Security and Co-operation in Europe	118
8.6. European Union – Central Asia: Environment and Water Cooperation Platform ...	119
Section 9. Water Education	121
9.1. Higher Education Institutions and Professional Development Centers	122
9.1.1. Kazakhstan	122
9.1.2. Kyrgyz Republic	124
9.1.3. Tajikistan	125
9.1.4. Uzbekistan	126
9.2. Regional HEIs and Professional Development Centers	127
9.3. Professional Development Courses and Trainings	128
9.4. Interactive Map on Water Sector Professional Development in the Central Asian Countries.	128
Section 10. Science and Innovations	131
10.1. Innovations in 2017	132
10.2. An Interactive Map of Best Practices on Water, Land and Energy Use and Environmental Protection in Central Asia	137

Section 11. Key Water Developments	139
11.1. America	140
11.2. Africa	140
11.3. Asia	141
11.4. Europe	148
11.5. Middle East	151
11.6. Australia	152
11.7. Rivers of the world and nature rights	153
Section 12. Thematic Reviews	157
12.1. China's Belt and Road Initiative: Green Developments and Water- Management Projects	158
12.1.1. Green directions of the BRI	158
12.1.2. BRI structure and place of water relations and projects in this structure	160
12.2. Climate Change	167
12.3. Sustainable Development Goals: Reviewing Progress	170
Section 13. Publications in 2017	175
Section 14. Central Asia Water Awards	183
Section 15. Global Risks 2018	189
Section 16. 2018 Calendar of Events	193
List of Abbreviations	197

Introduction

We are delighted to introduce this first edition of the *Water Yearbook: Central Asia and Around the Globe*, which covers key water related events and developments in 2017.

The idea of such a yearbook originated during the preparation to the 25th anniversary of the Interstate Commission for Water Coordination (ICWC) in Central Asia. It became apparent that despite regular issue of ICWC newsletters, much of the Commission's activity and achievements remained in memories of its veterans only and had not been properly documented. We thought that it would be instrumental for all of us and especially for future generations to have an annual publication, where one may trace the water history of our countries against the background of global trends and developments.



Another motive for initiation of this work was that the year 2017 turned to be very rich for memorable events.

Besides the 25th jubilee of ICWC, last year we celebrated 30th anniversary of the Basin Water Organization Amu Darya and the Basin Water Organization Syr Darya, 15 years since the establishment of the Global Water Partnership (GWP) for Central Asia and Caucasus, 10th birthday of the Chu-Talas Commission, and 10th anniversary of the UN Regional Centre for Preventive Diplomacy for Central Asia.

The year 2017 was marked by enhanced cooperation in the Central Asian region. A new direction for Uzbekistan's foreign policy towards closer relations with its neighbors opened new horizons for cooperation. In the course of the year the leaders of the Central Asian countries had frequent and productive meetings that addressed complex issues, including demarcation of boundaries and reinforcement of water relations (see [Bilateral water cooperation between the states in Central Asia](#)).

The Heads of Central Asian states made statements from a high tribune of the UN about their concerns and priorities, with the water issues taking central place (see [General Assembly](#)). Bilateral working groups (or commission) continued collaborating on water matters between Kazakhstan and Uzbekistan, Kazakhstan and the Kyrgyz Republic, Tajikistan and Uzbekistan, and Uzbekistan and Turkmenistan.

ICWC members took active part on different platforms. The Kazakhstan's Vice-minister of Agriculture Mr. Nysanbayev participated in the work of the Global High-level Panel on Water and Peace (see [Global High-level Panel on Water and Peace](#)). First Deputy Minister of Energy and Water Resources of Tajikistan Mr. Rahimzoda was appointed Special Presidential Envoy for the High-level Panel on Water (see [High Level Panel on Water](#)).

Two members of ICWC have been awarded by state decorations. The Uzbekistan's Deputy Minister of Agriculture and Water Resources Mr. Khamraev was awarded the title of Honored Irrigator of the Republic of Uzbekistan. Director General of the Department for Water Resources and Land Reclamation of Kyrgyzstan Mr. Tashtanaliyev received an honorary order "Dank".

On the occasion of the 25th jubilee of ICWC, six veterans of the Commission were awarded the title "Honorary member of ICWC" and more than 100 persons received awards for diligent work and significant contribution to international and regional water cooperation (Section [Central Asia Water Awards](#)).

The Yearbook also contains information on water related activities of international organizations and development partners in Central Asia (Section [Activity of International Partners in Central Asia](#)). It is our hope that this collection will contribute to better coordination of their efforts.

In addition to major developments in Central Asia, the Yearbook highlights key developments around the globe to give sight of general trends, challenges and innovations in water management and related spheres (Section [Innovations in 2017, Key Water Developments](#)). Key events and activities

of international water organizations, such as the International Commission on Irrigation and Drainage (ICID), GWP, World Water Council, International Network of Basin Organizations (INBO) and many others are presented in Section [International Water Organizations and Initiatives](#).

The content of the Yearbook covers wider than only water issues, given that water should be viewed against the background of general development in the countries and in the context of integration processes. For example, Eugene Simonov's review of the China's Belt and Road Initiative highlights possible direct or indirect impacts of this initiative on water management and use in Central Asia. Climate change and progress in achieving the SDGs also were spotlighted under separate thematic sections due to their particular relevance and importance (Section [Thematic Reviews](#)).

However, this publication does not pretend to be exhaustive. This is only first trial to highlight key water-related events and developments of the past year in single and easy to read format.

Materials that fed the publication were collected and compiled from official sites of public bodies, international organizations and information agencies. Those were supplemented by SIC's analytical reviews, web searches and inputs from individual persons and organizations in response to our requests.

In this context, the authors would like to express their utmost gratitude to all organizations and individuals who responded to our request for information.

We hope that our collective work will give valuable insights into the historical origins and context of regional developments in the water sphere.

We would appreciate your comments and additions and rely on your collaboration in the future.

Professor Viktor A. Dukhovniy
March 2018