Interstate **C**ommission for **W**ater **C**oordination in **C**entral Asia	**BULLETIN № 4 (75)**	December 2017

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SPEECH OF PRESIDENT OF THE KYRGYZ REPUBLIC H.E. ALMAZBEK ATAMBAYEV AT 72ND UN GENERAL ASSEMBLY

(extract)

[…]

Climate change is a particular menace to mountainous countries, such as Kyrgyzstan. The climate change has impact on all sectors of economy in the Republic and cause substantial damage through more frequent natural disasters, such as landslides, mudflows, floods, and avalanches.

Of particular concern is intensive melting of Kyrgyz glaciers that are natural reservoirs and sources of freshwater in Central Asia and all over the world.

As forecasted, by 2025 the total glacial area in the Republic could drop by 30-40% on average and, consequently, Central Asian rivers could lose 25-35% of water.

And, by 2100, glaciers in the Kyrgyz Republic could disappear on the Earth. Therefore, our country stands for implementation of joint projects for preservation of glaciers in mountain ecosystems of upstream countries.

The fundamental nature of transition to sustainable development is survival of humankind and conservation of the biosphere. Various rare wildlife species and biodiversity of our mountain ecosystems have become endangered due to climate change.

[…]

One of the main factors for prosperity in Central Asia would be the mutually beneficial use of water and energy resources.

The Kyrgyz Republic consistently advocates the origin and implementation of economic mechanisms for water use in the region.

The limited nature of water resources sooner or later brings us to the understanding that water is an economic resource that requires reasonable use.

We would like to particularly note that the matters of water use in Central Asia can and must be resolved by the countries in the region themselves via open dialogue, with account of the interests and needs of all concerned parties.

It is unacceptable that international and regional organizations impose upon the countries of Central Asia their approaches and their ways for building cooperation in this sphere.

Distinguished President,

The problem of management of uranium tailing sites inherited from the former Soviet Union is a significant threat to the entire region, particularly as many of them

are located near water resources.

In the event of an accident at a tailing site, pollution of rivers in the region by highly toxic substances would lead to massive environmental and humanitarian consequences that would imperil the lives of millions of people and imperil socio-economic development of all the Central Asian countries.

That is the reason why in 2012 my country initiated a proposal to adopt a special resolution on the matter of the uranium heritage in Central Asia. This was adopted by the UN General Assembly in 2013.

Over the past five years we made significant progress in addressing matters of radiation and environmental safety. Today we see that new resolutions are in the pipeline.

In this connection here today in New York we will be having a special meeting on this issue, and one of the initiators of this meeting was my country.

We firmly believe that this event will enable us to promote new programs and new joint measures that seek to regenerate uranium tailing sites.

[…]

http://kg.akipress.org/news:1405770/

STATEMENT BY H.E. EMOMALI RAHMON PRESIDENT OF THE REPUBLIC OF TAJIKISTAN AT THE 72nd SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

(extract)

[…]

Mr. Chairman,

Adoption of 2030 Agenda by the international community is a milestone for sustainable development and involves all sectors of society to this process.

Tajikistan over the past years made a great stride towards implementation of Sustainable Development Goals.

The Government of the Republic of Tajikistan, in cooperation with the relevant UN agencies, has developed and adopted a Mid-Term Development Strategy 2020 and National Development Strategy 2030.

The strategies have been developed in line with the Global agenda on sustainable development, and we believe that their timely and effective implementation will contribute to the achievement of the global Sustainable Development Agenda.

Tajikistan was among 44 countries, which presented their Voluntary National Review last July during the High Level Political Forum on sustainable development.

To ensure successful implementation of Agenda 2030 it is necessary to help least developed and developing countries to participate through providing support especially in the area of financial support and advanced technologies.

In our opinion, increasing Official Development Assistance still remains one of the main issues of the day.

It is worth mentioning that geographical location of the land locked developing countries and lack of access to sea pose serious obstacles to their sustainable development.

In such circumstances, these countries need much more assistance of developed countries and international financial institutions in their efforts to develop infrastructure, to improve transit transport systems, simplify trade policies and regional integration.

For this reason, joint global development requires comprehensible partnership at all levels.

In this regard, the UN bodies especially the Economic and Social Council, can and should also play an important role.

We also call on the developed countries and international structures to ensure favorable conditions for labor migrants in receiving states and support the countries of origin in creating new jobs.

We are convinced that greater focus on urgent economic, social and ecological issues would contribute to the timely implementation of 2030 Agenda.

Ladies and Gentlemen,

In this regard, the UN bodies especially the Economic and Social Council, can and should also play an important role.

We also call on the developed countries and international structures to ensure favorable conditions for labor migrants in receiving states and support the countries of origin in creating new jobs.

We are convinced that greater focus on urgent economic, social and ecological issues would contribute to the timely implementation of 2030 Agenda.

Currently, 60 percent of the Central Asia water resources are formed on the territory of Tajikistan.

This means that the continued acceleration of glaciers melting can negatively affect the process of water resources formation in the region.

In this regard, time has come for us to translate words into actions and implement the goals of the Paris Agreement.

Based on this Agreement Tajikistan is currently developing National Strategy on Adaptation to Climate Change.

In our opinion, at this stage, one of the ways to achieve the Paris Agreement goals is to adhere to the recommendation of the "pure" economy and efficient use of renewable energy sources.

In this context, we reiterate our commitment to the global initiatives "Sustainable Energy for All" and the International Decade "Sustainable Energy 2014-2024"

Mr. Chairman,

Tajikistan is strongly committed to continue its contribution to the implementation of the UN water agenda.

It is with great delight I note that in December 2016, the UN General Assembly adopted by consensus the Resolution entitled “International Decade of Action “Water for Sustainable Development, 2018-2028”.

We are confident that an implementation of the new Decade at the national, regional and international levels will contribute to the achievement of the water-related sustainable development goals and will help to preserve this invaluable resource for future generations.

This morning, we have conducted a High-level Event, entitled “Towards Implementation of the International Decade of Action “Water for Sustainable

Development", 2018-2028 at the 6 UN Headquarters, where participants exchanged their views on effective ways and mechanisms for advancement of the new International Decade and achieving the SDG-6.

Furthermore, in order to review and deliberate on proposals and adopt Action Plan for the Decade, we intend to organize on World Water Day, 22 March 2018, in New York a special event on the occasion of launching the International Decade for Action "Water for Sustainable Development, 2018-2028", and host a High-level International Conference on Water for Sustainable Development in Dushanbe next June.

We have a strong conviction that UN member states, international and regional organizations, international financial institutions, civil society, think tank organizations, women and youth will work together to implement the goals and objectives of the Decade to ensure dignified life of the people around the globe and for a better, safer and more secure life of future generations.

Thank you for your attention.

http://khovar.tj/rus/2017/09/vystuplenie-glavy-gosudarstva-emomali-rahmona-na-plenarnom-zasedanii-72-j-sessii-genassamblei-oon/

TURKMENISTAN'S INITIATIVES STATED AT THE PLENARY MEETING OF THE 72ND UNITED NATIONS GENERAL ASSEMBLY

(extract)

Turkmenistan pays special attention to preventive diplomacy and gives a high status to the activities of the United Nations Regional Center for Preventive Diplomacy for Central Asia. In this context, it is proposed at the 72nd General Assembly to consider a possibility for adoption of a resolution in support of the preventive diplomacy mechanisms for addressing the important issues of delivering peace and security.

The priority direction of the activities of Turkmenistan on the international stage will be further strengthening of partnerships for implementation of the Sustainable Development Goals (SDG). Here, the main role for formation of a platform in support of effective implementation of SDGs will be given to a Training and Methodological Center established within the Institute of International Relations.

Turkmenistan will actively participate in international efforts to deal with the most important issues of environmental protection, including management of water resources, and prevention and mitigation of natural and technogenic catastrophes.

In light of Turkmenistan's chairmanship in the International Fund for saving the Aral Sea (IFAS), it is proposed holding a Summit in 2018 in Turkmenistan, namely the Summit of the Heads of Founding States of IFAS and including participation of the UN specialized structures, such as the UNDP, UNEP, and the UN Regional Center for Preventive Diplomacy for Central Asia .

ADDRESS BY H.E. SHAVKAT MIRZIYOYEV PRESIDENT OF THE REPUBLIC OF UZBEKISTAN AT THE 72ND SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

(extract)

[…]

Ladies and Gentlemen,

Today, Uzbekistan considers the region of Central Asia to be as the main priority of its foreign policy.

And this is a conscious choice. Being in the heart of Central Asia, Uzbekistan is keenly interested in the region to become a zone of stability, sustainable development and good-neighborliness.

A peaceful and economically prosperous Central Asia is our most important goal and key task.

Uzbekistan is determined to engage in dialogue, constructive interaction and strengthening the good-neighborliness.

We stand ready for reasonable compromises with the countries of Central Asia on all issues without exception.

Thanks to joint efforts in recent months, the level of political confidence has significantly increased in the region.

Fundamentally important decisions on many issues were found.

Signing the Treaty on the State border between Uzbekistan and Kyrgyzstan in early September this year became a truly landmark event.

A breakthrough in this very sensitive issue achieved for the first time in 26 years became possible thanks to political will demonstrated by parties and the readiness to find mutually acceptable solutions.

In a word, absolutely new political atmosphere was created in the region in a short period of time.

I believe that holding the regular consultation meetings of the heads of Central Asian states would facilitate the consolidation of this trend.

We intend to discuss the fundamental problems of the region at the High-Level International Conference "Central Asia: One Past and Common Future, Cooperation for Sustainable Development and Prosperity" to be held under the aegis of the United Nations in Samarkand in November.

Based on its results, we intend to make a proposal on the adoption of a special resolution of the General Assembly in support of the efforts of the states of Central

Asia in terms of ensuring security and enhancing regional cooperation.

We count on the support of this proposal by the leadership of the United Nations and the international community.

Distinguished Mr. Chairman,

Speaking about the problems of ensuring security and stability in Central Asia, one cannot overlook such an important issue as the joint use of the region's shared water resources.

We fully share the position of the UN Secretary-General that "the problems of water, peace and security are inextricably linked".

I am convinced that there is no alternative to addressing the water problem other than equally taking into account the interests of the countries and nations of the region.

Uzbekistan supports the draft conventions on the use of water resources of the Amudarya and Syrdarya river basins developed by the United Nations Regional Center for Preventive Diplomacy.

I would like to once again draw your attention to one of the most acute ecological problems of our time - the Aral Sea catastrophe.

I am holding the map of the Aral tragedy in my hands. I believe, comments are unnecessary here.

Overcoming the consequences of desiccation of the sea requires today the active consolidation of international efforts.

We stand for full implementation of the special UN Program to provide effective assistance to the population affected by the Aral Sea crisis adopted this year.

[…]

http://www.president.uz/ru/lists/view/1063

SIC ICWC INITIATES A WATER SAVING CAMPAIGN

Press-conference was held on the 28th of September 2017 at the Scientific-Information Center of the Interstate Commission for Water Coordination in Central Asia (SIC ICWC) for Uzbek mass media.

The conference was aimed to enhance relationship with the media for raising awareness about water saving.

In his welcome speech, Director of SIC ICWC Prof. V.Dukhovniy stressed critical challenges facing all Central Asian countries in the context of growing water scarcity.

The observed rapid growth of population in the Aral Sea basin, growing demand for agricultural production, and Afghanistan's intentions to increase its water diversions from the Amudarya River (from the present 2.2 km^3 a year to 6 km^3) under conditions of changing climate lead to lower water supplies and call for cardinal revision of approaches to water management and use.

He mentioned Israel as a positive example of sound water management under conditions of scarce water, where water saving is practiced as a well-established system with strict government control rather than as one-time effort. One major aspect of making good use of water and all-round conservation of water in Israel, along with application of advanced methods and automation of agricultural management, is education of population so that the latter respects water and values water.

In 1998, a strategy for efficient water use was elaborated together with SIC ICWC and approved in March by the Board of the International Fund for Saving the Aral Sea (IFAS). In September 1998, the Board of IFAS returned to this topic and, while taking notice of ICWC's work for reduction of water wastage in the Aral Sea Basin, recommended intensive efforts in this direction. Unfortunately, this decision has not been fulfilled in full.

There are still problems caused by obsolete irrigation infrastructure, outdated irrigation technology and technique, poor water monitoring, etc.

Nevertheless, the Central Asian countries, particularly Uzbekistan have experience and knowledge on reduction of water wastage, optimization of water use, and improvement of water productivity. Those include agricultural diversification (re-orientation). For example, irrigated cropping patterns have changed by reducing the areas under water-intensive rice and cotton and extending the areas under fruits and grapes, wheat and other low water consuming crops. Particular attention is paid to regulatory and legal base. Incentives are provided for farmers.

Other examples are the modernization of infrastructure, institutional changes, adoption of water-conservation technologies, etc.

Prof. Dukhovniy showed as an example the positive results of the project "Integrated Water Resources Management in the Fergana Valley" implemented in Uzbekistan, Tajikistan, and Kyrgyzstan in 2001-2012 with the support of the Swiss Agency for Development and Cooperation.

However, for the desirable results to be achieved it is not sufficient to have fragmented best practices. The whole set of measures, with strict control over the use of water and its countrywide monitoring is needed. It is necessary to adopt economic mechanisms for regulation of water use and ensure water re-use. In addition, one should pay attention to implementation of up-to-date irrigation techniques, including drip irrigation, flexible hose irrigation. Undoubtedly, implementation of modern technologies and techniques is costly but this will contribute substantially to saving of water.

SIC ICWC expert N.Mirzaev in his presentation described in details the vision of main institutional aspects of water saving in Uzbekistan. He underlined that thanks to numerous projects and measures undertaken by the Government of Uzbekistan, since 1991 water diversions have been decreased (from 64 to 51 km^3, and accordingly for irrigation from 59 to 43 km^3), and unit irrigation water diversion has also decreased to 10,300 m^3/ha on average.

It should be noted that the reduction of unit irrigation water delivery is achieved largely through re-use of return water rather than by saving water on the field. Hence, it is not the case of quantity of water delivered to the field but rather application of such approaches and tools that ensure all-round water re-use and lowering of wastage during transportation of water.

Water saving, as a rule, is induced now. Additional important incentives are needed so that water saving become voluntary, i.e. when water user chooses a water-saving approach even if water is not scarce.

One successful step towards all-round water saving is an effective system of incentives and rules that shape individual behavior causing people to do things that otherwise they will not do. One of effective measures is financial one that implies penalties or money rewards that impel to save water resources everywhere. Special attention should be paid to encouraging the staff of water operators and water user associations to ensure sound water management and give bonuses to farmers who adopt advanced irrigation methods, such as drip irrigation.

In addition to available potential, scientific knowledge and expertise in the Republic, it is very important and of priority to change minds and attitudes towards water among the general public and decision makers in order to solve existing problems and improve water governance.

Only deeper understanding of the value of water and the importance of water saving both among managers at different levels and population and the general determination and joint efforts would allow us to meet the current water-related challenges and risks.

The Scientific-Information Center of ICWC appeals to all media representatives

to unite and extend their outreach activity among the general public aimed at rearing careful attitudes towards water since our futures depend on this!

DECLARATION ON STRATEGIC PARTNERSHIP, FRIENDSHIP, NEIGHBORLY RELATIONSHIP AND CONFIDENCE BETWEEN THE REPUBLIC OF UZBEKISTAN AND THE KYRGYZ REPUBLIC

The Republic of Uzbekistan and the Kyrgyz Republic, hereinafter referred to as the Parties, guided by the Treaty on eternal friendship between the Republic of Uzbekistan and the Kyrgyz Republic of 24 December 1996 and the Joint Statement of the President of Uzbekistan H.E. Shavkat Mirziyoyev and the President of the Kyrgyz Republic H.E. Almazbek Atambayev of 5 September 2017, reaffirming their commitment to goals and principles of the UN's Charter, willing to enhance bilateral cooperation to contribute to capacities and topical needs of both nations, drawing upon centuries-old history of friendship and affinity of languages, moral values and cultures of the both nations, striving to bring multifaceted bilateral relations to a whole new level and develop their actively in political, economic, trade, scientific, technological, cultural, education and other spheres, and believing that strategic partnership between the Republic of Uzbekistan and the Kyrgyz Republic on the basis of strong friendship, neighborliness and trust would further enhance cooperation in all spheres, declare the following:

The Parties noted that establishment of strategic partnership, strengthening of friendship, neighborly relations, and trust would bring multifaceted connections between the two countries to a high and totally new level both bilaterally and on a regional and global arena.

The Parties, underlining that development of mutually beneficial bilateral partnership relations is one of priority and strategic directions in foreign policies of the states, will further strengthen political confidence and promote cooperation in all spheres.

Cooperation between the countries will be based on the principles of national sovereignty, equality and territorial integrity, national border inviolability, non-interference in internal affairs, and mutual respect and mutual benefit, and will be developed in the following spheres:

1) Political cooperation:

In order to strengthen policy dialogue for progressive development of Uzbek-Kyrgyz relations, the heads of state will hold bilateral meetings no less than once a year.

The parties will activate inter-parliamentarian cooperation via exchanges, joint events and interactions between inter-parliamentarian groups of friendship.

The Parties will meet regularly at the level of heads of state to establish close interactions between the national governments .

Foreign ministers of the both countries will meet regularly to review progress in bilateral relations and discuss regional and international matters that are of mutual interest.

Foreign services of the Parties will expand the practice of policy consultations on bilateral, regional, and global matters that are of mutual interest.

The Parties will interact to build peace and keep stability and security in the Central Asian region.

The Parties will be actively interacting within the framework of activities of the United Nations Organization, the Commonwealth of Independent States, the Shanghai Organization of Cooperation and other multilateral interstate organizations; will provide mutual support in addressing the issues of mutual interest in international forums.

2) Interactions in the field of cross-border cooperation and regional security:

The Parties will provide to each other extensive support and mutual help in addressing the matters related to prevention of threat to their independence, sovereignty and territorial integrity.

The Parties note that final legalization of a part of the Uzbek-Kyrgyz state border that should become a border of friendship and cooperation meets basic interests of the fraternal peoples. Signature of the Agreement on confidence-building measures will serve as a basis for consolidation of confidence between the two countries within the border area and for keeping stability and security in the region.

The Parties will pay particular attention to the establishment and enhancement of border cooperation, with the help of local authorities of Uzbekistan and Kyrgyzstan via exchanges, joint measures in all spheres of cooperation, and communications between citizens of the countries.

The Parties will take measures to create favorable conditions for two-way travels and visits of Uzbek citizens to the Kyrgyz Republic and of Kyrgyz citizens to the Republic of Uzbekistan.

The Parties believe that settlement of matters related to border checkpoints meets interests of the both nations. This would contribute to trade-economic and cultural-humanitarian cooperation of the Parties and build transit capacity of the region as a whole.

The Parties will activate close cooperation in the field of actions against terrorism, extremism and their financing, separatism, organized crime, illegal drug turnover, laundering of proceeds from crime and against other challenges and threats to global and regional security.

The Parties express their intention to cooperate in the field of law, based on

existing treaty basis, including in the sphere of judicial assistance and legal relations on civil, domestic and criminal cases.

The Parties will promote exchange of experience and interactions between law-enforcement agencies, customs, tax, penitentiary, and migration services.

The Parties express their interest in deepening cooperation to prevent and eliminate emergencies.

3) Trade and economic cooperation:

The Parties will enhance cooperation and undertake effective work within the framework of the Joint Inter-governmental Commission for bilateral cooperation between the Republic of Uzbekistan and the Kyrgyz Republic. The Parties welcome assignment of Prime-ministers of the two countries as co-chairmen of the Commission.

The Parties will make joint efforts to increase multiply the volume of trade and diversify trade items in the near years, as well as maintain positive dynamics of trade.

The Parties will broaden mutually beneficial cooperation in order to create joint ventures for assembly of cars, agricultural and other equipment, as well as for production of fruits and vegetables, textiles and other goods.

The Parties will support creation of favorable conditions for entrepreneurship, investments and other economic activities, as well as for development of direct communications between enterprises and other economic entities.

The Parties will organize mutual visits of businesses of the two countries, promote their participation in international sectoral exhibitions and fairs, and hold joint business-forums.

The Parties will pay particular attention to development of industrial specialization and cooperation among agroindustry, agriculture, machinery construction and light industry, transport and communication, as well as to mobilization of investments and establishment of joint business councils.

The Parties will promote organization of tourist exchanges and interactions between tourist agencies in the countries.

4) Cooperation in the transport and communication spheres:

The Parties express their willingness to deepen cooperation in the sphere of transport communication, free transit, as well as to provide mutual support in the development of transit capacities in the two countries, based on international treaties, to which they are signatories;

The Parties observed mutual interest in rapid construction of the railroad project “China-Kyrgyzstan-Uzbekistan”.

The Parties will develop cooperation in the sphere of road services by opening

new road corridors, including on the Kashgar-Irkeshtam-Osh-Andizhan-Tashkent route and other mutually agreed transit routes in territories of the Parties. This will expand mutually beneficial communications between the states in the region and provide additional impetus to their economic development.

The Parties will broaden air-, motor- and railway transportation between the two countries, that will be backed by the Memorandum of Cooperation in the field of transport and the signature of intergovernmental Agreement on delegation of responsibilities over air traffic service, as well as the flight Tashkent-Issyk Kul-Tashkent and rail communication along agreed routes.

For further development of road services between the cities of Uzbekistan and Kyrgyzstan, and for cooperation in the touristic sphere, the Parties express their intention to consider the matter of opening bus routes between the countries' cities.

The Parties agreed to establish cooperation in the field of information technologies and e-government services for further exchanges on the above matters.

5) Water and energy cooperation:

The Parties recognize the importance of enhanced bi- and regional cooperation on effective and multipurpose utilization of water and energy resources in Central Asia, taking into account the interests of all the countries in the region. To this end, the Parties will hold regular consultations for rapid development of relevant long-term mechanisms that are mutually beneficial and sustainable.

The Parties will hold regular meetings of the Joint Bilateral Water Commission to address matters of multipurpose water use.

The Parties will develop cooperation in the sphere of energy, including implementation of joint hydropower projects.

6) Cultural and humanitarian cooperation:

The Parties intend to deepen cooperation in the field of education, science and technology and encourage direct communication between educational and research institutions, including for implementation of joint educational, scientific, and technological programs and projects. The Parties will interact and create favorable conditions for training academic and teaching staff, for exchanges of researchers and students and information related to recognition of diplomas, qualifications, and scientific degrees.

The Parties will make efforts to save rich cultural heritage of the republics and contribution of two nations to the world civilization, to establish and maintain contacts and exchanges between cultural, artistic, and civil society organizations and unions, implement relevant joint programs and events.

The Parties intend to hold regular events dedicated to work of distinguished cultural figures, men of arts and science in the two countries.

The Parties will organize mutual days of culture and arts and support all kinds of cultural and humanitarian exchanges.

The Parties intend to develop bilateral cultural cooperation at the level of public and civil society organizations and between citizens.

The Parties will render every assistance to development of Uzbek language and culture in Kyrgyzstan and of Kyrgyz language and culture in Uzbekistan.

The Parties will promote cooperation in the sphere of mass media, encourage direct communication and exchanges between agencies and representatives of electronic and print media in order to strengthen and expand interstate relations and interactions between peoples of the two countries.

The President of the Kyrgyz Republic H.E. Almazbek Atambayev expressed thanks to the President of the Republic of Uzbekistan H.E. Shavkat Mirziyoyev and to the Uzbek nation for hospitality and warm and friendly welcome.

Signed in the city of Tashkent on the 5th of September 2017 года in two original copies in Uzbek, Kyrgyz and Russian.

JOINT DECLARATION OF THE PRESIDENT OF THE REPUBLIC OF TAJIKISTAN AND THE PRESIDENT OF TURKMENISTAN

H.E. Mr. Gurbanguly Berdymukhamedov, President of Turkmenistan made an official visit to Tajikistan on the 2nd of November 2017 upon invitation of H.E. Emomaly Rahmon, President of the Republic.

The Presidents of Tajikistan and Turkmenistan discussed in a friendly atmosphere the current states and prospects of development in bilateral relations and also a number of topical issues on the regional and global agenda, which were of mutual interest.

The Heads of State were pleased to note the sustainable and positive dynamics of interactions between Tajikistan and Turkmenistan in political, economic, socio-humanitarian and other spheres of bilateral cooperation at the present stage. It was noted that the key factors for development of relations is friendship, equality and mutual respect. The Heads of State made a commitment for further strengthening of bilateral partnership to the benefits of the both states.

The Presidents stressed a need to expand cooperation and coordinate the steps within the framework of the international organizations, of which Turkmenistan and Tajikistan are participants. The Parties affirmed the role of the United Nations Organization and its agencies as an universal mechanism in addressing global issues, such as sustainable development, enhanced security and stability in the world.

In terms of economy, the presidents advocated more active trade and economic relations between the countries and expressed their intention to promote searching and implementation of more promising directions.

To achieve a totally new level of bilateral trade and economic cooperation, the presidents of Tajikistan and Turkmenistan underlined a need for more effective control over fulfillment of decisions made within the Joint Tajik-Turkmen Inter-governmental Commission for trade, economic and scientific and technological development.

The Heads of State noted favorable conditions for improvement of cooperation in the area of transport, energy, industry, trade, and agriculture. In this context, the parties expressed a need to make efforts to encourage business links, explore products produced in the countries, study export and import opportunities, and seek new forms for enhancement of economic cooperation.

The presidents acknowledged that the enhancement of cooperation in transport area is key for development of international trade between countries and regions. It was noted that mutual participation in projects dealing with formation of international transport corridors will contribute to improved and expanded economic cooperation,

developed transport infrastructure and new transit traffic flows via transport communications of the two states.

The sides underlined the importance of a project for construction of the railway connecting Tajikistan, Afghanistan, and Turkmenistan. This project is the largest transport project in the region.

The presidents also noted the importance of further developing cooperation in the field of reasonable water and energy use.

The heads of state expressed view that cultural dialogue makes a significant contribution to all-round cooperation between Tajikistan and Turkmenistan, strengthens friendship and mutual understanding between two nations. In this context, the sides agreed to provide every possible support to development of bilateral relations in the field of education, science, and culture.

For strengthening old friendship ties between two nations, the Presidents expressed their intention to continue days of culture and organize exchanges of cultural and arts delegations.

The sides underlined that early political stabilization and socio-economic recovery of Afghanistan will be crucial for security and stability in the region. They also noted the significance of regional and international projects contributing to sustainable development in this country.

The heads of state considered it necessary to further expand joint efforts for fighting such transboundary threats as terrorism, organized crime, and illegal drug turnover.

While welcoming high quality of the international treaty framework for Tajik-Turkmen relations, the presidents stated a need to continue working on its broadening and improvement.

The sides stated that during the visit it was important to sign a range of documents related to broadening of specific fields of relations in trade, economy, culture, etc. and development of cooperation at subnational level between Turkmenistan and Tajikistan.

The signed documents are to strengthen the legal framework of bilateral relations between Turkmenistan and Tajikistan. This will serve as a reliable base for inclusive development of countries' interactions and efficient use of their potential to the benefits of both nations.

The heads of state expressed their confidence that the visit would provide additional impetus to next steps forward in bilateral interaction, based on traditions of friendship, mutual understanding, and trust between two friendly nations.

H.E. Emomali Rahmon, President of Tajikistan and H.E. Gurbanguly Berdymukhamedov, President of Turkmenistan were encouraged by the results of their meeting held in the atmosphere of full trust and mutual understanding.

The sides agreed to continue active high-level political dialogues and regularly hold bilateral meetings to discuss the status of Tajik-Turkmen relations and set further

prospects for development.

The President of Turkmenistan expressed profound gratitude to the President of Tajikistan for hospitality and hearty welcome and invited H.E. Emomaly Rahmon to make an official visit to Turkmenistan in any convenient time. The invitation was gratefully accepted. Dates of the visit will be coordinated through the diplomatic channels.

H.E. Emomaly Rahmon
President
Republic of Tajikistan

H.E. Gurbanguly Berdymukhamedov
President
Turkmenistan

Dushanbe, 2 November 2017

COMMUNIQUÉ OF THE INTERNATIONAL CONFERENCE ON SECURITY AND SUSTAINABLE DEVELOPMENT IN CENTRAL ASIA UNDER THE AUSPICES OF THE UNITED NATIONS

On November 10-11, 2017, the city of Samarkand hosted the International Conference on Ensuring Security and Sustainable Development in Central Asia under the auspices of the United Nations «Central Asia: Shared Past and Common Future, Cooperation for Sustainable Development and Mutual Prosperity».

The forum has been organized by Uzbekistan in cooperation with the UN Regional Centre for Preventive Diplomacy for Central Asia (UNRCCA) and the UNODC Regional Office for Central Asia.

High level officials of the UN, EU, OSCE, SCO, CIS, delegations of Central Asian countries, Afghanistan, USA, European states, Russia, China, Turkey, Iran, India, Pakistan, Japan, South Korea and others, as well as scientists, public figures and officials took part in the conference.

Participants underscored that Central Asia, located at the crossroads of the ancient routes between East and West along “The Great Silk Road”, has contributed to promoting dialogue and interaction of world cultures, languages and religions for thousands of years. Possessing significant energy and natural resources, unique transport and communication potential, Central Asia possesses geopolitical significance. Developments in the region affect the stability of the entire Eurasian continent.

In this context, it was pointed out that in the prevailing conditions, Central Asian states play a significant role in addressing contemporary issues, related to enhancing international security. Among them are: countering the threats of terrorism and extremism, measures aimed at tackling illicit drug trafficking, illegal arms trade, organized crime, human trafficking, preventing threats in the information sphere.

Participants emphasized that the security of Central Asia is inseparable from global security. It was especially pointed out that in order to prevent new challenges and threats, Central Asian countries require closer and more coordinated cooperation as well as interaction with international and regional organizations and partner states.

Participants also underlined the need for strengthening the central role of the UN in countering security challenges and threats in the region. They noted the need for more effective use of preventive diplomacy instruments, including the relevant mechanisms of the United Nations and the UN Regional Centre for Preventive Diplomacy for Central Asia according to its mandate.

At the same time, participants marked the primary and decisive role of the countries of the region in ensuring peace, security and sustainable development, as well as in encouraging regional and international cooperation in Central Asia through mutual negotiations and consultations based on consensus, equality, and respect of each other's interests.

The countries of Central Asia recognized the importance of strengthening bilateral and regional cooperation on the rational and complex use of water and energy resources in Central Asia taking into account the interests of all regional states. For these purposes, they will hold regular consultations to elaborate mutually beneficial and sustainable mechanisms in this domain.

Participants also noted that International Decade for Action "Water for Sustainable Development", 2018-2028 is good platform for promoting progress on water and sanitation on all levels.

Participants welcomed the positive developments on solving the issues of delimitation and demarcation of state borders, which are important factors for ensuring peace, stability and security in Central Asia. In this context, they greeted the signing of the Agreement between the Republic of Kazakhstan and Turkmenistan on demarcation of the Kazakh-Turkmen state border, the Treaty between the Kyrgyz Republic and the Republic of Uzbekistan on the Kyrgyz-Uzbek state border, and the Treaty between the Republic of Kazakhstan, Turkmenistan and the Republic of Uzbekistan on tripoint of state borders between the three countries.

Participants supported initiatives aimed at backing the peace process in Afghanistan, promoting the reconstruction of socio-economic infrastructure, more active integration of the country into global economic networks. In this regard, the high importance of implementing energy, transport-communications, investment and other projects by the Central Asian countries in cooperation with Afghanistan was stressed.

Delegates underlined the necessity of information and experience exchange on all aspects of preventing terrorism and extremism, as well as the development of relevant joint measures and strategies based on the UN Global Counter-Terrorism Strategy and the UN Secretary-General's Plan of Action to prevent violent extremism.

Taking into account the Joint Plan of Action for implementing the UN Global Counter-Terrorism Strategy in Central Asia, developed with the support of UNRCCA, the Ashgabat Declaration and the results of the "High-level Dialogue between the UN and Central Asia on implementing the UN Global Counter-Terrorism Strategy in Central Asia", held on 13 June 2017, in Ashgabat, Turkmenistan, under the chairmanship of the UN Secretary-General, participants noted the need to strengthen cooperation in identifying and preventing cross-border terrorist activities, suppressing recruitment channels of militants, countering terrorism financing and arms smuggling, ensuring cyber security and protecting information space from extremist attacks.

Representatives of the Central Asian states noted the importance of concrete joint measures to prevent the involvement of youth in the activities of various terrorist and radical organizations. In this context, they stressed the need for special attention to

the enlightenment, spiritual and moral upbringing of youth, nurturing in them a striving for knowledge and self-improvement.

Participants called for the development of coordinated measures by the Central Asian states, including in cooperation with the UNODC and Interpol, to strengthen measures to counter drug trafficking in the region by mobilizing additional resources, new technologies and methods to combat illicit trafficking of drugs and precursors.

Participants stressed the importance of implementing the 2006 Treaty on Nuclear-Weapon-Free-Zone in Central Asia and Protocol on Guarantees from the Permanent Members of the UN Security Council of 2014 to take measures on non-proliferation of weapons of mass destruction, maintaining nuclear safety, eliminating radioactive waste, establishing reliable mechanisms of cooperation in preventing illicit trafficking in nuclear materials and combating nuclear terrorism in Central Asia, as well as disseminating best practices of Central Asian countries to expand nuclear-free zones into other regions.

Participants noted the important role of the Resolution No. 68/218 adopted by the UN General Assembly in 2013 "The Role of the International Community in Preventing Radiation Threats in Central Asia" in addressing ecological security issues in the region. In this regard, the sides underlined the need for the adoption of a new UN General Assembly resolution calling for further international support in addressing the challenge of the uranium legacy in Central Asia.

Participants unanimously noted and expressed readiness to assist in strengthening the dialogue and cooperation between the countries of Central Asia, in particular, in advancing joint initiatives on ensuring regional security, developing trade and cross-border cooperation, renewing and expanding the transport and communication linkages, including through opening of new bridges, roads, railways and flights.

Participants expressed their readiness for further strengthening good neighborhood and friendly relations between nations, promoting deeper relations in the fields of education, science and technology, innovation, tourism, culture, arts, sports, as well as continuing mutual assistance in emergency situations.

Participants welcomed the initiative on holding consultative meetings of the Heads of Central Asian states for maintaining regular open dialogue and developing mutually acceptable approaches on contemporary regional issues.

Delegates supported the practice of regular meetings of Central Asian Foreign Ministers for discussing prevailing regional issues. In this regard, they welcomed the signing of the Program of cooperation among the Ministries of Foreign Affairs of the Republic of Kazakhstan, the Kyrgyz Republic, Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan for the years of 2018-2019 on the sidelines of the Samarkand conference.

Participants called on the states of the region to intensify cooperation between relevant ministries and agencies, as well as the administrations of bordering regions. They noted the importance of establishing partnerships with national parliaments by

creating “friendship groups”. They stressed the need to broadly engage public organizations, primarily youth movements, cultural and creative associations, NGOs, scientific, think tanks and other structures in intensifying contacts between Central Asian states.

Delegates called all UN agencies and other international organizations, and partner countries of the Central Asian states, to increase and strengthen their cooperation with the region on security and sustainable development issues, in accordance with the priorities, interests, needs and national programs of the Central Asian countries by providing required technical, expert, legal, financial and other forms of assistance.

Participants especially highlighted the importance of promoting the development and implementation of promising projects aimed at ensuring sustainable development of the region, in particular those that enable Central Asian states to obtain guaranteed access to international seaports and roads of communication, thus increasing their transit potential, investment attractiveness and improving the conditions for doing business in the region.

Delegates noted that this meeting provided a unique opportunity for open and comprehensive discussions on a wide range of important issues in Central Asia, which will facilitate the development of mutually agreed solutions on them.

Participants supported the proposal on drafting a mutually agreed UN General Assembly Resolution by the Central Asian states on enhancing regional and international cooperation to ensure security, peace and sustainable development in the Central Asian region.

In conclusion, Conference participants expressed gratitude to the Government of Uzbekistan, the UN Regional Centre for Preventive Diplomacy for Central Asia and the UNODC Regional Office for Central Asia for organizing the Conference at the highest level.

MINUTES OF THE 72nd MEETING OF THE INTERSTATE COMMISSION FOR WATER COORDINATION (ICWC) OF THE REPUBLIC OF KAZAKHSTAN, KYRGYZ REPUBLIC, REPUBLIC OF TAJIKISTAN, TURKMENISTAN AND REPUBLIC OF UZBEKISTAN

November 24, 2017 Tashkent, Uzbekistan

Chairman:

Khamraev Shavkat Rakhimovich	Deputy Minister of Agriculture and Water Resources of the Republic of Uzbekistan (MAWR RUz)

ICWC members:

Nysanbayev Yerlan Nuralievich	Vice Minister of Agriculture, Republic of Kazakhstan
Rakhimzoda Sulton Nurmakhmadpur	First Deputy Minister of Energy and Water Resources, Republic of Tajikistan (MEWR RT)
Mommadov Begench Amanovich	Head, Water Use Department, Ministry of Agriculture and Water Resources, Turkmenistan

ICWC executive bodies:

Dukhovniy Viktor Abramovich	Director, Scientific Information Center (SIC) of ICWC
Babadjanova Malika Pulatovna	Head, ICWC Secretariat
Kholkhuzhaev Odil Akhmedovich	Head, BWO Syrdarya
Makhramov Makhmud Yakhshibaevich	Head, BWO Amudarya

Invited:

Baydjanov Guyzgeldy. Nazargeldyyevich	Chairman, Executive Committee of IFAS
Badashev Yerlan Aytmakhanovich	Advisor to Vise Minister of Agriculture of the Republic of Kazakhstan
Zhienbaev Musilim Rysmakhanovich	Head, Transboundary Rivers Division of Water and Resources Department, Ministry of Agriculture, Republic of Kazakhstan
Imasheva Gulmira Saginbayevna	Head, Administration on Regulation of Use of Water Resources of the Committee for Water Resources, Ministry of Agriculture of the Republic of Kazakhstan
Karlykhanov Adilkhan Karlykhanovich	Head, Aralo-Syrdarya Basin Inspection for Water Use Regulation and Protection
Khasanzoda Khomid	Deputy Director, Agency of Land Reclamation and Irrigation at the Government of the Republic
Kholmatov Daler Abdukhalokovich	Head, Administration on Energy and Water Policy, Ministry of Energy and Water Resources of Tajikistan
Pashyyev Yanov Durdyevich	Head, Water Use Administration, Ministry of Agriculture and Water Resources, Turkmenistan
Kuchkarov Sharifjon Zikrillayevich	Head, Water Balance and Advanced Water Saving Technologies Division, MAWR of the Republic of Uzbekistan
Beglov Iskander Ferdinandovich	Head, Information Division of SIC ICWC
Uktamov Avazjon Rakhimberdievich	Head, Water Use Department, BWO Syrdarya

Agenda of the 72nd ICWC Meeting

1. Results of the use of water withdrawal limits and operation regimes of reservoir cascade in the Syrdarya and Amudarya River basins over the growing season 2017 and forecasts for the non-growing season 2017-2018.

2. Progress on the "Implementation Plan on strengthening ICWC activities in key directions".

3. Agenda and venue of the next 73rd ICWC meeting.

4. Supplementary items

Decisions on the first item:

1. Take into account the reports presented by BWO Amudarya and BWO Syrdarya on the results of the use of water withdrawal limits and operation regimes of the reservoir cascade in the Amudarya and Syrdarya River basins over the growing season 2017, including the fact that water was discharged into the Arnasay depression (Syrdarya basin) at the expense of the Uzbekistan's limit in the amount of 500 mcm, as well as emergency water releases because of high water availability in this period.

2. Approve water withdrawal limits by country and forecast operation regimes of the reservoir cascade in the Amudarya and Syrdarya River basins over the non-growing season 2017-2018 (Annexes 1 and 2).

Decisions on the second item:

1. Take into account information of SIC ICWC about the progress on the "Implementation Plan on strengthening ICWC activities in key directions".

2. Note that based on decisions of ICWC, four Working Groups were organized on water conservation, IWRM, water accounting, and water sector professional development with the participation of Kazakhstan, Turkmenistan, Uzbekistan, BWO Amudarya, and BWO Syrdarya.

3. Agree on the need to enhance the work of these groups and focus on water conservation and water accounting, as well as staff professional development. It is desirable to establish a network of demonstration sites, 50 ha each, in all representative areas of the Aral Sea basin countries.

4. Apply to the World Bank, Asian Development Bank, Swiss Agency for Development and Cooperation, GIZ, and other donors with the request to develop a unique donor program to support the strengthening of ICWC activities.

Decisions on the third item:

1. Hold the 73rd meeting of ICWC in Kyzylorda, Republic of Kazakhstan. The date of the meeting should be approved in a working order.

2. Propose the following agenda of the 73rd meeting of ICWC:

1) Use of water withdrawal limits and operation regimes of the reservoir cascade in the Amudarya and Syrdarya River basins over the non-growing season 2017-2018 and forecasts for 2018.
2) Supplementary issues.
3) Agenda and venue of the next 74th ICWC meeting.

Decisions on the supplementary issue

1. Award the title "Honorary member of ICWC" to:

1) Kokhir Rasulzoda, Prime-Minister of the Republic of Tajikistan;
2) Islam Abishev, Chairman of the Committee for Water Resources, Republic of Kazakhstan;
3) Shavkat Khamraev, Deputy Minister of Agriculture and Water Resources, Republic of Uzbekistan;
4) Khomid Khasanzoda, Deputy Director of the Agency for Land Reclamation and Irrigation at the Government of Tajikistan,
5) Begench Mommadov, Head of Water Use Department, Ministry of Agriculture and Water Resources, Turkmenistan
6) Ismat Eshmirzoev, former Minister of Land Reclamation and Water Resources, Republic of Tajikistan

2. Award the breastplates "Veteran of ICWC" and "For active work" to distinguished members of water-management organizations in the Central Asian countries (Annex 3)

Republic of Kazakhstan	**Y.N.Nysanbayev**
Kyrgyz Republic	
Republic of Tajikistan	**S.N.Rakhimzoda**
Turkmenistan	**B.Mommadov**
Republic of Uzbekistan	**Sh.R.Khamraev**

Annex 1

Forecast schedule of the Naryn-Syrdarya reservoir cascade
(October 1, 2017-March 31, 2018)

		October	November	December	January	February	March	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m^3/s	245	213	177	166	163	173	
	mcm	657	553	474	445	394	462	2,985
Volume: beginning of the season	mcm	19,586	19,366	18,619	17,348	15,998	14,771	
end of the season	mcm	19,366	18,619	17,348	15,998	14,771	13,813	
Water releases from the reservoir	m^3/s	400	500	650	670	670	530	
	mcm	1,071	1,296	1,741	1,795	1,621	1,420	8,943
Bakhri Tochik reservoir								
Inflow to the reservoir	m^3/s	724	644	862	947	1,012	807	
(Akjar gauging station)	mcm	1,938	1,670	2,309	2,535	2,449	2,162	13,064
Volume: beginning of the season	mcm	3,404	3,330	3,415	3,418	3,397	3,366	
end of the season	mcm	3,330	3,415	3,418	3,397	3,366	3,430	
Water releases from the reservoir	m^3/s	772	613	850	980	1,050	800	
	mcm	2,069	1,588	2,277	2,625	2,540	2,143	13,242
Shardara reservoir								
Inflow to the reservoir	m^3/s	729	582	1,064	1,079	1,156	916	
	mcm	1,953	1,509	2,849	2,891	2,797	2,453	14,452
Volume: beginning of the season	mcm	1,194	1,055	1,017	2,633	4,076	4,793	
end of the season	mcm	1,055	1,017	2,633	4,076	4,793	4,611	
Water releases from the reservoir	m^3/s	900	616	450	500	500	550	
	mcm	2,411	1,596	1,205	1,339	1,210	1,473	9,234
Water supply to the Aral Sea	m^3/s	171	180	260	265	255	224	

		October	November	December	January	February	March	Total, mcm
	mcm	459	467	696	710	617	600	3,548
Charvak reservoir								
Inflow to the reservoir	m^3/s	135	119	101	90	88	127	
(4 rivers in total)	mcm	361	309	271	240	214	339	1,735
Volume: beginning of the season	mcm	1,768	1,665	1,582	1,451	1,261	1,087	
end of the season	mcm	1,665	1,582	1,451	1,261	1,087	1,051	
Water releases from the reservoir	m^3/s	172	150	150	160	160	140	
(water releases from the Gazalkent HEPS)	mcm	461	389	402	429	387	375	2,442
Andizhan reservoir								
Inflow to the reservoir	m^3/s	65	68	72	60	52	57	
	mcm	174	177	192	161	125	152	981
Volume: beginning of the season	mcm	1,019	981	1,059	1,211	1,343	1,407	
end of the season	mcm	981	1,059	1,211	1,343	1,407	1,339	
Water releases from the reservoir	m^3/s	79	38	15	11	25	82	
	mcm	210	98	39	29	61	220	658

Mr. O.A. Kholkhuzhaev, Head of BWO Syrdarya

Annex 2

Forecast operation regimes of the Nurek and Tuyamuyun reservoirs
(October 2017-March 2018)

	unit	Actual	Forecast					Total
		October	November	December	January	February	March	
Nurek reservoir								
Volume: beginning of the season	mcm	10,571	10,503	10,122	9,352	8,424	7,656	10,571
Inflow to the reservoir	m^3/s	356	262	162	170	183	212	
	mcm	954	679	435	455	442	566	3,531
Water releases from the reservoir	m^3/s	382	409	450	516	500	450	
	mcm	1,023	1,060	1,205	1,382	1,210	1,205	7,085
Volume: end of the season	mcm	10,503	10,122	9,352	8,424	7,656	7,020	7,020
Accumulation (+),drawdown(-)	mcm	-68	-381	-770	-928	-768	-637	-3,551
Tuyamuyun reservoir								
Volume: beginning of the season	mcm	4,672	4,649	5,061	4,412	4,760	4,496	4,672
Inflow to the reservoir	m^3/s	415	305	321	400	464	437	
	mcm	1,112	791	860	1,071	1,123	1,172	6,128
Water releases from the reservoir	m^3/s	424	146	564	271	573	851	
	mcm	1,136	378	1,511	726	1,385	2,278	7,414
Volume: end of the season	mcm	4,649	5,061	4,412	4,760	4,496	3,386	3,386
Accumulation (+),drawdown(-)	mcm	-23	412	-649	348	-264	-1,110	-1,286

Mr.M.Makhramov, Head of BWO Amudarya

Annex 3

List of awardees on the occasion of the 25th Anniversary of ICWC

Breastplate "Veteran of ICWC"

The breastplate is awarded to ICWC founders; ICWC members who served for 10 and more years; heads and staff of Executive bodies, who served 10 and more years.

1. R.A.Giniyatullin
2. I.Kh.Djurabekov
3. Z.Kh.Djurabekov
4. U.Kh.Majidov
5. N.K.Kipshakbayev – Director of Kazakh branch of SIC ICWC
6. V.A.Dukhovniy – SIC ICWC Director
7. T.A.Altyev – former minister of land reclamation and water resources of Turkmenistan
8. A.K. Kenshimov – Director of Department of Water Resources, Executive Administration of IFAS (Kazakhstan)
9. A. Muhamedov – Head of Middle Amudarya Administration (Turkmenistan)
10. M.Saparbaev – Deputy Head of BWO Amudarya (Uzbekistan)
11. G.K.Tilyavova – Deputy Head of Water Resource Administration, BWO Amudarya (Uzbekistan)
12. U.A.Ashirbekov – first Head of BWO Amudarya (Uzbekistan)
13. I.Kalandarov – Head of BWO Amudarya (1994–2000, Uzbekistan)
14. Yu.Khudayberganov – Head of BWO Amudarya (2000–2008, Uzbekistan)
15. M.Kh. Khamidov – former head of BWO Syrdarya
16. A.G.Laktionov – former deputy head of BWO Syrdarya
17. A.Muminov – Chief Engineer of the Naryn-Karadarya Administration of Hydroschemes, BWO Syrdarya
18. O.Tursunova – Head of Gulistan Administration of Hydroschemes and Dustlik canal, BWO Syrdarya
19. A.Urazmetov – Mechanic Engineer, Upper Chirchik Administration of Hydroschemes, BWO Syrdarya

20. Kh.E.Mukhiddinov – former head of ICWC Secretariat and Tajik branch of BWO Syrdarya
21. Kh.Kuchkarov – Head of Water Use Department, Naryn-Karadarya Administration of Hydroschemes, BWO Syrdarya
22. F.F.Beglov – Head of Division, SIC ICWC
23. A.G. Sorokin – Head of Division, SIC ICWC
24. O.K.Usmanova – Head of Division, SIC ICWC
25. V.I.Sokolov – Deputy Director, SIC ICWC (1996-2016)

Breastplate "For active work"

The breastplate is awarded to veterans of water management from Central Asian states, experts of ICWC's Executive bodies who actively (more than 10 years) participated in the implementation of decisions made by ICWC.

1. T.Kh.Kholtoev
2. L.Kh.Mukhamednazarov
3. U.V.Abdullaev
4. Z.Srajiddinov
5. U.A.Azimov
6. Kh.Kh.Ishanov
7. N.Sh.Ernazarov
8. Kh.K.Gapparov
9. U.K.Buranov
10. S.T.Pernabekov
11. Sh.Kh.Rakhimov
12. L.P.Shadrina
13. Sh.Z.Kuchkarov
14. R.A.Mamutov
15. V.M.Akhmadjonov
16. K.S.Bobojonov
17. A.R.Rakhmatillaev
18. B.R.Rakhimov
19. K.Artikov
20. R.M.Ostonov

21. A.Yulbarsov
22. A.Mustanov
23. Ye.N.Nysanbayev – Vice Minister of Agriculture of the Republic of Kazakhstan
24. S.N.Rakhimzoda – First Deputy Minister of Energy and Water Resources of the Republic of Tajikistan
25. A.Shamshyeva – veteran of water management (Kazakhstan)
26. A.K. Karlykhanov – Head of the Aralo-Syrdarya Basin Inspection for Water Use Regulation and Protection, Committee for Water Resources of the Ministry of Agriculture (Kazakhstan)
27. D.A. Kholmatov – Head of Administration on Energy and Water Policy, Ministry of Energy and Water Resources of Tajikistan
28. A.Kamolidinov – Deputy Head of the "Integrated management in the Zarafshon River basin" project
29. M.P. Babadjanova – Head of ICWC Secretariat
30. Ya.D.Pashyyev – Head of Water Use Department, Ministry of Agriculture and Water Resources (Turkmenistan)
31. M.Babadjanov – Head of Water Use Department, Production Association of the Dashoguz province (Turkmenistan)
32. M.Ya.Makhramov – Head, BWO Amudarya
33. O.A. Kholkhuzhaev – Head, BWO Syrdarya
34. M.M. Atamyratov – Head of Water Resources Administration, BWO Amudarya
35. S.A.Karomatov - Chief engineer, Upper Amudarya Administration of BWO Amudarya
36. Yu.A.Latipova – Head of Palvan-Shavat Department of UPRADIK BWO Amudarya
37. E.Jeleznova – Senior engineer, BWO Syrdarya
38. D.R.Ziganshina – Deputy Director, SIC ICWC
39. I.F.Beglov – Head of division, SIC ICWC
40. L.A.Mukhina – Chief accountant, SIC ICWC
41. R.I.Kadyrova – Senior expert, SIC ICWC
42. Yu.Kh. Rysbekov – Head of division, SIC ICWC
43. S.I.Obidina – Head of division, SIC ICWC

Honorary diploma

The diploma is awarded to experts in Executive bodies, water management organizations, research institutes, design institutes and higher education institutions of countries who have made significant contribution to ICWC.

1. U.P.Umurzakov
2. M.Kh.Khamidov
3. A.T. Salokhiddinov
4. R.K.Ikramov
5. E.J.Makhmudov
6. A.K.Fozilov
7. Sh.G.Talipov
8. N.I.Sheraliev
9. I.A.Ergashev
10. J.R.Durmatov
11. Z.E.Ishpulatov
12. P.Rasulov
13. Sh.Ergashev
14. Sh.Kazakov
15. N.Rikhsitillaev
16. M.Sobirov
17. I.Kurbanov
18. B.K.Ruzibaev
19. M.F.Nadjimov
20. Kabilov Kh.Kh.
21. Majidov
22. M.R. Zhienbaev – Head, Transboundary Rivers Division of Water and Resources Department, Ministry of Agriculture, Republic of Kazakhstan
23. S.A.Bekmaganbetov (Kazakhstan) – representative of Kazakhstan in the Executive Committee of IFAS
24. M.D.Egenov (Kazakhstan) – Acting General Director, RSE “Kazvodkhoz”
25. T.O.Balpikov (Kazakhstan) – Acting Director, South Kazakhstan branch of RSE “Kazvodkhoz”

26. B.S.Arystanbayev (Kazakhstan) – Director, Kyzylorda branch of RSE "Kazvodkhoz"
27. A.Meyrman (Kazakhstan) – Head, Water Use Department of the South Kazakhstan branch of RSE "Kazvodkhoz"
28. M.Eshanov – Head of sluice dam site, Lower Amudarya Administration of BWO Amudarya
29. Sh.I.Rozyev – Engineer, Water Allocation Department, Middle Syrdarya Administration of BWO Amudarya
30. A.Fayzov – Head of Dekhkanabad site, Upper Amudarya Administration of BWO Amudarya
31. A.M. Iskandarov – Engineer, Lower Shevat Department of Dashoguz Directorate, BWO Amudarya
32. U.Baratov – Head, Upper Chirchik Administration of Hydroschemes, BWO Syrdarya
33. R.Valikhanov – Head, Kazakh branch of the Dustlik Canal, BWO Syrdarya
34. A.R.Uktamov – Deputy Head, Water Use Department, BWO Syrdarya
35. A.K.Boboev – Head, Tajik branch of Golodnaya Steppe Administration of Hydroschemes and Dustlik Canal, BWO Syrdarya
36. R.Valiev – Head, Upper Amudarya Administration of BWO Amudarya
37. V.M.Stepanov – driver, SIC ICWC
38. D.A.Sorokin – head of division, SIC ICWC
39. A.S.Degtyaryova – expert, SIC ICWC
40. A.G.Galustyan – senior expert, SIC ICWC
41. R.R.Masumov – senior expert, SIC ICWC
42. N.N.Mirzaev – senior expert, SIC ICWC
43. Sh.Sh.Mukhamedjanov – senior expert, SIC ICWC
44. Sharofiddinov Kh. – Director, Tajik branch of SIC ICWC

RESULTS OF THE USE OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADE IN THE AMUDARYA AND SYRDARYA RIVER BASINS OVER THE GROWING SEASON 2017 AND FORECASTS FOR THE NON-GROWING SEASON 2017-2018[1]

I. Amudarya River basin

Results of the growing season 2017

The actual water content in the Amudarya River basin at the nominal Atamyrat gauging station upstream of Garagumdarya was 107.8 % of the norm over the growing season 2017. The calculations were made taking into account the natural flow in the Vakhsh River and the flow regulation by the Nurek reservoir. Given the norm 47,592 mcm, the actual water content amounted to 51,326 mcm. In the past season, water content was 85.2 %.

The use of approved water withdrawal limits by state is as follows for the growing season:

Taking into account such hydrological conditions, totally in the basin 95.8 % of the approved water withdrawal limits was used. While the limit was 39,662.5 mcm, actually used volume was 37,997.2 mcm, of which:

The Republic of Tajikistan actually used 5,980.1 mcm (86.1 % of the total limit);

Turkmenistan actually used 14,837.7 mcm (95.7 % of the total limit);

The Republic of Uzbekistan actually used 17,179.4 mcm (99.8 % of the total limit);

Water user state	Limit, mcm	Actual, mcm	%% of the total limit
Republic of Tajikistan	6,942.5	5,980.1	86.1
Turkmenistan	15,500.0	14,837.7	95.7
Republic of Uzbekistan	17,220.0	17,179.4	99.8
Total	39,662.5	37,997.2	95.8

[1] Information on the first item of the 72nd meeting of ICWC

Over the growing season 2017, the use of limits downstream of the nominal Atamyrat GS (upstream of Garagumdarya) was 98.3 % of the total limit, of which:

The Republic of Uzbekistan actually used 16,157.7 mcm (100.9 % of the total limit)

Turkmenistan actually used 14,837.7 mcm (95.7 % of the total limit)

River reach Water user state	Limit, mcm	Actual, mcm	%% of the total limit
Downstream of the nominal Atamyrat GS	31,520.0	30,995.5	98.3
Turkmenistan	15,500.0	14,837.7	95.7
Republic of Uzbekistan	16,020.0	16,157.7	100.9

Actual use of the approved water withdrawal limits by river reach is as follows:

1. Upper reaches – 86.0 %, including 86.1 % in the Republic of Tajikistan and 85.1 % in the Republic of Uzbekistan.

2. Middle reaches – 100.8 %, including 102.4 % in the Republic of Uzbekistan and 100.0% in Turkmenistan.

3. Lower reaches – 95.7 %, including 99.9 % in the Republic of Uzbekistan and 86.8 % in Turkmenistan.

River reach Water user state	Limit, mcm	Actual, mcm	%% of the total limit
Upper reaches	8,142.5	7,001.8	86.0
Republic of Tajikistan	6,942.5	5,980.1	86.1
Republic of Uzbekistan	1,200.0	1,021.7	85.1
Middle reaches	16,284.0	16,419.9	100.8
Turkmenistan	10,514.0	10,510.7	100.0
Republic of Uzbekistan	5,770.0	5,909.2	102.4
Lower reaches	15,236.0	14,575.6	95.7
Turkmenistan	4,986.0	4,327.0	86.8
Republic of Uzbekistan	10,250.0	10,248.6	99.9

Water supply to the Amudarya River delta and Aral Sea was planned to be 2,100 mcm. However, actual supply was 9,423 mcm or 448.7% over the growing season.

For the growing season, the forecast inflow to the Nurek reservoir was to be 22,148 mcm; it actually was 21,887 mcm or 98.8 % of the forecast. Water releases from the reservoir were planned to be 18,346 mcm; they actually were 18,051 mcm or 98.4 % of the forecast. By the end of the growing season 2017, water volume in the reservoir was to be 10,543 mcm. The actual volume was 10,571 mcm or 100.3 % of the forecast.

For the growing season, the forecast inflow to the Tuyamuyun reservoir was to be 30,527 mcm; however, it was 27,743 mcm or 91.0 % of the forecast. Water releases from the reservoir were planned to be 28,005 mcm; actual releases were 25,656 mcm or 91.0 %.

By the end of the growing season 2017, water storage in the reservoir was planned to be 5,107 mcm; however, actual storage was 4,672mcm or 91.5 % of the forecast.

Name		unit	Nurek reservoir	Tuyamuyun reservoir
Volume: beginning of the season		mcm	6,733	2,585
Inflow to the reservoir	forecast	mcm	22,148	30,527
	actual	mcm	21,887	27,743
		%%	98.8	91
Water releases from the reservoir	forecast	mcm	18,346	28,005
	actual	mcm	18,051	25,656
		%%	98.4	91
Volume: end of the season	forecast	mcm	10,543	5,107
	actual	mcm	10,571	4,672
		%%	100.3	91.5
Accumulation (+), drawdown (-)	forecast	mcm	3,810	2,522
	actual	mcm	3,838	2,087
		%%	100.7	82.8

More detailed information is given in Annexes 1.1-1.3

Annex 1.1

Analysis of use of approved water withdrawal limits in the Amudarya basin over the growing season 2017, mcm

Name	Limit	Actual	%%
Upper Amudarya Administration			
(upper reaches)	8,142.5	7,001.8	86.0
of which:			
Tajikistan	6,942.5	5,980.1	86.1
Uzbekistan	1,200.0	1,021.7	85.1
Water withdrawals from the Amudarya River			
at nominal Atamyrat gauging station (Kerki)	31,520.0	30,995.5	98.3
of which:			
Turkmenistan	15,500.0	14,837.7	95.7
Uzbekistan	16,020.0	16,157.8	100.9
Middle Amudarya Administration	16,284.0	16,419.9	100.8
(middle reaches) of which:			
Turkmenistan	10,514.0	10,510.7	100.0
Uzbekistan	5,770.0	5,909.2	102.4
Lower reaches:	15,236.0	14,575.6	95.7
of which:			

Name	Limit	Actual	%%
Turkmenistan	4,986.0	4,327.0	86.8
Uzbekistan	10,250.0	10,248.6	99.9
Total for the basin	39,662.5	37,997.3	95.8
of which:			
Tajikistan	6,942.5	5,980.1	86.1
Turkmenistan	15,500.0	14,837.7	95.7
Uzbekistan	17,220.0	17,179.5	99.8

Annex 1.2

Actual operation regime of the Nurek and Tuyamuyun reservoirs from April 2017 to September 2017

	unit	actual						total
		April	May	June	July	August	September	
Nurek reservoir								
Inflow	m^3/s	751	1,426	1,777	2,071	1,464	789	21,887
Water losses	m^3/s							0
Volume: beginning of the season	mcm	6,733	6,893	7,617	9,040	10,029	10,543	6,733
end of the season	mcm	6,893	7,617	9,040	10,029	10,543	10,571	10,571
Accumulation(+),drawdown(-)	mcm	185	783	1,647	1,116	590	33	3,838
Water level: end of the season	m							
Water releases from the reservoir	m^3/s	695	1,157	1,225	1,701	1,271	777	18,051
Tuyamuyun reservoir								
Inflow	m^3/s	988	1,782	2,548	2,714	1,658	809	27,743
Volume: beginning of the season	mcm	2,585	3,344	4,083	4,350	5,487	5,168	2,585
end of the season	mcm	3,344	4,083	4,350	5,487	5,168	4,672	4,672
Accumulation(+),drawdown(-)	mcm	759	739	267	1,137	-319	-496	2,087
Water level: end of the season	m							
Water releases from the reservoir	m^3/s	695	1,505	2,445	2,290	1,777	1,000	25,656
including to the river	m^3/s	456	1,251	2,155	1,923	1,416	742	20,982

Annex 1.3

Information on water supply to the Aral Sea and Amudarya River delta for the growing season 2017, mcm

Name	April	May	June	July	August	September	Actual water supply from 01.04.17 to 30.09.17
From the Amudarya River, at Samanbay GS	161	884	2,696	1,645	2,587	474	8,447
Total water discharge from system Dustlik and Suenli canals	20	34	12	1	2	39	108
CDF	122	127	148	162	167	142	868
TOTAL:	303	1,045	2,856	1,808	2,756	655	9,423
Cumulative, mcm	303	1,348	4,204	6,012	8,768	9,423	

Note: Data on water supply to Prearalie was agreed with UzHydroMet

Forecast water withdrawal limits and operation regimes of the reservoir cascade for the non-growing season 2017-2018

BWO Amudarya submits limits for the non-growing season to ICWC members for consideration. Those limits were previously agreed with water management agencies of the countries, taking into account 100% of water content.

Based on these limits and normal water content, forecast operation regimes were developed for the Nurek and Tuyamuyun reservoirs.

One should take into account that the current hydrological conditions are not favorable for the non-growing season 2017-2018.

According to data and reposts of BWO Amudarya, water content is expected to be 90% of the norm totally in the Amudarya River basin, and at about 85% of the annual average norm at the nominal Atamyrat GS upstream of Garagumdarya over the non-growing season 2017-2018.

Taking into account the above-mentioned information, one may suppose that this growing season will be under pressure. To provide a secure and timely supply of water to the Amudarya River water users, supply of sanitary and environmental releases to Prearalie and Aral Sea and while approving water withdrawal limits and forecast operation regime, BWO Amudarya proposes to take note of these factors.

BWO Amudarya and each water user state of the basin have agreed upon preliminary limits of water withdrawal at the long-term annual average level for the non-growing season as follows:

The limit for the Republic of Tajikistan is 2,871.1 mcm,

The limit for the Republic of Uzbekistan is 5,980 mcm; moreover, for the Surkhandarya province it is 370 mcm.

The limit for Turkmenistan is 6,500 mcm.

BWO Amudarya submits the following issues to ICWC for consideration and approval for the non-growing season 2017-2018, taking into account current hydrological conditions and forecast for water availability:

1. Operation regime of the Nurek and Tuyamuyun reservoirs (Annex 1.5)

2. Water withdrawal limits from the Amudarya River basin (Annex 1.4)

3. Volume of water supply to Prearalie and Aral Sea

Annex 1.4

Limits of water withdrawal from the Amudarya River and water supply to the Aral Sea for the non-growing season 2017-2018

River basin, state	Water withdrawal limits, mcm	
	total annual (from 1.10.17 to 1.10.18)	**Including non-growing season (from 1.10.17 to 1.04.18)**
Total withdrawal from the Amudarya River	55,424	15,721.1
of which:		
Republic of Tajikistan	9,854	2,871.1
From the Amudarya River to Atamyrat gauging station	44,000	12,480
Turkmenistan	22,000	6,500
Republic of Uzbekistan	22,000	5,980
In addition:		
Surkhandarya province, Republic of Uzbekistan	1,570	370
Plus:		
- water supply to the Priaralie, including irrigation water and CDW	4,200	2,100
- sanitary and environmental releases to irrigation systems in:	800	800
Dashoguz province	150	150
Khorezm province	150	150
Republic of Karakalpakstan	500	500

Note: Water withdrawal limits imply water supply for irrigation, industrial, municipal and other needs. If water availability in the basin changes, the limits will be adjusted accordingly

Annex 1.5

Forecast operation regime of the Nurek and Tuyamuyun reservoirs (from October 2017 to March 2018)

	unit	Actual	Forecast					Total
		October	November	December	January	February	March	
Nurek reservoir								
Volume: beginning of the season	mcm	10,571	10,503	10,122	9,352	8,424	7,656	10,571
Inflow	m^3/s	356	262	162	170	183	212	
	mcm	954	679	435	455	442	566	3,531
Water releases from the reservoir	m^3/s	382	409	450	516	500	450	
	mcm	1,023	1,060	1,205	1,382	1,210	1,205	7,085
Volume: end of the season	mcm	10,503	10,122	9,352	8,424	7,656	7,020	7,020
Accumulation(+),drawdown(-)	mcm	-68	-381	-770	-928	-768	-637	-3,551
Tuyamuyun reservoir								
Volume: beginning of the season	mcm	4,672	4,649	5,061	4,412	4,760	4,496	4,672
Inflow to the reservoir	m^3/s	415	305	321	400	464	437	
	mcm	1,112	791	860	1,071	1,123	1,172	6,128
Water releases from the reservoir	m^3/s	424	146	564	271	573	851	
	mcm	1,136	378	1,511	726	1,385	2,278	7,414
Volume: end of the season	mcm	4,649	5,061	4,412	4,760	4,496	3,386	3,386
Accumulation(+),drawdown(-)	mcm	-23	412	-649	348	-264	-1,110	-1,286

Annex 1.6

Actual hydrological conditions in the Amudarya River over the growing season 2017

Parameters	unit	April	May	June	July	August	September	total
		actual						mcm
Inflow to the Nurek reservoir	m^3/s	751	1,426	1,777	2,071	1,464	789	21,887
Volume of the Nurek reservoir	mcm	6,893	7,617	9,040	10,029	10,543	10,571	
Water releases from the reservoir	m^3/s	695	1,157	1,225	1,701	1,271	777	18,051
Atamyrat GS actual	m^3/s	1,388	2,609	3,016	3,098	2,133	1,243	35,633
norm	m^3/s	1,072	2,314	2,853	3,447	2,454	1,460	35,961
%%	%	129.4	112.7	105.7	89.9	86.9	85.1	99,1
Upstream of Garagumdarya (actual water content)	m^3/s	2,123	3,644	4,373	4,309	3,128	1,856	51,326
norm	m^3/s	1,613	2,646	3,783	4,529	3,465	1,970	47,592
%	%	131.6	137.7	115.6	95.2	90.3	94.2	107.8
Cumulative actual	mcm	5,504	15,263	26,596	38,139	46,515	51,326	51,326
norm	mcm	4,182	11,269	21,076	33,205	42,485	47,592	47,592
%	%	131.6	135.4	126.2	114.9	109.5	107.8	107.8
Surkhandarya province	m^3/s	38	49	58	87	83	72	1,022
Water withdrawals upstream of Atamyrat GS	m^3/s	636	716	749	756	720	530	10,833
Inflow to Kelif GS	m^3/s	2,023	3,325	3,765	3,853	2,852	1,773	46,466
Water withdrawals at Kelif-Birata reach	m^3/s	5,245	14,149	23,908	34,229	41,869	46,466	
Return water of Kelif-Birata reach	m^3/s	140	133	129	119	112	109	1,952
Water losses at Kelif-Birata reach	m^3/s	353	674	345	2	113	130	4,259
Inflow to Birata GS- actual	m^3/s	934	1,748	2,414	2,757	1,725	912	27,729

Parameters	unit	April	May	June	July	August	September	total
		actual						mcm
norm	m^3/s	899	1,689	2,077	2,781	1,959	1,076	27,721
Cumulative, actual	mcm	2,420	7,101	13,359	20,743	25,364	27,729	27,729
actual	mcm	2,329	6,853	12,236	19,685	24,932	27,721	27,721
%	%	103.9	103.6	109.2	105.4	101.7	100.0	100.0
Water losses at Birata-Tuyamuyun reach	m^3/s	-55	-34	-134	43	67	104	-14
Volume of the Tuyamuyun reservoir: beginning of the season	mcm	2,585	3,344	4,083	4,350	5,487	5,168	
Inflow to the Tuyamuyun reservoir	m^3/s	988	1,782	2,548	2,714	1,658	809	27,743
Water releases from the Tuyamuyun reservoir	m^3/s	695	1,505	2,445	2,290	1,777	1,000	25,656
Volume of the Tuyamuyun reservoir: end of the season	mcm	3,344	4,083	4,350	5,487	5,168	4,672	
Accumulation (+),drawdown (-)	mcm	759	739	267	1,137	-319	-496	2,087
Water withdrawals from the Tuyamuyun reservoir	m^3/s	239	255	291	366	361	258	4,674
Water withdrawals at Tuyamuyun-Samanbay	m^3/s	316	510	710	984	915	305	9,902
Water losses at Tuyamuyun-Samanbay	m^3/s	69	351	417	308	399	246	4,729
Water releases through Takhiatash	m^3/s	71	390	1,027	632	102	191	6,351
Water withdrawals at Kelif-Samanbay reach	m^3/s	1,432	1,800	2,135	2,563	2,403	1,404	31,006

II. Syrdarya River basin

Results of the growing season 2017

According to the forecast by Hydromet, water content in the Syrdarya River basin was expected to be within norm for the growing season 2017: Naryn, Karadarya, rivers in the South of the Fergana Valley, Chirchik, and Akhangaran within 100-110% of the norm and rivers in the North of the Fergana Valley within 90-100% of the norm.

At the 70th meeting of ICWC, its members considered the forecast operation schedule (hereinafter, schedule) of the Naryn-Syrdarya reservoir cascade for the growing season 2017 and water withdrawal limits for the user states in the Syrdarya River basin.

The results of operation of the reservoir cascade and use of water withdrawal limits in the Syrdarya River basin from April 1 to September 30 2017 are as follows:

Inflow to the upstream reservoirs

The normal inflow to the upstream reservoirs of the Naryn-Syrdarya cascade was 18,482 mcm during the growing season.

The scheduled inflow was to be 21,116 mcm.

The actual inflow to the upstream reservoirs was 26,209 mcm or 124% of the schedule (Table 2.1).

Lateral inflow

The lateral inflow to the Syrdarya River up to the Shardara reservoir is 11,042 mcm.

According to the Hydromet's forecast, the lateral inflow was to be 11,713 mcm.

Actual lateral inflow was 2,241 mcm or 119% more than the forecast and amounted to 13,954 mcm (Table 2.1).

Total inflow

The total inflow to the Syrdarya River was 29,524 mcm of the norm; however, 32,829 mcm were scheduled.

Actual total inflow was 40,163 mcm or 122% more than the schedule (Table 2.1).

Table 2.1

Name	Volume, mcm from April 1 to September 30, 2017			actual / forecast (%)	actual / norm (%)	Actual, mcm from April 1 to September 30, 2016
	norm	schedule -forecast	actual			
Inflow to upstream reservoirs						
Toktogul	9,746	11,702	13,383	114	137	12,095
Andizhan	2,990	3,240	4,132	128	138	2,277
Charvak (4 rivers in total)	5,746	6,174	8,694	141	151	6,145
Total:	**18,482**	**21,116**	**26,209**	**124**	**142**	**20,518**
Lateral inflow						
Toktogul – Uchkurgan	1,216	1,275	1,901	149	156	1,794
Andizhan – Uchtepa	2,529	2,768	3,227	117	128	2,379
Uchkurgan, Uchtepa - Bakhri Tochik	3,368	3,479	4,391	126	130	3,541
Bakhri Tochik – Shardara	3,020	3,163	2,874	91	95	3,141
Gazalkent- Chinaz (excluding Ugam)	909	1,027	1,561	152	172	998
Total:	**11,041**	**11,713**	**13,954**	**119**	**126**	**11,853**
Overall:	**29,524**	**32,829**	**40,163**	**122**	**136**	**32,370**

Water releases from the reservoir

According to the operation regime schedule of the Naryn-Syrdarya reservoir cascade (NSRC), 27,676 mcm were to be released from April 1 to September 30, 2017.

Actual water releases were 40,492 mcm, which were 12,816 mcm or 146 % more than the schedule (Table 2.2).

Table 2.2

Reservoir	Water releases, mcm from April 1 to September 30, 2017		Actual/ schedule (%)	Actual from April 1 to September 30, 2016
	Based on operation schedule of NSRC	actual		
Toktogul	4,971	6,567	132	3,573
Andizhan	3,754	4,193	112	2,651
Charvak (water releases from the Gazalkent HEPS)	4,966	6,842	138	5,180
Bakhri Tochik	6,890	10,849	157	6,112
Shardara	7,095	12,041	170	7,593
TOTAL:	**27,677**	**40,492**	**146**	**25,109**

Water storage in the reservoirs

By October 1, 2017, water storage in the reservoirs is 26,971 mcm, which is 3,727 mcm or 116% more than in 2016.

In 2016, water storage in the reservoirs was 23,244 mcm (Table 2.3).

Table 2.3

Name	Water storage in the reservoirs by October 1 (mcm)				Dead storage (mcm)
	including dead storage		excluding dead storage		
	2017	2016	**2017**	2016	
Upstream reservoirs					
Toktogul	**19,586**	17,487	**14,086**	11,987	5,500
Andizhan	**1,019**	731	**869**	581	150
Charvak	**1,768**	1,679	**1,342**	1,253	426
Total	**22,373**	**19,897**	**16,297**	**13,821**	**6,076**

Name	Water storage in the reservoirs by October 1 (mcm)				Dead storage (mcm)
	including dead storage		excluding dead storage		
	2017	2016	**2017**	2016	
In-stream reservoirs					
Bakhri Tochik	**3,404**	2,270	**2,487**	1,353	917
Shardara	**1,194**	1,077	**674**	557	520
Total	**4,598**	**3,347**	**3,161**	**1,910**	**1,437**
Overall	**26,970**	**23,244**	**19,457**	**15,731**	**7,513**

Water supply to states

Water was supplied to the states from April 1 to September 30, 2017 based on their requests.

The total actual water withdrawals by the states were 11,191 mcm (Table 2.4).

Таблица 2.4

Water user state	**Water withdrawals, mcm from April 1 to September 30, 2017**		
	limit	**actual**	**%%**
Republic of Kazakhstan (Dustlik canal)	732	739	101
Kyrgyz Republic	247	188	76
Republic of Tajikistan	1,905	1,593	84
Republic of Uzbekistan	8,800	8,671	99
Total:	**11,684**	**11,191**	**96**

Inflow to in-stream reservoirs, discharge into Arnasay, and water supply to the Aral Sea

From April 1 to September 30, 2017, the inflow to the Bakhri Tochik reservoir was scheduled to be 6,360 mcm.

Actually, it was 11,341 mcm or 4,981 mcm more than the schedule (Table 2.5).

The inflow to the Shardara reservoir was scheduled to be 5,439 mcm.

Actual inflow was 9,800 mcm or 4,361 mcm more than the schedule (Table 2.5).

According to data by CDC “Energy” and RSE “Kazvodkhoz”, 1,387 mcm were supplied to Arnasay over the growing season 2017 (Table 2.5).

According to data by the South Karakalpakstan branch of RSE “Kazvodkhoz”, 1,348 mcm were diverted from the Shardara reservoir to the Arnasay depression for the growing season 2017.

This water was then supplied to Aydarkul lake. These were emergency water releases from Arnasay against bank erosion and flooding in the lower reaches of the Syrdarya River.

From April 1 to September 30, 2017, 1,363 mcm were to be supplied to the Aral Sea and Prearalie.

According to data by the Committee for Water Resources of the Republic of Kazakhstan, the inflow was 4,434 mcm or 3,071 mcm more than the schedule at the Karateren GS (Table 2.5).

Water supply to the Aral Sea and Prearalie was more than the scheduled amount because of high precipitation and increased water releases from the Shardara reservoir.

Table 2.5

Name	Schedule, from April 1 to September 30, 2017, mcm	Actual, from April 1 to September 30, 2017, mcm	Actual/ schedule (%)	Actual, from April 1 to September 30, 2016, mcm
Inflow to the Bakhri Tochik reservoir	6,360	11,341	178	5,732
Inflow to the Shardara reservoir	5,439	9,800	180	6,139
Discharge into Arnasay	0	1,387		22.5
Water supply to the Aral Sea	1,363	4,434	325	1,199

Conclusions

To conclude, the total inflow to the Syrdarya River basin amounted to 40,163 mcm or 122% more than the schedule.

High precipitation in spring resulted in increased inflow to the upstream reservoirs and lateral inflow.

Over the growing season, the inflow to upstream reservoirs was as follows (Table 2.1):

- Toktogul – 114 %;

- Andizhan – 128 %;

- Charvak – 141 % of the schedule-forecast.

Totally, the lateral inflow to the Syrdarya River was 119% of the forecast.

The inflow to the in-stream reservoirs was (Table 2.5):

- Bakhri Tochik – 178 %;

- Shardara – 180 % of the schedule.

Actual water releases from the reservoirs over the growing season were 40,492 mcm or 146% more than the schedule. Last year, they were 15,383 mcm less (25,109 mcm in 2016) (Table 2.2).

According to data by CDC "Energy", actual water releases from the Shardara reservoir were 12,041 mcm over the growing season 2017.

According to data by Kazhydromet, water releases from the Shardara reservoir at the gauging station in tail-water of Shardara were 11,813 mcm.

By October 1, 2017, because of high water content in the Syrdarya River basin, the total water volume in the reservoirs was 26,971 mcm or 3,737 mcm more than by October 1, 2016 (23,244 mcm in 2016) (Table 2.3).

Over the growing season, water was supplied to the states based on their requests. Actual water withdrawals were 96% of the limit (Table 2.4).

Over the growing season, **the following positive factors** should be highlighted:

1. The Republic of Uzbekistan bought electricity from the Kyrgyz Republic in the amount of 1,200 million kWh. From June 16 to September 30, 2017, Uzbekistan received 1,036 million kWh from the Kyrgyz Republic; this ensured additional water releases from the Toktogul reservoir in the amount of 1,152 mcm.

Power receipt by Uzbekistan positively impacted on meeting needs of the water user states in the upper and middle reaches of the Syrdarya River over the peak of the growing season 2017.

2. In the growing season 2017, the Republic of Tajikistan maintained maximum storage in the Bakhri Tochik reservoir. This allowed storing necessary water to cover possible water scarcity in the middle reaches of the Syrdarya River.

The representatives of the Republic of Tajikistan, Republic of Uzbekistan, and BWO Syrdarya jointly arrange water accounting and facilitate mechanical cleaning of BFC and NFC in the border districts.

3. In the growing season, the Republic of Kazakhstan made all efforts to ensure water supply to the Aral Sea and Prearalie in the amount of 4,434 mcm, given the schedule of 1,363 mcm, as well as water supply to the Aydar-Arnasay lakes system in the amount of 1,387 mcm in order to maintain water content in the middle reaches of the Syrdarya River and improve environment in the region.

Table 2.6

Schedule-forecast of the Naryn-Syrdarya reservoir cascade from April 1 to September 30, 2017

		April	May	June	July	August	September	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	350.00	785.00	1,370.00	1,045.00	487.74	400.00	
	mcm	907.20	2,102.54	3,551.04	2,798.93	1,306.37	1,036.80	1,1702.88
Volume: beginning of the season	mcm	**12,777.00**	**12,773.92**	**14,256.95**	**17,027.12**	**19,011.60**	**19,498.32**	
end of the season	mcm	**12,773.92**	**14,256.95**	**17,027.12**	**19,011.60**	**19,498.32**	**19,454.52**	
Water releases from the reservoir	m3/s	350.00	230.00	300.00	300.00	300.00	410.00	
	mcm	907.20	616.03	777.60	803.52	803.52	1,062.72	4,970.59
Bakhri Tochik reservoir								
Inflow to the reservoir	m3/s	555.56	430.97	300.00	300.00	380.00	450.00	
(Akdjar GS)	mcm	1,440.00	1,154.31	777.61	803.53	1,017.80	1,166.40	6,359.65
Volume: beginning of the season	mcm	**3,330.10**	**3,403.05**	**3,408.13**	**2,742.41**	**1,969.10**	**1,784.05**	
end of the season	mcm	**3,403.05**	**3,408.13**	**2,742.41**	**1,969.10**	**1,784.05**	**2,099.15**	
Water releases from the reservoir	m3/s	530.00	400.00	500.00	500.00	385.48	300.00	
	mcm	1,373.76	1,071.36	1,296.00	1,339.20	1,032.48	777.60	6,890.40
Shardara reservoir								
Inflow to the reservoir	m3/s	576.88	412.90	257.89	256.93	174.81	390.87	
	mcm	1,495.28	1,105.92	668.45	688.16	468.21	1,013.14	5,439.16
Volume: beginning of the season	mcm	**4,633.00**	**4,679.35**	**4,312.15**	**3,339.87**	**2,099.58**	**1,000.93**	
end of the season	mcm	**4,679.35**	**4,312.15**	**3,339.87**	**2,099.58**	**1,000.93**	**1,127.60**	
Water releases from the reservoir	m3/s	500.00	400.00	470.00	550.00	470.00	300.00	
	mcm	1,296.00	1,071.36	1,218.24	1,473.12	1,258.85	777.60	7,095.17
Water releases to the Kzylkum canal	m3/s	20.00	100.00	110.00	110.00	90.00	25.00	
	mcm	51.84	267.84	285.12	294.62	241.06	64.80	1,205.28
Discharge into the Arnasay	m3/s	0.00	0.00	0.00	0.00	0.00	0.00	

		April	May	June	July	August	September	Total, mcm
depression	mcm	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water supply to the Aral Sea	m3/s	175.50	93.90	42.70	44.70	44.30	118.70	
	mcm	454.90	251.50	110.68	119.72	118.65	307.67	1,363.12
Charvak reservoir								
Inflow to the reservoir	m3/s	278.53	497.33	647.15	483.89	270.07	163.02	
(4 rivers in total)	mcm	721.95	1,332.05	1,677.41	1,296.05	723.36	422.55	6,173.37
Volume: beginning of the season	mcm	**564.00**	**767.03**	**1,293.95**	**1,931.46**	**1,991.16**	**1,852.60**	
end of the season	mcm	**767.03**	**1,293.95**	**1,931.46**	**1,991.16**	**1,852.60**	**1,753.38**	
Water releases from the reservoir	m3/s	200.00	300.00	400.00	460.00	320.00	200.00	
(discharge by the Gazalkent HEPS)	mcm	518.40	803.52	1,036.80	1,232.06	857.09	518.40	4,966.28
Andizhan reservoir								
Inflow to the reservoir	m3/s	200.00	305.71	329.52	215.56	103.60	74.60	
	mcm	518.40	818.81	854.12	577.36	277.48	193.36	3,239.53
Volume: beginning of the season	mcm	**1,099.60**	**1,228.27**	**1,594.00**	**1,787.48**	**1,424.66**	**1,029.81**	
end of the season	mcm	**1,228.27**	**1,594.00**	**1,787.48**	**1,424.66**	**1,029.81**	**1,039.09**	
Water releases from the reservoir	m3/s	150.00	250.00	350.00	350.00	250.00	70.00	
	mcm	388.80	669.60	907.20	937.44	669.60	181.44	3,754.08

Table 2.7

Actual operation regime of the Naryn-Syrdarya reservoir cascade from April 1 to September 30, 2017

		April, actual	May, actual	June, actual	July, actual	August, actual	September, actual	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	505.00	1,243.93	1,299.73	1,067.45	579.71	371.10	
	mcm	1,308.96	3,331.75	3,368.92	2,859.06	1,552.69	961.90	13,383
Volume: beginning of the season	mcm	12,777.00	13,257.00	16,047.00	18,510.00	19,475.00	19,600.00	
end of the season	mcm	13,257.00	16,047.00	18,510.00	19,475.00	19,600.00	19,586.00	
Water releases from the reservoir	m3/s	323.20	212.45	344.07	697.22	532.87	375.50	
	mcm	837.73	569.03	891.83	1,867.45	1,427.23	973.30	6,567
Bakhri Tochik reservoir								
Inflow to the reservoir	m3/s	1,068.10	875.81	666.13	712.29	545.00	436.83	
(Akdjar GS)	mcm	2,768.51	2,345.76	1,726.61	1,907.79	1,459.73	1,132.27	11,341
Volume: beginning of the season	mcm	3,330.10	3,442.90	3,472.30	3,398.80	3,256.60	3,168.30	
end of the season	mcm	3,442.90	3,472.30	3,398.80	3,256.60	3,168.30	3,403.70	
Water releases from the reservoir	m3/s	1,031.39	857.05	662.60	700.82	552.88	310.37	
	mcm	2,673.36	2,295.53	1,717.47	1,877.08	1,480.84	804.48	10,849
Shardara reservoir								
Inflow to the reservoir	m3/s	1,345.04	983.01	709.38	361.55	158.58	173.10	
	mcm	3,486.36	2,632.89	1,838.72	968.38	424.75	448.68	9,800
Volume: beginning of the season	mcm	4,633.00	4,853.00	4,560.00	4,185.00	2,537.00	1,213.00	
end of the season	mcm	4,853.00	4,560.00	4,185.00	2,537.00	1,213.00	1,194.00	
Water releases from the reservoir	m3/s	1,174.50	945.97	733.50	852.42	658.00	199.33	
	mcm	3,044.30	2,533.68	1,901.23	2,283.13	1,762.38	516.68	12,041
Water releases to the Kzylkum canal	m3/s	81.50	49.68	46.50	101.77	36.45	6.33	

		April, actual	May, actual	June, actual	July, actual	August, actual	September, actual	Total, mcm
Discharge into the Arnasay depression	mcm	211.25	133.05	120.52	272.58	97.64	16.42	851
	m3/s	121.33	310.97	92.50	0.00	0.00	0.00	
	mcm	314.50	832.90	239.76	0.00	0.00	0.00	1,387
Water supply to the Aral Sea	m3/s	394.37	363.42	267.70	216.84	226.71	214.80	
	mcm	1,022.20	973.39	693.88	580.77	607.23	556.76	4,434
Charvak reservoir								
Inflow to the reservoir	m3/s	477.33	867.97	828.93	585.78	320.34	214.78	
(4 rivers in total)	mcm	1,237.23	2,324.76	2,148.58	1,568.94	858.01	556.70	8,694
Volume: beginning of the season	mcm	564.00	982.00	1,672.00	1,968.80	2,001.00	1,863.80	
end of the season	mcm	982.00	1,672.00	1,968.80	2,001.00	1,863.80	1,768.00	
Water releases from the reservoir	m3/s	332.13	587.00	721.57	485.07	283.00	185.83	
(Discharge by the Gazalkent HEPS)	mcm	860.89	1,572.23	1,870.29	1,299.20	757.98	481.68	6,842
Andizhan reservoir								
Inflow to the reservoir	m3/s	311.60	497.42	377.07	265.97	71.07	43.07	
	mcm	807.67	1,332.29	977.36	712.36	190.35	111.63	4,132
Volume: beginning of the season	mcm	1,099.60	1,460.00	1,746.26	1,797.13	1,628.08	1,141.40	
end of the season	mcm	1,460.00	1,746.26	1,797.13	1,628.08	1,141.40	1,018.60	
Water releases from the reservoir	m3/s	169.68	386.02	357.20	334.52	247.22	90.83	
	mcm	439.82	1,033.90	925.87	895.97	662.16	235.44	4,193

Forecast water withdrawal limits and operation regime of the Naryn-Syrdarya reservoir cascade for the non-growing season 2017-2018

Forecast by Hydromet

On September 26, 2017, BWO Syrdarya obtained forecast by Hydromet for the non-growing season 2017-2018 and adjusted forecast for the 4th quarter of 2017.

Accroding to the forecast, the inflow to upstream reservoirs is expected to be as follows:

- Toktogul reservoir - 103 %;
- Andizhan – 105 %;
- Charvak – 123 % of the norm.

The total lateral inflow is expected to be 106 % of the norm.

Totally, water content in the Syrdarya River basin is to be 107% of the norm.

Inflow to upstream reservoirs

The normal inflow to upstream reservoirs in the Naryn-Syrdarya reservoir cascade is 5,233 mcm for the non-growing season. The forecast inflow is expected to be 5,700 mcm (Table 2.8).

The normal inflow to the Toktogul reservoir is 2,891 mcm.

The forecast inflow is expected to be 2,985 mcm or 103 % more than the norm.

The normal inflow to the Andizhan reservoir is 934 mcm.

The forecast inflow is expected to be 981 mcm or 105 % more than the norm.

The normal inflow to the Charvak reservoir is 1,408 bcm.

The forecast inflow is expected to be 1,735 mcm or 123 % more than the norm.

Laterl inflow

The normal lateral inflow is 11,075 mcm. According to the forecast, the lateral inflow is expected to be 11,723 mcm or 106% more than the norm.

Total inflow

The total normal inflow to the Syrdarya River basin is 16,308 mcm for the non-growing season.

According to the forecast, water content is expected to be 17,423 mcm, which is 1,115 mcm or 107 % more than the norm.

To compare, the total inflow to the Syrdarya River basin was expected to be 16,082 mcm last year; it actually was 18,853 mcm, which was 2,771 mcm or 117% more than the forecast over the non-growing season 2016-2017.

Table 2.8

Name	Non-growing season, mcm from October 1, 2017 to March 31, 2018				
	norm	forecast	% of the norm	2016-2017	
				forecast	actual
Inflow to the upstream reservoirs					
Toktogul	2,891	2,985	103	2,804	3,643
Andizhan	934	981	105	945	1,124
Charvak (4 rivers in total)	1,408	1,735	123	1,498	1,873
Total	**5,233**	**5,700**	**109**	**5,247**	**6,640**
Lateral inflow					
Toktogul – Uchkurgan	398	410	103	386	423
Andizhan – Uchtepe	2,518	2,754	109	2,675	2,857
Uchkurgan, Uchtepe – Bakhri Tochik	4,365	4,710	108	4,317	5,435
Bakhri Tochik – Shardara	2,953	2,985	101	2,750	2,477
Gazalkent- Chinaz (excluding Ugam)	841	865	103	707	1,021
Total	**11,075**	**11,723**	**106**	**10,835**	**12,213**
Overall (total inflow)	**16,308**	**17,423**	**107**	**16,082**	**18,853**

Water storage in the reservoirs

By the beginning of the non-growing season, water storage in the reservoirs, excluding dead storage, is 19,458 mcm.

By October 1, 2017, water storage in the reservoirs, excluding dead storage, was 3,727 mcm more than for the same period last year (15,731 mcm by the beginning of the non-growing season 2016, excluding dead storage) (Table 2.9).

Table 2.9

Name	Water storage in the reservoirs as of October 1 (mcm)				Dead storage (mcm)
	including dead storage		excluding dead storage		
	2017	2016	2017	2016	
Upstream reservoir					
Toktogul	19,586	17,487	14,086	11,987	5,500
Andizhan	1,019	731	869	581	150
Charvak	1,768	1,679	1,342	1,253	426
TOTAL:	22,373	**19,897**	16,297	13,821	6,076
In-stream reservoir					
Bakhri Tochik	3,404	2,270	2,487	1,353	917
Shardara	1,194	1,077	674	557	520
TOTAL:	4,598	3,347	3,161	1,910	1,437
OVERALL:	26,971	23,244	19,458	15,731	7,513

Available water resources are 36,881 mcm in the Naryn-Syrdarya reservoior cascade (water storage in the reservoirs, excluding dead storage plus total inflow).

Water releases from the reservoir

According to the forecast operation schedule of the Naryn-Syrdarya reservoir cascade, 34,519 mcm are to be released over the non-growing season.

Last year, 34,106 mcm were released from the reservoirs over the non-growing season (Table 2.10).

Table 2.10

Reservoir	**scheduled** from October 1, 2017 to March 31, 2018	**actual** from October 1, 2016 to March 31, 2017
Toktogul	8,943	8,351
Andizhan	658	741
Charvak (water releases from the Gazalkent HEPS)	2,442	2,746
Bakhri Tochik reservoir	13,242	12,390
Shardara	9,234	9,878
TOTAL:	**34,519**	**34,106**

Water withdrawal limits

According to the requests submitted by water user states, the following water withdrawal limits are proposed for the non-growing season.

The total water withdrawal limits of all water user states are 3,360 mcm for the non-growing season (Table 2.11).

Table 2.11

Water user state	Based on request, mcm
Republic of Kazakhstan	475
Kyrgyz Republic	37
Republic of Tajikistan	365
Republic of Uzbekistan	2,483
Total from the Syrdarya River	**3,360**

For the non-growing season, water supply to the Aral Sea and Prearalie is shceduled in the amount of 3,548 mcm (based on the long-term annual average data).

According to the Hydromet's forecast, based on water accumulation in the reservoirs and requests of the water user states, forecast operation regime of the Naryn-Syrdarya reservoir cascade was developed for the period from October 1, 2017 to March 31, 2018. This operation regime is submitted to ICWC for consideration (Table 2.12).

Table 2.12

Forecast schedule of the Naryn-Syrdarya reservoir cascade from October 1, 2017 to March 31, 2018

		October	November	December	January	February	March	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	245	213	177	166	163	173	
	mcm	657	553	474	445	394	462	2,985
Volume: beginning of the season	mcm	19,586	19,366	18,619	17,348	15,998	14,771	
end of the season	mcm	19,366	18,619	17,348	15,998	14,771	13,813	
Water releases from the reservoir	m3/s	400	500	650	670	670	530	
	mcm	1,071	1,296	1,741	1,795	1,621	1,420	8,943
Bakhri Tochik reservoir								
Inflow to the reservoir	m3/s	724	644	862	947	1,012	807	
(Akdjar GS)	mcm	1,938	1,670	2,309	2,535	2,449	2,162	13,064
Volume: beginning of the season	mcm	3,404	3,330	3,415	3,418	3,397	3,366	
end of the season	mcm	3,330	3,415	3,418	3,397	3,366	3,430	
Water releases from the reservoir	m3/s	772	613	850	980	1,050	800	
	mcm	2,069	1,588	2,277	2,625	2,540	2,143	13,242
Shardara reservoir								
Inflow to the reservoir	m3/s	729	582	1,064	1,079	1,156	916	
	mcm	1,953	1,509	2,849	2,891	2,797	2,453	14,452
Volume: beginning of the season	mcm	1,194	1,055	1,017	2,633	4,076	4,793	
end of the season	mcm	1,055	1,017	2,633	4,076	4,793	4,611	
Water releases from the reservoir	m3/s	900	616	450	500	500	550	
	mcm	2,411	1,596	1,205	1,339	1,210	1,473	9,234
Water supply to the Aral Sea	m3/s	171	180	260	265	255	224	

		October	November	December	January	February	March	Total, mcm
	mcm	459	467	696	710	617	600	3,548
Charvak reservoir								
Inflow to the reservoir	m3/s	135	119	101	90	88	127	
(4 rivers in total)	mcm	361	309	271	240	214	339	1,735
Volume: beginning of the season	mcm	1,768	1,665	1,582	1,451	1,261	1,087	
end of the season	mcm	1,665	1,582	1,451	1,261	1,087	1,051	
Water releases from the reservoir	m3/s	172	150	150	160	160	140	
(water releases from the Gazalkent HEPS)	mcm	461	389	402	429	387	375	2,442
Andizhan reservoir								
Inflow to the reservoir	m3/s	65	68	72	60	52	57	
	mcm	174	177	192	161	125	152	981
Volume: beginning of the season	mcm	1,019	981	1,059	1,211	1,343	1,407	
end of the season	mcm	981	1,059	1,211	1,343	1,407	1,339	
Water releases from the reservoir	m3/s	79	38	15	11	25	82	
	mcm	210	98	39	29	61	220	658

PROGRESS ON THE IMPLEMENTATION PLAN ON STRENGTHENING ICWC ACTIVITIES IN KEY DIRECTIONS[2]

General information

At the 63rd ICWC meeting (18-19.04.2014, Tashkent), the "Implementation Plan on strengthening ICWC activities in key directions" was approved. The Plan consists of four main directions:

(1) Water conservation

(2) Implementation of IWRM as a tool for "green" development and adaptation to climate change

(3) Improvement of water accounting quality and accuracy

(4) Building capacity of regional and national organizations

According to the Plan, in the first stage it was planned to make inventory of all groundwork in the countries and the region as a whole in the four directions. The generalized material on each direction was then published in form of brochures and should serve as input for determination of necessary work efforts under each direction of the Plan and of relevant cost estimates. To implement the Plan, 4 working groups were organized.

At the 70th meeting of ICWC (11-12.04.2017, Tashkent) the ICWC members decided to:

3. Approve activity plan of the working groups for 2017 and the following schedule of their meetings:

- *meeting of the Working Group on Water Conservation to be held on June 5, 2017 under the Central Asian International Ecological Forum in Ashgabat, Turkmenistan;*
- *meeting of the Working Group on Improvement of Water Accounting Quality and Accuracy to be held on July 19-20, 2017 under EXPO-2017 in Astana, Republic of Kazakhstan; and*
- *meeting of the Working Groups on Building Capacity of Regional and National Organizations and Implementation of IWRM and Adaptation to Climate Change to be held in September 2017 in Tashkent, Republic of Uzbekistan.*

[2] Information on the second item of 72nd ICWC meeting

4. Entrust SIC ICWC to appeal to GIZ and CAREC with the request to fund meetings and preparation of reports of four regional groups, as previously agreed.

Implementation in 2017 is summarized below on the four directions

I. Water conservation

Results by 20 November 2017:

1. First *meeting* of the ICWC working group on water conservation was held (6.06. 2017, Ashkhabad).

2. *Summary report* "Water saving in the Central Asian countries: lessons learnt and future prospects" was prepared on the basis of country reports and presentations on water saving practices and future plans in Kazakhstan, Turkmenistan, and Uzbekistan and its main positions were presented at the ICWC anniversary Conference in Tashkent.

The total water withdrawal over this period decreased in Kazakhstan, Tajikistan, Turkmenistan and significantly in Uzbekistan. As to transboundary rivers, according to BWO Syr Darya, Tajikistan decreased its withdrawal by 680 Mm^3 in 2 years; Turkmenistan, by 1,760 Mm^3; Uzbekistan, by 1,630 Mm^3. However, this cannot be considered as the achievement of the countries as in 2015 all the riparian countries in the Syr Darya Basin did not change their amounts of water withdrawal and even increased them in the Amu Darya Basin. The proposal to set water conservation targets has not yet been formally adopted by any country. Meanwhile, the risk of water shortage in the Amu Darya Basin is 8 km^3 by 2035. And we must be prepared to this.

As water conservation measures, all member-countries, first of all, plan implementation of drip irrigation, coverage of which achieved 72,000 ha in Kazakhstan, 34,309 ha in Turkmenistan by 01.01.2017. Additionally, Uzbekistan expands areas irrigated by portable pipelines that covered 122,000 ha. Country reports by Kazakhstan and Uzbekistan indicated to prospective expansion of drip irrigation to 300,000 ha and 200,000 ha, respectively by 2030. The Turkmenistan's report does not show figure targets.

3. An *exhibition* "Water technology and industry - WATER 2017" was organized as part of the ICWC anniversary Conference and covered the water conservation issues as well.

4. An *interactive map of the best practices* on the use of water, land and energy resources and of environment in Central Asia (http://riverbp.net/innovation/map-best-practices/) was developed, representing 30 best practices of efficient water use and water saving from all countries in Central Asia. The interactive map was generated by SIC ICWC by request of CAREC under the Project "Promoting dialogue for conflict prevention related to water nexus in Central Asia. Central Asia Water Nexus Cooperation (CAWECOOP)" implemented with the

support of the European Union.

II. Implementation of IWRM as a tool for "green" development and adaptation to climate change

Results by 20 November 2017:

1. A *meeting* of the ICWC working group was held (4.09.2017, Tashkent).

2. *Summary report* "Implementation of IWRM in the Central Asian countries: lessons learnt and future prospects" was prepared on the basis of country reports and presentations collected from the members of the group in Kazakhstan, Turkmenistan, and Uzbekistan.

Kazakhstan implemented IWRM at basin level by organizing successfully Basin Councils in all country's basins, with the engagement of all subordinate water management organizations and water users (energy, environment, provincial authorities). Kyrgyzstan, Uzbekistan, and Tajikistan successfully developed and implemented IWRM in the Ferghana Valley on an area of 130,000 ha. Kyrgyzstan and Uzbekistan continued (though partially) working in this direction at the level of BISAs under a number of projects, such as RESP 2, WRMSP, IWRM-Zaravshan. In Tajikistan this work is taking off. Turkmenistan made the first step in form of a Government's decree, which opened road to participatory approach and other principles of IWRM. However, none of the countries provided future development reports with concrete proposals.

3. A special *thematic roundtable* "Integrated water resources management as a tool for 'green growth' and adaptation to climate change" was organized during the ICWC anniversary Conference on 23-24 November in Tashkent, where the summary report was presented and presentations of the countries and representatives of international and regional organizations were made. The report will be presented by the following ICWC meeting.

4. An *interactive map of the best practices* on the use of water, land and energy resources and of environment in Central Asia *(*http://riverbp.net/education/map-learning-centers/*)* was developed, representing 46 cases of best practices on IWRM from all countries in Central Asia. The map was generated by SIC ICWC by request of CAREC under the Project "Promoting dialogue for conflict prevention related to water nexus in Central Asia. Central Asia Water Nexus Cooperation (CAWECOOP)" implemented with the support of the European Union.

III. Improvement of water accounting quality and accuracy

Results by 20 November 2017:

1. A *meeting* of the ICWC working group on water accounting was held (7.09.2017, Almaty).

2. *Summary information* "Improvement of water accounting quality and accuracy in the Amudarya and Syrdarya River Basins" was prepared on the basis of country reports and presentations collected from the members of the group in Kazakhstan, Turkmenistan, and Uzbekistan.

The more detailed report was submitted by Kazakhstan and BWO Amu Darya. As part of the "State program of agroindustry development in the Republic of Kazakhstan for 2017-2021" water accounting in Kazakhstan was assessed and considered to be unsatisfactory. According to the data of Su-Metrology, which made full inventory of all hydrometric stations (2397 in total), 627 stations or 27% need to be reconstructed. In this context, the Kazakh water agency allocated funds for designing and reconstruction until the end of 2017.

Uzbekistan implemented automation of large structures in the Ferghana Valley and of BWO Syr Darya structures. The experience showed their high effectiveness with the use of SCADA technology. And water accounting accuracy improved from ± 10 to ± 2% there. Additionally, the Korean technology SmartWater was tested at water intakes in the Tashkent province. Nevertheless, neither Uzbekistan nor Turkmenistan provided the action plan to improve water accounting in their respective countries.

3. A *section* related to water accounting was updated in *the hierarchical classification system of knowledge base* on the CAWater-Info portal (http://www.cawater-info.net/bk/rubricator04.htm#4-2-1-8-2):

4.2.1.8. Automation and water accounting in irrigation systems

4.2.1.8.1. Automation of water distribution in canals

4.2.1.8.2. Water accounting in irrigation systems

4.2.1.8.2.1. Water accounting in open irrigation system

4.2.1.8.2.2. Water accounting in subsurface irrigation system

4.2.1.8.2.3. Water accounting in collector-drainage network

4.2.1.8.2.4. Water accounting along rivers

4.2.1.8.2.5. Water measuring structures

IV. Building capacity of regional and national organizations

Results by 20 November 2017:

1. A *meeting* of the ICWC working group on capacity building was held (5.09.2017, Tashkent).

2. *Regional report* "Water sector professional development in Central Asia: achievements and tasks for the future" was prepared on the basis of country reports

and presentations collected from the members of the group in Kazakhstan, Turkmenistan, and Uzbekistan.

Generally, the professional development system was established under umbrella of ICWC. In 1999, by the ICWC decision, professional development courses (PDC) were established for the Central Asian water sector. In 2000, PDC were re-organized into the Regional Training Center (RTC) with the support of the Canadian International Development Agency (CIDA). In 2000-2012, RTC organized and held more than 100 training courses for water sector professionals from the Central Asian countries in different water management topics. Over this period of time approx. 3300 representatives of national water management institutions got training.

In the recent years, due to lack of financing from the side of donors and ICWC member-states, except for Uzbekistan, the activity of RTC has become less active.

The establishment and development of the regional professional development system was supported significantly by the following two projects:

- CIDA project (2000-2005)
- Joint SIC ICWC and IHE-UNESCO project "Capacity Building for Integrated Water Resources Planning and Management in Central Asia" (2009-2012)

To cover as much trainees as possible and take into account training needs, national training centers were established at water-management organizations in Kazakhstan (Almaty), Kyrgyzstan (Bishkek, Osh), Tajikistan (Khojent), and Uzbekistan (Andizhan, Urgench, Fergana).

Activity of SIC ICWC has been particularly vigorous with the Uzbek Ministry of Agriculture and Water Resources since 2015. According to relevant orders of the Minister of agriculture and water resources, training courses has been held every year on various aspects of water management in all republican regions, and specialized courses as well. In 2016, specialized courses were held for hydrometry specialists of all Irrigation System Administrations (ISA) and their regional branches. In total, 224 hydrometry specialists from territorial organizations of the Central Water Management Administration were trained.

In 2015-2016, training courses were held for the water sector staff all over the republic. SIC ICWC helped the Central Water Management Administration of Uzbek MAWR to develop main directions and curricula of training courses and their optimal schedules. Lectures and other training materials were prepared and disseminated by SIC's lecturers.

1877 specialists were trained in three directions in 2016 only. In total, in winter and spring sessions (January-March) in 2016 training courses, including specialized hydrometry courses, were attended by more than 2100 (1877 + 224 (hydrometry courses)) specialists from organizations of the Central Water Management Administration. In 2017 in winter and spring sessions (February-May) the training courses were attended by 638 specialists.

3. A special *thematic roundtable* "Enhancement of water education and

professional development as well as improvement of regional and national training activities in Central Asia" was organized during the ICWC anniversary Conference, where the *regional report* was presented and presentations of the countries and representatives of international and regional organizations were made.

4. An *interactive map* was developed on issues related to building capacity of water sector professionals in the Central Asian countries (http://riverbp.net/education/map-learning-centers/) and included key information on institutions dealing with training provision in Central Asian water sector. The map was generated by SIC ICWC by request of CAREC under the Project "Promoting dialogue for conflict prevention related to water nexus in Central Asia. Central Asia Water Nexus Cooperation (CAWECOOP)" implemented with the support of the European Union.

5. A database was developed on key international projects, on-going or completed, on capacity building in the water sector of the Central Asian countries (joint product of CAREC and SIC ICWC).

Conclusions

1. Very active, useful and important work has been started in anticipation of future challenges and growing water scarcity. This requires active engagement of all members and bodies of ICWC and efficient implementation of working group decisions. We are behind time, it urges us to work together and share experiences and best practices.

2. It is necessary for ICWC members to apply to donors as it was not enough when SIC applied to them on behalf of ICWC. GIZ initially agreed to support financially but later told that financing will be arranged via CAREC, to which they allocated money. CAREC supported organization of working group meetings but activities of the working groups were financed by none of donors. Thus, all work was made through efforts of working group members and executive bodies of ICWC. It is to apply to donors for financing of competition on water conservation, IWRM and water accounting by analogy with the World Bank's Program A-2 and of the established training system on regular basis.

ANALYSIS OF HYDROLOGICAL CONDITIONS IN THE SYRDARYA AND AMUDARYA BASINS OVER THE GROWING SEASON 2017

1 Syrdarya River basin

The actual inflow to the upstream reservoirs (Toktogul, Andizhan, and Charvak reservoirs) in the Syrdarya basin was 26.21 km³ or 124% of the forecast and 142% of the norm for the growing season. The total lateral inflow to the Naryn and Syrdarya (in the reaches up to the Shardara reservoir) was 16.19 km³.

By the beginning of the growing season, the upstream reservoirs (Toktogul, Andizhan, and Charvak) have accumulated 14.44 km³ (total capacity); active capacity was 8.36 km³ (total capacity minus dead storage). In the Toktogul reservoir, the total capacity was 12.78 km³ and active capacity - 7.28 km^3. The in-stream reservoirs, Bakhri Tochik and Shardara, have accumulated 7.96 km^3 (total capacity); active capacity was 6.52 km³.

By the end of the growing season, the total capacity in the upstream reservoirs was 22.37 km³ or 101% of the BWO Syrdarya schedule; active capacity was 16.3 km³, including 19.59 km³ of total capacity and 14.09 km³ of active capacity in the Toktogul reservoir. The in-stream reservoirs, Bakhri Tochik and Shardara, have accumulated 4.6 km³ (total capacity); active capacity was 3.16 km³.

Water releases from the Toktogul reservoir were 6.57 km³ or 101% of the BWO Syrdarya schedule. Analysis of operation of the Toktogul reservoir shows that water supply to the reservoir was 1.7 km³ more than the forecast and amounted to 137% of the norm during the growing season. Water releases from the reservoir were 1.6 km³ more than scheduled (planned) by BWO Syrdarya. An amount of 18.5 km³ was accumulated in the reservoir by the end of June, whereas by the end of July, the total capacity was 19.5 km³. Consequently, larger inflow to the reservoir given high water levels allowed higher water releases from the reservoir.

The inflow to the Bakhri Tochik reservoir was 11.34 km³ and water releases into the river amounted to 10.85 km³. Analysis of operation of the Bakhri Tochik reservoir and HEPS shows that water supply to the reservoir was 5 km³ more than planned by BWO Syrdarya; water releases from the reservoir by 3.8 km³ more than scheduled by BWO Syrdarya. Consequently, higher inflow to the Bakhri Tochik reservoir allowed not only fulfilling the plan on water releases, but also maintaining the total capacity in the amount of 3.1-3.3 km³. This, in turn, allowed producing more electricity than planned.

The inflow to the Shardara reservoir was 9.8 km³; water releases from the

reservoir were 14.28 km³, including 12.04 km³ into the river. According to BWO Syrdarya (KazHydroMet), 1.39 km³ were released into the Arnasay reservoir from the Shardara hydroscheme. According to the Aralo-Syrdarya Basin Water Administration, the Koksarai reservoir accumulated water in the amount of 73 mcm only in April, while in other months it discharged the earlier accumulated flow in the amount of 2,339 mcm.

The total water intake from the Naryn and Syrdarya Rivers was 11.19 km³ or 96% of the limit in the reaches up to the Shardara reservoir. Over the growing season 2017, water withdrawal was 0.49 km³ less than planned by BWO Syrdarya. Water shortage (against the limit) was not observed in the Republic of Kazakhstan (along the Dustlik canal). However, it was 58 mcm in the Kyrgyz Republic, 313 mcm in the Republic of Tajikistan, and 127 mcm in the Republic of Uzbekistan. Water availability was uneven by state and river reach (Table 1.1). The highest water shortage (% of the limit) was in the middle reach Bakhri Tochik reservoir-Shardara reservoir – 6%.

Water availability was 99% for the Republic of Uzbekistan and 101% for the Republic of Kazakhstan. The lowest water availability was in the Kyrgyz Republic – 76%. In the Republic of Tajikistan, it was higher than in the Kyrgyz Republic. However, it was rather uneven in the river reaches: 1) Toktogul-Uchkurgan – 45%; 2) Uchkurgan-Bakhri Tochik – 119%; 3) Bakhri Tochik-Shardara – 78%.

Analysis of water balance in basin's reservoirs (Table 1.3) has detected unrecorded inflow of 1.04 km³ to the Shardara reservoir, losses in other reservoirs in the total amount of 0.97 km^3, including 0.64 km^3 in the Charvak reservoir and 0.31 km³ in the Bakhri Tochik reservoir.

Water losses in open river channel in the Toktogul-Shardara reach were 1.4 km³ or 6% of regulated runoff. In the lower reaches, runoff utilization was 10.08 km³ (including water intake, losses, minus lateral inflow).

According to KazHydroMet, water supply to the Aral Sea and Prearalie (Karateren GS) was 4.22 km³ for the growing season. (According to the Committee for Water Resources of the Republic of Kazakhstan, it was 4.43 km³).

Table 1.1

Water availability in the Syrdarya River basin countries over the growing season 2017

Water user	Water volume, km^3		Water availability %	Deficit (-), surplus (+), km^3
	BWO schedule/ Limit	Actual	Season	Season
1 Total water withdrawal up to Shardara reservoir	11.68	11.19	96	-0.492
2 By state:				
– *Kyrgyz Republic*	0.25	0.19	76	-0.058
– *Uzbekistan*	8.80	8.67	99	-0.127
– *Tajikistan*	1.91	1.59	84	-0.313
– *Kazakhstan*	0.73	0.74	101	0.01
3 By river reach				
3.1 Toktogul reservoir – Uchkurgan hydroscheme	3.95	3.77	95	-0.18
including:				
– *Kyrgyz Republic*	0.16	0.12	72	-0.05
– *Tajikistan*	0.24	0.11	45	-0.13
– *Uzbekistan*	3.55	3.55	100	0.00
3.2 Uchkugran hydroscheme – Bakhri Tochik reservoir	1.08	1.17	109	0.09
including:				
– *Kyrgyz Republic*	0.08	0.07	85	-0.01
– *Tajikistan*	0.45	0.54	119	0.09
– *Uzbekistan*	0.54	0.56	103	0.02
3.3 Bakhri Tochik reservoir – Shardara reservoir	6.66	6.25	94	-0.41
including:				
– *Kazakhstan*	0.73	0.74	101	0.01
– *Tajikistan*	1.22	0.95	78	-0.27
– *Uzbekistan*	4.71	4.56	97	-0.14
4 Additionally:				
– Inflow to Shardara reservoir	5.44	9.80	180	4.36
– Discharge into Arnasay	0.00	1.39		1.39
– Water supply to the Aral Sea and Prearalie	1.36	4.22	310	2.86

Table 1.2

Syrdarya River channel water balance for the growing season 2017

Balance item	Water volume, km^3		Deviation (actual - plan)
	Forecast/plan	Actual	
1 Inflow to the Toktogul reservoir	11.70	13.38	1.68
2 Lateral inflow in the river reach of Toktogul reservoir – Shardara reservoir (+)	14.00	16.19	2.18
including:			
– *Discharge from the Karadarya river*	3.15	3.24	0.09
– *Discharge from the Chirchik river*	3.85	3.78	-0.07
– *Lateral inflow from CDF and small rivers*	7.00	9.17	2.17
3 Flow regulation in the reservoirs: inflow (+) or withdrawal (-)	-6.02	-7.20	-1.18
including:			
– *Toktogul reservoir*	-6.73	-6.82	-0.08
– *Bakhri Tochik reservoir*	0.71	-0.38	-1.09
4 Regulated flow (1+2+3)	19.69	22.37	2.69
5 Water withdrawal in the Toktogul – Shardara reach (-)	-11.68	-11.19	0.49
6 Water losses (-) or unrecorded inflow to the river channel (+) in the Toктogul-Shardara reach	-2.56	-1.38	1.18
Including % of regulated flow	13	6	
7 Inflow to the Shardara reservoir	5.44	9.80	4.36
8 Flow regulation in the Shardara reservoir: inflow (+) or withdrawal (-)	2.86	4.48	1.62
9 Water releases from the Shardara reservoir	8.30	14.28	5.98
10 Including water releases into the river	7.10	12.04	
11 Flow regulation in the Koksaray reservoir: inflow (+) or withdrawal (-)	1.68	2.27	0.58
12 Runoff discharge (water intake-lateral inflow+losses)	7.41	10.08	2.67
13 Water supply to the Aral Sea and Prearalie	1.36	4.22	2.86

Table 1.3

Water balance of the Syrdarya River basin reservoirs for the growing season 2017

Balance item	Water volume, km³		Deviation (actual - plan)
	Forecast/Plan	Actual	
1.Toktogul reservoir			
1.1 Inflow to the reservoir	11.70	13.38	1.68
1.2 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	12.78	12.78	0.00
– end of the season (1 October 2017)	19.45	19.59	0.13
1.3 Water releases from the reservoir	4.97	6.57	1.60
1.4 Unrecorded inflow (+) or losses (-)	-0.06	0	-0.06
% of inflow to the reservoir	0	0	0
1.5 Flow regulation: inflow (+) or withdrawal (-	-6.73	-6.82	-0.08
2.Andizhan reservoir			
2.1 Inflow to the reservoir	3.24	4.13	0.89
2.2 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	1.10	1.10	0.00
– end of the season (1 October 2017)	1.04	1.02	-0.02
2.3 Water releases from the reservoir	3.75	4.19	0.44
2.4 Unrecorded inflow (+) or losses (-)	0.45	-0.02	-0.47
% of inflow to the reservoir	14	0	14
2.5 Flow regulation: inflow (+) or withdrawal (-)	0.51	0.06	-0.45
3.Charvak reservoir			
3.1 Inflow to the reservoir	6.17	8.69	2.52
3.2 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	0.56	0.56	0.00
– end of the season (1 October 2017)	1.75	1.77	0.01
3.3 Water releases from the reservoir	4.97	6.84	1.88
3.4 Unrecorded inflow (+) or losses (-)	-0.02	-0.65	-0.63
% of inflow to the reservoir	0	7	7
3.5 Flow regulation: inflow (+) or withdrawal (-)	-1.21	-1.85	-0.64
4 Bakhri Tochik reservoir			
4.1 Inflow to the reservoir	6.36	11.34	4.98
4.2 Lateral inflow	0.30	0.25	-0.05
4.3 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	3.33	3.33	0.00
– end of the season (1 October 2017)	2.10	3.40	1.30
4.4 Water releases from the reservoir	7.37	11.21	3.84
including:			
– *Water releases into river*	6.89	10.85	3.96

Balance item	Water volume, km³		Deviation (actual - plan)
	Forecast/Plan	Actual	
– *Water withdrawal from reservoir*	0.48	0.36	-0.12
4.5 Unrecorded inflow (+) or losses (-)	-0.52	-0.31	0.21
% of inflow to the reservoir	8	3	5
4.6 Flow regulation: inflow (+) or withdrawal (-)	0.71	-0.38	-1.09
5 Shardara reservoir			
5.1 Inflow to the reservoir	5.44	9.80	4.36
5.2 Lateral inflow	0.00	0.00	0.00
5.3 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	4.63	4.63	0.00
– end of the season (1 October 2017)	1.13	1.19	0.07
5.4 Water releases from the reservoir	8.30	14.28	5.98
including:			
– *Discharge into Arnasay*	0.00	1.39	1.39
– *Water releases into river*	7.10	12.04	4.95
– *Water withdrawal from reservoir*	1.21	0.85	-0.35
5.5 Unrecorded inflow (+) or losses (-)	-0.64	1.04	1.69
% of inflow to the reservoir	12	11	1
5.6 Flow regulation: inflow (+) or withdrawal (-)	2.86	4.48	1.62
TOTAL Flow regulation by reservoirs: inflow (+) or withdrawal (-)	-3.85	-4.50	-0.65
TOTAL losses (-), unrecorded inflow (+)	-0.78	0.07	0.85

2 Amudarya River basin

The actual water content in the Amudarya River at the nominal Atamyrat gauging station (upstream of intake to Garagumdarya) was 50.3 km³ or 11.57 km³ less than expected by the BWO Amudarya schedule (Table 2.2). The inflow to the Nurek HEPS amounted to 21.89 km³ and turned to be higher of the forecast by 1.46 km³. Water releases from the reservoir were 18.05 km³ or 1.44 km³ more than planned. Water withdrawal from the river through accumulation in the Nurek reservoir amounted to 3.84 km³ (Table 2.3).

Given such hydrological conditions, the established limit of water withdrawal into canals in the Amudarya River basin was 96% provided (Table 2.1). The total water withdrawal amounted to 38 km³, including 31 km³ downstream of Atamyrat gauging station (starting from intake to Garagumdarya). During the growing season, the average water availability was 86% for the Republic of Tajikistan, 96% for Turkmenistan and 100% for the Republic of Uzbekistan; in the lower reaches water availability was 87% for Turkmenistan, 100% for the Republic of Uzbekistan, and 85% for the Surkhandarya province (Table 2.1)

Water supply to TMHS was 11.4 km³ more than expected. This allowed accumulating about 2.1 km³ in the TMHS reservoirs over the growing season. In this period of time, the total water intake by the Nurek reservoir and TMHS reservoirs from the Vakhsh and Amudarya Rivers amounted to 5.9 km³.

Water losses in open channel of the Amudarya River at the nominal Atamyrat g/s to Bir-Ata g/s were calculated by the balance method and amounted to 4.27 km^3 or about 9 % of runoff at Atamyrat g/s. Water losses in the lower reaches (in the reach Tuyamuyun GS –Samanbay GS) were 2.63 km³ or 13% of runoff in the Tuyamuyun GS. Water losses along the Amudarya River (from the nominal Atamyrat GS-Samanbay GS) were approximately 9 km^3 or 18% of water content in the river.

An amount of 9.42 km³ (Amudarya runoff at Samanbay g/s plus collector-drainage flow) was supplied to Prearalie and the Aral Sea during the growing season.

Table 2.1

Water availability in the Amudarya River basin countries over the growing season 2017

Water user	Water volume, km³		Water availability %	Deficit (-), surplus (+) km³
	Limit/ schedule	Actual	Season	Season
1. Total water withdrawal	**39.7**	**38.00**	**96**	**-1.7**
2. By state:				
Kyrgyz Republic	-	-	-	-
Republic of Tajikistan	6.9	6.0	86	-1.0
Turkmenistan	15.5	14.8	96	-0.7
Republic of Uzbekistan	17.2	17.2	100	0.0
3. Downstream of Atamyrat g/s *)	**31.5**	**31.0**	**98**	**-0.5**
of which:				
Turkmenistan	15.5	14.8	96	-0.7
Republic of Uzbekistan	16.0	16.2	101	0.1
4. By river reach:				
Upper reaches	**8.14**	**7.00**	**86**	**-1.1**
of which:				
Kyrgyz Republic	-	-	-	-
Republic of Tajikistan	6.94	5.98	86	-1.0
Surkhandarya province, Uzbekistan	1.20	1.02	85	-0.2
Middle reaches	**16.28**	**16.42**	**101**	**0.1**
of which:				
Turkmenistan	10.51	10.51	100	0.0
Republic of Uzbekistan	5.77	5.91	102	0.1
Lower reaches	**15.24**	**14.58**	**96**	**-0.7**
of which:				
Turkmenistan	4.99	4.33	87	-0.7
Republic of Uzbekistan	10.25	10.25	100	0.0
5. **Additionally:**				
Emergency and environmental water releases to canals within lower reaches	0	0		
of which:				
Turkmenistan	0	0		
Republic of Uzbekistan	0	0		
Supply to the Aral Sea and Prearalie **	2.10	9.42	449	

***)** Atamyrat g/s nominal – section of the Amudarya River upstream of water intake to Garagumdarya

**) include the discharged collector-drainage water

Table 2.2

Amudarya River channel water balance for the growing season 2017

Balance item	Water volume, km^3		Deviation (actual-plan)
	Forecast/Plan	Actual	
1. Water content in the Amudarya River - non-regulated flow at Atamyrat g/s nominal	61.88	50.30	-11.57
2. Flow regulation in the Nurek reservoir: accumulation (+) or withdrawal (-)	-3.81	-3.84	-0.03
3. Water withdrawal in the middle reaches (-)	-16.28	-16.42	-0.14
4. Return flow (collector-drainage) in middle reaches (+)	1.93	1.95	0.02
5. Water losses (-) or unrecorded inflow to the channel (+)	-4.57	-4.27	0.29
% of flow at Atamyrat g/s nominal	8	9	1
6. River flow at Bir-Atal g/s	39.15	27.73	-11.42
7. Flow regulation in Tuyamuyun hydroscheme: accumulation (+) or withdrawal (-)	-7.00	-2.07	4.92
8. Releases from Tuyamuyun hydroscheme (including withdrawal from reservoir)	32.15	25.66	-6.50
9. Withdrawal in lower reaches, including withdrawal from Tuyamuyun hydroscheme (-)	-15.24	-14.58	0.66
10. Return flow (collector-drainage) in lower reaches (+)	0.00	0.00	0.00
11. Emergency and environmental water releases to canals (-)	0.00	0.00	0.00
12. Flow losses (-) or unrecorded inflow to the channel (+)	-6.67	-2.63	4.03
% of flow at Tuyamuyun g/s	25	13	-12.50
13. Supply to Prearalie and the Aral Sea (Samanbay g/s)	10.25	8.45	-1.80
TOTAL losses:	-18.23	-8.98	9.25
% of river water content	29	18	-11

Table 2.3

Water balance of the Amudarya River basin reservoirs for the growing season 2017

Balance item	Water volume, km^3		Deviation (actual-plan)
	Forecast / plan	Actual	
1 Nurek reservoir			
1.1 Inflow to the reservoir	20.42	21.89	1.46
1.2 Water volume in the reservoir:			
– beginning of the season (1 April 2017)	6.00	6.73	0.73
– end of the season (1 October 2017)	10.54	10.57	0.03
1.3 Water releases from the reservoir	16.61	18.05	1.44
1.4 Lateral inflow (+) or water losses (-)	0.73	0.00	-0.73
% of inflow to the reservoir	4	0	-3.58
1.5 Flow regulation: accumulation (+) or withdrawal (-)	-3.81	-3.84	-0.03
2 Tuyamuyun hydroscheme reservoirs			
2.1 Runoff at Bir-Ata g/s	39.15	27.73	-11.42
2.2 Water volume in the reservoirs:			
– beginning of the season (1 April 2017)	2.59	2.59	0.00
– end of the season (1 October 2017)	5.93	4.67	-1.26
2.3 Water releases from the hydroscheme	32.15	25.66	-6.50
of which:			
– releases into the river	26.61	20.98	-5.63
– withdrawal	5.54	4.67	-0.87
2.4 Unrecorded inflow (+) or water losses (-)	-3.65	0.01	3.66
Including % of inflow to the reservoir	9	0	-9
2.5 Flow regulation: accumulation (+) or withdrawal (-)	-7.00	-2.07	4.92
TOTAL flow regulation by the reservoirs: accumulation (+) or withdrawal (-)	-10.81	-5.91	4.90
TOTAL losses (-),unrecorded inflow (+)	-2.91	0.02	2.93

CENTRAL ASIAN INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE "THE 25 YEARS OF WATER COOPERATION IN CENTRAL ASIA: LESSONS LEARNT AND FUTURE OUTLOOK"

The Central Asian International Scientific-Practical Conference "The 25 years of Water Cooperation in Central Asia: Lessons Learnt and Future Outlook" was held on 23-24 November 2017 in Tashkent.

The Conference was dedicated to the 25th anniversary of the Interstate Commission for Water Coordination (ICWC) in Central Asia, which was established on February 18, 1992 upon the initiative of water ministers and with the support of the Heads of the region's states, including Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. Water cooperation in Central Asia is integral to activity of ICWC, which is comprised of the heads of national water ministries and departments. As long as 25 years, ICWC has been maintaining conflict-free distribution of common water resources and ensuring service ability of all interstate watercourses and structures.

Several events were organized as part of the ICWC anniversary celebrations in the course of 2017. Those included the International Scientific and Practical Conference "Challenges and Prospects of Effective Water Management against the Backdrop of Globalization" (11-12 April 2017, Tashkent), International Scientific and Practical Conference "Transboundary Cooperation in Central Asia – Sustainability and Prosperity of the Region" (7 September 2017, Almaty), International Conference "Blue Peace Central Asia: Dialogue for 2030 - Water Security and Inclusive Growth" (18-20 June 2017, Astana), as well as meetings of working groups on the Implementation Plan on strengthening ICWC activities (6 June 2017 in Ashkhabad, 4-5 September 2017 in Tashkent, and 7 September 2017 in Almaty).

The anniversary events were organized by the Ministry of Agriculture of Kazakhstan, Ministry of Energy and Water Resources of Tajikistan, Ministry of Agriculture and Water Resources of Turkmenistan, Ministry of Agriculture and Water Resources of Uzbekistan and the Scientific Information Center of ICWC with the support of the Asian Development Bank (ADB), Swiss Agency for Development and Cooperation (SDC), Organization for Security and Cooperation in Europe (OCSE), and U.S. Agency for International Development (USAID).

The Conference was attended by about 250 representatives of various national, regional, and international organizations from more than 15 countries, including representatives of embassies, UNDP, German Society for Cooperation (GIZ), ADB, WB, OSCE, UNESCO, International Commission on Irrigation and Drainage (ICID), Geneva Water Hub, International Network of Basin Organizations, Global Water

Partnership for Central Asia and Caucasus, National Water Partnership (NWP) GEF Agency of the International Fund for saving the Aral Sea in Uzbekistan, Basin Water Organizations of Amu Darya and Syr Darya, Central Asian Regional Environmental Center, Central Asian Institute for Applied Geosciences, Regional Hydrology Center, etc.

The main objectives and tasks of the anniversary events were to:

- review the progress and demonstrate achievements made during the 25-year long activity of ICWC in the area of interstate water cooperation in Central Asia;
- increase visibility of ICWC as a regional institutional mechanism for transboundary water cooperation;
- facilitate formulation of future tasks before ICWC that would contribute to enhancement of mutually beneficial cooperation between the Central Asian countries in the field of efficient water use and protection in the region;
- revitalize development partners' attention to ICWC;
- demonstrate cutting-edge knowledge, best practices and scientific achievements in the field of water use and protection and promote innovations for sustainable water management.

The highly topical conference program included three plenary sessions and six round tables, as well as a special session. During two days, the participants had the opportunity to learn about results of activities in the sphere of Central Asian water cooperation and set milestones for further development and strengthening of close cooperation between the countries in the region. The 72nd meeting of ICWC was also held on the 24th November 2017 as part of the conference.

At the opening ceremony, Deputy Premier of the Republic of Uzbekistan and Minister of Agriculture and Water Resources Mr. Mirzaev welcomed the participants on behalf of the Government of Uzbekistan.

The key reports summarizing ICWC activity over 25 years were presented by the Chairman of the Executive Committee of the International Fund for saving the Aral Sea Mr. Bayjanov Guyzgeldy, as well as by the heads of country delegations from Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan.

Directors of executive bodies of ICWC, honorary members and veterans of ICWC, as well as representatives of the diplomatic corps and international organizations delivered their speeches on the role of ICWC as a regional institution of interstate water cooperation in Central Asia during the plenary sessions as well.

articular attention was paid to transboundary cooperation as an important driver of food, energy, and environmental security in Central Asia, as well as to actions to overcome growing challenges caused by depletion of available freshwater.

During parallel roundtables, the participants addressed such topical and important issues as integrated water resources management as a tool for ‘green growth’ and adaptation to climate change, improving legal framework of water cooperation and promoting water diplomacy as a prerequisite for good neighborly relationship between the Central Asian countries, enhancement of water education and professional development as well as improvement of regional and national training activities in Central Asia, financial and economic mechanisms of water management and use, and also issues related to sound water use and ecology.

The special session was organized with participation of young water professionals to address the water use related issues.

On the occasion of the 25th anniversary of ICWC, the awards were presented for diligent work and strong contribution to international and regional water cooperation to specialists of country water sectors in the Aral Sea basin. More than 100 people were awarded in total.

One of key events was the Central Asian International Exhibition “Water Technologies and Industry – WATER-2017”, which was organized during the first day of the conference.

he exhibition showcased best practices and scientific achievements in the area of water conservation and sound water use, automation of waterworks facilities, metrology and up-to-date water accounting facilities.

The Russian version of the Report of the Global High-Level Panel on Water and Peace "A Matter of Survival" was presented for the first time during the conference by Mr. Yerlan Nysanbayev, Vice Minister of Agriculture (Republic of Kazakhstan) and a member of this Panel.

A Symphony for Water and Peace composed progressively during two years as the Panel convened in different countries (Switzerland, Senegal, Costa Rica, and Jordan) was performed at the Gala anniversary dinner.

Finally, the Conference adopted its resolution.

To learn more about Conference, please visit icwc-aral.uz/25years/.

The Conference and the preceding events have constituted a part of the regional preparatory process to the 8th World Water Forum to be held in Brasilia in March 2018.

RESOLUTION
of the Central Asian International Scientific and Practical Conference
"The 25 years of Water Cooperation in Central Asia:
Lessons Learnt and Future Outlook"

We, representatives of ministries, agencies, academia and the public of the Central Asian countries as well as representatives of regional and international organizations, which gathered together in Tashkent on 23-24 November 2017 on the occasion of the 25th anniversary of the Interstate Commission for Water Coordination (ICWC) in Central Asia,

relying on the solid historical ties between the Central Asian states, the centuries-old bonds of brotherhood and interaction among the people in the region's countries, based on the principles of mutual respect, trust, and openness,

noting with satisfaction the dynamic and progressive development of good-neighborly relations between the Central Asian states, as well as significant results achieved over the past quarter-century,

adhering to the understandings reached in the course of bilateral visits and consultations among the countries in the region and at the High-level International Conference "Central Asia: Shared Past and Common Future, Cooperation for Sustainable Development and Mutual Prosperity" held under the auspices of the UN in Samarkand on the 10-11th of November 2017,

taking into account the importance of the resolution adopted by the UN General Assembly on declaration of the International Decade for Action "Water for Sustainable Development", 2018-2028,

taking into account the outcomes of events held as part of preparation to the ICWC anniversary, such as the International Scientific and Practical Conference "Challenges and Prospects of Effective Water Management against the Backdrop of Globalization" (11-12 April 2017, Tashkent), International Scientific and Practical Conference "Transboundary Cooperation in Central Asia – Sustainability and Prosperity of the Region" (7 September 2017, Almaty), International Conference "Blue Peace Central Asia: Dialogue for 2030 - Water Security and Inclusive Growth" (18-20 June 2017, Astana), regional consultations on the high-level water panel's initiatives "International Decade for Action 'Water for Sustainable Development', 2018-2028" and "Valuing Water" (June 2017, Dushanbe), as well as meetings of working groups on the Implementation Plan on strengthening ICWC activities (6 June 2017 in Ashkhabad, 4-5 September 2017 in Tashkent, and 7 September 2017 in Almaty);

in order to further advance the regional dialogue for elaboration of harmonized approaches to integrated and mutually beneficial use of water resources in interstate sources to the benefit of all countries in the region,

having discussed the priority issues of regional water cooperation related to commitments made in the context of Sustainable Development Goals, themes of the 8th World Water Forum (Brasilia, March 2018) and directions of the Plan on strengthening ICWC activities,

declare the following:

1. Water is **central** to sustainable regional development, being a key factor of water, food, energy, and environmental security and a **catalyst of cooperation between** the Central Asia states.

2. The region's countries **have seen significant progress** in the area of water resources management at the interstate and national levels.

3. **The ICWC of Central Asia,** established upon initiative and in goodwill of the region's countries, plays **the key role** in the IFAS's structure in promoting interstate water cooperation in the region. Owing to cooperation within the framework of the ICWC, despite four dry and three extremely high-water years, there has been no disputable situations allowed to emerge. Building on inextricable community and interconnectedness of water-management systems in Central Asia, the ICWC and its executive bodies have achieved significant results in the development of specific tools for cooperation.

4. Legal and institutional conditions for implementation and development of the principles of **integrated water resources management** (IWRM) have been created in the Central Asian countries: transition to hydrographic principle of water management has been made or is being made, also through the establishment of basin administrations, councils and water user associations. It is recognized that IWRM is a key tool of "green growth", adaptation to climate change and water-food-energy-environment nexus.

5. Measures to introduce up-to-date resource- and **water saving technologies** and best practices and to upgrade and equip irrigation systems have been taken.

6. Some progress in improvement of **water accounting** in irrigation systems and along main canals has been achieved.

7. The Central Asia states, also with the support of development partners, continue to **improve capacity** of water management specialists.

8. Work to protect and restore aquatic **ecosystems**, including restoration of the Northern Aral Sea, development of a system of small water bodies in Southern part of the Aral Sea and afforestation is under way.

9. Reliability and **safety of hydraulic structures** are being improved, also through good operating practices, repair and rehabilitation, and harmonization of technical rules for operation of these structures.

10. At the same time, we note with concern that the available **freshwater per capita is expected to decrease** in the Aral Sea basin by 2030 in light of the

declining water resources due to climate change and increased demands for water by growing population and national economies.

11. While acknowledging the importance of tasks to ensure water, energy, and food security and adapt to climate change that the region face, we express our readiness to take **further actions** to reach fair and mutually beneficial agreements on the integrated and rational use of water resources of interstate sources at the regional level and to improve water management at the national level. Among other things, we deem it is necessary to:

- Strengthen the capacity and operations of the ICWC and its executive bodies to more efficiently and timely implement their tasks and enhance cooperation within the framework of ICWC;
- Intensify the work to improve legal and institutional mechanisms for interstate water cooperation;
- Recognize the importance of strengthening bilateral and regional cooperation on rational and integrated use of water and energy resources in Central Asia, taking into account the interests of all of the regional states. With this view, regular consultations will be held to elaborate mutually beneficial long-term sustainable mechanisms in the field at the earliest date;
- Invite development partners to pay special attention to joint solution of water problems in Central Asian countries caused by drying up of the Aral Sea, climate change, ecosystem degradation and increased frequency of water-related disasters;
- Carry out all appropriate measures to improve water use efficiency in all sectors by paying special attention to reasonable and equitable use of water resources;
- Improve the efficacy of institutional mechanisms for involving all stakeholders in water governance decision-making process to improve the quality of services and save water;
- More actively involve at all levels of water use the public, including the young and women, in water resources management and promote the practice of saving and reusing the water;
- Introduce the principles of integrated water resources management at all levels, including at regional level based on interstate cooperation, and to adapt to climate change and green growth promotion;
- Take all possible measures to improve the quality and accuracy of water accounting;
- Improve the adaptation capacity of the countries' water sector to climate change impacts ;
- Exchange, wherever possible, data, information and knowledge in order to ensure openness and build trust among various stakeholders, sectors and countries;

- Assist relevant services in improving the reliability of water resources-related forecasts and, as possible, the openness of their exchange;
- Encourage the development and mutual exchange of scientific knowledge, forecasts and innovative technologies to improve management and planning of water resources use;
- Ensure inclusive and quality lifelong learning/education (training, retraining, and advanced training) for specialists of water management organizations at national and regional levels to improve water resources management efficiency and sustainable development as a whole;
- Make use of the advantages and the platform of the International Decade of Actions "Water for Sustainable Development", 2018-2028, and other platforms acceptable to countries to strengthen cooperation for the purposes of mutually agreed and mutually beneficial solution of the region's water and energy problems.

12. We acknowledge the significant contribution of the UN agencies, international financial institutions and other development partners to the support of countries' actions towards enhanced interstate water cooperation. We emphasize the importance of continuing substantive engagement in the spirit of partnership and shared responsibility.

13. The Conference's participants also:

- Recognize the importance of strengthening of bilateral and regional cooperation on efficient and integrated water and energy use in Central Asia, taking into account the interests of all states in the region;
- Emphasize the need for regular consultations between the region's states in order to elaborate the mutually beneficial, long-term sustainable mechanisms of joint/ rational and integrated use of water and energy resources in Central Asia;
- Call for all stakeholders to continue consultations within the preparatory process of the **8th World Water Forum,** as well as the Meeting of the Parties of the UNECE Convention on the use and protection of transboundary water courses and international lakes (10-12 October 2018, Astana);
- Welcome the initiative of the Tajik side to hold in **Dushanbe** in June 2018 a **high-level meeting** dedicated to the International Decade for Action "Water for Sustainable Development", 2018-2028;
- Consider the results of this anniversary Conference as a contribution to the consolidated vision of the Central Asian region on the priority themes of the above mentioned events;
- Once again underlining urgency in finding solutions to the acutest problems of the Aral environmental catastrophe, call for consolidation of efforts at the regional and international levels and for donors' support in overcoming further the problems in the Aral Sea basin.

We **express our gratitude to** the Government of the Republic of Uzbekistan, organizers and development partners for organization of this anniversary Conference in Tashkent and for an excellent setting for productive work.

Adopted on the 24th of November 2017
in the city of Tashkent, Uzbekistan

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