Interstate
Commission for
Water
Coordination
of Central Asia

BULLETIN
№ 2 (52)

August
2009

CONTENT

JOINT STATEMENT BY THE HEAD OF FOUNDER-STATES OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA

A meeting of the Presidents of the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan was hold in the city of Almaty on 28 April 2009.

In the course of negotiations conducted in a mutual understanding, trust, friendly and constructive cooperation climate, the Head of Central Asian States have discussed issues related to activities of the International Fund for the Aral Sea Saving (IFAS), which was established in 1993 with the aim of implementing joint practical measures and long-term programs to overcome consequences of the Aral disaster, improve environmental and socio-economic conditions in the Aral Sea basin.

The Head of Founder-States of IFAS, hereinafter referred to as the "Parties",

being governed by the centuries-old good-neighbor relations build upon the community of history, culture and traditions, the mutual support and strategic partnership between the countries to meet vital interests of the region's nations,

based on rich experience of fruitful cooperation and showing mutual intention to bring up the interstate relations to higher level,

aiming at mutual help and support to achieve the Millennium Development Goals, at improved socio-economic and environmental conditions in the Aral Sea basin,

noting that the development of mutually beneficial cooperation among the Central Asian states is of significant importance for ensuring sustainable development and regional security,

considering the climate change, the intensive regional glacier and snowfield degradation, as well as the water use increase due to population growth and national economic development in the region,

emphasizing significance of the region's country efforts in integrated use and protection of water resources, in combating of desertification and land degradation in order to solve the Aral Sea basin problems,

placing importance on the projects as implemented under umbrella of IFAS, with account of country interests in the region,

keeping in mind that the use of water resources in the Central Asian region is to the benefit of all founder-states of IFAS and in compliance with widely recognized international law principles,

taking into account activities of IFAS and its structural bodies aimed at enhanced regional cooperation in socio-economic and environmental improvement in the Aral Sea basin,

showing content with the adoption of the UN General Assembly's Resolution of 11 December 2008 on giving the International Fund for the Aral Sea Saving a status of observer in the UN General Assembly,

expressing appreciation to UN structures, international financing institutions, donor-countries and other development partners for assistance and support rendered to the region's countries in solving the Aral Sea basin problems,

and based on common endeavor to make a feasible contribution in order to overcome consequences of the crisis in the Aral Sea basin,

have stated the following:

1. The Parties, acknowledging a positive role of IFAS, activity of which allows coordinating and solving crucial matters of cooperation in overcoming consequences of the crisis in the Aral Sea basin, will promote activities and cooperation with UN organization, including the UN Regional Center of preventive diplomacy for Central Asian countries, and with other international organizations.

2. The Parties express their willingness to improve further the institutional and contractual legal frameworks of IFAS in order to make its activity more efficient and develop more active cooperation with financial institutions and donors within the framework of projects and programs related with the Aral Sea basin problem solution.

3. The Parties assign the Executive Council together with the Interstate Commission for Water Coordination, the Interstate Commission for Sustainable Development of IFAS, with involvement of national experts and donors, to develop a Program of Actions for support of the Aral Sea basin countries for 2011-2015 (ASBP-3), with following examination and approval by the founder-states of IFAS.

4. The Parties will continue cooperation aimed at the improvement of environmental and socio-economic conditions in the Aral Sea basin.

5. The Parties reaffirm their interests in the development of mutually acceptable mechanism for integrated water use and environment protection in Central Asia to the benefit of all the states in the region.

6. The Parties emphasize that the constructive negotiations conducted in openness and mutual understanding climate in Almaty have made a weighty contribution to further development of traditional good-neighbor relations and mutually beneficial cooperation between founder-states of IFAS in the Aral Sea basin problem solution.

7. The Head of States express their gratitude for warm and open-armed welcome by the President of the Republic of Kazakhstan N.A.Nazarbayev on the hospitable Kazakh land.

Almaty, 28 April 2009

President of the Republic of Kazakhstan N.A. Nazarbayev

President of the Kyrgyz Republic K.S. Bakiyev

President of the Republic of Tajikistan E. Rakhmon

President of Turkmenistan G.M. Berdymukhamedov

President of the Republic of Uzbekistan I.A. Karimov

STATEMENT BY THE IFAS PRESIDENT, PRESIDENT OF THE REPUBLIC OF KAZAKHSTAN, NURSULTAN NAZARBAEV AT THE IFAS SUMMIT

Distinguished Heads of State!

The ecological crisis in the Aral Sea basin is recognized as the largest disaster of the 20th century by the world community. Everyone is well aware of the Aral Sea problems and impact of the ecological situation in the Priaralie on people residing there.

The countries of the region, as well as the world community are taking concrete measures to enhance ecological situation in the Aral Sea basin.

We have launched and implementing programs on supporting the Aral Sea basin: **ASBP-1** and **ASBP-2**. Under active support and collaboration of the World Bank, Asian Development Bank and European Union, we are implementing a number of concrete projects and actively raising donor's funds.

I would note with pleasure that measures we took have allowed us to achieve tangible results – this and refilling of the Aral Sea and the revival of fishery. And most importantly the climate is changing for the best

Last year phase 1 of the "Regulation of the Syrdarya River Channel and the Northern Aral Sea" Project, totaling to US$ 86 million (World Bank loan - US $64.5 million, co-financing from the RK budget - US$21.29 million) was completed in Kazakhstan.

It involved the construction of the Kokaral dam extending up to 13 km, which was put in commission in August 2005.

Moreover, along with reconstruction of the Shardara dam several new hydraulic facilities were built at the Syrdarya River. These works were conducted to increase capacity of the river and supply more water to the Northern Aral.

I would like to assure that despite of the world economic crisis, Kazakhstan is not intending scrapping the planned works. Soon we will proceed to Phase 2 of the "Regulation of the Syrdarya River Channel and the Northern Aral Sea" Project. Eight (8) components of the program worth more than US$ 191 million will be implemented. Among them – "Waterworks at the Sarishiganak gulf" amounting to US$ 82 million.

Distinguished Heads of State!

The activity of the International Fund for Saving the Aral Sea showed the importance of cooperation between countries and interstate organizations in solving regional as well as global problems.

At the same time, the analysis of the current situation in the Aral Sea basin indicates that regardless of our efforts, the growth rate of factors, threatening the region's ecology is outrunning the scales of measures taken.

Global climatic changes and difficulties related to emerged low-water season as well as shortage of irrigation water even under the conditions of flow regulation could be attributed to such factors.

We discussed the issues in private. It is quite serious and complicated issue. Different positions of Central Asian countries require flexible mechanism to regulate water relationships.

In turn, I would like to emphasize that interrelation of water use with natural and economic factors, as well as maintaining balance between economic development and environmental safety of the river ecosystems is one of the main provisions of current water resources management concept.

I am convinced that this principle will be taken as a basis during implementation of the third Program (ASBP-3) for 2011-2015 as well.

Following the results of today's meeting, we will have joint petition, which includes mandate for the Executive Committee of IFAS to elaborate this Program with attraction of donors to be approved by us at our follow-up meeting.

Unfortunately, it should be acknowledged that in recent years, work of the Fund itself is becoming less effective. In this context, we should make a principal decision in increasing the role and authority of this international organization.

Thereupon I propose followings:

First, increasing the role of the Board and Executive Committee of IFAS plays an important role.

We think it is necessary to recover the status of the Board members to the level of deputy heads of republics. Kazakhstan in return will appoint Umirzak Shukeyev, first deputy prime minister as a member of IFAS Board.

Level of representatives in Interstate Coordination Water Commission (ICWC), which must include ministries of water resources and land reclamation that are members of government, should also be increased.

We should take cardinal institutional, legislative, financial and economic measures for improving the efficiency of IFAS activities.

Second, new Executive Committee should take all measures to activate cooperation with international organizations and donors; conduct juridical expertise of Fund's regulations; examine the possibility of inclusion of international experts into the Board and Executive Committee of the Fund.

Aiming at developing and approving third Program on supporting the Aral Sea basin, Kazakhstan is proposing holding an international conference next year with the involvement of donors.

To our opinion, these policies would ensure stable attraction of donors' funds to the region.

Third, granting IFAS observer status at the UN General Assembly last year was an important event. It allows the Fund to develop cooperation with the UN organizations such as UNEP, OPEC etc.

We think that this activity should be continued. Further promotion of the idea of including IFAS in the structure of the UN organizations is required.

This requires EC IFAS to carry out revision of the Fund's entitlements. In particular, it is proposed to write additions to the regulations of the Fund– Statute of IFAS and Agreement on the Statute of IFAS and its organizations- according to which the UN Secretary General would be assigned as a depositary of these organizations.

Fourth, it is important to set up the work on informing the world community about the Aral Sea problems, including within the framework of dialogue platforms of organizations such as the UN and OSCE.

In this work, along with the Fund, state bodies and public organizations or our countries should exhibit activity. We hope that the United Nations Regional Center for Preventive Diplomacy for Central Asia will make tangible contribution to the promotion of this issue.

Broader engagement of OSCE capacity for addressing regional ecological problems seems possible within the economic and ecological framework of this Organization.

Upcoming chairmanship of Kazakhstan in OSCE in 2010 will allow our region to denote the importance of the Aral Sea issues and establish comprehensive dialogues on them on the scale of this largest regional structure.

In our opinion, one of the practical solutions within the framework of OSCE could be to bring forward the initiative on the development of monitoring mechanisms and preventive response towards ecological hazards. Herein, we would like to rely on the support of founder-states of the Fund.

I hope this summit will render additional impetus for the efforts of our countries in the activation of IFAS activities and solving the issues concerning shared use of water-energy resources and enhancing ecologic situation of the region.

Thank you for your attention.

STATEMENT BY THE PRESIDENT OF KYRGYZSTAN, KURMANBEK BAKIEV, AT THE EXTENDED SESSION OF THE HEADS OF FOUNDER- STATES OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA[1]

Distinguished President of the International Fund for Saving the Aral Sea,
Distinguished Heads of State,
Ladies and Gentlemen,

First of all, I would like to express my sincere appreciation and gratitude to the Kazakhstan's side and personally to you, distinguished Nursultan Abishevich (Nazarbaev), as the President of the Fund, for the excellent organization of today's meeting. I hope that today's meeting will become important and fruitful platform for discussing common problems related to the use of water-energy resources of the region.

Allow me in my address to focus your attention on problems which are of the most concern for Kyrgyzstan, and, in our view, should become priority objective in the activities of the International Fund for Saving the Aral Sea directed at the benefit of all countries of the region.

For 16 years from the moment of its establishment, IFAS became a unique platform uniting all countries of Central Asia in the framework of which interstate dialogue is to be supported with a view of overcoming challenges not only of ecological, but also of water economic and energy nature.

All of us realize the current situation in the region and in the world, and for today's meeting we have already come in other financial, economic and ecological conditions which require from all participants to come up with mutually acceptable solution on the way out from the current critical situation in the sphere of providing countries of the region with water-energy resources.

As is known, our republic is located in the river formation zone, epy the flow of which is intensively utilized by Kyrgyzstan, and Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan for irrigation, electric power generation, drinking and industrial needs. The rivers natural cumulative mean annual runoff accounts to 47.23 cubic kilometers.

---

1 http://www.un.int/wcm/webdav/site/kyrgyzstan/shared/documents/Statement%20by%20H.E.%20Mr.%20Kurmanbek%20Bakiev,President%20of%20the%20Kyrgyz%20Republic%20at%20the%20Meeting%20of%20Heads%20of%20the%20States-Founders%20of%20the%20International%20Fund%20for%20Saving%20the%20Aral%20Sea(IFAS).doc

At the same time our republic is currently facing threat of substantial decrease of fresh water stocks. For example, because of the global warming from the existing 8200 glaciers with a total area of about 8.2 thousand square kilometers on Tian-Shan, Pamir-Alay mountains, more than 2000 glaciers have melted receding at an average rate of 8 meters per year. It influences water availability in the rivers, vegetation and, first of all, climate change in Central Asia.

In this connection, there is essential necessity to take emergency actions for preservation of the rivers formation zone, restoration and expansion of forest fund taking into account their influence on the river regimes which, as a whole, requires attraction of considerable financial resources.

With this view it is necessary to channel funds of the International Fund for Saving the Aral Sea for recovery works in formation zones of the Amudarya and Syrdarya rivers. It is extremely clear that in case of further decrease of water resources in the rivers formation zone, in lower reaches (courses) of the Amudarya and Syrdarya there will be nothing to operate and divide soon.

Moreover, the most dangerous challenge is also a threat of the radioactive pollution the source of which is a heritage of the common past of the region - wastes of mining industry and manufacture of lead, zinc, mercury, antimony, uranium, rare-earth metals accumulated in the territory of the Kyrgyz Republic for many years of the Soviet period. There is a risk of radiation-dangerous ecological catastrophe occurrence for Central Asia's territory, with a total population of about 5 million, which covers possible impact zone.

While specifying the increased ecological challenges for Kyrgyzstan I did not wish to diminish the importance of resolving ecological problem of the Aral Sea for all countries of the region. It is necessary to realize that the crisis in the Aral Sea basin became possible due to inefficient and more and more increasing use of water for irrigation of lands.

At the same time during the last decade in Kyrgyzstan there is stabilization in a water consumption level, the water withdrawal volume is at the range of 8-10 billion cubic meters. That is for the last twenty years the republic's total water withdrawal has been reduced by 40 %, and water withdrawal from subsurface horizon has been reduced three times or by 70 %. For comparison, the republic's maximum water withdrawal fell at 1987-1990 and has come to 13 billion cubic meters.

In this context I would like to raise an issue with regard to hydraulic facilities in our republic. The main hydro-energy capacities - mostly on the Naryn cascade – were created in Kyrgyzstan as the national energy assets during the Soviet period. It is an indisputable fact, and today under the conditions of deficiency of natural energy carriers with a view of sustainable provision of the population with power resources, especially during the cold winter period, our state should make a special emphasis on hydro-energy development. For example, construction of the Nizhnenarynsky cascade

of reservoirs, and first of all, the Kambarata Hydrop-Power Stations 1 and 2. In case of implementation of the above said projects, not only our republic's energy demands will be completely met, but also it will allow the Toktogul hydro scheme to operate in an irrigation regime which our regional partners are interested in. It is necessary to emphasize that our republic's hydropower is not a water-consuming branch since hydro - power stations at dams can change only a regime of water drawdown taking into account energy requirements.

In particular, according to comparative analysis of normal annual runoff before construction of the Toktogul Reservoir and bringing hydro-power station into operation, during 1910 - 1975, the Naryn river flow in that section line accounted to 11.4 billion cubic meters. After beginning river flow regulation in the site of Toktogul hydro scheme during the period of 1975 - 2008, inflow and discharge accounted to over 12 billion cubic meters. During the period of work under intergovernmental agreements with the neighboring republics from 1995 to 2008 the long-term average inflow and discharge has been increased and amounted to over 13 billion cubic meters.

The above stated data confirms that during all periods the volume of release in the site of Toktogul hydro scheme did not decrease below natural level, and during other periods, especially in dry years, even exceeded natural point thanks to compensating ability of the Toktogul Reservoir. Therefore, we consider that the created reservoirs have not affected decrease in releasing water resources into the river of Syrdarya and the Aral Sea. Meanwhile I wish to specially note that the largest part of the difficulties to overcome low water-level problems and severe winter of the last year have laid down on shoulders of the population of Kyrgyzstan who has experienced all burdens of the electric power deficiency and fan power cutting-off measures aimed at water saving. Nevertheless, the water release volume in summer of 2008 remained within the annual point. A strategic issue that requires solution here can be only bringing closer irrigation and power schedules of water drawdown and compensatory deliveries of fuel resources, which should be the subject of interstate cooperation among the interested parties and application of water saving technologies. In turn, the Kyrgyz side intends to implement its commitments on further mutually beneficial water supply of the region.

At this point it is important to emphasize that in the report of the World Bank as of 2004 on «Water Energy Nexus in Central Asia» the undertaken actions of Kyrgyzstan are supported as a whole. In particular, experts of the World Bank consider that in order to achieve sustainable regional cooperation and net benefits for both up-stream and down-stream countries are fairly be optimized, it is necessary to accept the reconsidered approach. Particularly the given authoritative financial institution recommends to recognize openly the principle where the upstream country needs indemnification in the monetary form for its services in water accumulation which it is obliged to provide with at significant costs to its economy, and in the certain agreements it is also necessary to provide a sum to be paid in the monetary form for the services in accumulation of water. Besides, the World Bank confirms the position

of our republic that construction of the Kambarata Hydro- Power Stations 1 and 2 will allow Kyrgyzstan to increase winter power generation without increasing winter discharges of water. According to experts of the World Bank the above stated projects would l substantially increase summer power output in Kyrgyzstan.

We are deeply confident that the problem of ecological improvement of the Aral Sea basin is closely interconnected with the solution of the issue on rational use of water-energy resources. Thereupon, we propose to convene consultations among the governments of all Central Asian countries to discuss all set of problems and explore mutually acceptable mechanism on using of water-energy resources.

Distinguished Heads of States,

With a view of addressing regional challenges, it is important to encourage International Fund for Saving the Aral Sea in accelerating its activities in favor of all countries-participants and strengthening cooperation with the international organizations. For this purpose, in our view, there is a necessity of gradual reforming the IFAS and its structural organs according to the present day realities, and in case of expediency, reduction of inefficient bodies of the Fund.

A considerable importance should also be given to improvement of the IFAS's activities in accordance with the world practice of reporting system by all bodies of the Fund. In that case, to our view, their responsibility for the activities being conducted will be strengthened taking into account interests of all Central-Asian states

During the meeting in Dushanbe, 2002, Nursultan Abishevich (Nazarbaev) has proposed to establish international administrations on the Syrdarya and Amudarya rivers on the basis of existing basin water organizations "Syrdarya" and "Amudarya" and other water organizations. Supporting that initiative, I would like to propose establishing, in accordance with the international practice, separate intergovernmental commissions on each river, with equal participation of water and energy experts of the parties. As a successful example I would like to point out the activity of bilateral Kyrgyz-Kazakhstan Commission on the Chu-Talas river.

A considerable approach is also necessary to define member-states contributions to the Fund in order to find their most favorable for the current situation level. In our opinion, the proposed amount of differentiated financial contributions, that is above the scale of the United Nations contributions, is overestimated and requires more accurate and well-considered discussion.

In conclusion I would like to highlight that only by common efforts of Central Asian states, including further development of cooperation within the IFAS framework, it is possible to reach preservation of water-energy balance, and in this connection I hope that we will reach mutual understanding on all issues relating to rational use of water-energy resources of the region.

STATEMENT BY THE PRESIDENT OF THE REPUBLIC OF TAJIKISTAN, EMOMALI RAHMON AT THE MEETING OF THE HEADS OF CENTRAL ASIAN STATES ON THE ARAL SEA PROBLEMS

Distinguished Heads of State,
Dear participants,

First of all, I would like to thank my colleague, Nursultan Abishevich, the President of the Republic of Kazakhstan and of the International Fund for Saving the Aral Sea for excellent organization of this meeting. I hope that today's meeting will give a positive impetus for solving accumulated problems related to the Aral Sea ecological crisis.

As you know, water in Central Asia is not only a vital factor of social-economic development, but also an important element of the national and regional security. Moreover, today water problem has become an important factor of the world economy and policy as well, since according to the UN data today more than one billion people do not have access to clean drinking water. At the last fifth World Water Forum, water problems of our region were the focus of attention. Therefore, its rational and efficient utilization should always remain as one of the key priorities.

Disregarding this principle has already brought to tragic results. Being agriculture oriented economy as well as excessive use of water resources for irrigation needs has caused one of the global disasters of the 20th century – drying up of the Aral Sea.

Since its establishment in 1993 the International Fund for Saving the Aral Sea has made significant contributions to mitigating consequences of this ecological crisis, engaging attention of international community to the Aral Sea problem, as well as strengthening the regional cooperation.

Joint efforts of Central Asian countries within the frameworks of the Fund facilitated the achievement of certain progress in the management of water resources, rehabilitation of waterworks, partial recovery of the Small Aral Sea, improvement of environmental monitoring, and addressing social problems of the region.

The Republic of Tajikistan also made a significant contribution to the above said progress. Consistently complying with all its obligations under the Fund, our country is playing an active part in dealing with Aral Sea basin problems at national, regional and international levels.

Between 2002 and 2008 Tajikistan was chairing IFAS and therefore I think it is necessary to briefly turn our attention to the work done.

During this period of time considerable efforts were made for further improvement of the ecological and socio-economic situation in the Aral Sea basin, informing the world community about the crisis, raising funds through international organizations and donors for addressing the problems related to them.

Adoption and implementation of fundamentally new program on the Aral Sea basin, development of the Regional Center of Hydrology, adoption of the Subregional framework Convention on the environmental protection for sustainable development in Central Asia, holding of international conferences and forum devoted to water issues, organization of special sessions within the framework of major international water events, launching expeditions to the immediate crisis and flow formation zones, opening the Fund's web-site, numerous publications, films and photo exhibitions on the Aral Sea problems, organized during this period, significantly helped to the development of process on solving the problems and strengthening the capacity of the IFAS, as one of the key regional institutions.

Adoption of the resolution by the UN General Assembly about granting IFAS observer status at the UN General Assembly is undoubtedly an additional factor for activation of these processes and development of subsequent cooperation between the IFAS and the UN.

At the same time I would like to say that we could not achieve everything that we aimed at. Unfortunately, there were other moments that least contributed to the effective work of the Fund.

Therefore, with all my heart I wish our Kazakh friends success in solving urgent problems, which are facing IFAS and declare our willingness to close cooperation in the name of achieving those noble aims for which we have established International Fund for Saving the Aral Sea.

Fruitfulness of our collaboration mainly depends on the integrity of activities of Fund's structure.

Tajikistan hopes that today's meeting will become the beginning of the meaningful dialogue and concerted actions in addressing current issues. Our further steps should be integrated and systematic and for this political will and willingness to build water partnership on the basis of mutual trust and consideration of interests of each is necessary.

I am convinced that in traditional spirit of mutual respect and friendship we can solve existing problems for the sake of prosperity of the region and well-being of our nations.

STATEMENT BY THE PRESIDENT OF TURKMENISTAN, GURBANGULY BERDIMUKHAMEDOV AT THE MEETING OF THE HEADS OF FOUNDER- STATES OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA

Distinguished Heads of State,
Dear members of delegations!

In the first place I would like express my sincere gratitude to Nursultan Abishevich for inviting to visit beautiful city Almaty, meet with you and discuss most important issues of cooperation, particularly, at the regional scale. Our meeting in hospitable Kazakh land is primarily the reflection of our high-level relations and mutual striving for solving the regional problems, in particular, caused by the Aral Sea crisis.

As you know the Aral Sea problem has multifaceted dimension and focuses attention of the whole world community. Here much depends on concerted actions of our governments, directly suffering from negative consequences of this ecological disaster.

Monitoring data on the situation in the Aral Sea region make us give thorough consideration not only to today's problems, but also to the fates of future generations of our nations. Therefore, relying on already existing experience, it is expected to thoroughly plan the action programme on overcoming the consequences of ecological, as well as humanitarian nature, and designed to ensure adequate livelihood for our countries and people.

Realizing the full complexity of the situation in the Aral Sea region, our governments once created the International Fund for Saving the Aral Sea by elaborating and adopting series of joint documents. These policies laid foundation to the dialogue in political and legislative field and formation of mechanisms of interstate cooperation.

Adoption of the «Concrete action programme on the improvement of ecological and socio-economic situation in the Aral Sea basin» in June 1994 and its second stage in August 2003 shows the existence of the necessary potential for developing and implementing cooperative actions of our countries.

In this context, I would like to note that priorities of long-term reform programmes, implemented in Turkmenistan are aimed at providing social protection to people, ecological and sanitary well-being, development of appropriate infrastructure, primarily, water supply systems. With this view, we are carrying out reconstruction of existing and construction of new engineering and communication facilities, as well widely implementing advanced technologies and methods of water and sewage treatment.

In accordance with adopted programmes on the improvement of the ecological and socio-economic situation in the Aral Sea basin, Turkmenistan for the last two years has invested about 170 million dollars in appropriate projects only in Dashoguz veloyat. However, we must say it straight, this did not solve all problems. I will not specify all what we have done not to keep your attention, but I would like to mention that under adopted documents we rigidly observe and fulfill undertaken obligations. We think that for overcoming the Aral Sea crisis, all spectrums of ecological problems in Central Asia, consolidated approach of all countries of the region, as well as international organizations and donors is needed.

Distinguished Heads of State,
Dear members of delegations,

Undoubtedly, the problem of paramount importance for the fate of Aral and for us all is the problem related to the issues of water use, which is escalated at present. Long-term, painstaking and very delicate work in determining the balance of interests of our countries as the most important condition for equitable water use and stability achieved in this issue, strengthened by interstate instruments can in an instant collapse, which will lead to unpredictable consequences both for the Aral Sea, and for millions of people living in this region. I am telling about measures being taken by individual governments in a unilateral basis on changing current water-energy balance in our territories. The position of Turkmenistan with respect to water-energy problem in Central Asia is abundantly clear – we must address these issues entirely on the basis of generally recognized norms and principles of international law, taking into account interests of all countries of the region and with engagement of international organizations.

Especially I would like to underscore the importance of conducting mandatory independent international technical and economic expertise of all hydropower facilities on transboundary rivers at the stage of design on the principle of openness and transparency.

Dear colleagues,

The fate of Aral substantially depends also, on how much our joint efforts in cooperation with broad international community will be successful and sound.

Moreover, searching of mutually acceptable solutions in conformity with rules and principles of international law should become the basis of this activity.

In this connection, I propose creating special group of experts, which in cooperation with the UN and its structures can prepare complex international legal instrument on saving the Aral. In our opinion, here it is possible to use the potential of the UN Regional Center for Preventive Diplomacy in Central Asia to the full extent.

Moreover, I think it is necessary to cooperate in this context also with specialized international organizations, dealing with water and water-energy resources problems.

Environmentally sound and sustainable development is one of the priority areas of cooperation between Central Asian states. I believe it is important to develop fundamental international legal base of this activity. In this context I would like to emphasize that signing of the Framework Convention on protection of environment for sustainable development in Central Asia by majority of regional countries in November 2006 in Ashgabat was a kind of benchmark event on this way. I am hopeful that early joining to this Convention of all Central Asian countries will contribute to successful development of the regional interaction, as well as cooperation with ecological structures of the UN.

Drawing attention to the global character of the Aral Sea problem, especially I would like to note the importance of interaction of our countries within the framework of Interstate Commission on sustainable development. Once Regional Action Programme on protection of environment as common ecological programme for Central Asian countries was adopted within this Commission.

In connection with increasing threat of climate change, its impact on the environmental condition in the region and the whole planet, prevention of the consequences of climate change is assuming more actual importance. That is why in 2007 Turkmenistan initiated to create a regional project on combined actions taking into account climate change, assuming the coordination function of action on its development.

As a country-coordinator Turkmenistan became a place of holding of regional events on challenges of climate change, in which Central Asian countries participate. Following the results of these events, recommendations were given on establishment of the UN Environmental Programme (UNEP) Regional Office in Ashgabat or the UN Regional Center on climate change. I believe this idea will be also supported at the level of the heads of Central Asian states.

We also think that we should work to address water-energy problems of the region. With this view, we suggest to develop and adopt joint investment plan for creating common regional power system with the attraction of financial and technical resources of international organizations under the aegis and with participation of the UN. In return, Turkmenistan is ready to supply its neighbors in the right quantities and volumes natural and liquefied gas, as well as energy. After solving the problem of common energy security, it would be much easier for us to solve water problems as well.

Dear friends, colleagues!

In conclusion I would like to wish all of you success in your work and hope that today’s meeting will give positive results in addressing problems related to

overcoming the consequences of the Aral Sea crisis, further strengthening cooperation between our countries for the sake of our nations.

STATEMENT BY THE PRESIDENT OF UZBEKISTAN, ISLAM KARIMOV AT THE MEETING OF THE HEADS OF FOUNDER-STATES OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA[2]

Dear Heads of State,
Ladies and Gentlemen,

Allow me to greet and express my high respect to the heads of states, the heads and representatives of regional and international organizations, experts present here, as well as all participants of this forum.

Allow me also express a sincere gratitude to the president of the Republic of Kazakhstan Nursultan Abishevich Nazarbaev for a traditional hospitality and substantial consideration, which he is showing to the participants of our meeting.

I think there is no need to underscore a special significance of the meeting of heads of founding states of the International Fund for Saving the Aral Sea and the issues being discussed at the session, which go far beyond the limits of our region.

The problem of the Aral Sea traces back long into the past. But the threatening scales it has acquired in the 60s of the 20th century. The rise in a number of population and the increasing growth of demand for water, intensive development of new lands, further development of irrigated land farming and systematically continuing water-short years have created the conditions for one of the largest global ecological catastrophes in the latest history – the drying up of once one of the most beautiful basins on our planet. The entire humanity witnesses the death of sea. To my mind, the history has not yet known such a thing.

For over the past fifty years the water area of the Aral Sea has shrunk for more than four times, the volume of water has decreased ten fold as much as increased its mineralization.

We are all witnessing that Priaralie is being inexorably occupied by the desert that had emerged there. The permanent ecological risk zone, which negatively affects the quality of life, health and gene pool of our children and locally residing population, encompasses not only the regions located around drying up sea – the Kyzyl-Orda oblast of Kazakhstan, Dashkhovuz oblast of Turkmenistan and the Republic of

[2] http://www.un.int/wcm/content/site/uzbekistan/pid/9548

Karakalpakstan, Khorezm, Navoi and Bukhara oblasts of Uzbekistan – but also the entire region of Central Asia.

The deficit of water resources, deterioration of drinking water quality, land degradation, rapid reduction of biodiversity, climatic changes resulted from increased haziness of atmosphere, probably related to it shrinking of area of glaciers on Pamir and Tian-Shan, where the substantial part of flow of the region's main rivers is formed – these are just a short list of results of perishing Aral.

Today it is obvious that the difficult complex of ecological, climatic, socio-economic and demographic problems came about in Priaralie, which are of global, I would say planetary scale.

In the unfolding situation, which according to the experts bears far-reaching threatening planetary consequences, it is becoming more and more obvious the very fact that without joint efforts coordinated with the world community and in the first place with the UN institutions it is impossible to resolve this problem.

As a matter of fact, in March this year it has turned 16 years since establishment of the International Fund for Saving Aral and we may summarize some outcomes of its activity. The indisputable merit of the Fund is the fact that we have been able to draw the attention of the world community, governments of many countries of the world and whole number of international institutions to the problem of Aral.

At the moment, given the active support and participation of the World Bank, Asian Development Bank, Global Ecological Fund, various international organizations and particular states of the world a whole number of projects is being implemented aimed at recovering the unfavorable state of affairs in the region, which threatens the gene pool of the locally residing population.

The fact that the International Fund for Saving the Aral Sea was granted the observer status at the United Nations General Assembly in 2008 opens up new opportunities for its activity at the global level."

Holding on the initiative of Uzbekistan of the international conference on Aral in March 2008 in the city of Tashkent rendered a substantial impetus for this acute problem to be broadly considered on the international format. The fact that the representatives of over 90 international organizations, the largest state financial institutions of Japan, Germany, China, Arab countries and leading research centers participated at the conference serves as a testimony to the aforesaid.

On the outcomes of Forum Tashkent Declaration and Action Plan were adopted, providing for the implementation of projects in the amount of about US$ 1.5 for mitigation of drastic consequences of the Aral disaster.

In our view, the Action plan, which was approved by international institutes and donor countries, can be efficiently used by our experts and specialists of IFAS in elaborating the third phase of the Action plan, set for 2011-2015, to render assistance to the region of the Aral Sea basin in the framework of IFSA.

In Uzbekistan we unambiguously realize that it is hardly possible in practice to save the Aral Sea in the fullest sense of this word, but we are simply obliged to accomplish the comprehensively thought-out Action plan to create the locally residing population normal conditions necessary for a healthy way of life. This is our duty.

We consider our most important task to overcome the consequences of drying up of Aral and ecological recovery of the Aral Sea basin, firstly, in terms of implementation of the following measures:

-establishment of the local basins at the already dried bottom of the Aral Sea, filling of delta basins with water to reduce the sand and salt storms, recovery of biodiversity and delta ecosystem;

- tree planting at the dewatered Aral seabed, fixation of the drift sands, reducing the removal of poisonous aerosols out from the drained seabed;

- supply of drinking water and provision of communal and medical facilities with water disinfesting tools, re-equipment of water intake facilities with chlorination installations and many others that save and revitalize population;

- continuous study of the impact of the growing ecological crisis in Priaralie on the state of health and gene pool of population, prevention and prophylaxis of a broad spread of various dangerous human diseases specific for this region, deployment of a specialized network of prophylactic and medical facilities for the locally residing population and accomplishment of the program of measures on accelerated development of the social infrastructure.

The funds worth in the dollar calculus that equal over 1 billion dollars were spent for over the past ten years alone for implementation of the said projects and programs in Uzbekistan, including at the expense of foreign lending, technical aid and grants – about 265 million dollars.

Availing myself of this high rostrum as much as this opportunity, I consider it my duty to express the feeling of gratitude to the United Nations, its institutions, and all donor countries that have rendered us a substantial assistance.

Yet there is another issue which I would like to very shortly touch upon.

Speaking of the Aral tragedy and measures in terms of its overcoming, certainly, we all realize that the resolution of this task is most directly linked to the problems of rational and reasonable use of the water and energy resources, the most careful

approach towards preserving the already fragile ecological and water balance in the region.

I think that given the unfolding current very serious and ever more worsening ecological situation in Priaralie and entire region, obviously, there is no need to prove or persuade someone in terms of adopting the most radical measures to prevent the possible negative consequences of drying up of Aral.

Dear participants of the summit,

During the tête-à-tête meeting of heads of states we have reached an agreement that at the delegation-level meeting we were going to discuss only one issue – the activity of the International Fund for Saving the Aral Sea and its major tasks for the perspective. However, the addresses of some our colleagues at the summit (plenary session) have gone out of scope of our agreement. In think that despite this today it is of no use to arrange discussions on the issues, which go far beyond the scope of activity of the International Fund for Saving Aral.

I would like only to once again remind you about the very important event for us – recently in Uzbekistan we have received a letter from the president of World Bank Mr. Robert Zoellick, which was published in the press. That was an answer to the letter of President of the Republic of Uzbekistan, in which all currently available complex problems in Central Asia in terms of the joint use of hydropower resources of entire region have been concretely laid out.

For over the last years the substantial debates and complex discussions on this issue have been taking place. I believe that the differences that have emerged in the debates between the countries located at the upper reaches of the two great rivers of our region – Amudarya and Syrdarya, and the countries in the downstream – Uzbekistan, Turkmenistan and Kazakhstan, - are quite natural.

Tajikistan and Kyrgyzstan, above all, are concerned about their own interests, but we are speaking about the interests of each particular state, and I want to note that these are the interests of not today but are the interests of the future. Since, as it was spoken here, it was messed up so much during the Soviet time in terms of implementing the water and energy programs then today one has only to regret about it. Among the grandiose projects there are the turn of the Siberian rivers to the territory of Kazakhstan and Central Asia and many other initiatives, which were adopted in line with the resolution of Central Committee of the Communist Party of the Soviet Union, Politburo and Council of Ministers of the USSR.

I am convinced, and this is confirmed by facts that not a single of those the so-called “great projects” has not been seriously thought out, did not go through not only international but also no serious expert assessment. “The decision of party shall be implemented into life” – that was the motto all this thoughtless work has been dictated by, which had brought about so much problems not only in our region, but also at vast

spaces of the former Soviet Union, about which now the environmentalists have to speak with enormous indignation and regret.

This is a topic for a separate conversation. But one thing is clear today – construction of all those water reservoirs, hydropower stations and other facilities on the territory of Central Asia does not have a definite assessment. This is related to the fact that along with tackling the major issues, which have been pursued, i.e. deriving the electrical power, there have been created many problems, firstly, the ecological ones, which we have already been facing now at every step. Therefore, the debates on this topic are quite logical and natural.

I want to underscore once again that we come out for holding the independent international examination of the scheduled construction of all largest hydropower facilities in the region. In this we are supported not only by the World Bank and the Asian Development Bank, but also by the European Union. In particular, it was spoken about by the EU representative Mr. Morel, who has not once traveled to the region, including to Tajikistan and Kyrgyzstan.

Therefore, the point is about not only the views of those countries, which are located at the lower reaches of Amudarya and Syrdarya, but about the public opinion practically in the entire world. At the same time, I would like any assessments to be excluded in these debates, which may yet intensify the discussions between us, I am repeating, the quite natural discussions. It becomes obvious, what their own strategic goals some third countries are pursuing that attempt to influence on these processes in the region.

I think that we are, the heads of states, who are responsible before our people, before history, must, firstly, think about to find today the points of contact, and not to engage these discussions and not to take them out to a political level. Otherwise, it is not excluded that the interests of our countries, our people will be moved aside and the issues related to strategic and geopolitical interests and goals of the third countries, as much as the issues of managing the region, will step onto the foreground.

Most importantly – not to strain the relations between our countries and heads of states, but vice versa, to find compromises. We don't have another way. I want to note once again that I, as much as we all, give credit for the interests of Tajikistan and Kyrgyzstan. But the compromise must be found since without it this most important issue cannot be resolved.

I would like to underscore that I fully support the address by President of Turkmenistan Gurbanguly Berdymuhamedov at this meeting, I would say, some principal provisions which he has laid out. The position of Turkmenistan, which is laid out in his address, is as follows: "We must achieve the balance of interests of states in this region." This stands for everything.

If we don't achieve the balance, don't achieve the compromise, then we will not be able to resolve this task and the problem will be tackled for the years ahead. And it is not known, who after all will achieve its goals. Is it us, the people, who reside in this region, or in the final outcome, will the interests of others be achieved? After all, we

will find ourselves in the position of a small coin along implementation of the principle “divide and rule”.

We don’t have a right to allow it.

Thank you.

MESSAGE OF THE SECRETARY-GENERAL TO THE SUMMIT OF THE MEMBER STATES OF THE INTERNATIONAL FUND FOR SAVING THE ARAL SEA, DELIVERED BY MIROSLAV JENCA, SPECIAL REPRESENTATIVE OF THE SECRETARY-GENERAL AND HEAD OF THE UN REGIONAL CENTER FOR PREVENTIVE DIPLOMACY FOR CENTRAL ASIA[3]

I would like to extend my sincere greetings to the Summit of the Member States of the International Fund for Saving the Aral Sea. I am heartened that, despite the serious global economic and financial crisis, the decision-makers of the Central Asian region have agreed, at the highest level, to discuss ecological issues of common concern, including those of the Aral Sea basin.

Central Asia's water resources are particularly vulnerable. In recent decades, the Aral Sea, once the world's fourth largest lake, has shrunk by 70 per cent, threatening local livelihoods and national prosperity. Climate variability poses a further challenge in this region characterized by vast areas of arid and semi-arid land. The mountain glaciers of Kyrgyzstan and Tajikistan that feed the lake are melting at an alarming rate. By 2050, water flow in the Amu-Darya and Syr-Darya rivers could diminish by up to 40 and 30 per cent respectively.

As a regional organization, the International Fund for Saving the Aral Sea is ideally positioned to facilitate the development of mutually beneficial and durable solutions among Central Asian countries. The fact that the Fund was granted observer status to the General Assembly emphasizes the commitment of the United Nations to supporting you to realize this potential.

My Special Representative for Central Asia and the Regional Center for Preventive Diplomacy are prepared to assist you in formulating a long-term solution to the interrelated water and energy issues of the Aral Sea basin, and to offer mediation

[3] http://www.un.org/apps/sg/sgstats.asp?nid=3815

support to any future negotiations in this area. Wherever needed, United Nations specialized agencies also stand ready to provide assistance and technical expertise.

Any discussion of the Aral Sea must recognize the growing threat of climate change. This December, the world's governments will meet in Copenhagen to negotiate a new climate change agreement. It must be ambitious, fair and effective in reducing greenhouse gas emissions. It must also assist countries to adapt to the inevitable effects of climate change by facilitating the development and transfer of relevant resources and technology.

Such an agreement can begin to unlock the investments and innovation needed to transform the climate crisis into an opportunity for equitable, sustainable growth for all countries. In order to seal the deal, we will need leadership at the highest level from all countries, powerful or poor. I encourage your active participation in this process, with the same spirit that you are engaged in saving the Aral Sea. I wish you a productive and successful meeting.

ENHANCED REGIONAL COOPERATION: COORDINATION MEETING ON THE FOLLOW UP TO THE IFAS SUMMIT IN ALMATY[4]

The important international event “Enhanced regional cooperation: Coordination meeting on the follow-up to the IFAS Summit in Almaty” was held in the conference hall of the United Nations Regional Center for Preventive Diplomacy for Central Asia (UNRCCA) in Ashgabat. Chief executive officers of UN Agencies, OSCE, EU, Executive Committee of IFAS and its branches, senior representatives of five Central Asian states, as well as relevant regional and international organizations participated in the meeting.

Special representative of the UN Secretary-General, head of the UNRCCA, Ambassador Miroslav Jenca; Deputy Chairman of the Cabinet of Ministers, His Excellency Rashid Mederov, Minister for Foreign Affairs of Turkmenistan; Deputy of the UN Secretary-General, Mr. Yan Kubish, Executive Secretary of the UN EEC; Deputy of the UN Secretary-General, Assistant of the UNDP manager, Ms. Kory Udovichki, Director of the UNDP Regional Office for Europe and CIS; Mr. Goran Svilanovich, OSCE Coordinator of Economic and Environmental Activities delivered welcoming speeches.

Sagit Ibatullin, Chairman of the EC IFAS, presented keynotes about the Summit results and the key actions needed to implement its decisions. Discussion of the

[4] http://sic.icwc-aral.uz/releases/eng/164.htm

regional ecological problems and issues on the water resources management in the Aral Sea Basin took place.

There was a constructive exchange of views about possible measures aimed at enhancing regional cooperation in water, agriculture and energy sectors during the meeting. Mr. Alex Grzhibovsky, International Expert on Water Issues of the UNRCCA had addressed the conceptual presentation at the meeting.

The proposed concept on mutual benefits of the enhanced dialogue and cooperation was considered; the possible effects on the cooperation activity between Central Asian countries, possible use of this concept in different sectors of the economy, and also further steps towards the enhanced regional cooperation jointly with international community were discussed.

FINAL DOCUMENT ADOPTED BY MEETING PARTICIPANTS[5]

A round table discussion "Enhanced regional cooperation: coordination meeting on the follow up to the IFAS Summit in Almaty" took place in the United Nations Regional Center for Preventive Diplomacy for Central Asia (UNRCCA) in Ashgabat, Turkmenistan, on July 16, 2009. The event, organized by the UNRCCA, with support of the Government of Turkmenistan gathered senior representatives of five Central Asian states, principal officials of the Executive Committee of the International Fund for Saving the Aral Sea (IFAS) and its branches, as well as high level representatives of UN Agencies and relevant international and regional organizations.

The meeting has allowed participants to assess achievements and to discuss the optimal ways of implementing decisions adopted on the IFAS Summit. During the meeting there was a constructive exchange of views about possible measures aiming at enhancing the regional cooperation in water, energy and agricultural sectors that will contribute to the improvement of socio-economical conditions in the Aral Sea Basin. Representatives of Central Asian states welcomed the willingness of UNRCCA to support and encourage development of the mutually acceptable mechanism for integrated use of water and energy resources and environment protection in Central Asia considering interests of all states in the region.

Participants underlined the significance of clearly expressed political will of the presidents of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan to further improve organizational structure and contractual-legal basis of the IFAS presented during the meeting at the IFAS Summit on 28 April, Almaty.

[5] http://sic.icwc-aral.uz/releases/eng/164.htm

It was emphasized that more effective functioning of regional structures under the sound modern legal basis will promote development of the mutually beneficial decisions about water and energy resources in the region. Strengthening the IFAS institutional structure and the updated contractual-legal base facilitate the confidence building between the participating states and allows creating the reliable guarantees for implementing the mutual agreed decisions on water and energy management issues in the region.

Participants stressed out the importance of coordination between donors and international organizations and welcomed “Central Asia Water Sector Coordination Initiative” (CAWSCI) as an effective instrument for current and proposed measures in water sector, encouraging new partners and donors to join. It was also underlined that existing international organizations and agencies should effectively support the International Fund for Saving the Aral Sea.

Participants noted that the effective coordination of donors' activity at the regional level and support of constant consultations between IFAS, the UN special agencies, financial institutes and donors' community including during development of 3rd Programme on the Aral Sea Basin were given the special importance at the IFAS Summit. In this connection they had expressed readiness to consider proposals of the IFAS Executive Committee to organize the conference on coordination of donors' activity jointly with international partners.

Participants were also introduced to a concept of shared benefits aimed at enhancing mutually advantageous cooperation in the region of Central Asia which will be further discussed in October 2009 at the seminar “Mutually beneficial multilateral water agreements: opportunities to add value and share benefits in the energy, agriculture and water sectors in Central Asia”, to be organized by UNRCCA in cooperation with the Food and Agriculture Organization of the United Nations.

MINUTES
OF THE 53rd REGULAR MEETING OF THE INTERSTATE COMMISSION FOR WATER COORDINATION (ICWC) OF THE REPUBLIC OF KAZAKHSTAN, THE KYRGYZ REPUBLIC, THE REPUBLIC OF TAJIKISTAN, TURKMENISTAN AND THE REPUBLIC OF UZBEKISTAN

June 04, 2009 **City of Dushanbe**

Chairman	Saidi Yokubzod ICWC member, Minister of Land Reclamation and Water Resources Republic of Tajikistan

ICWC members:

Kenshimov Amirkhan	Deputy Chairman of the Committee for Water Resources Ministry of Agriculture, Republic of Kazakhstan
Kamtchibekov Ravshanbek Kamtchibekovitch	Director General of the Water Resources Department Ministry of Agriculture, Water Resources and Processing Industry, Kyrgyz Republic
Ataliyev Kakadurdy Khankuliyevich	Deputy Minister of Water Resources Turkmenistan
Khamrayev Shavkat Rakhimovich	Deputy Minister, Head of Central Water Administration Ministry of Agriculture and Water Resources, Republic of Uzbekistan

ICWC executive agencies:

Dukhovny Victor Abramovich	Director, SIC ICWC, Professor, Honorable ICWC member
Kdyrniyazov Burkitbay Tajiniyazovich	Head of BWO «Amudarya»
Khamidov Makhmud Khamidovich	Head of BWO «Syrdarya»
Mukhitddinov Hayrullo Ergashevitch	Head of ICWC Secretariat

Invited:

Ibatullin Sagit Rakhmatullayevich	Chairman of IFAS Executive Council
Seisenov Sembay Baymenovich	Director, RGP "Yugvodkhoz", Committee for Water Resources Ministry of Agriculture Republic of Kazakhstan
Mamataliyev Nurgazy Patiydinovich	Director, Kyrgyz branch of SIC ICWC
Zoirov Anvar Mukhitdinovich	Deputy Minister of Land Reclamation and Water Resources Republic of Tajikistan
Pulatov Yarash Ergashevich	Director, TajNIIGiM
Gadoyev Istamkul Murodilloyevich	Director, Tajik branch of SIC ICWC
Kamolidinov Anvar	Senior researcher, Tajik branch of SIC ICWC
Ibodzoda Hairullo	Tajikistan's representative in EC IFAS
Kazakov Mavlon	Tajikistan's representative in EC IFAS
Valiev Ramazon	Head of Upper Amudarya branch of BWO "Amudarya"
Radjabov Makhmadali Isupovich	Head of Analysis and Strategic Research Department, MFA RT
Valamat-zadeh Timur Gapharovich	Senior staff-member, Electroenergetics Administration, Ministry of Energy and Industry, Republic of Tajikistan
Boirov Khomijan Boirovich	Head of Sogd Water Management Administration, Ministry of Land Reclamation and Water Resources Republic of Tajikistan
Tachnazarov Ashyrklych Seyitnazarovich	Head mirab Ministry of Water Resources Turkmenistan
Muradov Kurbon Djurayevich	Head of Amu-Surkhan BAIS, Ministry of Agriculture and Water Resources Republic of Tajikistan

Beglov Ferdinand Fatikhovich Head of division, SIC ICWC

AGENDA
of regular 53rd ICWC meeting

1. About results of non-growing season 2008-2009 and adoption of limits of water withdrawal from Amudarya and Syrdarya river channels for the next growing season 2009 and approval of forecast operation of the cascade of reservoirs (responsible BWO "Amudarya" and BWO "Syrdarya").
2. Analysis of fulfillment of ICWC decisions by the executive agencies (charge to ICWC Secretariat, Protocol No.51 of 18.09.2008)
3. About implementation of the adopted pattern of rotation of ICWC executive agencies.
4. Any other business
5. Agenda and venue of the next 54th ICWC meeting.

The members of the Interstate Commission for Water Coordination (ICWC) of Central Asia, having agreed on the agenda, having heard the reports and exchanged the opinions, had decided on the following:

First item:

1. Take into consideration the information of BWO "Amudarya" and BWO "Syrdarya" on the fulfillment of water withdrawal limits and provision of the accepted operating regime of reservoir cascade system and water withdrawals in Amudarya and Syrdarya basins during non-growing season 2008-2009.
2. Adopt forecast regimes of reservoir cascade operation and water withdrawal limits by states in the Amudarya river basin for the growing season 2009 under a level of 100% probability. In case of changes in flow probability, BWO "Amudarya" may make necessary correction proportionally to share of each state.
3. BWO "Amudarya" should ensure planned transportation of water through Takhiatash waterworks to Prearalie and the Aral Sea.

Second item:

1. Take notice of SIC Secretariat's information about analysis of implementation of ICWC decisions by the executive agencies.
2. The ICWC executive agencies should take timely urgent measures for implementation of ICWC decision.

3. ICWC Secretariat should submit for consideration of IFAS Board, for further implementation at Governmental level the signed "Regulations of ICWC" (Articles 4.3, 4.4, and 4.6), the draft Agreements "About institutional improvement of management, protection and use of water resources from the interstate sources in the Aral Sea basin" and "About information exchange for maintenance of databases on integrated use and protection of water resources in the Aral Sea basin (DB IUPWR ASB)".

Third item:

1. Take notice of SIC Secretariat's information about progress with the "Provisions on rotation of ICWC executive agencies and their managers".
2. ICWC members (state-founders of ICWC) should decide on implementation of the adopted rotation pattern and submit their decisions officially to ICWC Secretariat in one month.
3. According to the Article 3.2 "Provisions on rotation of ICWC executive agencies and their managers", take into consideration the statement of the Republic of Kazakhstan about refusal to accommodate SIC ICWC.
4. Due to refusal of Kazakh, Kyrgyz, and Turkmen parties from re-dislocation of SIC ICWC, the parties have decided to take into consideration the statement of the Tajik party and approve re-dislocation of SIC ICWC to the Republic of Tajikistan according to point 3.2 "Provisions on rotation of ICWC executive agencies and their managers".
5. According to point 4 "Provisions on rotation of ICWC executive agencies and their managers", the parties should consider an issue regarding nomination of candidates for the next meeting in order to ensure collective leadership in managing BWOs and SIC.

Fourth item:

1. Request the Swiss Development and Cooperation Agency (SDC) within the framework of the Regional Hydrometeorological Center (RHMC) project, as well as the Asian Development Bank and the German Development Agency (GTZ) to envisage construction of new and reconstruction of existing interstate gauging stations and provide them with remote communication equipment.
2. In order to ensure clear and equal distribution of water along interstate waterways, a working Commission should be established for location and sharing costs in designing and constructive new gauging stations.
3. In pursuance of Decisions of the Heads of Central Asian States of 11.01.1994, point 10 and of 09.04.1999, points 5, 10 and 11, request ICWC members to submit, in one month, to ICWC Secretariat the lists of officials, operating staff, vehicles, cars, mechanisms and workers for processing - through EC IFAS - of identity certificates and diplomatic number plates for ICWC members of a uniformly set

model and other relevant documents for unimpeded crossing of boundaries across Central Asian countries in order to execute interstate water-management activities.

Fifth item:

1. Next 54th ICWC meeting is to be held in Uzbekistan in September 2009.
2. Adopt agenda of the next 54th ICWC meeting.

AGENDA
of 54th ICWC meeting
in Uzbekistan

1. About progress of the growing season and additional measures for its completion (responsible BWO "Amudarya" and BWO "Syrdarya").
2. About environmental improvement in Amudarya and Syrdarya deltas (responsible SIC ICWC)
3. About progress with rotation of ICWC executive agencies: list of candidates of country-members for filling of deputy heads of ICWC executive agencies.
4. Miscellaneous
5. Agenda and venue of the next 55th ICWC meeting

Signed:

For the Republic of Kazakhstan	**A.Kenshimov**
For the Kyrgyz Republic	**R.Kamtchibekov**
For the Republic of Tajikistan	**S.Yokubzod**
For Turkmenistan	**K.Ataliyev**
For the Republic of Uzbekistan	**Sh.R. Khamrayev**

FULFILLMENT OF WATER WITHDRAWAL LIMITS FOR NON-GROWING SEASON 2009 AND ADOPTION OF LIMITS OF WATER WITHDRAWAL FROM THE AMUDARYA AND SYRDARYA RIVER CHANNELS FOR THE NEXT GROWING SEASON 2009 AND APPROVAL OF FORECAST OPERATION OF THE CASCADE OF RESERVOIRS[6]

I. The Amudarya river basin

1. Fulfillment of water withdrawal limits for non-growing season 2008-2009.

Actual water availability during the non-growing season in the Amudarya river basin in the site of Atamurad above Garagumdarya is 53.0% of the norm. Actual water availability amounted to 7 billion 716 million m^3 under the norm of 14 billion 555 million m^3.

Actual flow to gauging station (g/s) Kelif was 11 072 million m^3.

The use of fixed water withdrawal limits during current non-growing season by states is as follows:

- Fixed water withdrawal limit was used in total for the basin at 76.0 %; under the limit of 15 billion 743 million m^3, the actual one was 11 billion 965 million m^3.
- The Republic of Tajikistan used fixed water withdrawal limit at 73.0 %, 2 billion 112 million m^3 were used actually under the limit of 2 billion 893 million m^3;
- Turkmenistan used water withdrawal limit at 68.5 %, under the limit 6 billion 500 million m^3, actual figure indicated 4 billion 452 million m^3;
- The Republic of Uzbekistan used water withdrawal limit at 86.1 %; 5 billion 150 million m^3 were used actually under the limit of 5billion 980 million m^3.

The use of fixed water withdrawal limits by the reaches of the river is as follows:

1. Upstream – 72.4 %, including: Tajikistan – 73.0 %, The Republic of Uzbekistan – 68.0 %.

2. Middle stream – 81.3 %, including: Uzbekistan – 100.6 %, Turkmenistan – 68.9 %.

3. Downstream – 68.2 %, including: Uzbekistan- 68.9 %, Turkmenistan – 66.9 %.

[6] Information for the first issue of the agenda of ICWC meeting 53, April 2009, Dushanbe

Water supply of three users in the lower riches of the river for the reporting period is as following:

1. Dashaguz veloyat – 66.9 %
2. Karakalpakstan – 74.4 %
3. Khorezm veloyat – 62.2 %

Water supply plan in Priaralie and Aral was fulfilled at 6.9 % for non-growing season period; 144 million m^3 were supplied under the plan of 2100 million m^3.

The actual volumes of run-of-the-river reservoirs for 01.04.09 amounted to:

- 6 billion 001 milion m^3 in the Nurek reservoir;
- 2 billion 100 million m^3 in the Tuyamuyun reservoir.

On the whole the accounting period of the non-vegetation was rather tense. Due to low water year, expected operation modes of Nyrek and Tuyamuyun waterworks were not sustained.

2. Proposal of BWO «Amudarya» on the adoption of water withdrawal limits from the Pyandj, Vakhsh, Kafirnigan and Amudarya river channels for the next growing season 2009 and approval of forecast operation of the cascade of reservoirs

Water availability in the given site of Atamurat and upstream of Garagumdarya for growing season 2009, taking into account natural discharges of the Vakhsh river, according to UzHydromet data is expected to be below the norm-- in the range of 60-80 %.

However, with regard to actual dryness of April 2009, according to preliminary estimates, water availability will range from 75 to 80 %, which accounted for 57.0% in low water year 2008.

In addition, it should be noted that for the beginning of the growing season useful storage of the Tuyamuyun reservoir was fully activated. This time last dry year, the volume of water in Tuyamuyun reservoir was 2 billion 732 million m^3.

The unfolding water situation and initial conditions in the region in all respects show that entirely complex growing season is expected. It is likely that as a whole there will be enough water, however there is probability of water deficit during certain months or decades.

Therefore, primary objective of our organization is to increase accounting and control over the use and allocation of water resources, maintain equitability of water consumption at all sites of the river.

Associations of each country-water user of the basin received water withdrawal limits for growing season 2009 in full (100 % coverage).

For reference. Actually declared volumes of water withdrawal limits in the light of countries are given below:

-for the Republic of Kyrgyzstan water withdrawal limit is planned to be fixed in the volume of 450 million m^3;

-for the Republic of Tajikistan in the volume of 6 billion 776 million m^3;

-for Turkmenistan in the volume of 15 billion 500 million m^3;

-for the Republic of Uzbekistan in the volume of 16 billion 020 million m^3 for growing season 2009.

This will account for 38 billion 746 million m^3 in the Amudarya river basin, including 31 billion 520 million m^3 downstream of given site of Atamurat upstream of Garagumdarya.

It should be noted that although during last year's growing season 10 % reduction in water withdrawal limits from the Amudarya basin was adopted at the ICWC meeting, total use of reduced water withdrawal limits amounted to 72.6 % or 26 billion 118 million m^3 in absolute figures. If these figures are confronted with requests of countries for growing season 2009 – 38 billion 746 million m^3, then they will amount to only -67.4 %.

BWO «Amudarya» suggested 20.0 % reduction in water withdrawal limits for growing season 2009 from the Amudarya basin.

BWO «Amudarya» has developed an alternative operating mode of the Tuyamuyun hydroscheme (TMHS) for growing season, taking into account 20 % reduction in water withdrawal limits from the Amudarya basin, which assumes fair outcome for the beginning of dormant season 2009-2010.

Moreover, BWO «Amudarya» together with Unified Control Station (ACS) «Energiya» specified the operation mode of the Nurek reservoir for growing season 2009.

Taking into account water availability forecast for growing season in the site of Atamurat upstream of Garagumdarya, water withdrawal volumes and current storage in the reservoirs we propose to fix water supply plan in the Aral Sea and Priaralie for growing season with account of CDF (collector and drainage flow) in the volume of 1 billion 680 million m^3.

In conclusion, BWO "Amudarya" proposed:

1. To adopt operation modes of the cascade of reservoirs, water withdrawal limits, water supply volumes to the Aral Sea and the Amudarya river delta for the growing season 2009 that were submitted for consideration to ICWC members.

II. The Syrdarya river basin

1. Fulfillment of water withdrawal limits for non-growing season 2008-2009 in the Syrdarya river basin

Water withdrawal limits of Syrdarya basin countries for non-growing season 2008-2009 were adopted at 51st ICWC meeting, which was held on 17-18 September 2008 in Almaty. Fulfillment of limits for the first half of non-growing season was discussed at 52nd meeting of ICWC in December of the previous year in Ashgabat.

Following the results of the non-growing season, water situation is characterized as follows.

Inflow to upper reservoirs (Table 1.1) accounted for 5 billion 121 million m^3, or 725 million m^3 higher than expected. The inflow to Toktogul reservoir was 2672 million m^3, to Andijan - 874 million m^3 and 1390 million m^3 to Charvak. The side inflow (Table 1.1) amounted to 9.4 billion m^3.

Total inflow in the basin reached to 14.6 billion m^3 at long-time average annual norm of 20.2 billion. Thereby inflow exceeded the expected value by 20 %, or 2.5 billion m^3.

Releases from reservoirs amounted to 107 % of the volume, specified by the schedule, due to higher discharges from the Andijan and Kayrakkum reservoirs (Table 1.2).

As a result, on 1 April 2009 storage in reservoirs was (Table 1.3): Toktogul - 6421 million m^3, Andijan – 691 million m^3, Charvak – 844 million m^3. In general, storage in the upper reservoirs reached to 7 billion 956 million m^3, which was 699 million m^3 above the volume specified by the planned schedule at this date – 7 billion 257 million m^3.

Owing to measures taken by the Kyrgyz Republic on the restriction of energy consumption, intensity of the Toktogul reservoir drawdown was lower than previous year's, when during non-growing season the reservoir was drafted from 13 billion 700 million m^3 to 6578 million m^3. Nevertheless, to the beginning of current growing season its volume was 140 million m^3 less than previous year's.

Water supply to states-water users for non-growing season accounted for: Kazakhstan along Dostyk canal – 291.69 million m^3 (73 %), Kyrgyzstan – 21.16 million m^3 (57 % of limit), Tajikistan – 41.92 million m^3 (23 % of limit) and Uzbekistan – 2564.76 million m^3 (103 % of limit) (Table 1.4 and 1.5).

Kazakhstan received less water than needed along Dostyk canal due to the lack of water downstream Kayrakkum reservoir as a result of reducing releases in March to 150 m^3/sec, while long-time average annual release of the reservoir for this period equals to 800 m^3/sec.

Releases were reduced in order to accumulate water for upcoming growing season to compensate compulsory drawdown of reservoir in February due to inconformity of energy receipt issues.

Upon availability of sufficient water, The Kyrgyz Republic fulfilled water withdrawal in accordance with domestic needs.

Water withdrawals of the Republic of Tajikistan were fixed up according to the demands of water consumers and correspond to long-term average values of water withdrawals of Tajikistan during non-growing season.

The Republic of Uzbekistan obtained water in full, slightly surpassing the fixed limit.

The water supply to the Aral Sea and Priaraliye amounted to 883 million m^3 and 300 million m^3 to the Arnasay reservoir (Table 1.6).

Table 1.1

Balance elements	**Volume, million m^3(from 01.10.08 to 01.04.09)**		
	Expected	**Actual**	**Percentage (%)**
Inflows to upper reservoirs			
to Toktogul	2515.03	2672.18	106.2
to Andijan	706.49	874.28	123.7
to Charvak	1017.62	1390.6	136.6
river Ugam	157.51	184.48	117.1
Total	*4396.65*	*5121.54*	*116.5*
Side inflows			
Toktogul – Uchkurgan	357.00	388.71	108.9
Uchkurgan, Uchtepe-Kayrakkum	2943.31	4182.11	142.0
Andijan – Uchtepe	1826.06	2123.28	116.2
Kayrakkum –Chardara	1898.25	1945.74	102.5
Gazalkent-g/s. Chinaz-Chirchik	707.36	839.22	118.6
Total	*7722.98*	*9479.06*	*122.7*
TOTAL	***12119.63***	***14600.6***	***120.4***

Table 1.2

Reservoir	Releases (from 01.10.08 to 01.04.09), million m^3		Percentage (%)
	Scheduled	Actual	
Toktogul	6111.94	5883.67	96.2
Andijan	380.76	527.05	138.4
Charvak	1363.39	1277.34	93.7
Kayrakkum	6109.72	7879.08	129.0
Chardara	3378.24	3022.79	89.5
TOTAL:	17344.05	18589.93	107.2

Table 1.3

Reservoir	Reservoir volumes, million m^3			
	for 01.10.08	Scheduled for 01.04.09	Actual for 01.04.09	Actual for 01.04.08
Toktogul	9617.0	6000.0	6421	6563
Andijan	362.4	686.2	691	690
Charvak	926.5	571.2	844	477
Kayrakkum	826.0	3339.4	3198	3478
Chardara	931.0	4995.2	5385	5189
TOTAL	12662.9	15592	16539	16397

Table 1.4

Area, country-water use	Water withdrawal limit for 01.04.09, million m^3	Actual water withdrawal for 01.04.09, million m^3	Percentage (%)
Toktogul – Uchkurgan water works, including:	1378.72	1394.22	101
Kyrgyzstan	29.76	21.16	71.1
Tajikistan	46.8	41.92	89.5
Uzbekistan	1302.16	1331.14	102
Uchkurgan – Kayrakkum water works, including:	171.58	135.62	79
Kyrgyzstan	7.13	0	
Tajikistan	43.48	0	
Uzbekistan	120.97	135.62	112
Kayrakkum water works – Shardara reservoir, including:	1537.14	1389.69	90
Kazakhstan	400	291.69	72.9
Tajikistan	88.89	0	
Uzbekistan	1048.22	1098	105

Table 1.5

Republic – water user	**ICWC limit for 01.04.09, million m^3**	**Actual water withdrawal for 01.04.09, million m^3**	**Percentage (%)**
Kyrgyz Republic	36.89	21.16	57.3
Republic of Uzbekistan	2471.35	2564.76	103
Republic of Tajikistan	179.17	41.92	23.4
Republic of Kazakhstan (Dostik canal)	400	291.69	72.9

Table 1.6

Indicators	**Scheduled for 01.04.09, million m^3**	**Actual for growing season, million m^3**
Water supply to the Aral Sea	1458	883
Discharge to Arnasay depression	0	300
Inflow to Shardara reservoir	7630.65	8124.5

2. Water withdrawal limits from the Syrdarya river channel and forecast operation of the Naryn-Syrdarya cascade of reservoirs for growing season 2009

According to improved forecast of the Hydromet service, for growing season 2009 as of 6.04.09 water availability in Fergana valley rivers—Karadarya and Chirchik is going to range within 100-120 % and in Ahangaran – within 100-150 % of the norm. The inflow to Toktogul reservoir is expected to be at the level of 83 %, while to Andijan and Charvak reservoirs at 60 % and 79 % of the norm respectively. Meanwhile the total side inflow will amount to 66 % of the norm (Table 2.1).

Table 2.1

As predicted by the Hydromet service for the growing season 2009 (from 01.04 to 01.10.09)	Volume, million m^3				Percentage (%) of the norm		
	norm	expected limits		mean	expected limits		mean
		min.	max.		min.	max.	
Inflows to upper reservoirs							
to Toktogul	9586	6320	9490	7905	65,9	99	82
to Andijan	3035	1420	2210	1815	46,8	72,8	60
to Charvak	5188	3480	4740	4110	67,1	91,3	79
river Ugam	542	310	480	395	57,1	88,5	72
Total	18351	11530	16920	14225	62,8	92,2	77
Side inflows							
Toktogul–Uchkurgan	1184	882	1100	991	76	93	84
Uchkurgan, Uchtepe-Kayrakkum	3378	2210	2850	2530	65	84	75
Andijan–Uchtepe	2545	1420	2060	1740	56	84	68
Kayrakkum–Shardara	3178	790	2060	1425	25	65	45
Gazalkent-g/s Chinaz-Chirchik	986	560	860	710	57	87	72
Total	11271	5449	9014	7482	53	80	66
TOTAL	29623	17479	25934	21707	59	87	73

In general, water availability in the Syrdarya river basin is expected to be at 73 % of the norm, or 21.7billion m^3.

Total available water resources for growing season 2009, including water storage level in reservoirs without considering the dead storage, amount to 30 billion 36 million m^3 (Table 2.2). In comparison with low water year 2000, when the same side inflow was registered, the volume of available resources is expected to be 6 billion m^3 less due to low water storage levels at the Toktogul and Andijan reservoirs.

Table 2.2

Year	2000	2007	2008	2009
Total inflows	22411	27361	19866	21707 (expected)
Percentage of the norm (29623mln.m^3)	76 %	92 %	67 %	73 %
including:				
to upper reservoirs	14014	16680	12763	14225
side inflow	8397	10681	7103	7482
Water storage net of dead storage	13612	12938	8884	8329
including:				
Toktogul	5499	5171	1063	921
Andijan	1226	605	540	541
Charvak	268	388	51	418
Kayrakkum	2373	2536	2561	2160
Shardara	4246	4238	4669	4289
Total available water resources	36023	40299	28750	30036

According to actual data, for the last growing season (01.04.08 – 10.05.08), total inflow to upper reservoirs amounted to 2 billion 509 million m^3, exceeding the expected limit by 327 million m^3, mainly due to the inflow to Charvak reservoir (Table 2.3). The side inflow amounted to 2 billion 949 million m^3, which is also 241.3 million m^3 higher than expected. Increased against forecast side inflows took place at the sites of Andijan-Uchtepe and Charvak-Ustye, while at the site of Uchkurgan-Uchtepe-Kyzylkishlak the side inflow was 22 % lower than expected.

Total inflow of water resources to the basin for the past growing season turned out to be 12 % higher than expected and made up 5 billion 457 million m^3 .

Table 2.3

Balance elements	Volume, million m^3 April 2009		May 2009 (01.05-10.05.09)		Total for (01.04.-10.05.09)	
	Expected	Actual	Expected	Actual	Expected	Actual
Inflows to reservoirs						
Toktogul	616.9	707.44	439.78	292.81	1056.68	1000.25
Andijan	254.02	324.95	152.06	161.91	406.08	486.86
Charvak	435.46	679.28	284.26	342.49	719.72	1021.77
Side inflows at sites						
Toktogul-Uchkurgan	173.66	173.66	84.67	84.67	258.33	258.33
Uchkurgan-Uchtepe-Kizilkishlak	648.0	555.55	207.36	109.73	855.36	665.28
Andijan-Uchtepe	355.1	435.46	127.87	228.1	482.97	663.56
Kayrakkum-Chardara	570.24	570.24	233.28	233.28	803.52	803.52
Charvak-Ustye	220.32	435.71	87.26	122.66	307.58	558.37

Since the beginning of the growing season in total 5 billion 389 million m^3 water has been released from reservoirs, of which 1 billion 35 million m^3 falls on Toktogul and 339 million m^3 on Andijan, while Charvak, Kayrakkum and Shardara account for 426 million m^3, 1 billion 348 million m^3 and 1 billion 648 million m^3 respectively. Inflows to reservoirs at this period were as follows: Toktogul -1 billion m^3, Andijan -487 million m^3, Charvak - 1 billion 22 million m^3, Kayrakkum - 1 billion 756 million m^3, Shardara - 2 billion 278 million m^3. As of May 10 of this year, total volume of the reservoirs accounted for 17 billion 409 million m^3, i.e. from the beginning of the growing season their water reserves have increased by 870 million m^3 (Table 2.4).

Table 2.4

Reservoir	Volume for 01.04.09, million m^3	Inflow from 01.04 to 10.05.09, million m^3	Release from 01.04 to 10.05.09, million m^3	Volume for 10.05.09, million m^3
Toktogul	6421	1000.25	1035.24	6402
Andijan	691	486.86	339.29	834.2
Charvak	844	1021.77	426.13	1355
Kayrakkum	3198	1756.78	1348.44	3513
Shardara	5385	2278.35	2539.73	5305
TOTAL	16539	6544.01	5688.83	17409.2

Water supply to countries-water users (10.05.09) amounted to: Kazakhstan along the Dostyk canal - 30 million m^3, Kyrgyzstan - 19 million m^3, Tajikistan – 85.5 million and Uzbekistan - 954 million m^3.

Taking into account actual operation mode of the Toktogul reservoir, the volume released from the reservoir for the growing season to meet domestic requirements of the Kyrgyz Republic will not exceed 3.3 billion m^3 for energy, and by the end of the growing season, the reservoir can fill up to 10.5 billion m^3.

With regard to emerging situation and absence of agreement at the moment on the operation mode of the Toktogul reservoir for upcoming growing season, several possible options for the operation mode of the Naryn-Syrarya reservoirs cascade have been estimated on the basis of releases from the Toktogul reservoir.

Option I: amount of releases – 3.6 billion m^3 in accordance with domestic energy requirements of the Kyrgyz Republic.

Option II: amount of releases – 4.3 billion m^3, or 0.7 billion m^3 more than required by the Kyrgyz Republic.

Option III: amount of releases – 5.0 billion m^3, or 1.4 billion m^3 more than required by the Kyrgyz Republic.

For the above options, balances of water resources (Table 2.5), water withdrawal limits of countries (Table 2.6) and forecast schedules of the operation mode of the Naryn-Syrdarya reservoirs cascade have been prepared and presented to ICWC members.

In case an agreement is concluded between the Syrdarya basin countries on shared use of water and hydropower resources of the Syrdarya basin for the growing season 2009, then on the ground of submitted data, it would be possible to specify the operation mode of the Naryn-Syrdarya reservoirs cascade and water withdrawal limits, which should also be corrected according to unfolding actual water situation.

Table 2.5

Balance elements	Option I	Option II	Option III
	mln. m³	*mln. m³*	*mln. m³*
Input			
Releases from Toktogul reservoir	3621	4361	5076
Total side inflow	4933	4933	4933
Gauging station Chinaz-Chirchik	1714	1714	1714
Gauging station Uchtepa	885	885	885
Drawdown of the run of the river reservoirs:			
Kayrakkum	2160	2160	2160
Chardara	4289	4289	4289
Total	17602	18343	19057
Output			
Losses from the run of the river reservoirs	958	958	958
Channel losses and downstream ecological releases	1358	1358	1358
Supply to the Aral Sea	1806	1806	1806
Total	4123	4123	4123
Total, available water resources	13480	14220	14935
Required water resources			
Total water requirements of governments	18651	18651	18651
water supply factor	0,72	0,76	0,80

Table 2.6

Water withdrawal limits of Syrdarya basin countries for the growing season 2009

Balance elements	Limits			
	100%	Option I	Option II	Option III
Total withdrawal from the Syrdarya river	18651	13429	14175	14921
Republic of Kazakhstan	7700	5544	5852	6160
including Dustlik canal	800	576	608	640
Kyrgyz Republic	246	177	187	197
Republic of Tajikistan	1905	1372	1448	1524
Republic of Uzbekistan	8800	6336	6688	7040
Water supply to the Aral Sea	1806	1806	1806	1806

ANALYSIS OF FULFILLMENT OF ICWC DECISIONS BY THE EXECUTIVE BODIES

The Interstate Coordination Water Commission of Central Asia (ICWC) is created by the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan according to Agreement on co-operation in shared management of international water resources use and protection signed on behalf of sovereign states on 18th February 1992 in Almaty.

The structure of ICWC includes the following bodies:

- Commission
- BWO «Amudarya» and BWO «Syrdarya»
- Coordination Metrological Center (CMC)
- SIC ICWC and its national branches
- ICWC Secretariat.

By the decision of ICWC the secretariat was established on 10 October 1993. It is permanent acting body of ICWC and acts according to the Agreement between the Republic of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and the Republic of Uzbekistan.

The Secretariat together with other executive bodies of ICWC prepares the agenda, measures and draft decisions of ICWC for meetings and controls over execution of ICWC decisions and receipt of funds from State-Founders for financing executive bodies.

During 2007-2009 7 meetings of ICWC were held, at which members of executive bodies were encharged with tasks by ICWC members.

Throughout the existence of ICWC, the question has arisen concerning rotation of ICWC bodies.

However, this issue has not been embodied due to emerging gaps in issues concerning principles and concrete objectives of the methodology and remained unapproved over several years. Necessity emerged to adopt rotation principles with the aim pf regulating concurrence of actions with IFAS bodies, with respect to EC IFAS.

The heads of ICWC executive bodies are appointed, with determined term of office and rotation order, and dismissed by ICWC decision on the ground of new «Statute of ICWC».

Location of executive bodies and their redislocation (rotation) is determined by ICWC decision. Based on rotation proposals made to ICWC Secretariat by state-founders of ICWC and having examined them, ICWC Secretariat presented its own

version of the rotation of heads of ICWC executive bodies, and a location has been arranged.

Methods of work are remaining as before according to new «Statute» approved by the ICWC members.

At 46 meeting of ICWC held in Ashgabat, after discussing proposed by the Secretariat draft «Rotation of ICWC executive bodies», the Secretariat together with SIC ICWC was entrusted with task of including respective draft into «Statute of ICWC» in two weeks' time on the basis of discussions with specification of rotation dates, financing conditions and location.

At 51st ICWC meeting «Statute of ICWC» and «Provision about rotation of executive bodies of ICWC of Central Asia and their heads» was adopted.

SIC ICWC together with its branches prepares draft decisions and programs on perspective development and common regional water policy, improvement of management and use of transboundary waters, common water conservation program; the enhancement of the ecological situation in the basin, rationale and development of automated water management systems in the river basins.

Approval and submission of draft «Agreement between the governments of the Republic of Kazakhstan, Republic of Kyrgyzstan, Republic of Tajikistan, Republic of Uzbekistan and Turkmenistan on strengthening organizational framework for management, protection and rational use of transboundary water resources in the Aral Sea basin» to the governments for consideration.

At 52nd ICWC meeting in Turkmenistan it was proposed to support SIC ICWC and BWO «Syrdarya» regarding equipping gauging stations UCHKURGAN, AKDJAR and KYZYLKISHLAK through financial support of Swiss donors. European Union was invited to support «Development of Central Asian training network on integration of water resources management» Project.

ICWC considers and approves the program of workshops, their budget and venue. It was proposed to consider the draft Agreement at the meeting of water and energy organizations of Central Asia with engagement of representatives of regional working groups on preparation of above mentioned draft agreement.

BWO «Amudarya» and «Syrdarya» annually develop water release plans releases of water into the Aral Sea and Priaralie, the volumes of which are adopted by ICWC based on requirements, and cannot be used for other purposes. The heads of BWO are responsible for fulfilling releases adopted by ICWC to the Aral Sea. All data on conducting growing season and additional measures on its completion are given in the reports of the heads of BWO «Amudarya» and BWO «Syrdarya».

It follows from the reports of the heads of BWO «Amudarya» that low water availability in current growing season, water shortage in the Tuyamuyun reservoir and low inflow to the TMHS has most negatively affected water situation in the downstream of Amudarya. Emerging water situation in the region in all respects reminds the situation of 2001, but despite the worst water conditions, the use and operational management of water resources due to active support of the Ministry of Water Resources of Turkmenistan and the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan has proved to be better than it was in 2001. As a result water consumers of the river downstream received 1108 million m^3 more water than in 2001. Following the approved «Agreement on shared use of water resources between Turkmenistan and the Republic of Uzbekistan in the downstream of the Amudarya River», for accounting period, six meetings of the commission on apportionment of water with participation of the heads of production association (PA) «Dashoguzsuvkhujalik», BAIS (Karakalpakstan and Khorezm), BWO «Amudarya» and OU TMHS were held.

At these meetings operation mode of the TMHS was developed and water resources were allocated proportionally based on their availability. Such approach has given certain positive results.

In BWO «Syrdarya» for growing season 2009 complex situation in supplying water to consumers may repeat. Therefore, it is necessary to deal with problems related to the supply of fuel-energy sources. According to BWO «Syrdarya» estimations at the beginning of the growing season as of 1 April 2009 carryover storage in Toktogul reservoir will amount to approximately 6 billion m^3, which is 5.3 billion less than long-term average values. Operation mode of the Naryn-Syrdarya reservoirs cascade in the current growing season was adjusted depending on unfolding water situation. Relatively large share of Kazakhstan's water withdrawal arises from the fact that Kazakhstan, having purchased energy from Kyrgyzstan since 12 July 2008, allowed additional water releases from the Naryn reservoirs cascade in the total volume of 600 million m^3. This allowed not only increasing water supply to Kazakhstan part of the Dostyk canal, but also preventing further evolution of water supply crisis on the whole. It was managed to avoid early drawdown of the Kayrakkum reservoir, maintain its operating level until 01.09.2008 as well as improve water availability in Tajikistan and Uzbekistan.

Water withdrawal limits provide for the delivery of water for irrigation, industry and utilities and for other needs. In case water availability changes in the basin, water withdrawal limits will be adjusted accordingly.

In general, executive bodies of ICWC accomplished all tasks assigned to them during 2008-2009.

The delay in the fulfillment of ICWC Secretariat tasks was due to obtaining untimely data from BWO «Amudarya» and BWO «Syrdarya». Lack of communication with BWO «Amudarya» in Mart-April prevents from controlling

execution of ICWC decisions. ICWC Secretariat asks to address the problem of unobstructed travel of ICWC executive bodies and its members from territory of one country to another, and consider the issue of office allocation for delegation of ICWC Secretariat in Tashkent (Republic of Uzbekistan). Solution of above-mentioned problems will significantly improve the work of ICWC Secretariat.

STATUTE OF THE INTERSTATE COORDINATION WATER COMMISSION OF CENTRAL ASIA

I. General

1.1. The Interstate Coordination Water Commission of Central Asia (ICWC) is created by the Republic of Kazakhstan, the Kyrghyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan according to Agreement on co-operation in shared management of international water resources use and protection adopted by Heads of State on 18th February 1992 in Almaty.

1.2. By the decision of the Heads of State of Central Asia of March 26, 1992 and April 9, 1999 and the decision of IFAS Board of March 27, 2004, ICWC and its executive bodies are annexed to the International Fund for Aral Sea Saving (IFAS) and rank as international organizations.

1.3. ICWC in its activity is led by bi- and multilateral agreements between the State-Founders on water resources use from interstate sources, by Decisions of IFAS Board and by the present Statute.

1.4. ICWC is a regional body of the Central Asian states to deal with joint solution of issues related to shared water management, effective use and protection in the Aral Sea basin and to implement of commonly elaborated programs following the principles of collectivity and mutual respect of parties' interests.

1.5. ICWC and its executive bodies implement a set of measures and procedures ensuring equitable water allocation along the interstate sources, taking into account nature needs and future development.

1.6. Any other state may join ICWC as a member or an observer upon consent of the Governments of State-Founders.

II. Main objectives

The main objectives of ICWC are as follows:

2.1. Elaboration and implementation of a regional policy of efficient shared water use and protection in order to meet social, economic and environmental needs of the State-Founders on equitable basis, as well as development and implementation of joint programs for water supply improvement in shared basins in the region.

2.2. Shared water management in the Aral Sea basin by applying IWRM principles.

2.3. Elaboration and approval of annual limits of water withdrawals from shared sources for State-Founders and supervision over their observance; planning and control of large interstate reservoirs operation regimes, water allocation management under actual flow probability and water-economic situation.

2.4. Ensure annual releases for environmental protection and the Aral Sea and sanitary releases along canals.

2.5. Development and implementation together with ICSD of regional environmental programs related to the Aral Sea desiccation and water sources exhausting, including catchment zone and wetlands.

2.6. Preparation of recommendations to the Governments of State-Founders on the development of uniform pricing policy and possible losses compensation mechanisms related to shared water and energy use, as well as on legal framework of shared water use.

2.7. Coordination and control over implementation of joint research aimed at scientific and engineering solution of regional water-related problems and of regional projects, with the use of available scientific capacities of the State-Founders and implementation of the results achieved.

2.8. Preparation of projects and initiation of work on improvement of active international agreements in area of shared water management.

2.9. Render assistance to the Governments of State-Founders in cooperation with international organizations and institutes.

2.10. Development and operation of unified regional, basin and national information systems on water use, on dissemination and exchange of information related to water resources and their use by the State-Founders.

2.11. Facilitation and coordination of relationships between the regional, national water organizations and the regional, national hydrometeorological services; initiation of regional programs and works on the improvement of monitoring system and hydrometric provision.

2.12. Reconciliation of releases from reservoirs for irrigation needs with the Coordination Dispatch Center “Energy”, with consideration of hydropower generation

requirements, as well as coordination of actions with national ministries and departments of Central Asia - electric energy producers.

2.13. Facilitation of corporate affairs in developing and implementing water-conservation technologies, advanced irrigation methods and technique, modern facilities for water measurement and automation, in designing and developing general metrological system, and accrediting metrological services and in other measures promoting better water use.

2.14. Elaboration of joint programs for prevention, early warning and liquidation of consequences from emergencies and disasters related to operation of interstate hydrostructures.

2.15. Establishment and development of a training system at national and regional levels in order to increase skills of water-management organizations' staff and of water users.

2.16. Strengthen financial, material-technical and legal bases and scientific and technological capacities of ICWC executive bodies.

2.17. Investigation of disputes and disagreements between shared water users; if necessary, development of a procedure for creation of a special commission to establish facts, as well as setting procedures for liabilities.

2.18. Investigation of notification by one of the Parties about construction of new water structures impacting water regimes in shared waterways.

2.19. Elaboration of country proposals on construction, reconstruction and operation of interstate water structures, with cost sharing among the Parties.

III. Structure and organizing the activities

3.1. ICWC members are comprised of leaders of national water ministries or departments of State-Founders or of authorized representatives of country Governments.

3.2. ICWC meetings are held on a quarterly basis, by turns in each of State-Founders under chairmanship of ICWC member of the respective state. The host-country bears responsibility for timely approval of meeting dates and submission of agreed agenda to ICWC members by executive bodies in due time.

3.3. Extraordinary ICWC meeting can be held upon initiative and with agreement of the Parties.

3.4. ICWC's decisions are made on consensus basis.

3.5. ICWC may make “Protocolar decision” on individual questions.

3.6. ICWC members, leaders of ICWC executive bodies and of international organizations who have made considerable contribution to ICWC activities, would be awarded a title of “ICWC Honorary Member” and a breastplate of standard form. The ICWC Honorary members can participate in ICWC meeting and have a right of advisory vote.

3.7. ICWC establishes its executive bodies for fulfillment of set tasks and provides financing of their activities, as well as of approved programs and measures at expense of State-Founders and, if necessary, changes duties of the executive bodies or ceases their activities.

3.8. ICWC may crease special interstate investment funds for shared financing of work related to regional water sector development and for fulfillment of other tasks as mentioned in given Statute.

3.9. The costs of ICWC meetings on the spot are covered by the host-country.

3.10. The working language of ICWC is Russian.

IV. Rights and obligations

4.1. Annually ICWC approves water-withdrawal limits from shared water sources (for a hydrological year with division into growing and non-growing periods) for State-Founders, with consideration of foreseen flow probability and established releases to the Aral Sea and river deltas. ICWC makes decisions on water-withdrawal limits correction, according to actual water situation.

4.2. Based on actual water situation, ICWC permits to BWOs to make on-line water-withdrawal corrections within the established limits, with notification of ICWC members.

4.3. ICWC considers and approves activity program of ICWC and its executive bodies (plans of financing, capital investments, research, development and metrology, training activity and other costs), work programs for preparation of draft interstate agreements, international cooperation, for improvement of ICWC and its executive bodies, performs control over work, financing and economic activities of executive bodies.

4.4. Decisions made by ICWC regarding regulation, use and protection of shared water are obligatory for all water consumers and users, irrespective of their citizenship or affiliation and ownership form.

4.5. The members ensure execution of ICWC's decisions on territories of their respective states.

4.6. Leaders, officials and staff of ICWC executive bodies, who have business trips to State-Founders, can enter, leave and stay without visas on territories of these states no more than 30 days provided that they have national passports, service certificates in form approved by the Parties, and travel authorization.

V. Executive bodies

5.1. ICWC executive bodies include:

- Secretariat;
- Basin water organization «Amudarya» (BWO «Amudarya»);
- Basin water organization «Syrdarya» (BWO «Syrdarya»);
- Scientific Information Center for water related problems (SIC) and its national branches;
- Coordination Metrological Center (CMC) and national organizations;
- Training Center (TC) and its branches.

5.2. ICWC may establish work groups for a certain period of time, with involvement of other economic sectors, to solve individual thematic tasks.

5.3. ICWC Secretariat together with other executive bodies prepares agenda, measures and draft decision for ICWC meetings and performs control over execution of ICWC decisions and receipt of funds from State-Founders for financing of ICWC executive bodies.

5.4. BWO "Amudarya" and BWO "Syrdarya" operate intake structures, waterworks facilities, reservoirs and other interstate structures that are transferred to BWO's responsibilities for temporal operation, make estimates of water use in shared sources, make proposals for setting water-withdrawal limits, depending on water availability in sources for a planned period and ensure delivery of ICWC-set water limits in order to supply with water economic sectors, population and environment in State-Founders.

5.5. On annual basis, BWO "Amudarya" and BWO "Syrdarya" prepare agreed proposals on water releases for nature, Aral Sea and on sanitary releases along canals that should not be used for other purposes. The heads of BWO "Amudarya" and BWO "Syrdarya" bear personal responsibility for execution of ICWC-set releases to the Aral Sea within the zones of BWO jurisdictions.

5.6. SIC ICWC together with its branches prepares draft decisions and programs on prospective development and implementation of a common regional water policy, on improvement of shared water use and management, common water conservation program, on environmental improvement in the basin, rationale and creation of

automated water management systems in river basins, on creation and operation of common regional, basin and national information systems on water and land use; develops draft interstate agreement on shared water management in the Aral Sea basin; analyses water situation in the region and in the world and prepares proposals; upon agreement with ICWC cooperates with international donors and funding agencies; initiates and upon agreement with ICWC coordinates regional project implementation; organizes and provides training activity; organizes and stuffs reference-information fund, prepares and issues periodical and non-periodical publications. SIC ICWC undertakes publishing activity by authority of ICWC.

5.7. CMC ICWC together with national metrological organizations coordinates technological policy and its implementation in area of metrological provision of ICWC programs and decisions on water use, protection and accounting in sources and water systems; organizes joint preparation and use in practice of normative-technical basis of metrological provision for water measurement, conducts integrated policy on water accounting, measurement technologies, automation devices and facilities developed and applied in water sector; organizes and performs work on accreditation, certification and training in area of hydrometry.

5.8. TC ICWC together with its branches trains national water sectors' higher and medium level staff through training workshops on IWRM, national and international water laws, irrigated agriculture and nature management improvement, etc. and ensures equal representation of the region's countries, prepares and publishes essential courseware.

5.9. ICWC executive bodies are legal entities having their independent balances, stamps with their titles in Russian and English, budget, settlement and other accounts. They act according to Regulations (Statues) approved by ICWC.

5.10. The executive bodies may represent ICWC only after agreement by all ICWC members.

5.11. Financing of ICWC executive bodies is made by the State-Founders:

- for upkeep of personnel and basic operations of an executive body; moreover, the costs are shared proportionally to water withdrawals from interstate sources, with obligatory consideration of all efforts made by the executive body on the territory of given state;
- for research, development and metrological work – on the basis of ICWC-approved plan of this work, by each national water department of State-Founder according to territorial affiliation, towards assignments to IFAS;
- financing of Secretariat's activities is made by ICWC State-Founder, which hosts the Secretariat, towards assignments to IFAS;
- financing of SIC ICWC' national branch is made by the State-Founder, which hosts given branch, towards assignments to IFAS.

5.12. The property of ICWC executive bodies (real estate, cars, machinery, equipment and other material and technical values) is not subjected to privatization. Renting is made only upon permission of ICWC.

VI. Order of rotation of the executive bodies and their heads

6.1. The heads of ICWC executive bodies are appointed, with determined term of office and rotation order, and dismissed by ICWC decision.
Location of executive bodies and their redislocation (rotation) are determined by ICWC decision.

6.2. Rotation of ICWC executive bodies is made according to the Provision about order of rotation of executive bodies of the Interstate Coordination Water Commission (ICWC) and their heads.

VII. Order of Statute change or activity cessation

7.1. The Statute of ICWC is reviewed and adopted at ICWC meeting. Changes and amendment to the Statute are inserted in the same way.

7.2. ICWC ceases its activity according to decision of the Heads of State-Founder.

7.3. If ICWC ceases its activity, the property and jointly created assets, as well as structures transmitted to BWOs for temporal operation will be transferred to State-Founders based on their belonging and according to established order of their creation.

7.4. This Statute enters into force since the date of its signature.

Done in the city of Almaty on 18th of September in 2008.

Republic of Kazakhstan	**A. Ryabtsev**
Kyrgyz Republic	**B. Koshmatov**
Republic of Tajikistan	**S. Yokubzod**
Turkmenistan	**K. Ataliyev**
Republic of Uzbekistan	**Sh. Khamrayev**

PROVISION ABOUT ROTATION OF EXECUTIVE BODIES OF THE INTERSTATE COORDINATION WATER COMMISSION (ICWC) OF CENTRAL ASIA AND THEIR HEADS

Article 1. Aim of the Provision

1.1. Setting term and order of rotation of executive bodies and their heads.

Article 2. General

2.1. ICWC executive bodies include:

- Secretariat;
- Basin water organization «Amudarya»;
- Basin water organization «Syrdarya»;
- Scientific Information Center for water related problems (SIC) and its national branches;
- Coordination Metrological Center (CMC) and national organizations;
- Regional Training Center (RTC) and its branches.

2.2. ICWC may establish new or modify structure of existing executive bodies.

2.3. ICWC executive bodies are legal entities having their independent balances, stamps with their titles in Russian and English, budget, settlement and other accounts. They act according to Regulations (Statues) approved by ICWC.

2.4. The heads of executive bodies bear personal responsibility for execution of ICWC decisions and obligations as set in the ICWC-approved provisions (Statues) of these bodies.

Article 3. Rotation of executive bodies

3.1. State-Founders make rotation of executive bodies' host-places for 5 years according to the following pattern.

Executive body	Host country
SIC ICWC	Kazakhstan
BWO «Amudarya»	Turkmenistan
BWO «Syrdarya»	Tajikistan
CMC ICWC	Kyrgyzstan
Secretariat	Uzbekistan
Regional Training center	Kyrgyzstan

3.2. Relocation is decided by ICWC at the suggestion of a country that prepared place and institutional framework for location of any executive body. The country mentioned in the above pattern has a right to refuse from such relocation or transmit this right to another country by ICWC decision.

Article 4. Rotation of the heads of executive bodies

4.1. The heads of executive bodies are appointed, on a competitive basis, with determined term of office and rotation order, and dismissed by ICWC decision.

4.2. The term of office of the Head of Secretariat, Head of BWO, Director of SIC, Director of CMC, Director of RTC, Director of SIC's national branch is 5 years.

4.3. ICWC may dismiss the head of executive body from this position before termination of the term of office (because of illness, retiring, transfer to another job, non-meeting of administrative duties, etc.) or extend the term to 2-3 years.

4.4. In order to guarantee collegiality in governance of BWOs and SIC, with participation of State-Founders, BWOs and SIC shall have positions of Deputy Heads of BWOs and Heads of territorial offices, Deputy Directors of SIC and heads of regional division assigned among representatives of State-Founders.

4.5. ICWC State-Founders shall ensure allocation of additional directed funds for upkeeping of the country representatives in the Administrations of executive bodies, purchase and maintenance of departmental apartments, as well as payment of housing and public utility services and personal cars.

4.6. Upon completion of the term of office, the Head of executive body shall report to ICWC meeting about work done for given reporting period. Based on this report, a decision is made whether:

- to extend term of office;
- to replace the head of executive body.

4.7. Official salaries of the heads and staff of ICWC executive bodies shall be comparable to those of the staff of international organizations (by status of IFAS).

Article 5. Secretariat

5.1. The Head of the Secretariat governs activities of the latter. The Head can be chosen among those persons who have higher education; minimum 10-year experience in water-management, of which minimum 5-year experience in managerial posts; experience in shared water use; knowledge of international water law basics; fluent Russian.

5.2. Upon termination of the term of office and after making decision on replacement (rotation), one of candidates nominated by the ICWC member representing State-Founder, which hosts Secretariat, is appointed Head of Secretariat by ICWC decision.

Article 6. Basin Water Organization

6.1. The Head of Basin Water Organization (BWO) governs activities of the latter. The Head can be chosen among those persons who have higher education; minimum 10-year practical experience in operational water-management organizations, of which minimum 5-year experience in managerial posts; experience in organization of regional cooperation in shared water management and use; knowledge of international water law basics; fluent Russian.

6.2. Upon termination of the term of office and after making decision on replacement (rotation), a representative of one of State-Founders, who meets the above requirements, shall be appointed this post.

6.3. Deputy Head BWO, who has not met this vacancy, is dismissed from hold position, and new candidate among representatives of one of State-Founders is appointed to undertake an internship in this position.

Article 7. Scientific-Information Center for water-related problems

7.1. The Director of Scientific-Information Center (SIC) governs activities of the latter. The Director of SIC can be chosen among those persons who have higher education; minimum 10-year experience of work in research and water-management organizations, of which minimum 5-year experience in managerial posts; degree of Doctor or Candidate of Science; experience in implementation of joint international research; knowledge of international water use and allocation, environmental sustainability problems in the region; knowledge of international law basics; experience in organization of regional cooperation in shared water management and

use; fluent Russian and preferably English for holding negotiations with a number of international organizations, where SIC holds membership, as well as with international donors.

7.2. Upon termination of the term of office and after making decision on replacement (rotation), a representative of one of State-Founders, who meets the above requirements, shall be appointed Director SIC.

Article 8. Coordination Metrological Center

8.1. The Director of Coordination Metrological Center (CMC) governs activities of the latter. The Director of CMC can be chosen among those persons who have higher education; minimum 10-year experience of work in experimental-design metrological organizations of water-management profile, of which minimum 5-year experience in managerial posts; experience in implementation of joint international projects in area of metrology, automation and dispatching control of hydrostructures; knowledge of international water use and allocation; knowledge of international law basics; fluent Russian and preferably English.

8.2. Upon termination of the term of office and after making decision on replacement (rotation), one of candidates nominated by the ICWC member representing State-Founder, which hosts CMC, is appointed Director CMC by ICWC decision.

Article 9. Regional Training Center

9.1. The Director of Regional Training Center (RTC) governs activities of the latter. The Director of RTC can be chosen among those persons who have higher education; minimum 10-year experience of work in water research organizations, of which minimum 5-year experience in managerial posts; degree of Doctor or Candidate of Science; knowledge of international water use and allocation; knowledge of international law basics; experience in organization of regional cooperation in shared water management and use; fluent Russian and preferably English.

9.2. Upon termination of the term of office and after making decision on replacement (rotation), one of candidates nominated by the ICWC member representing State-Founder, which hosts RTC, is appointed Director RTC by ICWC decision.

Article 10. Final clause

10.1. This Provision enters into force since the date of signature.

Done in the city of Almaty on 18th of September in 2008.

Republic of Kazakhstan	**A. Ryabtsev**
Kyrgyz Republic	**B. Koshmatov**
Republic of Tajikistan	**S. Yokubzod**
Turkmenistan	**K. Ataliyev**
Republic of Uzbekistan	**Sh. Khamrayev**

23rd EUROPEAN REGIONAL CONFERENCE OF ICID

The 23rd European Regional Conference of the International Commission on Irrigation and Drainage (ICID) was held in Lviv, Ukraine between 18 and 21 May 2009 and focused on the theme "Progress in Managing Water for Food and Rural Development". The conference was held at the Lviv Ivan Franko University – one of the oldest universities in Ukraine.

In his key note speech, Dr. Vasyl Stashuk, Head of Water Management Committee of Ukraine highlighted the status of Ukrainian Water Development and the irrigated agriculture that the country faces.

The Water Management Committee of Ukraine is applying the new approaches into the water management practice through the basin management organizations. Such organizations are already established in the river basins of Crimea, Dnieper, Siversky Donets, Southern and Western Bug, Prut, Danube and Desna. In the future it is supposed that such organizations will cover all activity on the water resources management sphere including investigations of water resources, monitoring, formation of the basin committees, water resources management for each basin, development of the basin regulation and mechanism for its implementation. Moreover it is outlined to implement:

- The science-based standards of water use and sewage disposal;
- The mechanism of compensation for losses caused by pollution;
- The uncoordinated actions at the water bodies;

- Payment for the ecosystem services.

In this connection the Water Management Committee of Ukraine focuses large attention on the improvement of the Water Code of the country in which the organizational basis and mechanisms for participation of the interested parties in the water resources management, mechanism for the conflicts resolution, tariffs and the pricing policy are clearly indicated. It should be noted that the irrigated area has reduced by more than 2 times as compared to 6 millions hectares of reclaimed area including 2,5 millions hectares of irrigated lands in 90th years of last century in Ukraine. Though the irrigation network covers 1,7 million hectares of lands no more than 800,000 hectares of lands are actually irrigated. The main reason is that the operation of the sprinkling systems is very expensive.

Large attention was given to development of the drip irrigation systems. Today in Ukraine 10-11 thousand hectares are put under drip irrigation annually, including half of these areas belongs to the lands of the country. The basis for this purpose is the special government decree, under which the State fund for water saving and development of highly effective crops is established. The Fund amounted one percent from selling of all alcoholic drinks including beer is allotted to the Treasury for renewal the lands under hop, and also for development of horticulture and viticulture with drip irrigation.

This year the Fund amounts 540 million hryvnias or 70 million dollars USA. 10 % of that Fund is allocated for development of hop and a little more than 40% is allocated directly for development of the drip irrigation. The same approach is obviously appropriate to implement in other countries for development of the water saving technology.

The European Regional Conference gave large attention to the floods control, to the water use specifying and also to the GIS application for the water resources management.

The special topic was devoted to climate change because the floods and droughts are observed frequently everywhere in Europe.

The river basins management plans are being developed broadly according to the European Framework Water Directive.

Three points were included to the Lviv Declaration of ICID following the reports presented by Prof. Dukhovny V.A., Director of SIC ICWC, and two his speeches:

point 5 - «The Conference agreed that there is an acute need for strengthened international water law to protect the rights of agricultural water users with the aim of maintaining sustainable and integrated irrigation and drainage management depending on local conditions as a required basis of food safety guarantee»,

point 6 - «The Conference marks the activity of ICWC towards development of cooperation between five countries – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – in transboundary waters in the context of climate

change. This may serve as an example of transboundary cooperation for other river basins»,

point 7 - «The Conference supports the development of the network of Russian speaking specialists and recommends national scientific institutes to join this network».

LVIV DECLARATION

Introduction

The 23rd European Regional Conference (ERC) of the International Commission on Irrigation and Drainage (ICID) was held during 18 - 21 May 2009 at Lviv, Ukraine. The theme of the ERC was '*Progress in Managing Water for Food and Rural Development*'. The conference was organized by the Ukraine National Committee of ICID (UKCID) in cooperation with the ICID European Regional Working Group (ERWG). Professionals from Bulgaria, Germany, Hungary, Iran, the Netherlands, Poland, Romania, Russia, Spain, Ukraine, United Kingdom, Uzbekistan, and ICID participated in the conference and discussed the various keynotes and papers.

Conclusion and recommendations

1. The conference papers highlighted the good 'on-going' development with respect to integrated management of water and land resources both with respect to policy related developments (stakeholder participation, actual implementation, modeling, data collection, storage) and their dissemination.

2. More and more projects were being developed and implemented in an integrated way by taking into account social conditions with stakeholder participation. Possible impacts of climate change including technical, economical, gender, and environmental aspects are getting addressed. However, more need to be done to improve these aspects. This will be especially important during the operation and maintenance phase of rural development projects. It is in this phase that the benefits of projects are really realized.

3. Primarily due to human activities and to a certain extent due to the impacts of climate change, the effects and impacts of floods and droughts are significantly increasing in many places. Therefore, it is increasingly important that in the development of projects, both the present day conditions as well as the envisaged mid-term and long-term scenarios are taken into account in the decision-making process. In the light of this, the European Water Framework Directive and the

European Flood Directive are important guiding documents that have to be implemented jointly.

4. For improved coordination of the wide range of activities for rural development at different spatial levels, like integrated land and water management, river basin management, rural development and spatial planning, it is recommended to update legislation and organizational structures where relevant.

5. There is an urgent need to strengthen international water legislation for protection of water rights for agriculture in order to support sustainable and integrated water management - irrigation and/or drainage, dependent on the local conditions - as a requirement to guarantee food security.

The conference recorded its appreciation to the activities of the Inter-state Coordination Water Commission of Central Asia in the framework of cooperation of the five states - Kazakhstan, Tajikistan, Uzbekistan, Turkmenistan, and Kyrgyzstan - on trans-boundary waters under the conditions of climate change and felt that it could be an example for the trans-boundary cooperation in other river basins. The conference also supported the development of a Russian speaking network of water management specialists that was initiated in the Moscow meeting of January 2009 and recommends that scientific organizations join the network.

Agreed actions

I. To increase food production significantly, through sustainable rural development in the forthcoming decades by realizing the potential of several of the European countries, like Ukraine, it was agreed (by several parties) that an initiative will be taken for a joint project on 'Integrated Water Management' for improving food production in European countries. The ICID European Working Group will take the initiative to prepare a proposal in cooperation with the potential partners.

II. To improve the network for European young professionals in the water management sector to be initiated jointly by UKCID and GECID. They will also promote joint activities like research projects, exchanges, summer schools, etc.

III. To review and further develop the activities of Work Team on Sustainable Irrigation Management (WT-SIM) in light of integrated rural development.

Finally, the participants thanked the conference organizers for their hospitality and good organization in the building of the Lviv University named by Ivan Franko situated in the historical district of Lviv.

Lviv, Ukraine, 21 May 2009

WORLD WATER FORUM 2012 - HOST COUNTRY AND CITY SELECTED

On 19 June 2009, the World Water Council selected Marseille, France as the city and country to host the 2012 World Water Forum. The selection followed a rigorous process for evaluating the candidates and a final vote from the Council's Board of Governors. The World Water Forum is the world's largest water gathering that brings together over 20,000 political leaders, NGOs, government officials, water professionals, and scientists every three years. "Thank you for your confidence and for this important challenge you have given us", said Martine Vassal, Deputy Mayor of Marseille.

In an effort to benefit from the excellent quality of the two final candidatures, France and South Africa, the Governors of the World Water Council suggested that the countries work hand in hand. "Our engagement to host the World Water Forum in 2012 is very strong and we really want to work together to bring solutions to the world's water challenges," Vassal continued, stressing the candidates' will to join forces. Prior to the vote, South Africa and France both had agreed to a partnership for the preparation of the next Forum. As such, when Marseille was selected, it extended an invitation to Durban, South Africa to be a full partner in the years running up to the Forum. "If you want to go fast, go alone; if you want to go far, go together", said one of the participants in the Board, emphasizing the unique opportunity that this partnership entails. After extending his congratulations to France, Kevin Wall, Alternate Governor of the World Water Council representing the South African candidacy, committed the full support of South Africa to the success of the World Water Forum in 2012 in Marseille. "We are very happy to be part of this process and enthusiastic to offer our experience."

The French candidacy showcased a will to engage people regionally in the global debate around water, but at the same time made it clear that debate is not enough. Through its candidacy, France committed to making the World Water Forum in 2012, "the Forum of Solutions", drawing from the many concrete successes that France has had in the environmental domain.

The Council's decision comes three months after the successful 5th World Water Forum that took place in Istanbul (Turkey) in March. During its meeting in Madrid, the Council's Board of Governors also reviewed the outcomes of this Forum. It commented on the major progress made through the signing of the Istanbul Water Consensus by over 100 cities from around the world. The accord promotes local action to deliver water and sanitation services and manage water resources sustainably. Over 20,000 people from 182 countries participated in the 5th World Water Forum, under which 90 Ministers, 250 Parliamentarians and 300 Mayors.

The Council's Board committed to put in place a thorough follow-up to the 5th World Water Forum feeding into the preparations of the World Water Forum 2012. In particular, more emphasis will be put on consultations with stakeholders at the (sub) regional level so as to ensure that sound proposals for solutions to the world water crisis are put forward in Marseille in 2012.

The meeting of the World Water Council's Governors comes as we are at a crossroads in how we use and govern the world's limited resources. Increasingly citizens and political leaders recognize that water forms a vital element for vibrant economies and healthy societies, and is key to sustain the ecosystems we depend on. Yet, despite growing attention, water resources continue to dwindle and billions still lack access to proper water supply and sanitation.

The Council's Governors reviewed this situation and discussed the strategic directions for the World Water Council. They expressed a clear need to deepen the dialogue on vital issues such as sanitation and the linkages between water, energy and agricultural production. They also indicated the need to broaden the engagement for water involving a wider variety of stakeholders that depend and impact on water resources. Furthermore, they indicated the need to mobilize further political will, for example to realize the Millennium Development Goals or to adapt to climate change and pro-actively prepare for disasters.

Hosted by its Spanish member organizations and the Canal Isabel II Foundation, the Board finally discussed its General Assembly in October 2009 when the full Council with its over 200 members will meet to agree upon the strategic directions for the years to come.

ANALYSIS OF WATER MANAGEMENT SITUATION WITHIN THE AMUDARYA AND SYRDARYA RIVER BASINS FOR VEGETATION PERIOD OF 2009

1. Syrdarya river basin

Water content in rivers of the basin characterized by the aggregate of inflow to the upper water reservoirs and the channel inflow, was expected on the Hydrometeoservice forecast at 17.48-25,93 km3 or 59-87 % of the norm (29,62 km3), in average - 21,71 km3 (73%).

The cumulative inflow to the Toktogul, Andijan and Charvak reservoirs (without inflow from the Ugam river) the prognosis values are 11,22-16,44 km3 or 63-92% of the norm, the average value is 13,85 km3 (77% of the norm). The actual water content according to the inflow to these reservoirs is equal to 19,9 km3 or 112%.

Inflow to the Toktogul reservoir is 10,68 km3 or 111% of the norm or 108% of the average inflow during vegetation period for last 5 years (Table 1.1). It is more than the forecasted inflow by 2,8 km3 (35%).

Table 1.1

Inflow and release of the Toktogul reservoir for 2003-2009, million m^3

№	Hydrological year	Inflow			Release		
		Non-vegetation period	Vegeta-tion period	Year *	Non-vegetation period	Vegeta-tion period	Year
1	2003-2004	3654	12045	15699	8478	6226	14704
2	2004-2005	3767	10692	14459	9045	6829	15874
3	2005-2006	3496	10362	13858	9082	5418	14500
4	2006-2007	3157	8911	12068	9538	5857	15395
5	2007-2008	2505	7371	9876	9726	4408	14134
	Average for 5 years	3316	9876	13192	9174	5748	14922
6	2008-2009	2672	10676	13348	5884	4440	10324

* Mean annual runoff (1911 - 2009) of the Naryn river at the Toktogul power site is estimated 11.8 km3.

Release from the Toktogul reservoir is 4.44 km3 and exceeds the planned power release (calculated by 25% down the water withdrawal limit) that is lower on 0.82 km3 (23%). It is close to the vegetation release of 2008 (Table 1.1) and is lower than the

average vegetation release from the Toktogul reservoir for last 5 years on 1.31 km3 (23%). The maximal reducing of releases was on June - 0.71 km3 (60%) - Table 1.2, Fig. 1.1.

Because of 6,19 km3 of accumulated water in the Toktogul reservoir, the water volume in the reservoir was 12,67 km3 at the end of vegetation period that is more than the planned volume on 1,85 km3. The water balance residual is 0.01 km3 that indicates the nonregistered inflow of 0.09% (Table 1.3).

Table 1.2

Releases from the Toktogul reservoir for 2004-2009, million m^3

Year	April	May	June	July	August	September	Total
2004	893	725	1134	1163	1240	1070	6226
2005	936	560	2367	984	1045	937	6829
2006	1008	604	760	1027	1064	954	5418
2007	802	670	1056	1355	1208	766	5857
2008	775	588	601	894	967	584	4408
Mean for 5 years	883	629	1184	1085	1105	862	5748
2009	826	631	477	959	816	733	4440
Reduction compared with mean for 5 years	57	- 2	707	126	289	129	1308

As a whole, the release from the Toktogul reservoir was reduced up to 10.32 km3 (87% of the inflow norm to the reservoir) and the inflow to the reservoir was 13.35 km3 (113% of norm) for the hydrological year 2008-2009 (from 1 October 2008 till 1 October 2009).

Thereby the water volume as a result of Naryn river runoff over-year regulation by the Toktogul reservoir for 2008-2009 is: 13.35 - 10.32 = 3.03 km3, therefore the reservoir's water volume at the end of vegetation period of 2009 was exceeded more than 3 km3 as compared to the same date of 2008.

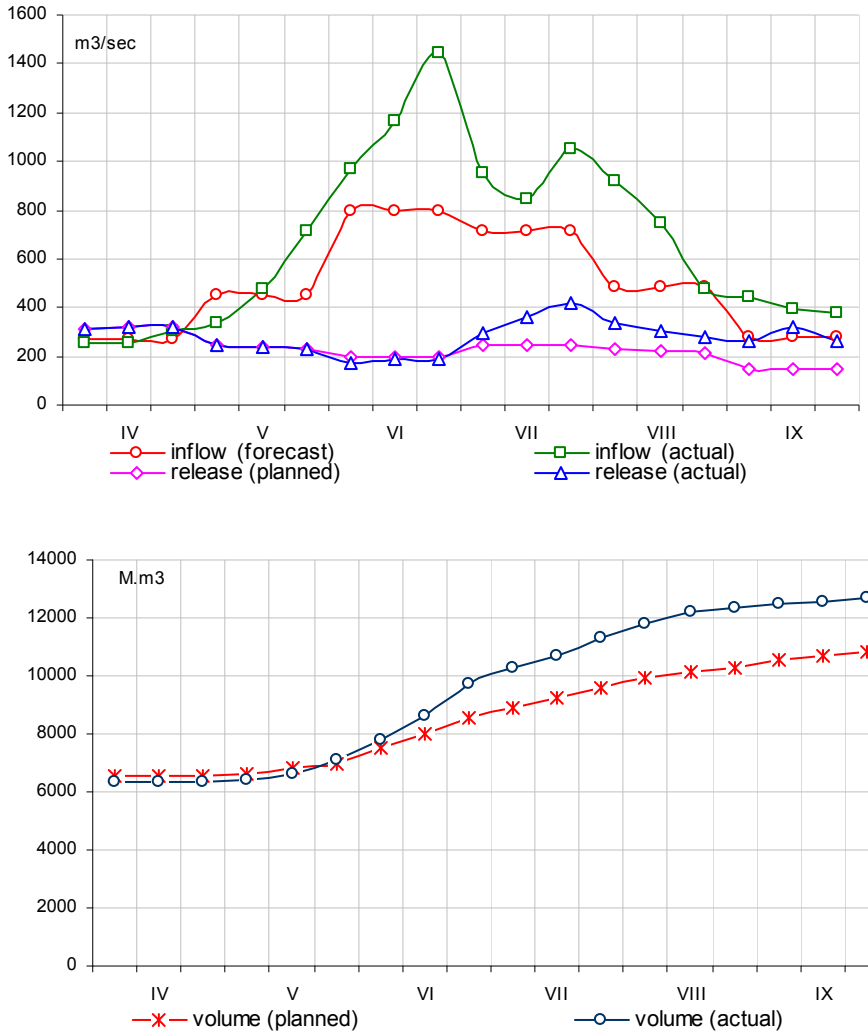


Fig. 1.1. Operation mode of the Toktogul reservoir for the vegetation period of 2009

Table 1.3

Water balance of the Toktogul reservoir for the vegetation period of 2009

Item of the water balance	Planned km3	Actual km3	Actual - Planned	
			km3	%
1. Inflow	7.92	10.68	2.76	35
2. Release	3.62	4.44	0.82	23
3. Inflow - Release (1 – 2)	4.3	6.24		
Water volume in the reservoir:				
4. At the beginning of vegetation period	6.42	6.42	-	-
5. At the end of vegetation period	10.80	12.67	1.85	17
6. Volume change (5 - 4)	4.38	6.25		
Residual (6 – 3)		0.01		

The inflow to the Andijan reservoir (2.91 km3 - 96% of norm) was higher than the predicted one on 1.09 km3 (60%). Some part of inflow was directed to reservoir for accumulation and another part was released down stream (Fig. 1.2). The release from reservoir was 2.65 km3 that is higher the planned one on 43%.

The water balance residual of the Andijan reservoir is 0.04 km3 (1,3%), see Table 1.4.

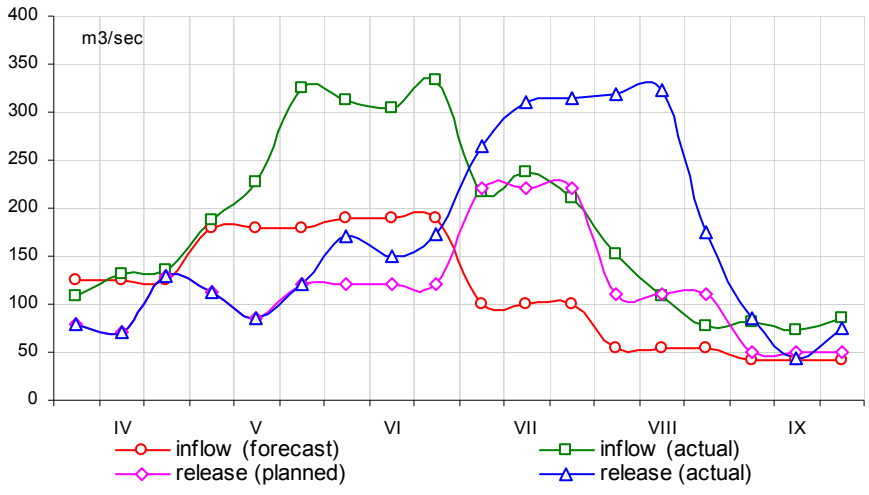
Table 1.4

Water balance of the Andijan reservoir for the vegetation period of 2009

Item of the water balance	Planned km3	Actual km3	Actual - Planned	
			km3	km3
1. Inflow	1.82	2.91	1.09	60
2. Release	1.85	2.65	0.8	43
3. Inflow - Release (1 – 2)	- 0.03	0.26		
Water volume in the reservoir:				
4. At the beginning of vegetation period	0.69	0.69	-	-
5. At the end of vegetation period	0.47	0.91	0.44	94
6. Volume change (5 - 4)	- 0.22	0.22		
Residual (6 – 3)		- 0.04		

Additional release (to the planned one) from the Andijan reservoir into BFC and BAC had compensated deficit of the irrigation release from the Toktogul reservoir.

Because of the increased water content and efficient activities to maintain the releases from the Andijan and Kayrakkum reservoirs the inflow schedule planned by BWO has been not only followed but also exceeded as a whole for the vegetation period and for some ten-days periods.



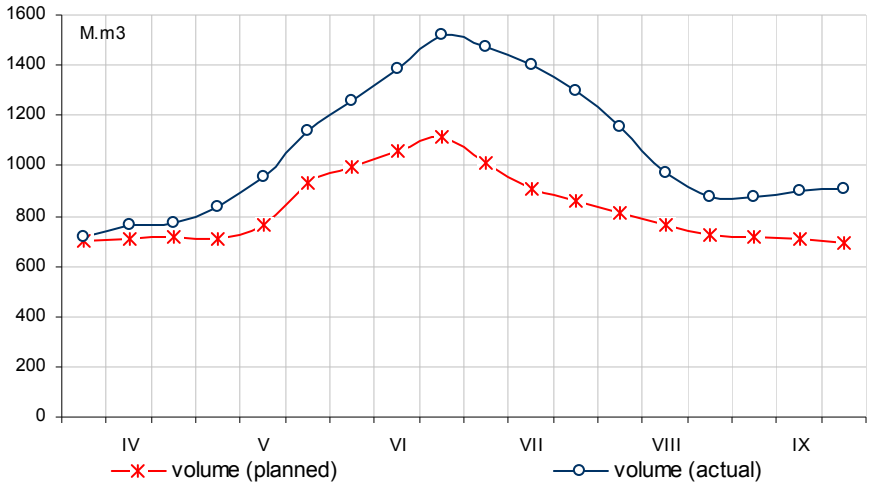


Fig. 1.2. Operation mode of the Andijan reservoir for the vegetation period of 2009

The expected water content as a result of the channel inflow was 3.52 km3 or 77% of norm at the Toktogul-Kayrakkum section, but the actual water content was 84% of norm (Table 1.5). The channel inflow for the vegetation period of 2009 correlates very well with probability of the water withdrawal for previous low-water management year (the vegetation period of 2008, the nonvegetation period of 2008-2009). At the Toktogul-Kayrakkum section the channel inflow of 2009 (% of norm) and the withdrawal probability of the water management year 2008-2009 have coincided and were 84% (Tables 1.5 and 1.6).

Table 1.5

Channel inflow within Syrdarya river basin for vegetation period of 2009, km^3

Section	Norm	Prognosis	Actual	% of the norm	
				Prognosis	Actual
Toktogul - Uchkurgan	1,184	0,991	1,108	84	94
Andijan – HP Ychtepa	2,545	1,739	2,24	68	88
Uchkurgan, Ychtepa - Kayrakkum (except inflow of the Karadarya river)	3,378	2,53	2,71	75	80
HP Gazalkent - HP Chinaz-Chirchik	0,986	0,712	0,862	72	87
Kayrakkum - Shardara (except inflow of the Chirchik river)	3,178	1,423	2,693	45	85
TOTAL	11,271	7,395	9,613	66	85
Including:					
Toktogul - Kayrakkum	4,562	3,521	3,818	77	**84**

Table1.6

Water withdrawal from the Syrdarya river for 2008-2009 water management year, km^3

	Toktogul - Uchkurgan	Uchkurgan - Kayrakkum	Kayrakkum - Shardara	Total:	Including: Toktogul - Kayrakkum
Vegetation period of 2008					
Limit	3,866	1,052	6,665	11,583	4,918
Actual	3,299	0,854	4,535	8,688	4,153
%	85,3	81,2	68,0	75,0	**84**
Non-vegetation period 2008-09					
Limit	1,379	0,172	1,537	3,088	1,551
Actual	1,608	0,301	2,425	4,334	1,909
%	116,6	175,0	157,8	140,3	123,1
Water management year 2008-2009					
Limit	5,245	1,224	8,202	14,671	6,469
Actual	4,907	1,155	6,96	13,022	6,062
%	93,6	94,4	84,9	88,8	93,7

Water availability at the section Toktogul reservoir - Uchkurgan waterworks is 82%; at the section Uchkurgan - Kayrakkum reservoir - 81%. Water deficit caused by the power releases from the Toktogul reservoir and as result of the decreased water withdrawals (as compared with the withdrawal limits) from the Naryn river was 0.71 km3 at the Toktogul-Uchkurgan section and was 0.2 km3 at the Uchkurgan-Kayrakkum section.

Water availability (% of limit) for states is as followings at different sections:

1) Toktogul - Uchkurgan:

- Kyrgyzstan - 83%
- Tajikistan - 60%
- Uzbekistan - 83%

2) Uchkurgan - Kayrakkum:

- Kyrgyzstan - 53%
- Tajikistan - 95%
- Uzbekistan - 74%

Water availability at the Toktogul-Kayrakkum section began fall sharply from the middle of April, and it ranged between 64 and 72% from the beginning of May till the middle of July. In September the actual water withdrawal excess above limits on 12-14% was observed.

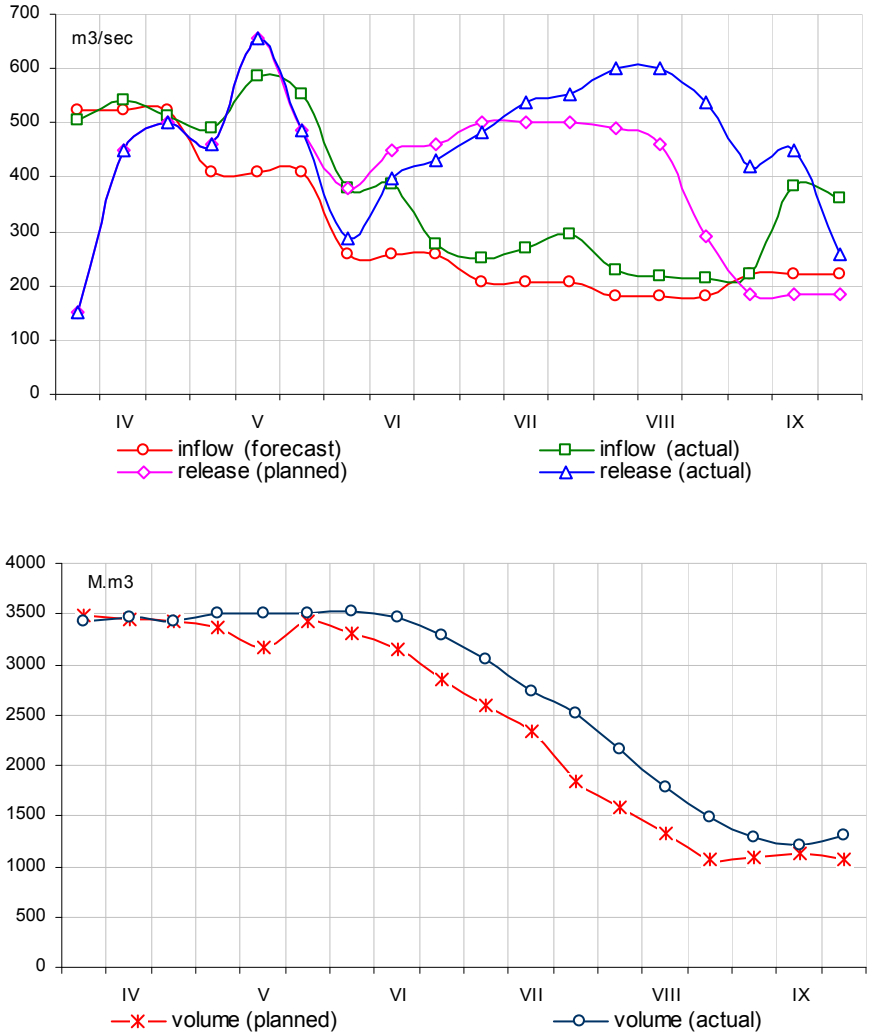


Fig 1.3. Operation mode of the Kayrakkum reservoir for the vegetation period 2009

Inflow to the Kayrakkum reservoir amounted 5.85 km3 under the planned one 4.7 km3. The total release from the Kayrakkum reservoir amounted 7.3 km3 that is more than releases planned by BWO on 0.86 km3 (13%) barely. Planned and actual inflows and releases from the reservoir Kayrakum for some decades are shown in table 1.7. The releases from the reservoir in April, June and July were determined at the rate 400-500 m3/sec, but the actual releases were being varied within 150-600 m3/sec.

Thereby the Kayrakkum reservoir was operated in fact in the power mode, keeping the maximal water volumes (levels) in April - June within 3.5-3.3 km3. Only from July the step-by-step discharge of reservoir was started with maximal reservoir drawdown in August (1 km3). The reservoir has to be discharged on 0.57-1.0 km3 in June-July

according to the plan. Actually it was discharged in those months only on 0.22-0.785 km3.

The actual inflow to the Charvak reservoir amounted 6.38 km3 that is more than the predicted one by 2.27 km3 (55%). The release from reservoir amounted 4.97 km3 that is more than the planned one by 0.84 km3 (20%) - Fig. 1.4.

In spite of sizable total release from the Charvak reservoir the water availability of upper zone of the Chirchik river basin(Parkent, Kelessky canal) in the vegetation period of 2009 was lower than average value for last 10 years. One of the probable causes is the target water delivery for the maximal power production by HEPS of Chirchik-Bozsu tract (Table 1.8).

Table 1.7

Inflow and release from the Kayrakkum reservoir for some 10-days periods of the vegetation period 2009

	1st 10-days period of April	1st 10-days period of June	1st 10-days period of July
1. Inflow			
Planned, m^3/sec	400	260	200
Actual, m^3/sec	506	381	250
Excess, m^3/sec	106	121	50
Excess,%	27	47	25
2. Release			
Planned, m^3/sec	400	400	500
Actual, m^3/sec	150	285	480
Deficit, m^3/sec	- 250	- 115	-20
Deficit, %	63	29	4

Table1.8

Runoff volume for vegetation period on some waterworks facilities in the Chirchik river basin for 2000-2009

Year	Release from the Charvak reservoir		Release through HPS No. 10		Total water withdrawal for the BKC[7] and Parkentsky canal	
	km^3	%	km^3	%	km^3	%
2000	3,68	78	1,13	84	0,6	90
2001	4,01	86	1,29	96	0,69	103
2002	6,08	130	1,37	101	0,67	100
2003	5,55	119	1,45	107	0,65	97
2004	4,62	99	1,44	107	0,75	112
2005	5,45	116	1,44	107	0,84	125
2006	4,12	88	1,39	103	0,7	104
2007	5,39	115	1,45	107	0,73	109
2008	2,95	63	1,14	84	0,47	70
2009	4,97	**106**	1,40	**104**	0,59	**88**
Mean value for 2000-2009	4,68	100	1,35	100	0,67	100

To the end of vegetation period 2009 the actual release from the Charvak reservoir was less than the planned one. However there was a possibility to correct the initial operational plan of the Charvak reservoir, bearing in mind the increased (in excess of the plan) inflow to that reservoir.

The channel inflow at the Kayrakkum reservoir - Shardara reservoir section (excluding the Chirchik river flow) amounted 2.69 km3 and exceeded the predicted one on 1.27 km3 (89%). Because of that the inflow by Syrdarya river to the Shardara reservoir amounted 6.42 km3 that is more than the planned one on 0.80 km3.

[7] Big Keles Canal

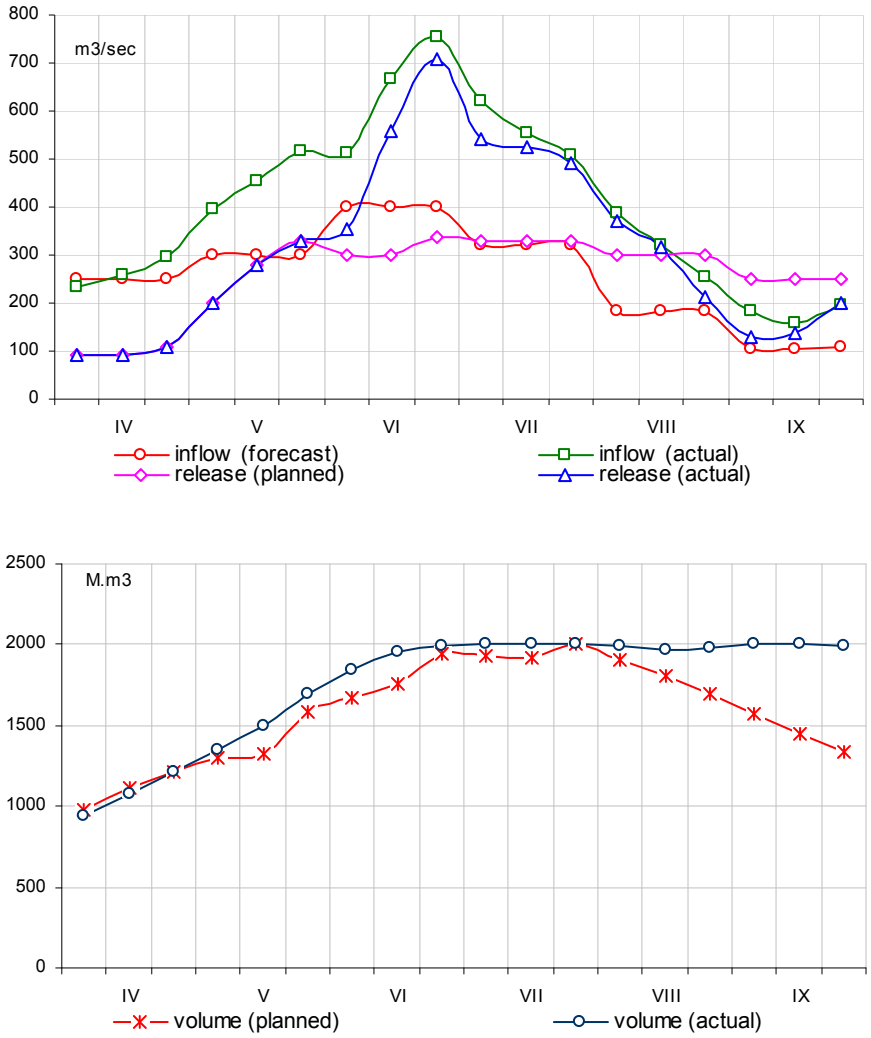


Fig. 1.4. Operation mode of the Charvak reservoir for vegetation period of 2009

The actual release from the Shardara reservoir amounted 10.89 km3 that is more than the planned one by the schedule on 1.42 km3 (15%). To the end of season the water volume 1.1 km3 in the Shardara reservoir was retained (Fig. 1.5).

The water release to the Arnasay (in April) had amounted 0.03 km3. The inflow to the Northern Aral Sea (HP Karateren) had amounted 2.4 km3 as compared with the planned one of 1.84 km3.

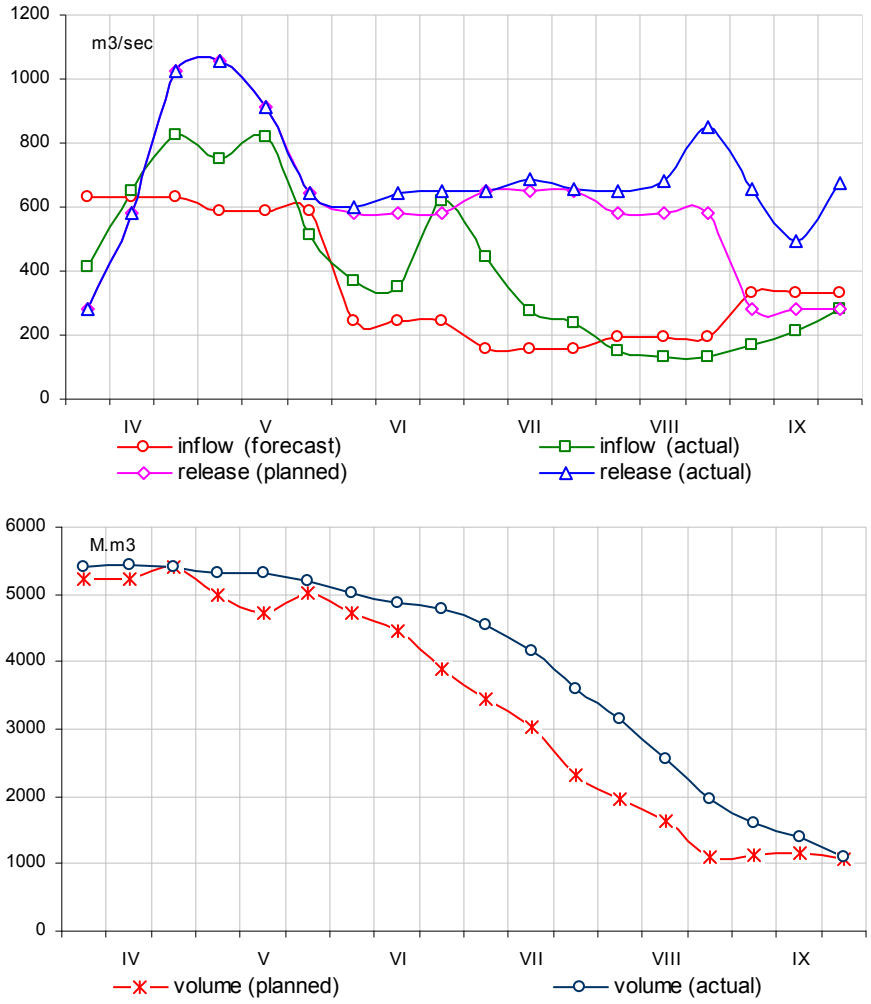


Fig.1.5. Operation mode of the Shardarinsky reservoir for vegetation period of 2009

The water availability (ratio of water withdrawal to the water withdrawal limit) at the Kayrakkum reservoir - Shardara reservoir section had amounted 74% when the total water deficit was 1.77 km3. The water deficit (% of limit) had amounted as followings: Tajikistan - 59%, Kazakhstan - 82%, Uzbekistan - 76%.

Conclusions

The analysis results of the water management situation in the vegetation period 2009 within the Syrdarya river basin are as follows:

1. The water withdrawal within the Syrdarya river basin (up to Shardara reservoir) had amounted 9.06 km3 or 77% of the limit, including: within Kyrgyzstan (despite of the increased water year) - 0.18 km3 (73% of the limit); Uzbekistan - 6.94 km3 (79%); Tajikistan - 1.29 km3 (68%); Kazakhstan - 0.65 km3 (82%). Water delivery was allocated between the states as follows: Kyrgyzstan - 2.0%, Uzbekistan - 76.7%, Tajikistan - 14.2%, Kazakhstan - 7.1%.

2. The total water deficit in the Syrdarya basin in the vegetation period (despite of the increased water year) had amounted 2.68 km3. Water availability from section to section is spread unevenly and is not stable across the time (see data on the website: *www.cawater-info.net/analysis/water/*).

3. The channel transmission losses were observed up to the Kayrakkum reservoir and had amounted 0.6 km3 (13%); and the nonregistered channel inflow had amounted 1.05 km3 (14%) and was observed at the Kayrakkum-Chardara section (see Table 1.9).

4. Though the Toktogul reservoir was operated in over-year regulation, the excessive water withdrawal from the Naryn river for the reservoir's filling (for the hydrological year 2008-2009) had led to less total annual release from the reservoir than the mean inflow on 1.43 km3 (during 2002-2008 the reverse result was observed: the annual release exceeded the mean inflow on 2.3-4.1 km3. This circumstance and nonregularity of releases from the Toktogul and Kayrakkum reservoirs were the main factors of the tense situation in the Syrdarya river basin.

Table 1.9

Water balance of Syrdarya river for the vegetation period of 2009

№	Section	Balance item	Unit	
1.1	Toktogul – Kayrakkum	Release from the Toktogul reservoir	km^3	4.44
1.2		Channel inflow (including inflow from the Karadarya river)	km^3	4.918
1.3		Water withdrawal	km^3	4.107
1.4		Inflow to the Kayrakkum reservoir	km^3	5.85
1.5		Balance residual (a difference between outflow and inflow): (+) nonregistered inflow, (-) losses	km^3	- 0.599
			%	13
2.1	Kayrakkum - Shardara	Release from the Kayrakkum reservoir	km^3	7.27
2.2		Channel inflow (including inflow from the Chirchik river)	km^3	5.148
2.3		Water withdrawal	km^3	4.95
2.4		Inflow to the Shardara reservoir	km^3	6.42
2.5		Balance residual (a difference between outflow and inflow): (+) nonregistered inflow, (-) losses	km^3	1.05
			%	14
	Toktogul - Shardara	Total residual (1.5 + 2.5)	km^3	0.45
			%	10
3.1	Shardara - Aral	Release from the Shardara reservoir	km^3	10.89
3.2		Inflow to the Aral Sea (HP Karateren)	km^3	2.4
3.3		Inflow used (sum of water withdrawal and losses excluding the channel inflow)	km^3	8.49
			%	78

Thereby despite of the natural water content exceeded the mean annual runoff, during the vegetation period 2009 in the basin the tense situation was observed, which was characterized by low water availability and nonregular water delivery within some periods at some sections of Ferghana Valley and middle course of the Syrdarya river and also by not sufficient water delivery to the delta.

2 Amudarya river basin

The actual water content of the Amudarya river at the Atamyrat cross-section upstream Garagumdarya (water intake into the Karakumsky canal) calculated with consideration of natural discharges of the Vakhsh river (without streamflow regulation by the Nurek reservoir) and water intake to the Surkhandarya area of the Republic of Uzbekistan had amounted 46.26 km3 or 97% of the flow rate that is more than probable predicted ones (Table 2.1).

Table 2.1

Water content of the Amudarya river in vegetation period of 2009

№	Parameter	Runoff volume, km^3	% of norm
1	Water content according to the Hydrometeoservice forecast		
	- minimal	28.6	60
	- maximal	38.1	80
	- mean	33.35	
2	Actual water content (data of BWO)	46.26	97
3	Difference from the forecasting value (on the mean value)	12.91	27

The actual inflow to the Nurek reservoir had amounted 16.83 km3 that is more than the expected one on 3.35 km3 (25%). The release from the Nurek reservoir had amounted 12.31 km3 that is more than the planned one by the schedule on 1.72 km3 (16%). At the end of vegetation period in the reservoir was accumulated 10.53 km3 of water (the planned accumulation of water was amounted 8.89 km3) - Fig. 2.1.

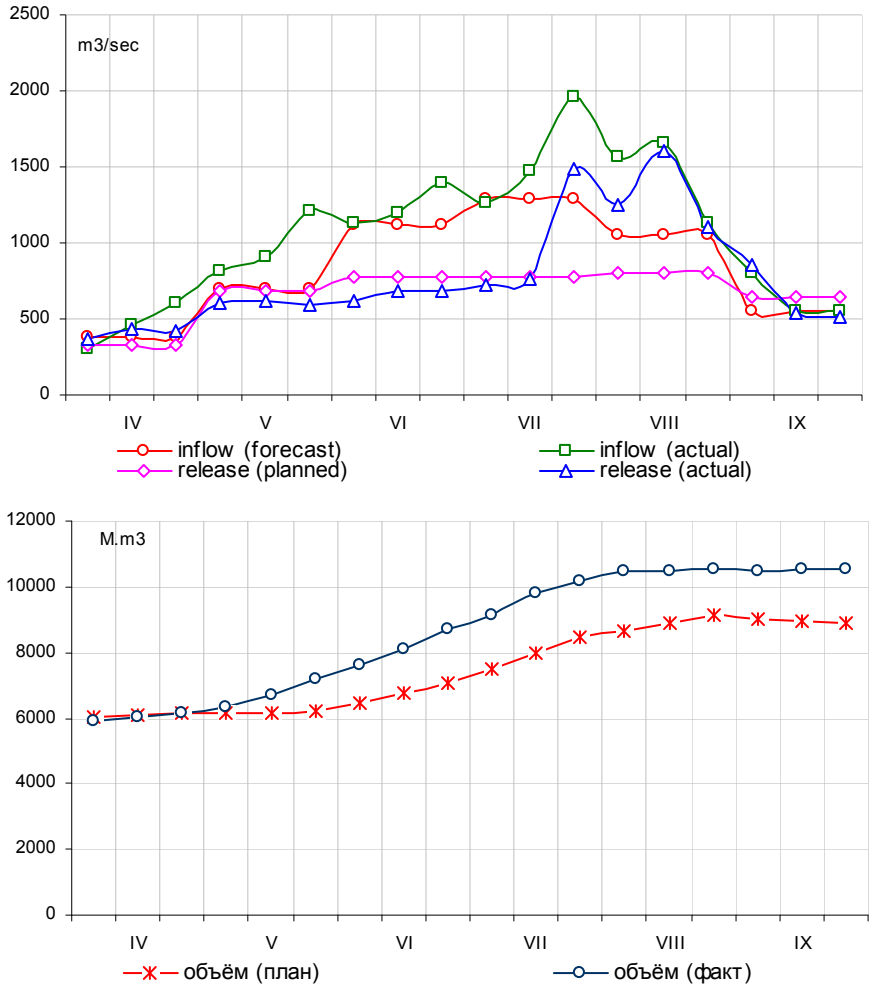


Fig. 2.1. Operation mode of the Nurek reservoir for the vegetation period of 2009

The water inflow to the Tuyamuyun waterworks facility (TWF) amounted 23.77 km3 that is more than the calculated one on 10.06 km3 (73%). Release from the TWF's reservoirs (including water withdrawals) amounted 19.91 km3 that is more than the planned schedule on 7.6 km3 (62%). The actual filling of reservoir at the end of vegetation period amounted 5.77 km3 (when the planned one was 2.13 km3) - Table 2.2 and Fig. 2.2.

Table 2.2

Water volume change in reservoirs in the vegetation period of 2009

	Nurek reservoir		TMHS reservoirs	
	On 1 April	On 1 October	On 1 April	On 1 October
According to the plan, km^3	6.00	8.89	2.10	2.13
Actual, km^3	6.00	10.53	2.10	5.77
On the same date of 2008, km^3	5.96	9.62	2.73	2.12

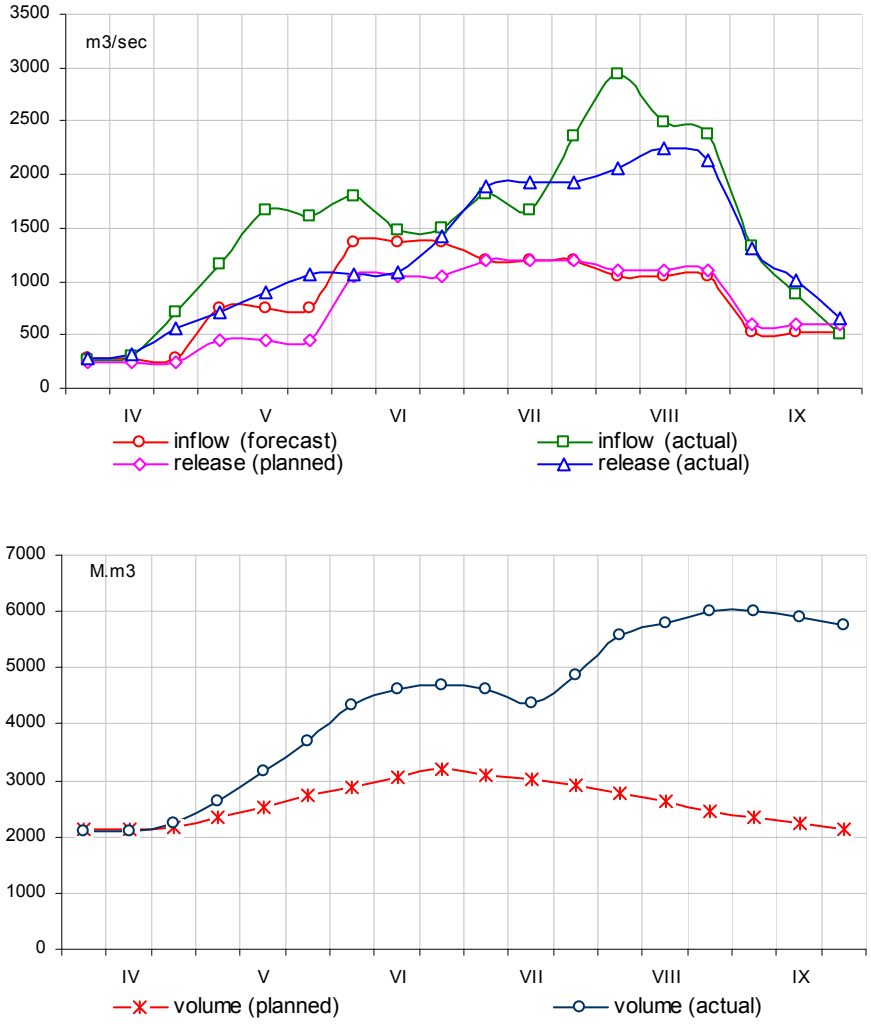


Fig. 2.2. Operation mode of the TMHS reservoirs during the vegetation period of 2009

As a whole the water availability within the basin amounted near 85%. Water withdrawal (33.94 km3) was allocated among the states as follows: Kyrgyzstan - 2%, Tajikistan - 79%, Turkmenistan - 85%, Uzbekistan - 89% (see Table 2.3).

Table 2.3

Withdrawal limit and actual distribution of the Amudarya river water during the vegetation period of 2009

№	State, river's section	Limit, km^3	Water withdrawal, km^3	Probability, %
1	Kyrgyzstan	0.41	0.01	2
2	Tajikistan	6.78	5.39	79
3	Turkmenistan	15.5	13.18	85
	Including:			
3.1	- middle course	10.46	8.66	83
3.2	- Dashoguz	5.04	4.52	90
4	Uzbekistan	17.23	15.36	89
	Including:			
4.1	- Surkhandariinskaya province	1.2	0.72	60
4.2	- middle course	5.74	5.27	92
4.3	- Khorezm	3.45	3.18	92
4.4	- Republic of Karakalpakstan	6.84	6.19	90
	Total in the basin:	39.92	33.94	85

Water delivery to Priaralie through the Amudarya river (cross-section Samanbay) for the vegetation period was 1.9 km3 (Table 2.4).

Table 2.4

Inflow to the Priaralie and to the Aral Sea in the vegetation period of 2009

№		Planned, km^3	Actual, km^3	Probability, %
1	Total inflow	2.1	2.7	128
2	Including by river	1.6	1.9	119
	For the same period of 2008	1.4	0.1	7

It is necessary to give attention that despite of the increased water content, the annual water delivery through the river to the Aral Sea and Priaralie was extremely low and the most of water bodies became empty.

The calculated water losses from the Amudarya river according to the water balance residual (Table 2.5) amounted 902 km3 at the Atamyrat-Samanbay section as a whole.

Table 2.5

Water balance of the Amudarya river for the vegetation period of 2009

№	Balance item	Water volume, km3
1	Water content of the Amudarya (at the Atamyrat upper Garagumdarya)	46.26
2	Water volume change in the Nurek reservoir (filling)	4.52
3	Water withdrawal at the Atamyrat-Darganata section	14.65
4	Return flow	1.57
5	Runoff at the Darganata section – calculation (1-2-3+4)	28.66
6	Runoff at the Darganata section – actual	25.06
7	Residual (water losses) (6-5)	- 3.6
	- % of water content	8
8	Water volume change in the TMHS reservoirs (filling)	3.67
9	Water withdrawal at the Darganata - Samanbay section	13.89
10	Return flow	0.01
11	Runoff at the Samanbay section – calculation (6-8-9+10)	7.51
12	Runoff at the Samanbay section – actual	1.9
13	Residual (water losses) (12-11)	- 5.61
	- % of the runoff at the Darganata cross-section	22
14	Total losses (7+13)	- 9.21

Conclusions

Analysis of the water management situation during the vegetation period 2009 within the basin highlighted the followings:

1. Water withdrawal within the basin amounted 33.94 km3 or 85% of the water limit.

2. The total water deficit within the basin amounted approximately 6 km3. Supply with water is not proportional within sections and not regular with time (see data on the website *www.cawater-info.net/analysis/water/*).

3. The channel water losses amounted 3.6 km3 (8%) at the HP Atamyrat-HP Darganata section and 5.6 km3 (22%) at the Darganata-Samanbay section For comparison: the recommended calculated channel water losses from the Amudarya river (data of the ADB RETA 6163 project) for the low water year amounted 1.5 (minimal) - 4.0 (maximal) % at the Kerky-Darganata section and 12 (minimal) - 21 (maximal) % at the lower reaches of Amudarya river.

Editorial board:

Dukhovny V.A.
Pulatov A.G.

Editorial address:
The Republic of Uzbekistan,
100187, Tashkent city, Karasu, block-4, building 11
SIC ICWC

e-mail: info@icwc-aral.uz

Our web-site:
sic.icwc-aral.uz

Editor
N.D. Ananyeva

Edition copies, 100
Printed in SIC ICWC, Tashkent city, Karasu, block-4, building 11