

Interstate Commission for Water Coordination in Central Asia	BULLETIN № 2 (45)	October, 2007
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MINUTES OF 47TH 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

April 25, 2007

City of Almaty

Chairman

Ryabtsev Anatoly Dmitriyevich
Chairman of Committee for Water Resources
Ministry of Agriculture
Republic of Kazakhstan

ICWC members:

Ryabtsev Anatoly Dmitriyevich	Chairman of Committee for Water Resources Ministry of Agriculture Republic of Kazakhstan
Koshmatov Baratali Turanovich	General Director of Water Resources Department at the Ministry of Agriculture, Water Resources and Processing Industry Kyrgyz Republic
Khamidov Masaid Yakubjonovich	Minister of Land Reclamation and Water Resources Republic of Tajikistan
Mukhammedov Akhmed	Head of Operations Division, Ministry of Water Resources Turkmenistan
Khamrayev Shavkat Rakhimovich	Deputy Minister, Head of Central Water Administration at the Ministry of Agriculture and Water Resources, Republic of Uzbekistan

ICWC executive agencies:

Dukhovny Victor Abramovich	Director, SIC ICWC, Professor, Honorable ICWC member
Khudaibergenov Yuldash Khudaibergenovich	Head of BWO «Amudarya»
Khamidov Makhmud Khamidovich	Head of BWO «Syrdarya»
Negmatov Gairat Abdusattarovich	Head of ICWC Secretariat, Honorable ICWC member
Makarov Oleg Stepanovich	Head of ICWC Metrological Center

Invited:

Kipshakbayev Nariman Kipshakbayevich	Director, Kazakh branch of SIC ICWC, Professor, Honorable ICWC member
Zulpuyev Meirajdin Zulpuyevich	Honorable ICWC member
Polad-Zade Polad Ajjiyevich	President of JSC “Vodstroy”, Member of the Engineering and Water-Environmental Academies
Lysenko Oleg Grigorievich	Head of division, BWO «Amudarya»
Nurjanov Omirbek Nurjanuly	Akym of Makhtarak district, South Kazakhstan province
Kuchkarov Sharifjon Zikrillayevich	Head of department, Ministry of Agriculture and Water Resources, Republic of Uzbekistan

AGENDA

1. Adoption of water withdrawal limits for the growing season 2007 and approval of forecasting operation of the cascade of reservoirs in Amudarya and Syrdarya basins (responsible BWO “Amudarya” and BWO “Syrdarya”)
2. Implementation of IWRM principles in the Central Asian region (responsible SIC ICWC, CWR Kazakhstan)
3. Considering draft «Statute of ICWC» and draft «Rotation of ICWC agencies»
4. Considering draft Agreement «About use of water and energy resources in the Syrdarya river basin».
5. Venue and agenda of the next 48th 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. Adopt water withdrawal limits for the growing season 2007 and approve the long-range operation of the cascade of reservoirs in Amudarya and Syrdarya basins (Annexes 1, 2, 3).
2. Taking into account current water situation in Amudarya and Syrdarya basins, agree on eventual correction of withdrawal limits within 15% in the growing season. If the situation becomes worse, this issue should be considered at an extraordinary meeting.
3. Taking into account expected water shortage in the growing season 2007, BWO “Amudarya” and BWO “Syrdarya” should strictly monitor withdrawal limits and maintain the established withdrawals.
4. BWO “Syrdarya” and SIC ICWC should work on forecasting design and options of Toktogul reservoir operation in the growing season 2008.

Second item:

1. Take notice of SIC’s information on on-going implementation of IWRM principles in Central Asia.
2. Apply to Asian Development Bank for consideration and probable financing of the project “IWRM in the Lowlands of the Amudarya and the Syrdarya Rivers» developed on the basis of feasibility study made earlier under support of US State Department.
3. ICWC members together with SIC should support preparatory activities of national UNDP Offices in justifying and developing “National IWRM Plans” for the Kyrgyz Republic.

lic, Tajikistan, and Uzbekistan. International donors should be sought for financing of given projects and initiation of similar project in Turkmenistan.

Third item:

1. Take notice of draft «Statute of ICWC» (version 7) integrated with draft «Rotation of ICWC agencies» as prepared by Secretariat and SIC.
2. ICWC members should submit their comments, item after item, on the draft Statute to Secretariat and SIC by May 5, 2007.
3. By May 15, 2007, Secretariat and SIC should organize an expert meeting on the draft Statute together with development of draft “Agreement on institutional improvement of ICWC executive agencies”.

Fourth item:

1. Approve in general a new draft Agreement about use of water and energy resources in the Syrdarya river basin.
2. This draft should be signed through polling during one month.

Fifth item:

1. Next 48th ICWC meeting is to be held in the Republic of Tajikistan in September 2007.
2. Approve the agenda of the next 48th ICWC meeting

AGENDA

1. Growing season 2007 and adoption of water withdrawal limits for the non-growing season in Amudarya and Syrdarya basins (responsible BWO “Amudarya” and BWO “Syrdarya”)
2. Results and prospect of work completing under Project ADB RETA 6163.
3. Development of operating principles under the project “Central Asian Regional Water Information Base” (CAREWIB) to the benefit of national information systems.
4. About «Statute of ICWC»
5. Venue and agenda of the next 49th ICWC meeting

For the Republic of Kazakhstan

A.D. Ryabtsev

For the Kyrgyz Republic

B.T. Koshmatov

For the Republic of Tajikistan

M.Ya. Khamidov

For the Turkmenistan

A. Mukhammedov

For the Republic of Uzbekistan

Sh.R. Khamrayev

APPROVAL OF WATER WITHDRAW LIMITS FOR THE GROWING SEASON 2007 AND FORECASTS FOR OPERATING MODES OF CASCADE OF RESERVOIRS IN SYRDARYA AND AMUDARYA RIVER BASINS¹

I. The Amudarya river basin

1.1 Summary for the non-growing season 2006-2007

Actual water availability for the non-growing season per the Amudarya river basin in given site Atamyrat and upstream of Garagumdarya was 71,6 % of norm. Under the norm 14 billion 555 million m³ the actual water availability was 10 billion 425 million m³.

Fixed water withdrawal limit use for current non-growing season in the light of states looked in the following way:

-Fixed water withdrawal limit was used in total for the basin by 92,3 % under the limit 15 billion 714 million m³, the actual one was 14 billion 509 million m³.

-The Republic of Tajikistan used fixed water withdrawal limit by 63,4 %, 1 billion 816 million m³ were used actually under the limit 2 billion 864 million m³;

-Turkmenistan used water withdrawal limit by 93,3 %, 6 billion 063 million m³ were used actually under the limit 6 billion 500 million m³;

- The Republic of Uzbekistan used water withdrawal limit by 103,4 %, 6 billion 183 million m³ were used actually under the limit 5 billion 980 million m³.

Fixed water withdrawal limit use in the light of river reaches is the following:

1. Upstream – 70,0 %, including Tajikistan - 63,4 %, Uzbekistan - 120,9 %.

2. Middle stream – 94 %, including the Republic of Uzbekistan - 104,1 %, Turkmenistan - 87,4 %.

3. Downstream – 106,2 %, including the Republic of Uzbekistan - 102,6 %, Turkmenistan - 112,9 %.

Water supply plan in Priaralie and the Aral Sea was fulfilled by 55,6 % for the non-growing season; 1 billion 167 million m³ were supplied under the plan 2 billion 100 million m³.

As for the beginning of April 2007 water volume for Nurek reservoir was 5 billion 974 million m³.

Water volume in Tyuyamuyun reservoir as for 01.04.2007 was 2 billion 475 million m³.

¹Information for the first issue of the agenda of ICWC Meeting 47, April 2007, Almaty

1.2 Proposals for establishing water withdrawal limits and operating mode of cascade of reservoirs for the growing season 2007

According to the Uzbek Central Hydromet Service data water availability in site Atamyrat and upstream of Garagumdarya for the growing season 2007 is expected to be less by 20,0-30,0 % of norm taking into account domestic discharges for Vakhsh river.

Hydrological, climatic and water situation in the basin is emerged towards low-water one. However water availability increase is pointed out in April during current growing season due to rain floods. Such situation has made water-related situation somewhat better in the basin, including Amudarya downstream.

Taking into account water availability forecast and accumulated snow reserves in Amudarya basin we are requesting ICWC members to discuss the option to reduce water withdrawal limits at least by 20,0% for the growing season 2007.

Water availability within 80,0% was accepted for operating mode of Tuyamuyun reservoir.

Under such operating mode it is possible to work successfully during the whole growing season and supply water to Priaralie taking into account collector-drainage water at least 2 billion 400 million m³.

In conclusion BWO «Amudarya» proposes:

1. To approve water withdrawal limits, operating modes of cascade of reservoirs and water supply volumes to the Aral Sea and the Amudarya river delta for the growing season 2007 submitted to ICWC members for discussion.

II. The Syrdarya River Basin

According to Uzhydromet service forecast of 11 April 2007 regarding precipitation amount in the Syrdarya river basin and evaluation of possible water availability for the growing season 2007 it was pointed out that at the end of March snow reserves came to 50,0% of norm in Kashkadarya basins and 60,0-80,0 % of norm in Chirchik basins. According to tentative evaluation made by hydromet services and based on analysis of hydrometeorological situation during the growing season 2007 water availability is expected to be within 80,0-90,0 % of norm in Naryn, 75,0-85,0 % of norm - in the southern rivers of Fergana and Chirchik, 60,0-70,0 % of norm - in Karadarya, the northern rivers of Fergana Valley and Akhangaran. At the same time if average inflow to Toktogul, Andijan and Charvak is about 80,0 %, then side inflow is only 72,0 % per cascade and 60,0% within Kayrakkum-Chardara reach and 67,0 % for Charvak – Mouth reach.

On March 27, 2007 Uzhydromet service provided forecast for the second quarter 2007, where inflows to upstream reservoirs had already come to 85,8 % and side inflow was 87,0 % for the whole cascade and 78,0 % within Kayrakkum – Chardara reach and 74,0% for Charvak - Mouth reach.

Precipitation wealth as rains at the first decade of April formed visibility of water-related situation improvement in the Syrdarya river basin. Inflow for gauging station Kal reached 1150,0 m³/s, for gauging station Kyzylkishlak - 1713,0 m³/s. About 245,0 million m³ of water was released to Arnasay depression. Water situation is still difficult in Andijan and Charvak reservoirs.

In this context there should be said that forecast is an important tool to plan and achieve optimal management of Naryn-Syrdarya water system operation.

Unfortunately, reliability of such forecast is often very poor. It relates to both low-water and high-water years.

First of all, everything that has been said about poor reliability relates to forecasts provided by hydromet services. As a whole every year such forecasts are given for the growing season. A tentative forecast is provided in March and final one is in April. They underlie planning of water system operation, because quarter and monthly forecasts can not be used to improve given situations.

Under such conditions when calculating forecast balance for the growing season 2007 BWO «Syrdarya» took water discharge values according to Uzhydromet forecast. BWO took Uzhydromet data of 27 March 2007 for the second quarter and Uzhydromet data of 11 April 2007 for the third quarter.

At the same time water withdrawal limits were taken according to average long-term values and with limitation 15,0 % for April. They were approved during the 46th ICWC Meeting. Releases from Toktogul reservoir were stipulated in signed Schedule on electric power supply from the Kyrgyz Republic to the Republic of Uzbekistan. Releases from Kayrakkum were provided in the Protocol between the Republics of Tajikistan and Uzbekistan.

On December 20, 2006 Open Joint-Stock Company «Electric Power Plant» of the Kyrgyz Republic and Public Corporation «Uzbekenergo» of the Republic of Uzbekistan signed the Schedule on additional guaranteed releases (besides own consumption) from Toktogul reservoir for the growing season 2007. Committee for Water Resources at the Ministry for Water Resources and Agriculture of the Republic of Kazakhstan should speed up signing of the Agreement on electricity intake for water generation with the Kyrgyz Government.

Adjusted water withdrawal limits to be approved at ICWC are given in Table 1.

Table 1

Water withdrawal limits from the Syrdarya River for the growing season 2007

River Basin, State	Water withdrawal limits for the growing season 2007, million m ³
Total from the Syrdarya River, including	18558,00
The Republic of Kazakhstan	7790,00
Including Dustlik	800,00
The Kyrgyz Republic	244,00
The Republic of Tajikistan	1876,00

River Basin, State	Water withdrawal limits for the growing season 2007, million m ³
The Republic of Uzbekistan, including Water supply to the Aral Sea	8648,00 1808,00

Definition of water resources availability for current growing season (Table 2) and situation analysis show that available water resources 17 billion 267 million 39 thousand m³ do not cover required water volume for irrigation 18 billion 746 million m³, so taking into account given situation prepared Schedule-Forecast for operating mode of Naryn-Syrdarya cascade of reservoirs and respective water withdrawal limits will be likely adjusted depending on emerging actual water-related situation.

Table 2
Definition of water resources availability for the growing season 2007 under emerging water-related situation

Balance elements	Volumes, million m ³
<i>Inflow items</i>	
Releases from Toktogul reservoir	6954,94
Total side inflow	7960,5
Chinaz-Chirchik	779,05
Gauging station Uchtepe	1034,38
Drawdown of in-stream reservoirs:	
Kayrakkum	2340,4
Chardara	4249,66
Total	222284,55
<i>Outflow items</i>	
Losses of in-stream reservoirs	1109,07
Channel losses and ecological releases in downstream	2100,06
Water supply to the Aral Sea	1808,03
Total	5017,16
Total, available water resources	17267,39
<i>Required water resources</i>	
Water withdrawal limits being approved by ICWC	18746,0
Adjustment coefficient	C =92

CENTRAL ASIAN INTERNATIONAL PRACTICAL CONFERENCE DEDICATED TO 15th ANNIVERSARY OF THE INTERSTATE COMMISSION FOR WATER COORDINATION IN CENTRAL ASIA

Official communiqué

The Central Asian International Practical Conference was organized in the city of Almaty on 24-27 April, 2007.

Water institutions, representatives of social, non-governmental environmental organizations were brought together in the city of Almaty in order to celebrate this significant date – first fifteen years of huge ICWC activity as undertaken for establishment of collaboration in area of transboundary water management and use in Central Asia. The importance of this activity is that despite frequently changing dry and flood periods and breach of previously existing economic base, we have managed to avoid conflicts over water supply for CAR countries and create the basis for guaranteed water use in the region. This was reflected in the welcome speech of the President of the World Water Council Loic Fauchon. While noting an importance of the Conference within the framework of global preparatory campaign to the Fifth World Water Forum, which is to be held in Istanbul in 2009, he underlined the following: «We can pay tribute to the organizers of this conference, and to all of you ladies and gentlemen, for bringing your contribution to solving water issues through concrete actions and not only intentions ... There are more than 260 transboundary basins in the world. But very few examples where five states are working together, hand-in-hand. Five States that are not only dealing with planning and negotiation but also with day-to-day management and functioning of two weighty rivers: the Amudarya and the Syrdarya. Their fruitful collaboration is the proof that, even if shared water resources can generate divergences and even conflicts, they are also a chance and a vector for collaboration between States and enables to overcome obstacles».

Written welcome addresses were also received from the President of the International Water Resources Association Cecilia Tortajada and the Chairman of WWF5 Organizing Committee, Director General of State Hydraulic Works Prof. Veysel Eroglu.

As a symbol of unity of the ICWC activities and the global water management improvement, the participants of Plenary meeting were shown video messages from the Fourth and Fifth World Water Forums.

His Excellency Minister of Agriculture of the Republic of Kazakhstan Akhmedjan Yesimov opened the plenary meeting. In his speech, along with acknowledgement of the Commission's activity, he expressed an aspiration of the Central Asian Governments to strengthen ICWC Executive Agencies, pay special attention to environmental restoration in Amudarya and Syrdarya deltas, and create a solid legal framework in form of multilateral agreements. The Chairman of Global Water Partnership for Caucasus and Central Asia Mrs. Nino Chkhobadze, Chairman Advisor of the Asian Water Forum Mr. Oda Hideaki, and former leader of the USSR Ministry of Water Resources and now President of JSC "Vodstroj" Mr.

P.A. Polad-Zadeh welcomed the Conference participants. Mr. Polad-Zadeh noted in his speech: «I was very glad that CAR water institutions maintained such huge structures that were constructed in the region by my age generation. We keep an eye on your success and are concerned with your fails». FAO regional representative in Central Asia Mr. Giovanni Munoz and UN representative in Kazakhstan Mrs. Steliana Nedera addressed the participants as well. The participants of Plenary meeting heard the reports of water managers and professionals in Central Asia, summarized results of work done and outlined the ways for future development. The Conference slogan «Water – bridge to the future» signalizes determination of ICWC to keep improving water use in the region on mutually beneficial basis.

The Conference included the 47th ICWC meeting and a number of specific sessions:

- Interstate cooperation and the role of ICWC in addressing regional problems
- Integrated water resources management – a way to achieve MDGs in Central Asia
- Global Water Partnership in Central Asia and Caucasus: towards 16th session of the UN CSD (2008) for implementation of IWRM plans
- Environmental challenges in Central Asia: analysis and future outlook
- Central Asian Regional Water Information Base
- Integrated water resources management in Kazakhstan: meeting of Basin Councils' representatives in the Republic of Kazakhstan
- Towards 1st Asian-Pacific Water Summit

Particular attention was paid to implementation of IWRM in CAR countries and, in particular, about 100 representatives have actively discussed development of basin councils in the Republic of Kazakhstan. Whereas Kyrgyzstan, Tajikistan, and Uzbekistan develop IWRM mainly through pilot projects as implemented by ICWC together with IWMI under support of Swiss Agency for Development and Cooperation (SDC), Kazakhstan held the 1st Meeting of Kazakhstan's Basin Councils within the framework of UN Programme «National IWRM and Water Efficiency Plan».

Discussion on IWRM implementation in the region was supplemented by concrete proposals for strengthening of legal and institutional frameworks in regional water management.

The session of Global Water Partnership in Central Asia and Caucasus put forward specific measures to assist all eight countries in this region in preparing review on implementation of IWRM in the region in light of MDGs for presentation of this review at 16th Session of UN CSD in 2008.

The development of information system at the regional basin and national levels, as well as of information portals plays a big role in raising trust and creating a cooperation platform among both water institutions and multiple stakeholders concerned with water use (water users, economic sectors, such as hydropower and ecology). The session dedicated to SDC-supported CAREWIB project activities aroused a discussion among 45 participants. As a result, the session participants underlined the importance and wide use of the portal and information system and also a need to reinforce the regional portal and develop information systems at national and basin levels.

Participants of the session “Interstate cooperation and the role of ICWC in addressing regional problems» gathered within the framework of ADB RETA Project on improvement of legal mechanism and work group activities for better regulation and use of water resources in both Syrdarya and Amudarya river basins.

The joint session of EC IFAS and GWP CACENA produced a plan for preparation of sub-regional document (Central Asia and Caucasus) containing information on the countries in the context of three priority themes of the 1st Asian Pacific Water Summit to be held in Japan in December 2007.

Meeting of donors and ICWC members also took place during the Conference. Representatives of ADB, SDC, UN, FAO, IWMI and GWP participated in this meeting. They exchanged opinions on priority directions of donor assistance and, at the same time, outlined vector for better interactions and coordination between ICWC members and donor organizations.

Finally, the Conference participants expressed their satisfaction and gratitude for excellent organization of the Conference along with all associated events.

SESSION “INTERSTATE COOPERATION AND THE ROLE OF ICWC IN ADDRESSING REGIONAL PROBLEMS”

A work meeting of thematic subgroups for ADB RETA 6163 Project “Improved Management of Shared Water Resources in Central Asia” was held on 25 April 2007 in Almaty within the framework of the session «Interstate cooperation and the role of ICWC in addressing regional problems». The issues on development of rules for fulfillment of procedural obligations and recommendations for improvement of the rules for regulation and management of water and energy resources in the Syrdarya river basin and revision of the draft Agreement on Strengthening the Organizational Framework for Management, Protection and Rational Use of Water Resources in Transboundary Water Bodies were discussed during the meeting.

Members of thematic subgroups and leader of the new membership to Kyrgyz NWG E.Zh. Zhusumatov took part in the meeting. Because Tajik NWG had not assigned its official representatives to five thematic subgroups provided with authority to participate in making draft decisions on all issues worked out by thematic subgroups, ICWC member for Tajikistan M.Y. Khamidov authorized NWG member I.Sh. Normatov to represent interests of Tajikistan at this meeting.

The participants of the meeting decided:

- 1) The work plan of thematic subgroup on procedural obligations and development of recommendations for improvement of the rules for regulation in the Syrdarya river basin shall be approved.
- 2) Members of thematic subgroup shall submit proposals, agreed with NWG members, according to the list of issues made during discussion.

3) Remarks and suggestions to version No.1/2007 of the draft Agreement on Strengthening the Organizational Framework for Management, Protection and Rational Use of Water Resources in Transboundary Water Bodies (Interstate Sources) in the Aral Sea Basin as well as to the draft Statute on ICWC (7th edition) shall be submitted up to 10 May 2007.

4) Funds allocated for NWGs according to the approved Work Program for 2007 shall be distributed among NWGs in equal shares.

On 26 April 2007 in Almaty, a work meeting of the thematic subgroup on more precise definition of channel losses in the Amudarya midstream and downstream was held within the framework of the ADB RETA 6163 “Improved Management of Shared Water Resources in Central Asia”. All the members of the thematic subgroup took part in the meeting.

Summary plan and work plan of thematic subgroup prepared by BWO “Amudarya” upon study of materials presented by subgroup members were submitted.

It was decided:

1) to approve the summary plan and work plan of thematic subgroup.

2) to note that due to the lack of funds for field studies to determine channel losses at the Amudarya river reaches, available materials of the group for several years should be used as a basis in the work.

3) to accept suggestions of the Turkmen party that all members of the subgroup participated in all planned activities, without separation.

4) to note that additional funds are necessary for carrying out GIS work on satellite image processing.

5) to assign work performance time May-July 2007.

SESSION “ENVIRONMENTAL CHALLENGES IN CENTRAL ASIA: ANALYSIS AND FUTURE OUTLOOK”

Jubilee events on the occasion of 15th ICWC Anniversary were held on 23-28 April 2007 in Almaty. Leading local and foreign organizations and specialists took part in events. The main aim of the conference was to analyze current state of water resources problems and activities in Central Asian countries and to agree joint efforts for implementing specific actions, including the Program for the Aral Sea Basin-2, for the nearest years and future.

On April 26, 2007 CAREC organized and held a special section «Environmental challenges in Central Asia: analysis and future outlook» within the jubilee conference with participation of the representatives from the Ministry for Water Resources of the Republic of Azerbaijan, the Ministry for Water Resources of the Republic Tajikistan, BWO Amudarya, ADB, OSCE, Scientific Production Association «KAZMEKHANOB», Almaty Municipal Maslikhat, Almaty Provincial Akimat, NGO of the Republic of Uzbekistan, NGO of the Republic of Kazakhstan, Caucasus REC and CAREC.

The following issues were discussed during special section:

- Central Asian Initiative on Sustainable Development
- Urgency of inter-sectoral cooperation in forming environmental policy in CA
- Integrated management in Ili-Balkhash basin
- Standards for surface water quality in Central Asia
- Issues related to conservation of water ecosystems in CA
- Environmental education and education for sustainable development in CA
- The Caspian Environmental Program: sustainable development of local communities
- Water supply to villages in Ili-Balkhash basin
- NGO and public participation in water resources management

After discussions the participants of special section proposed:

1. To take into account information about Central Asian Initiative (CAI) on sustainable development within preparatory process to Belgrade Conference of ministers for environmental protection. To assure cooperation on protection and rationale use of water resources in Central Asia with SIC ICWC and other stakeholders in future.
2. To prepare and include the report on «CAI successes» into UN report for the 16th UN CSD session in collaboration with GWP CACENA Regional Council and CAREC.
3. To prepare the report with using materials «Evaluation of water and coastal ecosystems», work results for Program of Small Grants and CAREC Program of Environmental Education and to present at 1st Asian-Pacific Water Summit.
4. CAREC jointly with Caucasus REC should develop the Concept for socially protected natural zones using the Japan experience on creation of socially protected natural zones.
5. Prepare draft proposals and submit to Almata Maslakhit in order to include in Almata budget programs.
6. Prepare draft proposals and submit to Provincial Administration for Environmental Protection in order to include into provincial budget environmental programs for the Republic of Kazakhstan.

CENTRAL ASIAN REGIONAL WATER INFORMATION BASE

Within the framework of the Central Asian International Scientific Practical Conference dedicated to the 15th anniversary of ICWC, a session “Central Asia Regional Water Information Base” was held on 26 April 2007 in Almaty. Representatives from stakeholders of the CAWater-Info Portal and CAREWIB Information System, executors and a donor of the CAREWIB Project took part in the session:

For the Republic of Kazakhstan	AO KEGOC Committee for Water Resources at the Ministry of Agriculture of Kazakhstan
For the Kyrgyz Republic	Ministry of Agriculture, Water Resources and Processing Industry of the Kyrgyz Republic AO “Elektricheskiye stantsii” Institute for Strategic Research at the President of the Kyrgyz Republic
For the Republic of Tajikistan	Institute “TajikNIIGiM” Ministry of Agriculture and Environment of Tajikistan Institute of Water Problems, Hydropower and Ecology at the Academy of Sciences of Tajikistan
For Turkmenistan	SIC ICSD
For the Republic of Uzbekistan	Ministry of Agriculture and Water Resources of Uzbekistan State Committee for Nature Conservation of Uzbekistan Institute of Water Problems at the Academy of Sciences of Uzbekistan Central Asian Scientific Research Institute of Irrigation (SANIIRI) Center for social and economic research
Regional organizations:	SIC ICWC BWO Amudarya BWO Syrdarya ICWC Secretariat CA Regional Ecological Center
International organizations:	Swiss Agency for Development and Cooperation UN Economic Commission for Europe FAO Asian Development Bank UNESCO-IHE

NGOs: “Logos”
“Zerafshan Basin Protection”

The meeting was attended by: Regional ADB Director Mr. Katsuji Matsunami, representative of UN FAO Office Mr. Giovanni Munoz, officials of SDC Mr. Sandjar Djalalov (Uzbekistan) and Zafar Samadov (Tajikistan), Director for Department of UNESCO-IHE Mr. Joop de Schutter.

Director of Swiss Cooperation Office in the Kyrgyz Republic Mr. Hanspeter Maag and Director of SIC ICWC Prof. Viktor Abramovich Dukhovny opened the meeting and welcomed the participants.

At the meeting, reports of key leaders and key specialists of the CAREWIB Project on the results of Phase 1, on opportunities for analytical use of CAREWIB, and a concept for developing activities in Phase 2 were listened. Furthermore, the results of the Review Mission presented by independent experts Prof. E.Zh. Makhmudov (Uzbekistan) and E.E. Orolbayev (Kyrgyzstan) were listened.

The meeting participants and the Review Mission noted that the creation of Central Asian Regional Information System with Water and Environmental Portal is unique enough in the region, the project is now of high interest, and has to a certain extent become a first step in satisfying information needs in water, environmental and associated sectors of economy and water resources use.

It was noted that the created and permanently updated electronic library of SIC ICWC and the formed information service provided with personnel that maintained the operation of a wide range of websites regularly updated and aimed at broader implementation of integrated water resources management in Central Asia were positive project results.

The CAREWIB Project has shortly increased ICWC information potential in assessment of water, land and other natural resources use, and created a unique instrument that uses state-of-the-art information technologies like integrated interface uniting database, GIS, modeling and analytical instruments.

The meeting participants were also presented a Concept of the Project Document for Phase 2, which includes 4 basic components:

- Component 1 – Enhance information scope and coverage of CAREWIB Portal and Information System including strengthening mechanisms for data collection.
- Component 2 – Produce and disseminate publications and other types of information.
- Component 3 – Capacity building in water management organizations and among other users and integrate CAREWIB into decision-making processes of national, regional and international bodies as well as in public debate.
- Component 4 – Ensure long-term political and financial support to CAREWIB.

The speakers and participants of the Review Mission noted the high usefulness of this project, while they expressed some aspirations and remarks:

1. Partner relationships with users and participants of the project should be expanded and formalized.

2. A mechanism for information supplier and user feedback should be developed.
3. A list of available information, possibility of and rules for access to it should be determined.
4. Information scope in other water use and related sectors, apart from ICWC, should be extended.
5. A permanent column informing about activities of IFAS and its executive bodies should be introduced.
6. Information on forthcoming events (conferences, workshops, meetings), and not just on their results should be included in News Digest. In this section, a list of questions discussed at these meetings can be announced.
7. To improve the performance of the CAREWIB Project, it is suggested within the framework of the project to study the issues of interaction with national information systems in water resources management and environmental protection. The main objectives of such interaction should be:
 - to organize thematic Internet forums for experience exchange between Central Asian countries on rational use and protection of water resources, improvement of water use culture;
 - to hold training seminars on active use of information resources on water-related problems for personnel of ministries and departments, enterprises and organizations in charge of water resources management and environmental control. This will enable to more effectively use the capacity of the CAREWIB Project.

The participants of the meeting unanimously made the following suggestions:

1. Approve the results of Project phase 1, and note a substantial and unique work done on creation of Regional Web-Portal and Information System.
2. Approve the prepared “Brief Concept for Developing a Sustainable Information Service on Water Resources in the Aral Sea Basin” containing the general provisions of activities in Project Phase 2; include remarks and suggestions made by stakeholders in the project document.
3. Agree with the necessity to focus a special attention in Phase 2 on the improvement of national information systems in such a format as that of CAREWIB, while institutionally formalizing partnerships between organizations at national level as well as between national and regional levels.
4. It is expedient to further orientate the development of the Portal and Information System to three directions correlating with water hierarchy levels in the Aral Sea basin:
 - a) regional, including IFAS, ICWC, ICSD and key BWOs in the basin;
 - b) national, including ministries and departments of water resources/agriculture, environment, energy and emergency situations, hydromet services, NGOs;
 - c) lower hierarchy level (“grass roots”), including farmers and WUAs: why to create and develop on the portal a knowledge base for extension services to farms and WUAs, using the experience of the “IWRM-Fergana” Project for this purpose.

5. In IS, it is necessary to develop instruments for analysis, including a mechanism for information validation for completeness and reliability, and instruments for modeling, which would enable to improve:

- methods for assessment and forecasting of usable water resources, including calculation of channel losses and lateral inflow,
- methods for planning of water resources distribution and flow regulation by reservoirs,
- methods for assessment of water resources use efficiency (assessment of water demands in comparison with water withdrawal and no-productive water losses, assessment of water and land productivity with respect to potential value, assessment of collector water disposal, identification of idle discharges and so on);
- measures to reduce risks of extreme situations in the basin (drought, flood), and mitigate them;
- operation of WUA extension services regarding analysis and forecasting of climatic and water situations (irrigated agriculture).

6. A possibly maximum part of the Information System should be accessible through the Portal.

For more accurate definition of necessary analytical instruments, user poll should be conducted.

For SDC

H. Maag

For SIC ICWC

V.A. Dukhovny

INTEGRATED WATER RESOURCES MANAGEMENT IN KAZAKHSTAN: MEETING OF BASIN COUNCILS' REPRESENTATIVES IN THE REPUBLIC OF KAZAKHSTAN

Committee for Water Resources at the Ministry of Agriculture of Kazakhstan jointly with UNDP Project «National IWRM and water efficiency plan for Kazakhstan» and Organization on Security and Cooperation in Europe (OSCE) held a special section «Integrated water resources management in Kazakhstan: meeting of Basin Councils' representatives in the Republic of Kazakhstan» within the framework of Central Asian International Scientific-Practical Conference devoted to 15th Anniversary of Interstate Commission for Water Coordination of Central Asia (ICWC).

90 persons, Mazhilis representatives for the Kazakh Parliament, the Prime-Minister Chancellery for the Republic of Kazakhstan, Committee for Water Resources at the Ministry of Agriculture of Kazakhstan, members of Interagency Work Group on development

of Program for IWRM and water efficiency in Kazakhstan, members of Basin Councils created in seven basins of Kazakhstan, Scientific-Research and Planning Institutes for Water Resources and Agriculture as well as other interested international, national and non-governmental organizations of Kazakhstan, the representative from Uzbekistan, Turkmenistan, Kyrgyzstan, Armenia, Azerbaijan took part in the conference.

The following issues were discussed:

- the main point and future outlook for approving and implementing the Program on IWRM and water efficiency in Kazakhstan up to 2025 developed within UNDP Project;
- development of basin plans/programs on integrated water resources management and water efficiency for each river basin in Kazakhstan;
- activity of Basin Councils with executive bodies;
- participation of Basin Councils in equitable and uniform flow distribution of trans-boundary rivers;
- water availability problems in cities and participation of Basin Councils when addressing them;
- implementation of Water Code Provisions on creation of water protection zones in basin water bodies;
- implementation of Water Code Provisions on introduction of reverse water supply in enterprises;
- NGO experience on establishment of Basin Councils and their functioning;
- other issues and problems of Basin Councils were also discussed.

28 participants presented their reports.

The book «Water resources management in Kazakhstan – history, current state, analysis, comparisons, recommendations» prepared by the Kazakh independent experts Nikolayenko A., Petrakov I.A., Alyakhasov Zh. was presented during the meeting.

The meeting resolution of Basin Councils in the Republic of Kazakhstan was accepted.

RESOLUTION OF SUB-REGIONAL SEMINAR «TOWARDS 1ST ASIAN-PACIFIC WATER SUMMIT»

(25 April 2007, Almaty, Kazakhstan)

We, the participants of sub-regional seminar «Towards 1st Asian-Pacific Water Summit» held within the framework of Asian-Pacific Water Forum events, Central Asia and Caucasus representing countries, regional and international organizations:

- express willingness to make a particular contribution while implementing tasks of International Tenth Anniversary of «Water for Life» actions, 2005-2015;
- take into account intergovernmental mandate of Executive Committee of International Fund for the Aral Sea Saving (EC IFAS) and an important role of Global Water Partnership for Central Asia and Caucasus (GWP CACENA) in developing and strengthening cooperation and encouraging regional initiatives in water sector;
- support call of Heads of Central Asian countries to provide effective assistance for mitigating ecological crisis of the Aral Sea, which becomes a planet catastrophe and is a serious threat for sustainable social and economic development in the region;
- recognize an importance of Asian-Pacific Water Forum and its 1st Summit in sustainable water resources management in order to achieve Millennium Development Goals in Asian-Pacific region.

Having listened and discussed the reports made the participants have addressed to EC IFAS and GWP CACENA being Coordinators in Central Asia and Caucasus sub-region to support further steps within APWF, namely:

1. To submit materials provided by Regional Work Group (RWG) members to ICWC, ICSD members and other stakeholders. If it is required, WG members should submit necessary additional information to coordinators up to the end of May 2007;
2. Coordinators with participation of ICWC, ICSD and EC IFAS branches will generalize received materials into a single document and submit it to all stakeholders for making comments and amendments;
3. The final regional document should be submitted to all Central Asia and Caucasus Governments after approval with ICWC, ICSD and EC IFAS branches (up to September 2007);
4. According to work results a sub-regional document will be prepared and highlight information over countries in the context of three priority APWF themes. Based on it a summary will be developed and not exceed 20 pages.

Chairman, Regional Council, GWP CACENA
Acting Chairman, EC IFAS
APWF President Advisor

Nino Chkhobadze
Sulton Rakhimov
Hideaki Oda

THE 15th ECONOMIC AND ENVIRONMENTAL OSCE FORUM

(Prague, 21 – 23 May 2007)

The 15th Economic and Environmental Forum «Key challenges to ensure environmental security and sustainable development in the OSCE area: land degradation, silting, soil contamination and water management» was held in Prague in Czernin Palace – the Ministry of Foreign Affairs for Czechoslovakia among OSCE participating countries. A considerable group of participants from Central Asia, in particular two ICWC members – Minister for Water Resources of Tajikistan Mr. M.Ya. Khamidov, Director, Department for Water Resources of Kyrgyzstan Mr. B.T. Koshmatov, Deputy Minister for Environment of Kazakhstan Mr. A. Braliev, Director, Agency for the Aral Sea Projects, IFAS Mr. U.K. Buranov, the representatives from water management and environmental organizations for Turkmenistan, Tajikistan and Uzbekistan were invited to take part in the Forum.

The key reporters were the Minister M.Ya. Khamidov and prof. V.A. Dukhovny. The reports are available on web-site: CAWATER-info.net.

The Spanish Management for OSCE organized and presided at the Forum. OSCE Secretary General Mr. Marc Perrin de Brichambaut and OSCE Chairmen-in-Office, the Minister for Foreign Affairs (Spain), Mr. Miguel Angel Moratinos underlined the role of water management as a key priority in modern world and OSCE Spanish Initiative.

Kaj Barlund, Director for Environment, Housing and Land Management Division, UNECE, Geneva, focused on water security in Central Asia and European Commission contribution to capacity building for international cooperation on transboundary waters in Central Asia. At the same time there was pointed out an importance of new program for desertification control, including Central Asia.

Head, 1st session of the Forum «Environmental security», Mr. Tom Spencer, Ex-Chairman, Committee for Foreign Affairs, the European Parliament, today Vice-President, Institute for Environmental Security, Holland, concentrated at growing impact of climate change, its permanently progressing and extra-heavy consequences, possibility for great increase of unforeseen losses in future that related to fusion of polar caps, world ocean level increase. He pointed at strengthening climatic and hydrological forecasts and enhancing water cooperation as two main directions to mitigate these consequences.

Director, Department for Nature Use and Development, Italy, Mr. Corrado Clini had critical concern about how donors looked at discussed problems today and underlined abundant replications and parallelism and low effectiveness. At the same time he pointed at a significant role of Central Asia in regional and global security in future.

Director, Federal Agency for Water Resources, Russia, Mr. R.Z. Khamitov described the role of Russia in enhancing water cooperation and noticed that Russia implemented actively EURASEC direction, within which it was proposed to create Eurasian Water Center combining interests of all CIS states.

The second plenary session was dedicated to cooperation on transboundary rivers – the French experience for Rhine, our experience for the Aral Sea and cooperation between Spain and Portugal. The session reviewed also the experience on international use of

transboundary waters in such scarce region as Middle East and listened the representatives from Palestine, Israel and Jordan. A special attention was paid to importance of information transparency between partners of such cooperation and strict correspondence to Aarhus Conference.

That day a special event “Evaluation of environmental aspects in Central Asia and possible follow-ups” took place. U.K. Buranov (the Uzbek Agency, IFAS) told about measures taken by Uzbekistan to improve natural environment in Priaralie (establishment of systems of small water bodies, afforestation, delta rehabilitation). The Minister M.Ya. Khamidov supported him and proposed to approve the appeal of meeting participants to advanced governments to assist in addressing environmental problems in Priaralie. Brailov (Kazakhstan) stated an extended program for eliminating bad consequences after past environmental disasters.

There was informed that Director General for Environment, EU, allocated half a billion dollars to Central Asian region.

Land degradation and soil contamination problems were discussed at 5th Forum Session. Grigory Kalbermatshen, Deputy Secretary, UN, Convention on desertification control, informed that Central Asia was a main point in Convention and that decision to create a Special Center for Desertification Control in Central Asia was made.

During the final session Head, Federal Agency for Water Resources, Russia, proposed that OSCE would concentrate its efforts at disasters control and elimination of their consequences, not replicating other programs. «Russia is willing to take the responsibility to assist Central Asian countries in addressing water problems».

During the Forum a number of meetings were held between Central Asian delegations and donors. In particular, understanding on developing cooperation program between ICWC and the Israeli water management organization was achieved with Israel MFA representatives and it was planned to carry out a number of measures. At the end of October – the beginning of November ICWC members will attend WATEC exhibition in Tel-Aviv by the invitation of the Israeli Government and be acquainted with achievements for the Israeli water sector. A number of trainings will be conducted and it is planned to hold some program meetings.

OSCE Management is planned to assist ICWC in developing training activity.

IMPROVEMENT OF WATER RESOURCES MANAGEMENT AT WUA LEVEL

WUA activity under «IWRM – Fergana» project held workshops on the subject “Improvement of water resources management at WUA level” from 11 to 19 of April at four points of Fergana Valley.

Workshops were held:

From 11 to 12 April – in Proletarsk, Sogd province, where 42 local representatives of WUAs and WMOs took part;

From 13 to 14 April – in TC, Fergana, where 77 local representatives of WUAs and WMOs took part;

From 16 to 17 April – in TC, Andijan, where 53 local representatives of WUAs and WMOs took part;

From 18 to 19 April – in TC, Osh, where 40 local representatives of WUAs and WMOs took part.

WUA activity Leader under “IWRM-Fergana” project, the candidate of economic sciences, **M.A. Pinkhasov** made the report «Ways for addressing water disputes in WUA».

He dwelled on nature and reasons of origin of water conflicts and disputes. In particular, he marked out that conflicts and disputes between water users within WUA, between WUAs and water users, between WUAs and WMOs can be resulted from: non-fulfillment of agreement terms between water users and WUA regarding water supply based on dates and volumes and rendering other services, including land reclamation services provided by WUAs; non-implementation of agreement terms between WMOs and WUAs, violation of established order for water supply by WUA member (unauthorized water withdrawal, increase of water withdraw points, regulation of waterworks, making temporal dams in canals, pumping units, well-boring for water, etc.), deterioration of land state due to inactivity or insufficient measures related to operation of irrigation and drainage systems, violation of WUA Statute, etc.

Disputes and conflicts between WUA members and WUAs, between WUAs and WMOs can be reviewed according to acting legal acts in Arbitration Board of WUA, Arbitration Board of Canal Water Committee, courts of aksakals (being organized under local bodies – khukumat, khokimiyat, aiyl akmat) and in WUA regulating body under MAWR (for the time present this body has been created under MAWR of the Kyrgyz Republic).

The reporter dwelled on proactive measures for preventing water conflicts and disputes.

He concentrated on recommended mechanisms for addressing disputes and conflicts and underlined that when using them, court examination could be avoided. They will provide a quick review and are low-cost ones when applying to juridical bodies.

Project consultant on hydrometry **R. R. Masumov** present the report «Necessity of accounting all water resources in WUA».

He marked out that under IWRM conditions use of the following water resources should be foreseen, including:

- ones delivered from irrigation canals;
- Natural sources, which are available within WUA territory – springs, sais;
- Artesian wells and wells of vertical drainage;
- Return water being supplied as waste water from upper lands;
- Collector-drainage water.

The reporter gave examples on collector-drainage water use (CDW) as «reserve» for crop irrigation taking into account its mineralization.

The reporter demonstrated the table with gradation of mineralization degree and content of toxic elements in CDW. He lightened the ways for reducing mineralization degree and respectively safe CDW use for irrigation.

The reporter recommended fixed channel of asymmetric section and treble gauging orifice as water accounting facilities under conditions of large water discharge in collectors.

Facts on water accounting in artesian wells and wells of vertical drainage with the help of ultrasonic, induction, electromagnetic and partial flowmeters were given in the report. He recommended metering well discharge in canal outlets using water weirs and SANIIRI flumes as alternative for these facilities.

Separately he dwelled on water accounting issues for water users groups (WUG). He recommended standard gauging facilities (weirs, flumes, thresholds, etc.) as water measuring facilities for water accounting in WUG.

A special attention was paid to construction, operation and attestation of water measuring facilities. In particular, he provided examples for practical production of SANIIRI flumes under field conditions and their forming on-site using collapsible metallic forms and applying the simplest improvised means («building level», water hose) when mounting and installing gauging rods, weir bulkheads and flumes.

The reporter lightened flow velocity metering. In particular, he reviewed all modern constructions for flow velocity metering (including hydrodynamic flow velocity meters produced at the expense of the project) and today condition of these facilities in Central Asian Region.

In order to gain discharge characteristics for gauging stations like fixed channel (FC), in particular, parabolic flumes «LP» the reporter described the methodology for calibration and elaboration of discharge schedule $Q=f(H)$.

In conclusion the reporter acquainted listeners with available manuals, guidelines on water accounting facilities developed in SIC ICWC.

WUA Activity Assistant **Alimdjanov A.** made two reports: «Practiced methodology on developing water use plan at WUA level» and «Need to transfer from decade water use planning to daily one in WUA».

As for the first report he noted that WUA specialists confronted with objectives on assuring:

- rational and economic water resources use by water users in WUA;
- guaranteed and equitable water distribution between water users in accordance with prepared normative documents (crop irrigation schedule);

- free access to information on water allocation between water users;
- reduction of non-productive water losses in WUA irrigation network.

The reporter lightened the main principles of practiced methodology on water use planning at WUA level as well as presented the list of required information for drafting water use plans.

During practical training Alimdzhhanov A. and the technician on water distribution Muradov E. proposed to make up water use plan for WUA canal to the workshop participants according to practiced methodology on decade water use planning in WUA.

Workshop participants made sure in practice that water use plan prepared according to practiced methodology on water use planning had the following drawbacks:

- it was impossible to supply water with daily discharge 0,25-1,5 l/s to outlet of water users with irrigated area 1 ha;
- it was not effective to supply water to outlets of water users by current flow with low average-decade discharges (1 l/s per 1 ha, 3 l/s per 5 ha) and it was impossible to irrigate in effective manner, to apply mineral fertilizers before irrigation and to till land after irrigation;
- WUA hydrometer workload was increased, since all canal water users should take water at one time;
- non-productive water losses were increased due to permanent operation of WUA irrigation network.

Application of existing methodology on water use planning in WUA brought to chaos when distributing water in WUA. WUA workers, who prepared water use plan for WUA, did not know whom, when and what water volume should be supplied.

Decade water use plan lost its water distributing function under new conditions and left only quantitative water demand of water users.

Decrease of irrigated areas of new water users impacted sufficiently on water use in WUA.

Alimdzhhanov A. proposed to make up daily water use plan.

Total water requirement for WUA canals was equal in both water use plans prepared by workshop listeners. But, only water use plan elaborated according to daily water use plan met all water user requirements regarding:

- rational and economic water resources use by water users in WUA;
- guaranteed and equitable water distribution between water users in accordance with prepared normative documents (crop irrigation schedule);
- free access to information on water allocation between water users;
- reduction of non-productive water losses in WUA irrigation network.

Provincial executor on WUA activity for Fergana and Andijan provinces of the Republic of Uzbekistan **Khalikov A.** made the report «Expanding WUA «Akbarabad» experience to created WUAs along SFC».

The reporter dwelled on mechanism for expanding pilot WUA experience in various activity directions to newly created WUAs along SFC.

He underlined that 6 mobilizers were trained to expand: 4 persons – for Fergana province and 2 mobilizers – for Andijan province. When expanding the principle «domino» is used. Colleagues from regional team train WUA mobilizers and the last ones for their turn train WUA workers in their district. In each district mobilizer is responsible for one base demonstration canal, by the example of which he shows other WUA workers how to:

- make daily water distribution in WUA;
- monitor over water use in WUA;
- make up plan of repair and reconstruction works in WUA canals.

Besides, mobilizer demonstrates to other WUA workers by the example of selected WUA how to:

- make up business-plan for WUA;
- address organizational, legal and structural problems in WUA for its sustainable functioning.

Mobilizer in each district WUA and by the example of one demonstration WUA canal provides consultations on water use and other directions of WUA activity for WUA workers in his district.

According to monthly results a mobilizer provides the outcomes of monthly water distribution between water users of base demonstration canal in selected WUA and submits analysis data to the regional team of Project WUA activity.

5 technicians – specialists on land reclamation take part in addressing WUA land reclamation problems with the help of consultants – specialists on land reclamation of the project.

Provincial executor on WUA activity for Sogd province of the Republic of Tajikistan **Mukhitdinov Kh.E.** also made the report «Expanding WUA «Zarafshan» experience to created WUAs along KhBC», where he dwelled on the mechanism for expanding pilot WUA «Zarafshan» experience in various activity directions to newly created WUAs along KhBC.

WORK MEETING WITHIN THE FRAMEWORK OF THE ASIAN DEVELOPMENT BANK RETA 6163: «IMPROVED MANAGEMENT OF SHARED WATER RESOURCES IN CENTRAL ASIA»

A work meeting of thematic subgroups on development of rules for fulfillment of procedural obligations and recommendations for improvement of the rules for regulation and management of water and energy (“water-energy” at the suggestion of Kyrgyz and Tajik NWGs) resources in the Syrdarya river basin (hereinafter “thematic subgroup 1”), and revision of the draft Agreement on Strengthening the Organizational Framework for Management, Protection and Development of Water Resources in Transboundary Water Bodies (hereinafter “thematic subgroup 4”) was held on 30-31 May 2007 in Tashkent within the framework of ADB RETA 6163 “Improved Management of Shared Water Resources in Central Asia”.

Members of thematic subgroups and RWG and NWG leaders for the Republic of Kazakhstan, the Kyrgyz Republic and the Republic of Tajikistan took part in the meeting. The participants were acquainted with assignment of Zairov A.M. as the Tajik NWG Leader and changes in WG staff. Prof. V.A. Dukhovny informed about work progress after Project Work Meeting and ICWC Meeting held in Almaty on 25-26 April 2007.

According to the 47th ICWC Meeting decision a new draft Agreement about water and energy resources use in the Syrdarya river basin was in general approved and should be signed through polling during the month. Chairman, Committee for Water Resources, Kazakhstan, Ryabtsev A.D. and Deputy Minister, Head, Central Administration for Water Resources, Uzbekistan, Khamraev Sh.R. signed the provided Agreement.

According to approved 46th ICWC Meeting decision there was delay regarding positions 2 and 3 at Work Schedule. Positions 7 and 8 are not still started. The meeting participants are addressing to leaders of thematic sub-groups to brisk up activities of sub-groups.

The participants request the Tajik NWG Leader to assign representatives from the Tajik NWG for thematic sub-groups up to 15 June 2007, especially a leader of sub-group on development and approval of detailed methodical recommendations for accounting of total basin discharges, data collection and evaluation of actual damages after water resources use schedules (thematic sub-group № 3). It is planned to conduct the first meeting of thematic sub-group at the beginning of July 2007.

As for thematic sub-group № 1 sub-group member for the Kyrgyz NWG and RWG provided detailed proposals. Members of thematic sub-group № 1 discussed proposals provided and prepared a separate protocol. It is proposed to prolong implementation of positions 2 and 3 up to 15 July 2007.

NWG representatives for Kyrgyzstan, Tajikistan and Uzbekistan provided written comments to draft «Provision on ICWC». According to 47th ICWC Meeting decision a draft was discussed in linkage with draft Agreement «Strengthening the Organizational Framework for Management, Protection and Rational Use of Water Resources in Transboundary Water Bodies (interstate sources) in the Aral Sea basin» (Version 1/2007, April

2007). On May 1, 2007 only the Uzbek NWG provided written comments for draft Agreement submitted to all ICWC members and executors.

On May 30, 2007 draft «Provision on ICWC» was discussed. Amendments and issues to be approved that made during the discussion were given in a new draft «Provision on ICWC» attached to the given protocol.

Draft Agreement on organizational framework was discussed up to paragraph 6 inclusive (Version 2/2007, May, Tashkent) according to comments provided earlier to draft Agreement 2003 by Kyrgyzstan and Tajikistan. Kyrgyzstan thought that such comments were not taken into account. The Uzbek NWG thought written amendments made № 04/96-237 of 07.05.07 were not discussed. A decision was made that proposals of NWG for Uzbekistan would be reviewed.

As the representatives from the Uzbek NWG and the Kyrgyz one think that all NWGs should provide their comments, the activity for this Agreement has been stopped until views given by various countries can be compared. Both representatives see that it is required to complete development of draft Agreement and after that to initiate refinement of Provision.

NWGs will submit their comments and proposals to discussed documents up to 20 June 2007. NWG representatives were requested to agree amendments made with ICWC members in order to achieve consensus. Then a decision to conduct regular meeting of sub-group will be made.

The Parties, excepting Kazakhstan, should pay attention to the fact that it is required to speed up making response to SIC ICWC letter №154 of 17.05.2007 regarding suggestion to continue activities for 2008-2010.

COMPONENT «TRANSBOUNDARY SMALL RIVERS» UNDER IWRM-FERGANA PROJECT

As it is well known, the Scientific Information Center (SIC) of the Interstate Commission for Water Coordination (ICWC) of Central Asia in collaboration with the International Water Management Institute (IWMI-Tashkent) are implementing the Project «Integrated Water Resources Management in Fergana Valley» («IWRM-Fergana») within three republics – Kyrgyzstan, Tajikistan, Uzbekistan. At the present time the Project Phase III is being realized and will be completed in April 2008. The activities were conducted within 4 components till 2007:

1. Pilot canals (PC),
2. Water Users Association (WUA),
3. Farms,
4. National Coordination and Support Group (NCSG).

In 2005-2006 SIC ICWC of Central Asia jointly with IWMI and the Swiss Agency for Development and Cooperation (SDC) reviewed the need to include a new Component “Transboundary Small Rivers” (TSR) into the project in order to study TSR water resources management problems in Fergana Valley in «IWRM-Fergana» Project area. It was approved by SDC and started in January 2007.

During years of independence a major attention and attempts of the Central Asian Governments and of international organizations were focused on addressing water resources management problems in the largest rivers in the region such as Amudarya and Syrdarya. At the same time sustainable TSR water resources management in Central Asia is of the same importance. In particular, today the interstate water resources management for Amudarya and Syrdarya is considerably well-ordered but it can not be said so about TSR water resources use. The problem of equitable TSR water resources management in Central Asia exists in Fergana Valley (between Tajikistan and Uzbekistan, Kyrgyzstan and Uzbekistan, Kyrgyzstan and Tajikistan), in Tashkent oasis (between Kazakhstan and Uzbekistan), Kopedag zone (between Turkmenistan and Iran, Turkmenistan and Afghanistan). TSR water resources management problem is particularly acute in border areas of neighboring countries in Fergana Valley, where problem addressing affects local communities from border regions in Kyrgyzstan, Tajikistan and Uzbekistan. The interstate water allocation volumes for TSR in Fergana Valley were determined and approved by Parties in 1980s through respective Protocols of the Ministry for Water Resources and Land Reclamation of USSR in centralized way. TSR water resources management became more difficult during last decade due to population growth and new land development in small river upstream. Sometimes the earlier achieved agreements on TSR water resources use are not observed and water allocation situation becomes complicated during dry years. In general breach of the established interstate water allocation in TSR results in intensification of social tension in border areas located in TSR basins and can be easily transformed into international conflicts.

In this context, SDC support for TSR water resources management in Fergana Valley within the Project «IWRM-Fergana» is recognized as timely and exceptionally important.

Efforts on introduction of IWRM principles in the project area would be mocked if trans-boundary aspects of IWRM are not studied in Fergana Valley. Component "TSR" will contribute to achieve the overall objective of Project "IWRM-Fergana" through working out legal, organizational, financial, technical and other aspects of water resources management with involving stakeholders and the wide public from border regions of neighboring countries into this process.

The introductory workshop was held in SIC ICWC Training Center on 30-31 May 2007 in order to discuss Work Plan for component «TSR» and to develop general approaches to component implementation.

The workshop organizers were SIC ICWC of Central Asia and IWMI. Chairman was Deputy Director, SIC ICWC of Central Asia, Regional Coordinator for Project «IWRM-Fergana» V. Sokolov.

Workshop participants: Direction (V. Sokolov), regional office-manager (A.Galustyan), NCSG Coordinators for Kyrgyzstan (N.Mamataliev) and Uzbekistan (U.Azimov), Assistant of Head, Central Administration of Water Resources under MAWR, Uzbekistan (I.Ernazarov), Component Leaders (M.Pinkhasov, N.Mirzaev, Yu.Rysbekov) and other Project executors (I.Ruziev, R.Masumov and others), directors of provincial and district water management organizations (A.Zholdoshev, A.Yuldoshev – Kyrgyzstan, Kh.Khodzhiev, A.Abdusaminov – Tajikistan, M.Makhsudov – Uzbekistan), division Head, scientific-production association (NGO) SANIIRI (M.Horst), non-governmental non-commercial organizations «Ziyonur» (Z.Akhunova, Uzbekistan) and «Association of scientific and technical intelligentsia» (F.Tyuraev, Tajikistan), IWMI colleagues (N.Nizamedinkhodzhaeva, J.Kazbekov, B.Mirzaev, K.Djumabaev, A.Tashmatov, O.Anarbekov).

In general about 30 specialists interested in successful implementation of “TSR” component under “IWRM-Fergana” Project took part in the workshop.

The final objective for component «TSR» is to provide sustainable TSR water resources management in Fergana Valley based on IWRM principles. At the initial stage work scope for the component will be restricted to the results really achievable during January 2007 – April 2008, so SDC proposed to confine intervention within 2 pilot TSRs in "IWRM-Fergana" Project area – TSR Shakhimardan (Kyrgyzstan/Uzbekistan) and TSR Khodjabakirgan (Kyrgyzstan/Tajikistan).

The following reports were made:

1. «Principal results for Project «IWRM-Fergana», 2006-2007» (the report of prof. V.Dukhovny was presented by Regional Project Manager, candidate of geographical science, V.Sokolov). The key project results and problems to be resolved in 2007 for the first two years of Phase III were reflected in the report.
2. Component «Transboundary Small Rivers» under Project «IWRM-Fergana» (idea, tasks, measures, action plan for the period till April 2008 and future outlook). In general the workshop participants were acquainted with the history of project development, objectives, tasks and planned measures for component «TSR».

Then Work Plan for component “TSR” was discussed. The discussion was lead by Component Leader Yu.Rysbekov.

The participants discussed the issues according to principal objectives and planned measures within Work Plan for component «TSR»:

Objective A: «Studying water allocation status and preparing legal frameworks for TSR Shakhirmardan and Khodjabakirgan water allocation». Planned measures:

- Analyzing water allocation status;
- Assessing the status of river and irrigation infrastructure in border regions and determining work scope to improve it;
- Studying legal aspects of interstate distribution of TSR water resources in IWRM-Fergana Project area;
- Developing the principal provisions on IWRM introduction in TSR basins.

Objective B: «Preparing conditions for creating organizational structures on TSR Shakhimardan and Khodjabakirgan water resources management». Planned measures:

- Mobilizing key stakeholders to support proposals on improvement of TSR water resources management (Shakhimardan and Khodjabakirgan);
- Organizing and holding roundtables and consultations to develop a concerted view on TSR water allocation;
- Developing proposals for establishing River Commissions on TSR water resources sharing;
- Developing draft Provision on River Commission and draft Agreement on general principles of TSR water resources sharing (Shakhimardan and Khodjabakirgan).

Objective C: "«Capacity building of main coordination commissions and monitoring the process». Planned measures:

- Conducting trainings, working meetings and roundtables for key stakeholders;
- Discussing proposals on IWRM experience adaptation in selected TSR basins with key stakeholders;
- Creating database and information system;
- Raising awareness and disseminating experience.

When discussing the participants replied on SIC ICWC questionnaire regarding Work Plan for component «TSR». In particular:

- the participants marked out importance and timeliness to implement component «TSR», sufficiency of workshops and trainings for the first year, the need to conduct a final (trilateral) workshop widely with invitation of key stakeholders from three «IWRM-Fergana» Project states;

- As a whole the participants named the following key stakeholders (for large-scale blocks): local bodies and authorities, water and environment bodies, water users including domestic sector, departments for emergencies, local communities, industry and others (mass media, NGO). As an original and a very true reply should be considered the one (NGO «Ziyonur»), where project executors were named among key stakeholders. As a rule this fact was left behind;
- The principal priorities are equitable water allocation at low level, ecology, drinking water supply, mudflow control measures, TSR flow regulation (construction of mudflow catchments, minor hydropower development), technical provision of gauging stations of trans-boundary meaning, creation of database and information system, monitoring including social one;
- River Commission to be created for TSR water resources sharing will be composed of representatives from water and environment bodies, main water users, the public, boundary and customs services in adjacent districts, other stakeholders, certain heavy water users according to object principle (industrial enterprise or army unit). In general they are also key target groups including owners of homestead lands;
- Question «Should boundary services be involved into negotiation process and when?» - almost all participants answered that this step was an obligatory condition for successful River Commission activity and it would be expedient to invite representatives of boundary services from two Parties to take part in current bilateral workshops and final trilateral one»;
- As for IWRM scope for TRS Shakhimardan and Khodjabakirgan basins it was rational to direct towards the above mentioned priorities, to study additionally the issue taking into account specificity for each basin and views of key stakeholders;
- The participants underlined that «Development of draft Agreements on TSR water allocation» was narrowed. The agreement should cover a wide spectrum of issues related to TSR water resources management (ecology, information exchange, databases, basin management, problems to be resolved by joint efforts, privileges to cross borders, etc.);
- The participants deemed it appropriate to unite a number of workshops and trainings of IWMI and SIC ICWC of Central Asia (in particular – regarding conflict addressing) to avoid replication and to save limited funds. To find additional finances it was proposed to conduct 1-2 target workshops for local communities from border districts of adjacent countries (Propaganda of Component ideas, awareness raising, water and sanitation and similar ones);
- As for TSR database creation the participants agreed with SANIIRI view that initially it should be restricted to minimal data scope required to implement “TSR” component objectives and further it would be expanded. The following data is priority and obligatory one to be introduced into DB: TSR flow for main gauging stations (over all observing years), its distribution between the Parties for 1980-2005 (normative and actual one), river and irrigation infrastructure, irrigated lands and main grown crops, flow formation zone state, key water users, mudflow and flood phenomena, population, lands available to be developed, perspective plans for developing border districts of the Parties within TSR Shakhimardan and Khodjabakirgan basins, etc.
- The participants marked out especially the importance of participation of the public and representatives from local communities not only in discussing process but when developing

draft Provisions on River Commissions and Agreements on TSR water resources management, which should include regulations on rights to take part in decision making and on access to any information affected their interests. In this context, it is reasonable to include a number of provisions from Aarhus Convention on «Access to information, public participation in decision making and access to justice related to environment» into draft Provisions on River Commissions and Agreements on pilot TSR.

«TSR» component executors prepared and disseminated additional analytical and reference materials among the workshop participants, in particular: «Reference on terminology (to draft regional Agreements)», «The Aral Sea Basin Program 2: legal block», «Regarding transboundary small rivers management in Fergana Valley» as well as materials for IWRM 2005 in Central Asia prepared by regional consultant for UNEP Program (M.Horst) – «Roadmaps for implementing IWRM aims...» in Kyrgyzstan, Tajikistan and Uzbekistan.

The participants noted that those materials could be very useful for understanding preparation process and when developing draft Agreements on TSR in Fergana Valley within planned “TSR” component activity. They also underlined that «TSR» component realization:

- fitted in a number of positions within «Roadmaps for implementing IWRM aims...»,
- would certainly contribute to implement a series of the Aral Sea Basin Program (ASBP) positions ("Program for concrete actions to improve ecological and social and economic situation in the Aral sea basin for 2003-2010") developed by IFAS EC, ICWC and ICSD in pursuance of commissions assigned by the Heads of Central Asia states and approved by IFAS Management Board Decision (2003r.), in particular:
 - position "Development of agreed mechanisms for complex water resources management in the Aral sea basin" (Name of Priority №1 ASBP-2);
 - position "Legal framework to realize integrated water resources management principles in form of portfolio of documents" (Priority №1);
 - position "Rules for water resources management in the Syrdarya river basin" ("Expected results" of the project 1.1 Priority №1), etc.,

In the part related to TSR water resources management in Fergana Valley since TSR water resources in Fergana Valley was a part of water resources in transboundary rivers in our region.

Exchange of views and discussion of Work Plan allowed specifying approaches to realize «TSR» component till the Project Phase III completion (April 2008). The participants underlined that to discuss Work Plan for implementing donor projects in details was a very rare event and not met practically. Open discussion of objectives and planned measures for the component will facilitate to provide transparency when realizing the component and meets spirit of time.

SIC ICWC Director, “IWRM-Fergana” Project Director, professor Dukhovny V.A. made a concluding speech.

INTEGRATED WATER RESOURCES MANAGEMENT IN CENTRAL ASIA

The fair «Integrated water resources management in Central Asia» was held **on September 08, 2007 in Osh (Kyrgyzstan)**. The fair organizers were the Swiss Agency for Development and Cooperation (SDC), Department for Water Resources under the Ministry for Agriculture, Water Resources and Processing Industry for the Kyrgyz Republic, the Ministry for Land Reclamation and Water Resources for Tajikistan, Central Administration for Water Resources under the Ministry for Agriculture and Water Resources of Uzbekistan, Project «Integrated Water Resources Management in Fergana Valley» («IWRM-FERGANA»), International Water Management Institute (IWMI-Tashkent), Scientific-Information Centre of Interstate Commission for Water Coordination (SIC ICWC) of Central Asia, Osh Administration, Osh Basin Administration for Water Resources (BAWR), Osh City Administration.

IWMI-Tashkent and SIC ICWC of Central Asia organized the workshop «Public participation as an important element in water resources management» (section 2) within the fair. The following persons took part in the workshop: key executors for «Pilot Canals» («PC») and "Transboundary Small Rivers" («TSR») components under «IWRM-FERGANA» Project from IWMI-Tashkent and SIC ICWC of Central Asia and other stakeholders, in particular – the representatives of water management organizations from border regions and provinces of Kyrgyzstan, Tajikistan and Uzbekistan: Osh and Batkent Basin Administrations for Water Resources; Sogd Administration for Water Resources; Fergana Valley Main Canal Administration with United Dispatcher Center; South-Fergana, Aravan-Ak-Bura and Khodjabakirgan Canals Management Organizations; Unions of SFC, AAC and KhBC Water Users; Uzgen, Lyaylyak, Kadamjay, Chon-Alay District Administrations for Water Resources; «Kuva khayoti» newspaper (editor); Center for Research Development under Bonn University (ZEF, Germany) and others. In whole 30 persons attended the workshop.

“PC” Component Leader Mirzaev N.N. elected by the workshop Chairman was responsible for coordinating section activities.

“PC” Component Leader Mirzaev N. characterized current situation related to public participation in water resources management within the project «IWRM-FERGANA». He dwelled on the key water resources management problems of public bodies in pilot AABC, KhBC and SFC created due to the project «IWRM-FERGANA» and possible ways to resolve them.

The core theme of speeches made for «PC» Component was that creation of public bodies on water resources management for pilot AABC, KhBC and SFC was an institutional innovation in organizational water resources management improvement at canal level. Support for the nearest 2-3 years is important in order UCWUs become as sustainable structures on water resources management. SDC and the government can provide such support. In particular, the Chairman (M.Sayfutdinova), Union of SFC WU, noted that decisions on SFC water allocation were made on collective basis; farmers thanked UCWU for fair attitude to the given issue. There was marked out that when specialists on hydropower faced to UCWU

activity in practice they addressed to UCWU with request to include them into Union of SFC WU, i.e. other economic sectors, which were receiving water from SFC but not directly involved into "IWRM-FERGANA" Project, aspired to UCWU membership.

Somewhat different approach was prevailed when discussing «TSR» Component. The speakers marked out the timeliness of component implementation and dwelled on trans-boundary aspects of public participation in TSR water resources management to mitigate conflict capacity in TSR water use in Fergana Valley.

The common view was about involvement of UCWU for pilot canals (AABC, KhBC, SFC) into pilot Shakhimardan and Khodjabakirgan TSR water resources management. Such will meet successful «TSR» component implementation and allow:

- contributing to introduction of one of the key IWRM principles (public participation) at interstate (transboundary) level of water resources management;
- minimizing conflicts at canal level through ensuring joint TSR (Shakhimardan and Khodjabakirgan) water resources management. Pilot KhBC and SFC take water from these TSRs;
- meeting the objective related to strengthening transboundary cooperation in Fergana Valley and keeping sustainability in border regions of adjacent countries, as a whole;
- living and working with duty executed feeling before local communities in border regions of adjacent countries (Kyrgyzstan-Tajikistan, Kyrgyzstan-Uzbekistan) having shared TSR through creating conflict-free dialogue in the light of management of vital resource such as water.

The single approach to introduction of IWRM principles in «IWRM-FERGANA» Project area can not be ensured without reviewing its transboundary aspects, in particular, introduction of basin water resources management principle (another key IWRM principle).

Transboundary River Commissions (TRC) for small rivers of Fergana Valley can be formed similarly as Unions of AABC, KhBC and SFC WU. It is obligatory to include public bodies on water resources management into TRC created within «IWRM-FERGANA» Project.

The participants underlined the need in close cooperation between "TSR", "PC" and "Water Users Association" components as an important element for successful component implementation. M.Sayfitdinova and A.Abdusaminov (Union of SFC WU), M.Makhsudov (Fergana Valley Main Canal Administration with United Dispatcher Center), R.Rustamov (SFC), Zh.Akzholova (WUA «Uvam»), A.Yuldoshev (Batkent BAWR), M.Alimov (AABC), Kh.Khodzhiev (Sogd Administration for Water Resources), M.Ergeshev (Noukat District Administration for Water Resources), F.Kodirov (Aravan District Administration for Water Resources), Zh.Polotbekov (Uzgen District Administration for Water Resources) and other took part in the discussion.

National Coordination and Support Group (NCSG) for Kyrgyzstan, IWMI-Tashkent and SIC ICWC conducted a **special workshop (round table) and work meeting for «TSR» Component on September 09, 2007** in Osh branch of SIC ICWC Training Center. The workshop participants were the directory (professor Dukhovny V.) and other «IWRM-FERGANA» Project executors from IWMI-Tashkent and SIC ICWC of Central Asia, the representatives of the Tajik (Sogd Administration for Water Resources, Union of KhBC WU), the Uzbek (Fergana Valley Main Canal Administration with United Dispatcher Cen-

ter) and the Kyrgyz (Osh and Batkent BAWR and district divisions) Parties and other stakeholders. In whole 29 persons attended the workshop.

SIC ICWC Director, professor Dukhovny V. presented the idea, strategic «TSR» Component aims and main directions for further activity. He underlined that time remaining up to Project Phase III completion should be used in the most effective way to realize priority «TSR» Component objectives, in particular, to organize dialogue between the key stakeholders at transboundary level. This process should be irreversible. The ultimate aims should be international legalization of TSR water resources sharing since social sustainability in border regions as well as interstate and international relationships depend on sustainable TSR water resources management in Fergana Valley. The speaker also noted that successful «TSR» Component implementation would allow ensuring «IWRM-FERGANA» Project integrity in the part of application of basin approach through introducing interstate (higher) water resources management level.

D-r G.Stulina covered gender equality theme. She emphasized that lack of gender aspects in TSR water resources management within Component documentation was an omission. D-r G. Stulina suggested taking into account gender aspects when preparing project proposal for future including assurance of women representation in TSR Basin Commission to be created.

«TSR» Component Leader for «IWRM-FERGANA» Project (D-r Yu.Rysbekov) emphasized to revise the previous international legal framework for TSR water resources management in Fergana Valley or to create a new one. The participants were acquainted with key provisions of the agreements on transboundary water resources sharing concluded between Central Asia countries (Tashkent Statement of 1991, Alma-Ata Agreement of 1992, Kzyl-Orda Agreement of 1993, Agreement on the Syrdarya River Basin of 1998, Agreement on Chu and Talas River Basins of 2000 and others) as well as with the European approaches to transboundary river water resources management by the example of the provisions within ECE Helsinki Convention of 1992.

The participants recognized river basin as coordination unit for various bodies involved into water management, consultations at the instance of any Party, joint research and development activities in the light of environmental restrictions, elaboration of joint monitoring and evaluation programs, contribution to information exchange for different transboundary water resources management aspects including planned measures, assurance to aware the public and other Helsinki Convention provisions as the most acceptable ones for taking as a basis when preparing draft Agreements on Shakhimardan and Khodjabakirgan TSRs and on TSRs in Fergana Valley in future.

The participants recommended the European approaches to transboundary river basin water resources management as required ones for being discussed and as rational ones for being included into draft Agreements on Shakhimardan and Khodjabakirgan TSRs taking into account local specificity and provided that achieving consensus between the Parties.

The Director, the Kyrgyz Branch of SIC ICWC (Mamataliev N.), underlined the importance of developing international legal framework for joint TSR water resources management to improve water resources management not only at transboundary level but at national one, in particular, at canal level. The reporter emphasized that the given workshop was a training one and that such workshops should be held with key stakeholders who would be involved into negotiation process on pilot TSR water resources management.

«TSR» Component Leader Assistant for «IWRM-FERGANA» Project (B.Tillaev) marked out a special importance and usefulness to conduct target trainings for key stakeholders, in particular, trainings on international legal aspects of transboundary river water resources management including small rivers. It was noted that if negotiation process participants had subject knowledge then it would be easier to achieve consensus and if they had no such knowledge then usually emotions would prevail to the prejudice of constructive discussion of existing problems.

J.Kazbekov (IWMI-Tashkent) spoke about achieving the dialogue between local communities from border regions through organizing joint measures – trainings, experience exchange, unofficial meetings in order to create natural dialogue climate (such widespread popular «gaps»).

A.Yuldoshev (Batkent Basin Administration for Water Resources) dwelled on water accounting and exchange of hydrologic information for Khodjabakirgan TSR among Kyrgyzstan and Tajikistan. At the present time these issues are not coordinated by joint efforts.

The reports reflected different aspects of TSR water resources management in Fergana Valley:

- O.Anarbekov (IWMI-Tashkent): social mobilization on unofficial basis;
- K.Mosin (IWMI-Tashkent): importance of component information dissemination through mass media as an element to involve the public into TSR water resources management;
- Zh.Bekboev (civil-engineer for Osh province, «Onfarm irrigation» Project): co-financing need for constructing water structures of transboundary meaning.

The participants recognized that there was need to expand «TSR» Component within the whole Fergana Valley in future. Such was reflected in the speeches made by T.Akmatov (Osh Basin Administration for Water Resources), N.Mamataliev (SIC ICWC, the Kyrgyz Branch) and others.

Academician B.Toktoraliyev (Pro-rector, Osh Technical University, Kyrgyzstan), Doctor Herat Manthritilake (Director, IWMI-Tashkent), M.Asatov (Head, Batkent Basin Administration for Water Resources, Kyrgyzstan), A.Khamidov (Deputy Head, Sogd Administration for Water Resources, Tajikistan), A.Abdusaminov (Chairman, Union of KhBC WU, Tajikistan), M.Sayfitdinova (Chairman, Union of SFC WU, Uzbekistan), R.Rustamov (Head, SFC, Uzbekistan), M.Askarov (Acting Head, Osh Basin Administration for Water Resources, Kyrgyzstan), M.Makhsudov (Deputy Head, Fergana Valley Main Canal Administration with United Dispatcher Center, Uzbekistan), M.Mavlyanov (Head, AABC Management Organization, Kyrgyzstan) and other participants emphasized the strategic significance of «TSR» Component expansion within the whole Fergana Valley for the sake of peace and security during «IWRM in Central Asia» Fair and informal meetings.

IWMI-Tashkent, SIC ICWC of Central Asia and NCSG for Kyrgyzstan organized trilateral work meeting devoted to «TSR» component (09.09.2007, Osh). There were discussed cooperation and coordination of «TSR» Component between IWMI-Tashkent (J.Kazbekov) and SIC ICWC of Central Asia (Yu.Rysbekov) as well as among «TSR» Component and the Kyrgyz NCSG (N.Mamataliev) within «IWRM-FERGANA» Project and joint measures in Kyrgyzstan.

One of the main lessons gained from the workshops, round table and work meetings held in Osh was recognition of usefulness of joint actions regarding planned measures within «IWRM-Fergana» Project components. These actions have «crossing» positions.

«IWRM-Fergana» Project Phase III will be finished in six months. Joint horizontal (Central Water Agencies of Fergana Valley countries, IWMI-Tashkent and SIC ICWC of Central Asia) and vertical actions (Project components) are very useful, since all such actions have the one goal “IWRM for sustainable development”.

Unity of «IWRM-Fergana» Project components (joint actions and efforts) in the part of overall Project objectives will also facilitate to avoid replication for similar positions within General Work Plan and to understand project complexity as a whole.

CENTRAL ASIA REGIONAL WATER INFORMATION BASE (CAREWIB)

A Regional Workshop under the ‘Central Asia Regional Water Information Base (CAREWIB)’ Project was held in Tashkent on 25-26 September 2007 with the sponsorship of the Swiss Agency for Development and Cooperation (SDC). The aim of this workshop was to present the CAWater-Info Portal and CAREWIB Information System created during Phase 1 and train to establish national information systems and apply the CAREWIB Regional Information System in daily activities.

The workshop brought together representatives from the stakeholders of the CAWater-Info Portal and CAREWIB Information System, the executors and donor of the CAREWIB Project:

For the Republic of Kazakhstan

Committee for Water Resources (CWR) at the Ministry of Agriculture (MA) of Kazakhstan
AO KEGOC

Kazakh Institute of Strategic Research (KISR) at the President of Kazakhstan

For the Kyrgyz Republic

Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI)

of the Kyrgyz Republic

SIC ICWC Kyrgyz Office

For the Republic of Tajikistan

Ministry of Land Reclamation and Water Resources (MLRWR) of Tajikistan

Institute TajikNIIGiM

Institute of Water Problems, Hydropower and Environment (IWPHE) at the Academy of Sciences (AS) of Tajikistan

SIC ICWC Tajik Office

For Turkmenistan

Ministry of Water Resources (MWR) of Turkmenistan

For the Republic of Uzbekistan

Ministry of Agriculture and Water Resources (MAWR) of Uzbekistan

Center for Socio-Economic Studies (CSES)

State Water Inspection

For the Russian Federation

FGUP “Center for Register and Cadaster” (CRC) at the Russian Water Agency

Regional organizations

SIC ICWC

BWO Amudarya

BWO Syrdarya

IFAS GEF Agency

International organizations

Swiss Agency for Development and Cooperation

NGO

“Logos”

Director of SIC ICWC Prof. V.A. Dukhovny and SDC Consultant J. Kraehenbuehl opened the workshop and welcomed the participants.

At the workshop, key staff members of the CAREWIB Project made presentations on the application of the CAWater-Info Portal, CAREWIB Information System, including its analytical capabilities, application of Geographic Information Systems (GIS) in water resources management, methods for establishment of databases. A practical training was organized for the participants to reinforce skills to establish databases and conduct operations with data. A number of instructional guidelines and special questionnaires were prepared and published for the workshop:

- Guidelines for use of the CAWater-Info portal in daily practice
- Guidelines for use of the Regional Information System of the Aral Sea basin countries
- Instructional guidelines for establishment of water information system at national level

According to the draft Agreement on the Formation and Functioning of National, Basin and Regional Databases on Integrated Use and Protection of Water Resources in the Aral Sea Basin approved by ICWC members at the 44th ICWC meeting (30-31 March 2006, Ashghabat), the significant way for supporting the CAREWIB Project is to enhance the access to information on water resources, water sector and environment in Central Asia at regional, basin and national levels through initiating formation of national information systems inter-linked to regional, basin and national databases. The CAREWIB Project will develop a common methodical basis for national information systems of all Central Asian countries by joint efforts of SIC and ICWC members.

The Decision made by the Interstate Commission for Water Coordination in Central Asia (minutes of 46th ICWC meeting, 8-10 March 2007, Ashghabat) serves as a basis for establishment of national databases as well.

The water ministries of the countries will be beneficiaries of the expected national databases. They will also conduct maintenance of national databases.

SIC will deliver specially purchased hardware, necessary software, methodology for database maintenance, model interface and available database on each country to developers of each national database, and will provide support in form of series of training workshops and consultations.

All the participants of the workshop noted that there is undoubtedly a need for further development of information exchange in the region and adoption of information systems not only in the water ministries and province water management organizations, but also at lower level, i.e. district water management organizations and WUAs. The application of national information systems will enable to improve the procedure of water use planning in quality and perform the procedures of water resources use planning and control up to date.

Following the presentations and discussion, the participants expressed the following opinions:

For the Republic of Kazakhstan:

- To build a national database, it is necessary to use official data from territorial and other authorities, which will be responsible for information reliability. Information on water resources use for provinces located in the Aral Sea basin will be provided by RGP “Yugvodkhoz” and Aral-Syrdarya BWA.
- The national database will be used to plan water withdrawal limits, operation modes of reservoirs, and to account water supply to the Aral Sea, water resources consumption.

For the Kyrgyz Republic:

- In future, it is necessary to include Chui, Issyk-Kul and Talas provinces in the model national database prepared by a group of developers at SIC ICWC.
- Osh and Batkent provinces should be divided in the prepared model national database.
- A request should be made to the leadership of the Water Department (WD) at MAWRPI of the Kyrgyz Republic for establishing a working group composed of representatives from WD (6-10 people) to perform items 1, 2.
- The national database should cover the following water hierarchy levels: State – Province – District.
- Only one man should be charged with data input.
- Province water management organizations should serve as a source of primary data for the national database.
- It is advisable to foresee an option of water source supplies forecasting in the database in future.
- Information from the database is necessary for solving tasks to forecast and make up the current and prospective water use and irrigation plans as well as for solving the present problems in the agriculture of the country.
- It is necessary to seek for cooperation with the National Hydromet Center, OAO “Elektricheskiye stantsii” (Electric stations), State Agency for Nature Conservation and State Statistic Committee to receive data from them for the national database.
- Feedback between information supplier and recipient is very important.

For the Republic of Tajikistan:

- The national database will be used for water resources management, planning and forecasting and preparation of materials for decision makers.
- The national database will only be augmented with data from sources having government status (ministries, departments). The reliability of data will be estimated through calibration (known underestimated and overestimated values shall be discarded), and balance method will be used.
- The structure of all tables should be common for Tajikistan as a whole in order to further use at lower water hierarchy levels.
- It is necessary to add the following parameters: natural objects – morphology, genesis, regime; man-made objects – technical parameters, operation regime, and external impacts.
- The access to the national database should be limited: decision makers; heads of departments and divisions of ministries; managers of irrigation systems; managers of water use divisions at province and district water management organizations; chairmen of

Water User Associations, Dekhkan Farms Associations, research officers of research organizations, senior engineers of design organizations.

For Turkmenistan:

- The national database will be used for sustainable water management in the country.
- The national database will be augmented with data provided by national statistical agencies.
- The access to the national database will not be limited.

For the Republic of Uzbekistan:

- Information sources for the national database will be: Water Department of the Ministry of Agriculture and Water Resources of Uzbekistan, Basin Water Administrations, State Committee for Forecasting and Statistics, State Committee for Nature Conservation, Uzzemgeokadastr, Hydromet, State Water Inspection, State Company “Uzenergo”. Information will be gathered under agreement between the parties.
- It is advisable to include the following components in the model national database prepared by a group of developers at SIC ICWC: unit water use per ha; water productivity per agricultural produce unit; basic technical indicators of hydraulic structures (planned, actual); areas of land recultivation (planned and actual).

All the participants expressed sincere gratitude to the workshop organizers: SIC ICWC and workshop sponsor SDC.

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