Interstate **C**ommission for **W**ater **C**oordination of Central Asia	BULLETIN № 1 (51)	April 2009

CONTENT

MINUTES OF 52ND 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

December 5, 2008 **City of Ashgabat**

Participants:

ICWC Members:

Ryabtsev Anatoly Dmitriyevich	Chairman of Committee for Water Resources Ministry of Agriculture Republic of Kazakhstan
Koshmatov Baratali Turanovich	Director General of Water Resources Department at the Ministry of Agriculture and Water Resources and Processing Industry Kyrgyz Republic
Yokubzod Saidi	Minister of Land Reclamation and Water Resources Republic of Tajikistan
Khamrayev Shavkat Rakhimovich	Deputy Minister, Head of Central Water Administration at the Ministry of Agriculture and Water Resources Republic of Uzbekistan

ICWC Executive agencies:

Umarov Pulatkhon Djakhanovich	Deputy director of SIC ICWC, head of ICWC Training Center
Kidirniyazov Burkitbay Tajiniyazovich	Acting head of BWO «Amudarya»
Khamidov Makhmud Khamidovich	Head of BWO «Syrdarya»

Invited:

Kipshakbayev Nariman	Director Kazakh branch of SIC ICWC
Seysenov Sembay	Head of PWR «Yugvodkhoz» Committee for Water Resources at the Ministry of Agriculture

	Republic of Kazakhstan
Sheraliyev Nurmukhammed	Head of division, Central Water Administration at the Ministry of Agriculture and Water Resources
	Republic of Uzbekistan
Taganov Seitmurad	Instructor of the Agricultural department at the Cabinet of Ministers
	Turkmenistan
Khanmedov Guvanch	Head of Operations Division, Ministry of Water Resources Turkmenistan

Chairman: Yazmuradov Annageldi Orazberdiyevich – ICWC member, Minister of Water Resources
Turkmenistan

AGENDA

1. Regarding results of vegetation period 2008 (responsible: BWO «Amudarya» and BWO «Syrdarya»).

2. Regarding fulfillment of water withdrawal limits and of the operation modes of the reservoirs cascade in the Amudarya and Syrdarys river basins during the non-vegetation period 2008-2009.

3. Regarding the organization of regional training center for specialists at high and middle levels of water management, energy and environmental agencies of Central Asian countries on the basis of the ICWC Training Center and its branches (SIC ICWC and TC ICWC are responsible for implementation).

4. Revision of draft agreement «About water and energy use in the Syrdarya river basin».

5. Venue and agenda of the next 53rd ICWC meeting.

Additional issues for consideration:

1. Concerning the project «Water productivity improvement at field level» (included at a request of SIC ICWC).

2. Appointing the heads of ICWC executive bodies: BWO «Amudarya» and ICWC Secretariat

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

First item:

1. Take into account the results of the operation modes of the reservoir cascade and of water withdrawals of countries for vegetation period 2008 as informed by BWO «Amudarya» and BWO «Syrdarya».

Second item:

1. Take into account the fulfillment of water withdrawal limits and of the operation modes of the reservoirs cascade in the Amudarya and Syrdarya river basins for the past non-vegetation period as informed by BWO «Amudarya» and BWO «Syrdarya».

2. Pay special attention to the reliability of the gauging stations information in the Naryn and Syrdarya rivers

3. Support the proposal of SIC ICWC and BWO «Syrdarya» concerning the equipment of gauging stations Uchkurgan, Akdjar and Kizilkisjlak through the financial support from Swiss donors.

Third item:

1. Ask European Union to support the project «Development of Central Asian training network on integrated water resources management».

2. ICWC should consider and adopt schedule of wokshops, their budgets and venues.

Fourth item:

Consider given draft agreement during the meeting of the heads of water and energy organizations of Central Asia in December 2008 in Bishkek city, with the involvement of representatives from the regional and national working groups on the preparation of the draft agreement «About water and energy use in the Syrdarya river basin».

Fifth item:

1. Next 53rd ICWC meeting will be held in Tajikistan during the second decade of April 2009.

2. Approve the agenda of the next 53rd ICWC meeting.

Agenda

1. Regarding fulfillment of water withdrawal limits during non-vegetation period 2008-2009 and adoption of water withdrawal limits along the Amudarya and Syrdarya for the next vegetation period 2009 and approval of expected operation of the reservoirs cascade (responsible: BWO "Amudarya", BWO "Syrdarya").

2. Analysis of fulfillment of ICWC decisions by executive bodies (order to ICWC Secretariat, protocol №51, 18.09.2008).

3. Adoption of rotation of ICWC executive bodies

4. Miscellaneous

5. Venue and agenda of the next 54th ICWC meeting.

Regarding additional issues:

1. Relieve Khudaybergenov Yuldash Khudaybergenovich from the responsibility of the head of BWO "Amudarya" on the basis of a resignation and appoint Kdirniyazov Burkitbay Tajiniyazovich as the head of BWO "Amudarya".

2. Relieve Negmatov Gayrat Abdusattarovich from the responsibility of the head of ICWC Secretariat on the basis of a resignation and appoint Mukhitdinov Khayrullo Ergashevich as the head of ICWC Secretariat.

For the Republic of Kazakhstan	A.D. Ryabtsev
For the Republic of Kyrgyzstan	B.T. Koshmatov
For the Republic of Tajikistan	S. Yokubzod
For the Turkmenistan	A.O.Yazmuradov
For the Republic of Uzbekistan	Sh.R. Khamrayev

RESULTS OF VEGETATION PERIOD 2008[1]

1.The Amudarya river basin

The use of fixed water withdrawal limits in the current vegetation period by the states looks in the following way:

- 72.6 % of fixed water withdrawal limit was used in total in the basin; under the limit of 35 billion 988 million m^3, the actual use was 26 billion118 million m^3.

- The Republic of Kyrgyzstan used fixed water withdrawal limit by 2.2 %; 9 million m^3 were used actually under the limit 405 million m^3.

- The Republic of Tajikistan used fixed water withdrawal limit by 93.7 %; 5 billion 750 million m^3 were used actually under the limit 6 billion 135 million m^3.

- -Turkmenistan used water withdrawal limit by 74.3 %, under the limit 13 billion 950 million m^3, actual figure indicated 10 billion 369 million m^3;

- The Republic of Uzbekistan used water withdrawal limit by 63.1 %, 9 billion 102 million m^3 were used actually under the limit of 14 billion 418 million m^3.

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

1. Dashoguz veloyat – 47.6 %

2. The Republic of Karakalpakstan – 40.3 %

3. Khorezm veloyat – 52.8 %.

Water supply plan in Priaralie was fulfilled by 20.8 % for vegetation period; 393 million m^3 were supplied under the plan of 1 billion 890 million m^3.

For assessing given water-related situation, main figures are provided in the Table below. Figures show stream flows of main gauging stations in the middle stream of the Amudarya River, water availability in the given site of Atimurat above Garagumdarya and inflow to Tuyamuyun for the reporting period compared with the growing season 2001.

Actual water availability for vegetation period in the Amudarya river basin in the given site of Atamurat and upstream of Garagumdarya was 57.0 % of the norm.

Actual flow to g/s Kelif was 22 billion 563 million m^3, whereas in 2001 actual flow during this period was 26 billion 875 million m^3.

Low water availability during current growing season, deficit of water in Tuyamuyun reservoir, and low inflow to Tuyamuyun have negatively reflected on water situation in the lower reaches of Amudarya.

Even if the water situation seemed to be worse than in 2001, the use and management of water resources were improved as compared with that in 2001, due to the active support of the Turkmen Ministry of Water Resources and the Uzbek Ministry of Agriculture and Water Resources.

[1]Information for the first issue of the agenda of ICWC meeting 52, December 2008, Ashgabat

During the current growing season the main tasks of our organization were: improved accountability and control over use and allocation of water resources, ensuring equal water use in all river reaches.

Although the organization has ensured accountability, control over use and allocation of water resources, it could not entirely fulfill the condition for equitable water use in all river reaches.

The Table below shows uneven distribution of water withdrawals along the river.

Republic of Tajikistan	93.7 %
Middle stream	
Turkmenistan	87.5 %
Republic of Uzbekistan	96.5 %
Downstream	
Dashoguz	47.6 %
Republic of Karakalpakstan	40.3 %
Khorezm	52.8 %

It should be noted that main burden of water shortage fell on the lower reaches of the Amudarya River.

Following the "Agreement on shared water use by Turkmenistan and the Republic of Uzbekistan in the lower reaches of the Amudarya river", six meetings of the Commission for Water Allocation were held with the participation of PA "Dashoguzsuvkhujalik" BAIS (Karakalpakstan and Khorezm), BWO «Amudarya» and OU TMGS during the reporting period. In these meetings operation modes of TMGS were developed and water resources were allocated proportionally, based on their availability. This kind of approach to work resulted in certain positive outcomes.

2. The Syrdarya river basin

The operation mode of the Naryn-Syrdarya reservoir cascade and water withdrawal limits for the growing season 2008 were considered during the 49th ICWC meeting on March 19 in Tashkent. It was decided to reduce water withdrawal limits by 10 percent in April and afterwards correcting them for the remaining growing season. In accordance with forecast of Hydromet in April 8, flow probability in the Syrdarya river basin for the growing season is expected to be 74 % of the norm, while water resources deficit is expected to vary from 3.7 to 5.7 billion m^3 (depending on compensatory releases from Toktogul reservoir). However, decision regarding reduction of water withdrawal limits to 25 % during the 50th ICWC meeting in Bishkek, on May 29 was not supported unanimously.

Under these conditions the proposed operation mode of the Naryn-Syrdarya reservoir cascade was corrected depending on emerging water situation. Water withdrawals to main canals were fulfilled based on actual water resources availability. Inflow to upper reservoirs (Table 2.1) for the growing season lasting from April 1to October 1 accounted for 13 billion 90 million m^3 (71 % of the norm) which is

less than expected one by 0,5 billion m^3. Inflow to Toktogul reservoir was 7433 million m^3 (78 % of the norm); inflow to Charvak reservoir was 3694 million m^3, or 71% of the norm, whereas inflow to Andijan reservoir exceeded the expected volume of 294 million m^3 and accounted for 1636 million m^3 (54 %of the norm).

Table 2.1

Balance elements	**Norm, million m^3**	**Volume, million m^3 (from 01.04 to 01.10.08)**		**Percent (%) of the norm**	
		Expected	**Actual**	**Expected**	**Actual**
Inflows to upper reservoirs					
to Toktogul	9584	7932	7433	83	78
to Andijan	3035	1342	1636	44	54
to Charvak	5188	3961	3694	76	71
river Ugam	542	397	327	73	60
Total	*18349*	*13632*	*13090*	*74*	*71*
Side inflows					
Toktogul – Uchkurgan	1184	949	815	80	69
Uchkurgan, Uchtepe-Kayrakkum	3378	2609	2735	77	81
Andijan – Uchtepe	2545	1742	1624	68	64
Kayrakkum –Shardara	3178	2211	908	70	29
Gazalakent-g/s Chinaz-Chirchik	986	709	657	72	67
Total	*11271*	*8220*	*6739*	*73*	*60*
TOTAL	29620	21852	19829	74	67

Side inflow accounted for 6739 million m^3 (60 % of the norm) and was characterized by unevenness in parts.

The total inflow to the basin amounted to 19.8 billion m^3 or 67 % of the norm instead of 74 % as was expected.

Actual releases from reservoirs exceeded the volume planned by the Naryn-Syrdarya cascade by 5% (Table.2.2).

Table 2.2

Reservoir	Releases (from 01.04 to 01.10.08), million m^3		Percentage
	Scheduled	Actual	
Toktogul	3415.39	4386.01	128.4
Andijan	1630.37	1962.2	120.3
Charvak	3472.85	2924.81	84.2
Kayrakkum	4419.89	5189.88	117.4
Shardara	5393.95	4795.63	88,9
TOTAL:	18332.45	19258.53	105

For October 1, reservoir volumes were (Table 2.3): Toktogul – 9617 million m^3, Andijan – 362 million m^3, Charvak – 926.5 million m^3, Kayrakkum – 826 million m^3, Shardara – 931 million m^3.

Table 2.3

Reservoir	Reservoir volumes, million m^3			
	for 01.04.08.	Scheduled for 01.10.08	Actual for 01.10.08	Actual for 01.10.07
Toktogul	6563.0	11025.57	9617.0	13729.0
Andijan	689.8	390.80	362.0	479.27
Charvak	477.0	947.36	926.5	1550.2
Kayrakkum	3478.0	985.35	826.0	853.0
Shardara	5189.0	681.43	931.0	907.0
TOTAL	16396.8	14030.51	12662.5	17518.47

Unfavorable water situation in the whole basin for growing season 2008 resulted in reducing actual water withdrawals. On average, for September 1, water users were supplied with 74.2 % of water withdrawal limits of the countries for the relevant period. Water supply volumes to country-water users were: Kazakhstan – 673.14 million m^3 (84.1 % of limit for growing season), Kyrgyzstan – 132.7 million m^3 (66.4 %), Tajikistan – 1262.5 million m^3 (66.3 %) and Uzbekistan – 6619.18 million m^3 (75.2 %) (Tables 2.4 and 2.5).

Table 2.4

Area, country-water user	Water withdrawal limit, million m^3	Actual water withdrawal, million m^3	Percentage (%)
Toktogul – Uchkurgan water works, including:			
Kyrgyzstan	130.82	93.82	71.7
Tajikistan	236.56	105.63	44.6
Uzbekistan	3548.29	3099.17	87.3
Uchkurgan – Kayrakkum water works, including:			
Kyrgyzstan	69.18	38.88	56.2
Tajikistan	448.76	418.75	93.0
Uzbekistan	544.05	395.94	72.8
Kayrakkum water works – Shardara reservoir, including:			
Kazakhstan	800	673.14	84.1
Tajikistan	1219.71	738.13	60.5
Uzbekistan	4708.27	3123.98	66.4

Table 2.5

Republic –water user	ICWC limit for 01.10.08, *million m 3*	Actual water withdrawal for 01.10.08, *million m 3*	Percentage (%)
Kyrgyz Republic	200.00	132.70	66.35
Republic of Uzbekistan	8800.62	6619.09	75.20
Republic of Tajikistan	1905.03	1262.50	66.27
Republic of Kazakhstan (Dostik canal)	800.00	673.14	84.14

The relatively larger amount of water withdrawal of the Republic of Kazakhstan is explained by the fact that after Kazakhstan purchased electricity from Kyrgyzstan, from June 12, it has provided additional water releases from the cascade of Naryn reservoirs totaling 600 million m^3. Owing to this fact not only water supply to Dostik canal in Kazakhstan part has increased, but also prevented from further development of critical situation concerning water supply as a whole. It was managed to avoid early drawdown of Kayrakkum reservoir, maintain its operating level by September 1 and improve water supply to the lands of Tajikistan and Uzbekistan.

The water supply to the Aral Sea and Priaraliye amounted to 1 billion 302 million m^3; inflow to the Shardara reservoir was 1203,6 million m^3 (Table 2.6).

Actual operation mode of the Naryn-Syrdarya reservoirs cascade for the growing season 01.04- 01.09.2008 is presented in the Table 2.7.

Table 2.6

Indicators	Scheduled, *million m 3*	Actual, million *m 3*
Water supply to the Aral Sea	1807.42	1302.45
Inflow to Shardara reservoir	1478.04	1203.56

Table 2.7

Actual operation mode of the Naryn-Syrdarya reservoirs cascade,
01.04.2008 - 01.09.2008

	Unit	April	May	June	July	August	September	Total *million* m^3
Toktogul reservoir								
	m^3 /sec	265.10	639.74	701.03	488.48	452.52	268.20	
Inflow to the reservoir	*mln* m^3	687.14	1713.48	1817.07	1308.34	1212.03	695.17	7433.24
Volume: beginning of the period	*mln* m^3	6563.00	6484.00	7622.00	8852.00	9265.00	9506.00	
End of the period	*mln* m^3	6484.00	7622.00	8852.00	9265.00	9506.00	9617.00	
	m^3 /sec	295.00	214.90	231.83	333.71	361.00	225.37	
Release from the reservoir	*mln* m^3	764.64	575.59	600.90	893.81	966.90	584.16	4386.00
Kayrakkum reservoir								
Inflow to the reservoir	m^3 /sec	378.20	329.68	210.73	188.74	205.23	218.47	
	mln m^3	980.29	883.01	546.21	505.52	549.69	566.27	4031.00
Volume: beginning of the period	*mln* m^3	3478.00	3528.00	3271.00	2606.00	1768.00	999.00	
End of the period	*mln* m^3	3528.00	3271.00	2606.00	1768.00	999.00	826.00	
	m^3 /sec	265.70	248.74	350.63	427.68	408.07	265.30	
Release from the reservoir	*mln* m^3	688.69	666.23	908.83	1145.50	1092.97	687.66	5189.88
Chardara reservoir								
	m^3 /sec	122.08	55.31	61.92	57.81	57.63	103.90	
Inflow to the reservoir	*mln* m^3	316.43	148.14	160.50	154.84	154.36	269.31	1203.57
Volume: beginning of the period	*mln* m^3	5189.00	4734.00	3704.00	2724.00	1370.00	813.00	
End of the period	*mln* m^3	4734.00	3704.00	2724.00	1370.00	813.00	931.00	
	m^3 /sec	250.00	450.00	406.67	432.26	199.68	75.50	
Release from the reservoir	*mln* m^3	648.00	1205.28	1054.09	1157.77	534.82	195.70	4795.65
	m^3 /sec	70.67	21.94	48.17	128.06	35.16	5.00	
Release to Kizilkum canal	*mln* m^3	183.18	58.76	124.86	343.00	94.17	12.96	816.93
Discharge to Arnasay	m^3 /sec	0.00	0.00	0.00	0.00	0.00	0.00	
depression	*mln* m^3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	m^3 /sec	289.90	154.13	32.85	9.12	4.64	6.29	
Inflow to the Aral Sea	*mln* m^3	751.42	412.82	85.15	24.43	12.43	16.30	1302.55
Charvak reservoir								
	m^3 /sec	171.13	380.42	374.47	211.90	158.35	103.74	
Inflow to the reservoir	*mln* m^3	443.57	1018.92	970.63	567.55	424.12	268.89	693.68
Volume: beginning of the period	*mln* m^3	477.00	712.00	1194.20	1496.00	1257.00	972.00	
End of the period	*mln* m^3	712.00	1194.20	1496.00	1257.00	972.00	926.50	
	m^3 /sec	81.23	173.39	232.67	269.16	242.19	106.93	
Release from the reservoir	*mln* m^3	210.55	464.41	603.08	720.92	648.68	277.16	2924.80
Andijan reservoir								
	m^3 /sec	83.20	228.71	155.03	43.39	52.42	57.50	
Inflow to the reservoir	*mln* m^3	215.65	612.58	401.84	116.22	140.40	149.04	1635.73
Volume: beginning of the period	*mln* m^3	689.80	642.30	868.45	874.03	420.86	311.00	
End of the period	*mln* m^3	642.30	868.45	874.03	420.86	311.00	362.40	
	m^3 /sec	105.47	148.07	145.30	212.07	96.47	34.43	
Release from the reservoir	*mln* m^3	273.38	396.59	376.62	568.01	258.39	89.24	1962.22

FULFILLMENT OF WATER WITHDRAWAL LIMITS AND OF THE OPERATION MODES OF THE RESERVOIR CASCADES IN THE AMUDARYA AND SYRDARYA RIVER BASINS DURING THE NON-VEGETATION PERIOD 2008-2009[2]

1. Amudarya river basin

Water availability during the first two months of the non-vegetation period in the Amudarya river basin in the site of Atamurad above Garagumdarya is expected to be 42.7%of the norm.

Actual water availability amounted to 2 billion 349 million m^3 under the norm of 5 billion 503 million m^3, while expected one will be less than norm and range between 70–80 % during the whole non-vegetation period.

Actual flow to g/s Kelif was 3 billion 314million m^3.

The use of fixed water withdrawal limits during the first two months of the current non-vegetation period by states is as follows:

- Fixed water withdrawal limit was used in total for the basin by 76.1 %; under the limit of 5 billion 12 million m^3, the actual one was 3 billion 813 million m^3.

- The Republic of Tajikistan used fixed water withdrawal limit by 90.5 %,

1 billion 015 million m^3 were used actually under the limit of 1 billion 121 million m^3;

- Turkmenistan used water withdrawal limit by 71.0 %, under the limit 1 billion 822 million m^3, actual figure indicated 1 billion 336 million m^3;

- The Republic of Uzbekistan used water withdrawal limit by 71.4 %; 1 billion 320 million m^3 were used actually under the limit of 1billion 822 million m^3.

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

1. Upstream – 88.5 %, including: Tajikistan – 90.5 %, The Republic of Uzbekistan – 76.5 %.

2. Middle stream – 72.2 %, including: Uzbekistan – 83.9 %, Turkmenistan – 65.2 %.

3. Downstream – 70.1 %, including: Uzbekistan- 56.6 %, Turkmenistan – 163.2 %.

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

1. Dashaguz district – 163.2 %

2. The Republic of Karakalpakstan – 52.9 %

3. Khorezm district – 72.5 %

[2]Information for the second issue of the agenda of ICWC meeting 52, December 2008, Ashgabat

Water supply plan in Priaralie and the Aral Sea was fulfilled by 6.0 % during one month of non-growing season; 21 million m^3 were supplied under the plan of 350 million m^3.

The expected volumes of run-of-the-river reservoirs for 01.12.08 will amount to:

- 8 billion 467 million m^3 under the planned volume of 8 billion 505 million m^3 in the Nurek reservoir;

- in the range of 2 billion 346 million m^3 in the Tuyamuyun reservoir.

Preliminary results indicate that, in general, the riparian countries will not sustain fixed water withdrawal limits for the non-growing season 2008-2009.

According to preliminary rough estimates, actual water availability for non-growing season 2008-09 in given site of Atamurat upstream of Garagumdarya with a glance of everyday discharges of the river Vahsh is expected to be less than norm: in the range of 70 -80 % or even less.

The situation resembling water shortage is emerging in the basin, as a result of the hydrological, climatic and water management conditions. The first two months of the current non-vegetation period evidence it.

Under the emerging circumstances, it is recommended to consider the possibility of water withdrawal limit reduction, and adopt its implementation mechanism in case that hydrometeorological services of the countries prove the situation unfavorable.

The organization proposed options for water withdrawal limit reductions to ICWC members for consideration; they suggested reducing water withdrawal limits by 20.0 %.

At the end, BWO “Amudarya” suggested:

1. To adopt policies concerning operation modes of the reservoirs cascade, water withdrawal limits, water supply volumes to the Aral Sea and the Amudarya river delta for the non-growing season 2008-09, that were submitted for consideration to ICWC members.

2. The Syrdarya river basin

According to the hydromet service forecast, water availability in the Naryn River will account for 90% of the norm in the non-growing season 2008-2009, whereas in the Chirchik and Karadarya rivers it will account for 83 % and 76 % of the norm, respectively. The side inflow is estimated to be 65-75 % of the norm.

The actual water management situation for the past non-vegetation period on November 25, 2008 can be summarized as follows:

The actual inflow to the upper reservoirs (Table 2.1) amounted to 1 billion 657 million m^3, which is more by 70 million m^3 than expected. The inflow to Toktogul reservoir was 929 million m^3, to Andijan 251 million m^3, to Charvak 434 million m^3.

Side inflow amounted to 2.7 billion m^3 (Table 2.1).

Table 2.1

Balance elements	Volume (from 01.10.2008 to 25.11.2008) million m^3		
	Expected	Actual	Percentage (%) of the norm
Inflows to upper reservoirs			
to Toktogul	926.63	929.32	100.2
to Andijan	244.07	251.52	103.1
to Charvak	376.27	434.47	115.5
river Ugam	40.35	41.89	103.8
Total	*1587.32*	*1657.2*	*104.4*
Side inflows			
Toktogul – Uchkurgan	116.13	120.43	103.2
Uchkurgan, Uchtepe-Kayrakkum	790.94	1079.99	136.5
Andijan – Uchtepe	548.64	663.98	121.0
Kayrakkum –Chardara	481.69	444.96	91.8
Gazalkent-g/s Chinaz-Chirchik	205.90	417.41	202.7
Total	*2143.3*	*2726.77*	*127.2*
TOTAL	3730.62	4383.97	117.5

The total inflow to the basin amounted to 4.3 billion m^3, which exceeds the expected one by 653 million m^3 (117 %).

Actual releases from the reservoirs accounted for 118 % of the scheduled volume, which can be explained by larger discharges from Toktogul and Kayrakkum reservoirs (Table 2.2).

Table 2.2

Reservoir	Releases (from 01.10.2008 to 25.11.2008), *million m^3*		Percentage (%)
	Scheduled	Actual	
Toktogul	1130.11	1190.08	105.3
Andijan	138.68	280.66	202.3
Charvak	483.84	418.79	86.5
Kayrakkum	1317.6	1990.43	151.1
Chardara	591.84	455.08	76.9
TOTAL	3662.07	4334.44	118.4

As a result, water volumes in the reservoirs on November 25, 2008 are as follows (Table 2.3): Toktogul - 9048 million m^3, Andijan – 330 million m^3, Charvak - 893 million m^3. In whole, water reserves in the upper reservoirs account for 10 billion 271 million m^3, less by 386 million m^3 (by 3.6 %) than planned volume for this day – 10 billion 657 million m^3.

Table 2.3

Reservoir	Volume of reservoir, million m^3			
	For 01.10.08	Scheduled for 25.11.2008	Actual for 25.11.2008	Actual for 25.11.07
Toktogul	9617.0	9356.0	9048	12633
Andijan	362.4	477.0	330	334
Charvak	926.5	824.0	893	1239
Kayrakkum	826.0	1434.0	1483	1451
Chardara	931.0	1769.0	2218	968
TOTAL	12662.9	13860.53	13972	16625

Water supply to country-users for 25.11.08 accounted for: Kazakhstan (by Dostik canal) – 0.17 million m^3, Kyrgyzstan – 19.08 million m^3 (84 % of the limit), Tajikistan – 29.56 million m^3 (65 % of the limit) and Uzbekistan – 938.0 million m^3 (102 % of the limit) (Table 2.4 and 2.5).

Table 2.4

Area, country-water user	Water withdrawal limit for 25.11.08, million m^3	Actual water withdrawal for 25.11.08, million m^3	Percentage (%)
Toktogul – Uchkurgan water works, including	500	513.64	103
Kyrgyzstan	15.52	19.08	123
Tajikistan	28.17	29.56	105
Uzbekistan	456.31	465	102
Uchkurgan – Kayrakkum water works, including	41.13	32	79
Kyrgyzstan	7.13	0	
Tajikistan	5.18	0	
Uzbekistan	28.82	32	111
Kayrakkum water works– Chardara reservoir, including	441.57	441.17	99.9
Kazakhstan	0	0.17	
Tajikistan	12.1	0	
Uzbekistan	429.48	441	103

Table 2.5

Republic – water user	ICWC limit for 25.11.08, million m^3	Actual water withdrawal for 25.11.08, million m^3	Percentage (%)
Republic of Kyrgyzstan	22.65	19.08	84
Republic of Uzbekistan	914.61	938	102
Republic of Uzbekistan	45.45	29.56	65
Republic of Kazakhstan (Dostik canal)	0	0.17	

The inflow to the Aral Sea and Priaralie for 25.11.08 amounted to 83.6 million m^3, which is less by 211 million m^3 than expected. This decrease in inflow is caused by increased water accumulation in the Shardara reservoir and corresponding decrease in releases by 137 million m^3 as compared with planned ones (Table 2.6).

Table 2.6

Indicator	Scheduled for 25.11.08, million m^3	Actual for 25.11.08, million m^3
Water supply to the Aral Sea	295	83.59
Discharge to the Arnasai depression	0	0
Inflow to Shardara reservoir	1399.11	1618.55

THE 5TH WORLD WATER FORUM

Following a decision by the World Water Council, the 5th World Water Forum was organized by the Turkish government in Istanbul on 16- 22 March, 2009.

By the decision of the Turkish government the **Ministry of Environment and Forestry** and the city hall of Istanbul were charged with preparation and holding the Forum. The Forum was preceded by huge preparations, and was organized within the scope of regional and thematic sessions, as well as political process.

The thematic process was organized within six main subject areas:

1. Global changes and Risk Management.

2. Advancing Human Development and the Millennium Development Goals.

3. Managing and Protecting Water Resources and their Supply Systems to Meet Human and Environmental Needs.

4. Governance and Management.

5. Finance.

6. Education, Knowledge and Capacity Development.

The representatives of Central Asia were involved in the thematic sessions on themes from 1 to 4 through SIC ICWC and GWP Caucasus and Central Asia.

The regional process was carried out in continents, namely the Americas, Europe, Africa, and Asia-Pacific. Central Asia was involved in the special group "In/Around Turkey". The ICWC together with the Executive Committee of the IFAS and GWP under the financial support of the Turkish government organized a conference on "Climate Change, Water Resources Management; Governance and Capacity Building Issues in Central Asia and Caucasus", within the framework of the regional process in May 2008. The conference was held in Bishkek with the participation of all countries of the region.

The countries were involved into the regional process through virtual discussion of a number of reports and direct participation in a political committee, which was realized through the Ministry of Foreign Affairs. The direct discussion of the Ministerial Declaration texts, the Istanbul Ministerial Declaration and the Parliament Statement took place with the participation of Embassies of countries in Rome, Ankara, and Paris respectively. However, in contrast to organizers' desires, formulated and presented to the Forum Ministerial Declaration and Statement were not universally accepted due to the fact that contexts of their texts were rather vague and binding. The Forum gathered a large number of participants. According to the General Secretary of the WWC, over 23233 people participated in the Forum (according to Eroglu, Minister, Chairman of the Organizing Committee – up to 30 thousand people), including 8000 representatives from 192 countries. The participants of the exhibition

that was organized near the place where WWF was held, were not included in the number of participants.

The main Forum was accompanied with Fora devoted to Youth and Children, which involved a great number of young specialists from different countries.

The opening session of the Forum was visited by Abdullah Gul, President of Turkey, Suleyman Demirel, the former President of Turkey, Jalal Talabani, President of Iraq, Emomali Rahmon, President of Tajikistan, Willem Alexander, Prince of Orange, Albert II, Prince of Monaco, Naruhito Kotaishi, Crown Prince of Japan, Sha Zukang, UN Under-Secretary General, Abbas El Fassi, Prime Minister of Morocco, and I. Chudinov, Prime Minister of Kyrgyzstan.

In total, 231 sessions were organized in the Forum, of which 200 were related to Central Asian issues.

Major issues spotlighted in the Forum

Under the pressures of climate change, 235816 people died in 321 natural disasters that occurred in 2008, 211 million people were affected by their negative impacts and US $181 billion loss was caused.

Despite measures are taken to improve water supply, water supply conditions and hunger fight are not getting better. Comparing with 1990, the number of people without sufficient food has increased from 854 million (2003) to 963 million people in 2008. According to UN estimates, 1 billion people do not have access to clean water, while 2.5 billion people do not have access to adequate sanitation. Although International Sanitation Year was declared in 2008, the MDG achievement on these indicators is still far away, as it was in the beginning of the year. Thus, despite holding different activities to attract authorities' attention and world community for improving water supply system and sanitation, no visible improvements have been brought by any of the three forums. Certain concern has risen over this issue at almost each session of the Forum and emphasized the main issue determining the efficiency and advancement of decisions--the deficit of financial resources. The approximate estimation of necessary capital investments for solving the problem of water supply and sanitation in the developing countries is about US $100 billion per year.

It should be noted that some other challenges did not receive such general estimation at the Forum. They are given below:

- the deterioration of equitability and sustainability of water supply to agriculture under the impact of increasing hydro energy activity, as well as increasing water demand caused by increasing temperatures;
- fighting against increasing hydro egoism in the flow formation zones, that try to dictate downstream countries the river regimes and water distribution;
- the need for international control, right up to the level of Security Council, over guaranteeing human rights to drinking water, water for everyday necessities and food production;

- the need for strengthening transboundary cooperation and achieving hydro solidarity on the basis of equitability, transparency, trust, equal rights to water use, as well as equal rights to benefits from water use.

Unfortunately, these issues were not reflected neither in the Ministerial Declaration nor in the Ministerial Statement as was mentioned by the speakers at the closing session, in particular: in the speeches of the ministers of Uruguay, Bulgaria, Bolivia, Ecuador, Syria, Iraq, Hungary, President of League of Arab States, Vice Chairman of Asian Water Forum, Vice Chairman of UNO European Economic Commission. The dissemination by the UN bodies of the Statement of His Excellency Mr.Miguel d'Escoto Brockmann, President of the UN General Assembly, who sharply spoke against monetarist desires in primary documents of WWF, became an important event of the closing session. According to his notion, the WWF is impeding the partnership with the advocates of real water democratization and therefore he invited countries disagreeing with the Declaration to join his opinion.

The most considerable events of the Forum became:

- the publication of the third edition of the World Water Assessment report of UNESCO indicating the increase in the acuteness of water crisis;
- the increased attention to the issues of transboundary water resources, hydro solidarity and guaranteeing right to water in the discussions – in contrast to their weak reflection in the final Declaration.

Below are given conclusions deserving special consideration that were made in individual thematic reports.

Theme1 focused on the need for radical changes in the attitudes towards forecasts, informative support of the system providing climatic and hydrological support to water and agricultural sectors; organization of joint work allowing free access to database, crucial analysis and particularly of expected risks of disaster emergence. A close attention should be given to the system of preventive measures, which requires ten times less means than costs of elimination of consequences under current information availability. Two examples are typhoon Katherine and Australian drought.

Theme2 mentioned that external factors, such as development of agrofuel products, dominance of interests of hydro energy in operation of reservoirs, climatic changes and prices of goods sharply decrease the possibility of supplying agriculture with water, which requires undertaking additional measures to improve water availability for global food production.

The requirements concerning the improvement of food production can not be met under current *organizational* structure and tendencies in agriculture. A radical change in the optimal system combining small and large-scale water systems with efficient productivity and conservation properties, as well as development of dry farming is needed.

Along with the implementation of IWRM, multipurpose uses and functions of water should be used for improving governance and for involving a wide range of stakeholders into the processes of decision making, and allocating costs and benefits.

Theme 3: It was noted under this theme that increasing *competition over* limited water resources indicates to the efficiency of deviation from traditional sectoral approaches towards implementation of IWRM, based on the mass involvement of stakeholders in all disciplines, including transboundary contexts, flood and drought conditions. From this point of view the world should focus on hydro solidarity as a basis for improving transboundary basin cooperation. This concerns not only the relationships between water resources governors and water users, but also the involvement of local provincial and national governments. It would be rational to emphasize the priority of strengthening environmental needs of deltas and coastal territories in particular. In developing countries intensive environmental pollution is continuing: 90-95 % of all domestic drainage and 75 % of all industrial wastes are discharged into water sources.

Theme5: The theme recommends implementing a broad spectrum of water reforms, concerning both demand and supply of water. This requires increasing the efficiency of services offered by water systems as a priority. Financial aspects are achieved by cost minimization, as well as ensuring better cost recovery of investment projects on the basis of their prioritization.

Water sector financing should not consider water users to fully recover costs by themselves. It should be better built a combination of three basic factors: water rates, taxes and subsidies. Financial planning must be a base for choosing appropriate tariff structure, taxes, inter-sectoral subsidies and targeted infusions in all of these directions.

Theme 6: This theme is devoted to the development of science, education, and training of personnel and professional trainings. The need for increasing the attention of governments to financing these sectors as a basis for future progress and understanding the dynamics of the situation is noted here.

The most important issues of the Forum are:

- publication of the 3rd edition of the report on World Water Assessment, evidencing the increase in the sharpness of water crisis;
- increased attention during discussions to the issues of transboundary and water resources, hydro solidarity and guaranteeing the right to water that were not adequately reflected in the Declaration;
- presentation of «Diploma of the world leaders on the International Water Policy», including to Uzbekistan among 16 other countries for the active participation in and support of the UN Convention on Watercourses (1997).

Many delegates represented Central Asian countries, mainly from Kyrgyzstan, Tajikistan and Uzbekistan. Heads of delegations were A. Kurishbayev, Minister of Agriculture (Kazakhstan), I. Chudinov, Prime Minister of Kyrgyzstan, E. Rahmon,

President of Tajikistan, K. Ataliyev, Deputy Minister of Water resources (Turkmenistan) and Sh. Khamrayev, Deputy Minister of Water Resources and Agriculture (Uzbekistan).

Heads of the delegations actively spoke at the Asia-Pacific Water Forum, ministerial dialogues, and closing session of the Forum and at different panels.

Moreover, they actively participated in the sub-regional event «Climate change, water resources management, governance and capacity building issues in Central Asia and Caucasus», organized jointly by ICWC and GWP. More than 120 people participated in the event, during which lively discussions on the achievement of solidarity in the region's water sector took place.

Prof. V.A. Dukhovny spoke as a speaker and a panelist on three issues : «Climate change and its impact on social indicators», «Water and Food» and «Asian cooperation in the field of knowledge and science»; was on the jury during the Kyoto World Water Grand Prize award ceremony. Dr. V.I. Sokolov participated as a speaker and moderator during sessions 3.1.2 and 3.1.4. In his speech he mainly presented water governance system consisting of water management organizations, with the establishment of community-based bodies at each hierarchical level – on the example of «IWRM-Fergana» project. In addition, principles of coordinating different sectors and water users at all levels of hierarchy were shown in the presentation; it was recommended (along with other instruments of basin management) to use the UN bodies as an intermediary in negotiation processes, expertise and arbitral body in situations when the parties within the transboundary basin can not themselves achieve consensus in a broad spectrum of water resources assessment, governance and development issues.

During the special session «Aral and Caspian Sea», initiated by the Russian Academy of Sciences, V. Sokolov informed the participants about the results of the conference on «The Aral Sea problems, their impact on the population genofond, flora and fauna and international cooperation policies for mitigating their consequences», which was held in Tashkent in 2008.

Dr. Sh. Muhamedjanov spoke at the session «Water and Food» by demonstrating results on the improvement of land and water productivity. Dr. G. Stulina spoke as a panelist at the conference 1.2 on «Imbalances between land, water and people», during the session of Global Gender Alliance on «Gender mainstreaming in water resources management». A. Sorokin demonstrated the competitive water-energy situation in Sirdarya in issue 3.

The interview of the head of delegation from Uzbekistan was published in a newspaper «Djumhuriyat». The text of this article, texts of speeches of the President of Tajikistan E. Rahmon, as well as the statement of the President of the UN General Assembly are published in www.cawater-info.net/5wwf/

I. According to V.A. Dukhovny, main targets of WWF are:

- to bring forward water issues before world leaders – countries of G8, G20 - the UN organizations and authoritative civil communities and NGO;

- to implement policies allowing to overcome barriers existing in different parts of the world and constituting a menace to access of the poorest population to water and to poverty eradication.

The first objective was achieved partly: UN organizations peacefully participated in the Forum by presenting their ideas and demonstrating their work. If they got to the bottom of current water community problems, everything would be very well, but it is not clear yet. Moreover, one of the negative reactions of UN was the statement of the President of UN General Assembly, who condemned the Forum. Countries of G8 and G20 were adequately presented, however their reaction is also not clear, taking into account the fact that none of the real decision makers from these countries participated in the Forum. During the High Level Panel, which we were able to see in the video in the hall, participated only the leaders of developing countries or transition economies – there was no one who governs the world.

The second objective was touched only slightly. Principle problem of the world community is that preparation of measures for guaranteeing the real rights of people to water supply, sanitation facilities and food production and protection of these rights are staying as a good wish, which each government can take into account or ignore if wants so.

II. Ministerial declaration was focused on ministerial activities and such situation occurred: ministers (or their representatives) gave recommendations to themselves. Why do not they follow their own opinion, if they do agree with all their statements?

However many principle positions were out of these recommendations.

1. Theme 1. Climate change –lack of data and incorrect hydrological forecasts; non-availability of information exchange, particularly on transboundary rivers; limited number of countries that signed the Aarhus convention. The necessity of emphasizing the role of long-term flow regulation, which many countries ignore in order to meet the commercial demands of hydro power.
2. Theme 2
   - Instability of water supply for irrigation creates a huge risk in achieving MDG, not only in relation to food supply but also to poverty eradication, since lives of more than 50% of population in the rural areas depend on irrigation;
   - Hydro energy has become main competitor of food production sector and, taking into account increase in energy prices, which is incomparable with food prices, agricultural production is decreasing. Even irrigated lands have been reduced by 11 million ha! However, it all was left out of the Declaration framework.
3. Theme 3
   - Increasing hydro egoism of countries, where flow is formed, are finding even more support on the basis of doctrine «Absolute sovereignty». As a

result, reservoirs on the transboundary water sometimes turn into the instrument of political pressure.

- Until now, the UN Convention (1997) has not been ratified – nothing is mentioned about this in the Declaration.

4. Theme 4

- The right to water is one of the principle instruments of guaranteeing water availability and water contribution in MDG. But what we see in the Declaration? Only the right to water supply and sanitation! Where is the right to water for food production, for nature? How can this document ensure equal rights of all people to survive, and particularly in arid zone?
- A very strong opinion was heard at the Forum – ensuring the compliance with international water law should prevent the possibility of origination of anthropogenic floods or droughts, which must be recognized as an offence towards mankind.

III. Recommendations of a member of the WWC Board of Governors, Director of SIC ICWC to the following Forum:

- Work over recommendations of the future Forum should start immediately after making a decision on the development of Organizing Committee of the Forum;
- The Forum recommendations should be short, concrete and strictly directed to the certain audience. Previous recommendations with 150 items – is a Declaration. They are different in extent of their significance, acuteness, urgency, which will hardly attract decision makers, neither at heads of governments and governors of sectoral economy level, nor at high-ranking officials of international organizations level;
- It would be more reasonable to undertake concrete activities, ensuring adaptation of water resources management at decision making level, which:
  - Claim attention of UN and other international organizations;
  - Directed to decision making at national governmental and parliament levels;
  - Require decisions at agency/sector (water sector, agriculture and energy) level, that can be fulfilled by relevant ministries;
  - Addressed to local authorities, as well as to direct water users.

Each of these audiences must find clearly defined recommendations, specifically meant for their attention - recommendations, quantity of which is much less, but which are more focused on vital issues, allowing particular individuals who make decisions to realize the heart of the problem and identify arguable moments.

5th World Water Forum
Ministerial process

INSTANBUL MINISTERIAL STATEMENT

Ministry of Foreign Affairs of Turkey

World Water Council

22 March 2009

We the Ministers and Heads of Delegations assembled in Istanbul, Turkey, on 20-22 March 2009 on the occasion of the 5th World Water Forum, 'Bridging Divides for Water', are determined to address the global challenges related to water within the context of sustainable development. We,therefore:

Reaffirm the prior commitments made by national governments to achieve the internationally agreed upon goals on water and sanitation, including those in Agenda 21 and the Johannesburg Plan of Implementation, and acknowledge the decisions of the United Nations Commission on Sustainable Development (UNCSD), the multilateral agreements relevant to water, water use, sanitation and health.

Recognize the need to achieve water security. To this end it is vital to increase adaptation of water management to all global changes and improve cooperation at all levels.

Recognize that the world is facing rapid and unprecedented global changes, including population growth, migration, urbanization, climate change, desertification, drought, degradation and land use, economic and diet changes.

Recognize, in particular, the specific challenges facing different parts of the world, especially Africa, in meeting the MDGs and attaining an acceptable level of water security for socio-economic development. Therefore, we the Ministers and Heads of Delegations, present at the Ministerial Conference of the 5th World Water Forum, share the view on the following:

1. We will intensify our efforts to reach internationally agreed upon goals such as the MDGs and to improve access to safe and clean water, sanitation, hygiene and healthy ecosystems in the shortest possible time through appropriate policies and adequate financial resources at all levels.
2. We will further support the implementation of integrated water resources management (IWRM) at the level of river basin, watershed and groundwater systems, within each country, and, where appropriate, through international cooperation to meet economic, social and environmental demands equitably, inter alia to address the impact of global changes, taking into account the interests of all stakeholders, using a

participatory process in decision making and planning while creating better links between relevant sectors to achieve solutions that benefit all parties.

3. We endeavour to improve water demand management, productivity and efficiency of water use for agriculture including, where appropriate, building irrigation networks and also improve rain-fed agriculture to increase crop productivity and conserve water with a view to achieving sustainable production of sufficient food for rapidly increasing populations, and changing consumption patterns, improving living standards, especially in rural areas, and ending poverty and hunger consistent and in harmony with internationally agreed development goals and other relevant international obligations/agreements.

4. We support country-led development projects in different sectors related to water, especially with regard to energy and food security and poverty eradication. We will work to build new and maintain, strengthen and improve existing infrastructure for multiple purposes including water storage, irrigation, energy production, navigation and disaster prevention and preparedness that are economically sound, environmentally sustainable and socially equitable.

5. We will strengthen our understanding of the impacts of global changes on water resources, natural hydrological processes and ecosystems. We will work to preserve environmental flows, increase the resilience of and restore degraded ecosystems, taking advantage of new mechanisms as well as partnerships with foresters to enhance water-related forest services.

6. We will strengthen the prevention of pollution from all sectors in surface and groundwater, appropriately applying the polluter pays principle, while further developing and implementing wastewater collection, treatment and reuse.

7. We will consider the need of water-short areas to invest in desalination and wastewater treatment for reuse and provide technological support and know-how to make them sustainable and affordable.

8. We will respect international law providing protection for water resources, water infrastructure and the environment in times of armed conflict and cooperate in its further development, as necessary.

9. We resolve to develop, implement and further strengthen transnational, national and/or sub-national plans and programmes to anticipate and address the possible impacts of global changes. Assessments of varying hydrological conditions, extreme water events and the shape and functionality of existing infrastructure are essential in this context. Investment efforts to establish necessary infrastructure, to increase storage and drainage capacity in particular, needs to be scaled up, taking into account water efficiency.

10. We resolve to work to prevent and respond to natural and human-induced disasters, including floods and droughts. We resolve to proceed, where possible, from crisis management to disaster preparedness and prevention of human-induced disasters and risk management by developing early warning systems, implementing structural and nonstructural measures, both for water resources and access to water and sanitation, and building capacity at all levels. We resolve to also take necessary post-disaster mitigation and rehabilitation measures for affected people and hydrological systems.

11. We will strive to improve water-related monitoring systems and ensure that useful

information is made freely available to all concerned populations, including neighbouring countries.

12. We will clarify at all levels, as appropriate, the roles, rights and responsibilities of all actors and promote cross-cutting coordination and policies, in particular to provide people with access to water and sanitation as a key to achieve sustainable development while maintaining responsibility in line with social considerations, with national governments and local authorities, and support various forms of partnerships.

13. To improve at the national level the governance of the water sector, we will, as appropriate, aim to:

a) Promote institutional water management reform,

b) Strengthen water sector laws and regulatory frameworks, increase political and administrative accountability for their implementation, and ensure their effective enforcement,

c) Prevent corruption and increase integrity in implementing water-related policies, plans and practices,

d) Ensure transparency in decision making processes,

e) Strengthen public participation from all water stakeholders.

14. We will support scientific research, education, development and adoption of new technologies and broadening of technological choices in the field of water and promote their utilization towards sustainable use and management of water resources and to increase the adaptive capacities and resiliency of societies. We will make efforts to promote international cooperation in the development, application and diffusion, including dissemination of technologies, practices and processes in water issues, as well as in scientific, technological, socio-economic and other research, towards improving universal access to water and sanitation.

15. We acknowledge the discussions within the UN system regarding human rights and access to safe drinking water and sanitation. We recognize that access to safe drinking water and sanitation is a basic human need.

16. We will take, as appropriate, concrete and tangible steps to improve and promote cooperation on sustainable use and protection of transboundary water resources through coordinated action of riparian states, in conformity with existing agreements and/or other relevant arrangements, taking into account the interests of all riparian states concerned. We will work to strengthen existing institutions and develop new ones, as appropriate and if needed, and implement instruments for improved management of transboundary waters.

17. We invite international organizations and institutions to support international efforts to enhance the dissemination of experiences and sharing of best practices on sustainable water resources rehabilitation, protection, conservation, management and utilization.

18. We strive to prioritize water and sanitation in national development plans and strategies; develop local and national/regional water management plans; allocate adequate budgetary resources to water management and sanitation service provision; to lead donor coordination processes, and create an enabling environment for water and sanitation investments. We strive to mobilize resources from all sources, including public and private.

19. We will promote effective use of financial resources from all sources, including encouraging international financial institutions, development partners and beneficiary countries to increase support for water management, water supply and sanitation. We also will resolve to support more effective and diversified support, credit and financial management systems that are easily accessible and affordable.
20. Acknowledging that new and adequate resources are needed to achieve the MDGs, we call upon the international community, development partners and private sources of financing to invest resources to complement the efforts made by developing countries and countries with economies in transition, to develop sustainable water resources management and to build the infrastructure base for a sustained socio-economic growth, especially in Africa and least developed countries.
21. We acknowledge the need of fair, equitable and sustainable cost recovery strategies and we will therefore promote and implement realistic and sustainable financing strategies for the water sector, especially water supply, good water quality and sanitation sectors. We acknowledge that exclusively economic approaches and tools cannot capture all social and environmental aspects in cost recovery. Financing strategies should be based on a best possible use and mix of tariffs for all forms of water services, taxes and transfers to cover needs related to infrastructure development and extension, operation and maintenance.
22. We finally acknowledge that water is a cross-cutting issue. Thus, we will communicate our message to those outside of the water sector including the highest political levels. We will make our best efforts to follow this issue in order to develop innovative governance, integrated water policy management, legal frameworks, cross-sectoral policies, financing mechanisms and technologies in combination with capacity development.
Therefore, we the Ministers and Heads of Delegations present at the 5th World Water Forum Ministerial Conference share the view to:
- (A) *Convey* the results of the 5th World Water Forum Ministerial Process to relevant international and regional processes,
- (B) *Challenge ourselves and call upon all stakeholders to take into account* this Ministerial Statement and its recommendations to be incorporated, as appropriate, into our national policies related to water resources management and services and link these results to the 6th World Water Forum, and take note of the Istanbul Water Guide and its recommendations.
- (C) *Continue to work together* with Parliaments and Local Authorities, to address water and sanitation issues in a mutual fashion,
Finally, the Ministers and Heads of Delegations present at the 5th World Water Forum Ministerial Conference would like to:
- (D) Thank the Government of Turkey, Istanbul Metropolitan Municipality and the World Water Council for their organization of the 5th World Water Forum and the Ministerial Conference.
- (E) *Note with appreciation* the participation of National Governments, Regional and International Organizations and stakeholder groups in the Ministerial, Regional and Thematic Processes of the 5th World Water Forum.

ENVIRONMENTAL SECURITY – THE MAJOR FACTOR IN WATER RESOURCES USE

The regional scientific-practical workshop
23-25 October, Tashkent

The regional scientific-practical seminar " Environmental security is a major factor in the use of water resources" was organized and held in Tashkent on 23-25 October 2008 by OSCE and SIC ICWC.

The seminar focused on the discussions of international cooperation in issues concerning guaranteeing environmental security as a major factor in the use of water resources of Central Asia.

Representatives of respective ministries and agencies of five Central Asian countries, Assistant OSCE Project Coordinator in economic and environmental activities (headquarters in Vienna), A. Stukalo, OSCE Project Coordinator in Uzbekistan, Ambassador I.Vensel, Senior adviser in Canadian International Development Agency, Dr. A. Shady, Professor from the University of Dundee (Great Britain) S.Vinogradov, manager of the World Bank Regional Mission in Uzbekistan, L.Brefor, Director of the GEF IFAS U.K.Buranov, SIC ICWC staff, BWO "Amudarya" and "Syrdarya"-in all more than 40 people participated in the seminar.

The seminar was opened by Professor V.A. Dukhovny, the Director of SIC ICWC.

The participants of the seminar were greeted by the chairman of the State Committee for Nature Protection of Uzbekistan B.B. Alihanov, Deputy Minister of Agriculture and Water Resources of the Republic of Uzbekistan Sh.R. Khamrayev, OSCE Project Coordinator in Uzbekistan Ambassador I.Vensel, and Assistant OSCE Project Coordinator in economic and environmental activities A. Stukalo.

While delivering speeches, representatives of Uzbekistan noted the crucial importance of strengthening mutual understanding and cooperation in issues concerning exploitation of water-energy potential of the Transboundary Rivers of the region. Taking into account particular importance of water resources for Central Asia, Uzbekistan has always supported reasonable approach to the use of water resources.

Issues concerning water resources use of Transboundary Rivers of Central Asia should be decided taking into account interests of more than 50 million people, living in the region, on the basis of equitable and reasonable exploitation and use of energy-water resources policy, standards of international law, realizing nonseparability of problems of shared hydropower potential and control over water and energy resources.

Any of the activities implemented on the Transboundary Rivers, should not negatively impact on the existing environmental and water balance in the region.

It should be ensured that construction of structures will not cause irreversible environmental consequences and break existing balance of the watercourse used by all riparian countries.

In case the situation of transboundary water resources changes, the Central Asian countries may be confronted with difficulties in supplying the people and

agriculture with drinking and irrigation water, systematic droughts, as well as environmental disaster of unexpected scale with all implying consequences.

Uzbekistan in turn will continue taking consistent measures for supporting water and environmental balance in the region, aiming at maintaining peace and stability, improving safety and sustainable development of Central Asia, and regarding issues concerning environmental safety, the Aral Sea problems and saving genofond of plants and animals of the Priarlie, since this region is the most vulnerable from the point of view of ecology. It is necessary to prioritize reasonable and equitable water distribution among the Aral Sea river basin countries.

Besides, the process for improving ecological situation in the Priaralie is under way, but the issue of solving ecological problem and supplying water to the region is still remaining very crucial. On the basis of this fact, it can be noted that environmental stability in the region turns out to be an important and necessary condition for its sustainable development.

The representative from the Institute of Water Problems, Hydropower, and Environment at the Academy of Sciences of the Republic of Tajikistan G.N. Petrov in his speech brought forward the idea of treating water as a «good», which obviously contradicts to international regulations on water resources use. The international experts Dr. A. Shady (Canada), professor S. Vinogradov (Great Britain) were against this concept and recommended solving disputes over water allocation and water resources management only by negotiations.

The seminar participants from Kazakhstan and Uzbekistan also noted that at present there are a number of international normative legal tools for the trasboundary water resources management. Currently only Uzbekistan and Kazakhstan are signatories to the Convention on «the Protection and Use of Transboundary Watercourses and International Lakes» (Helsinki, 1992), Uzbekistan joined this Convention in 2007.

Moreover, in 2007 the Republic of Uzbekistan joined the “Convention on the Non-Navigational Uses of International Waterways” (New-York, 1997). These international legal tools should be the basic documents in water resources management of the Amudarya River and in turn Uzbekistan adheres to this position.

The representative of the World Bank’s Regional Mission Mr. L.Brefourt noted that there should not be «national egoism» in the issues related to water resources management, but regional approach to lowering costs and increasing benefits from water ideology is required.

International experts mentioned two points: (1) increasing interest of upstream countries to develop hydropower for short and long terms and (2) climate change, and aggravation of the process by desertification. Countries must decide on the scenario of activities required for the Aral Sea and Priaralie regions. It was mentioned that the most difficult task is the development of proposals for further activities for improving socio-economic and ecological situation in the region. The experts noted that Central Asia has a huge experience in implementing projects related to the problems of the Aral Sea, there is a good potential in the ministries and agencies, including high proficient SIC ICWC experts in water and environmental protection. At present time there are two differentiated development goals – agricultural and energy activity, and

international organizations expressed their willingness to assist in making mutually acceptable decisions.

It should be noted that the organizers held current scientific-practical seminar at high level, and in our opinion each participant gained additional information and became familiar with a new outlook on integrated water resources management and sustainable development goals of the region.

At the end of the seminar a relevant final document was adopted.

FINAL DOCUMENT
of the regional scientific-practical workshop
«Environmental security – the Major Factor in Water Resources Use»
(23-25 October, Tashkent)

Having recognized a paramount importance of the topic of environmental security as the major factor in water resources use, the participants have stressed that the Central Asia is an indivisible ecosystem united by shared rivers of the Aral Sea basin. The historical and geographic community of Central Asian countries and a need for further development of regional cooperation to the benefit of this ecosystem and for environmental security in the region were also underlined.

Confronted with the processes posing greater threats on a global scale, such as climate change and intensified freshwater shortage, food price rises and population growth, the water challenge becomes more acute in terms of opportunities for sustainable regional development. Given such conditions, efficient development of water-energy potential to the benefit of each country may and must be achieved on the basis of interstate cooperation. This would enhance food and energy security in the region's countries, allow addressing efficiently challenges of socio-economic development, and ensure investment saving. Existing problems should be solved by conducting a policy of equitable and wise development and use of water and energy resources and through the universally accepted standards of international law.

The participants in their reports and speeches dedicated to issues of integrated water-land and water-energy resources use underlined that it was necessary to continue and enhance cooperation in the following directions in order to achieve environmental security in all countries of the Central Asia:

- institutional strengthening of transboundary waterway management;
- creating mutually agreed mechanism, which establishes principles and procedure of water allocation, with coordination of reservoir operation regimes, in order to meet upstream and downstream demands in water and energy;
- exchange of information and technology advancements on various aspects of water use and protection;
- considering nature conservation needs;
- harmonizing water laws of Central Asian countries, environmental norms and standards.

As to legal aspects concerning improvement and further development of regional cooperation on the basis of equitable and sound shared water use, the participants stressed that the region's countries need to get assistance in

international conventions dedicated to water relations regulation in order to apply provisions and principles of the conventions under specific conditions of the Central Asian region.

The participants also emphasized a need to follow the limits of water use in transboundary water sources, ensure the agreed regimes of reservoir operation, with account of efficient use of water-energy potential, the environmental demands, and the strict fulfillment of obligations for compensations. It is necessary to improve mathematical models of water and energy management in the Aral Sea basin. At the same time, the participants recognized a demand to improve hydrometeorological services in the countries, particularly to organize interstate shared gauging stations along transboundary rivers both for reliable accounting of inflow and outflow quantity and quality and for accurate forecasting of flow probability and monitoring of pollution in water sources. Moreover, it was stated that it is important to raise status, extend mandate, as well as increase responsibilities of regional water organizations, along with implementation of basin management principles for transboundary water resources in the region.

The participants consider that, in a number of cases, water use discipline and measures undertaken to mitigate water shortage are not adequate to acuteness of situation. As a result, some zones suffer to a greater extent than it is conditioned by natural water shortage. Attention was paid to environmental deterioration in downstream zones. The participants noted that it is necessary to activate work with the public in various aspects of water-environmental cooperation, on solution of ecological problems and on involvement of non-governmental organizations in raising public awareness about efficient water use for mitigation in low-water years.

Conclusions

1. One of the main conditions for achieving sustainable regional development and ensuring environmental security is a coordinated work of all the Central Asian countries on creating a system of effective and efficient water use. In irrigated agriculture this may contribute to reduction of water supply, at least, by 15-20% to the benefit of economy and to improvement of productivity by 25-35%.

2. Taking into account growing water shortage in the region, it is proposed that each country-water user prepares, based on principle of equitable and wise water use, appropriate cost estimates and environmental assessments to justify rights of each country to their water shares. In addition, it is necessary to compare and

agree those estimates and assessment at expert level and next, at the interstate level in order to reach mutually acceptable agreement.

3. The standards of international and national water laws and their enforcement and improvement call for special attention. It is recommended SIC ICWC to organize, with the support of OSCE, training for higher and middle level staff of water-management and environmental organizations, as well as ministries of justice and foreign affairs in the region's countries in international and national water laws, with integration of basic conventions dedicated to water relations regulation.

4. Promote deeper studies by each of the countries regarding improvement of national legislation, application of international standards and legal instruments, and use of regional advanced practices and experience in area of legal regulation of relations on transboundary waterways.

5. Develop agreed mechanism of economic relations, which should be based on mutual understanding of overall responsibility of the countries for protection and use of international waterways and their management, and would promote enforcement of international water law's provisions:

- on equitable and reasonable water share of each country;
- on avoiding damage, and, in case of doing damage, on adoption of agreed compensations for it;
- on joint actions aimed at maintaining and ensuring stable water use.

6. It is recommended to SIC ICWC to establish a regional work group to develop mathematical models of water and energy resources management in the Aral Sea basin.

It is advisable to conduct a series of training workshops for users of the mathematical management models in the region's countries. The management models should be developed in the following directions:

a) optimization of seasonal regulation regimes to the benefit of CA countries;
b) economic mechanisms of relations, including compensation measures;
c) long-term planning of water use;
d) evaluation of environmental impact.

7. Taking into account growing impact of return flow on transboundary water quality, especially in low-water years, it is advisable to intensify work on quality monitoring of river run-off, groundwater, and drainage-waste water.

For mitigation of negative drainage-waste water impact on environment, it is advisable to conduct necessary research and take organizational and propaganda measures regarding maximal re-use of there waters in places of their formation for crop irrigation, production, and other needs.

8. Considering that most of unproductive water losses in irrigated agriculture take place due to poor educational level of water users, local specialists and members of peasant associations in the use of irrigation water, it is expedient to direct efforts of water-protection and non-governmental organizations to large-scale measures for consultation on rational water use rules.

9. Given an importance of political will of the Heads of Central Asian states in area of rational and efficient water use and ensuring of water protection, it is advisable to inform continually the governments on current water and environmental problems in the region.

10. Provision of the Aral Sea basin's population with clean drinking water should be considered a priority. In this context, the efforts to protect drinking water sources from pollution should be increased.

SESSION OF THE STEERING COMMITTEE OF «IWRM-FERGANA» PROJECT (PHASE 4)

The session of the steering committee of "IWRM-FERGANA" project (phase 4) was held in Tashkent on February 25, 2009, with committee members' participation:

H. Maag – Director of the regional office of Swiss Agency for Development and Cooperation (SDC) in Kyrgyzstan and Uzbekistan

N. Mamataliyev – authorized representative of Water Resources Department at the Ministry of Agriculture, Water Resources and Processing Industry, Republic of Kyrgyzstan

A. Khomidov – authorized representative of the Ministry of Land Reclamation and Water Resources, Republic of Tajikistan

Kh. Umarov – authorized representative of the Ministry of Agriculture and Water Resources, Republic of Uzbekistan

Kh. Mukhitdinov – Head of ICWC Secretariat.

Participants:

N. Guigas – Deputy Director of SDC in Tajikistan

O. Magnan –Water Resources Management Expert, SDC

Ch. Morger – Consultant of SDC

O. Islamova – Regional Water Programs Manager, SCO, Uzbekistan

R. Sadykov –National Program Officer of SCO, Tajikistan

B. Makhmutov –National Program Officer of SCO, Kyrgyzstan

V.A. Dukhovny – Director of SIC ICWC, Co-director of IWRM-Fergana project

A. Noble – Regional Director, IWMI Southeast and Central Asia

H. Manthritilake – Head of IWMI-Tashkent office, Co-director of IWRM-Fergana project

42 people were invited from the three targeted countries.

The session was held under the chairmanship of Mr. H. Maag.

Following two issues were on the agenda:

1. Approving the Progress Report on IWRM-Fergana project for 2008.

2. Approving the Annual Work Plan of IWRM-Fergana project for 2009.

During the discussion of the first issue, the director of the regional Swiss Agency for Cooperation and Development (SDC) in Kyrgyzstan and Uzbekistan approved corrections in the final progress report on the basis of proposals by SDC water consultant and list of monitoring tables attached to it. Now it is possible to see the types of publications which were developed, as well as types of capacity building activities that were carried out: in which theme, the number of people, relevant costs, gender aspects and follow-up.

Hanspeter Maag suggested approving the progress report on IWRM-Fergana project (phase IV) for 2008, since the report fully corresponds to the requirements of the operational report, and following such reporting format in the future.

Chris Morger added that in the future operational report should contain following subtopics concerning the fulfillment of planned actions: what was planned, what was achieved and why planned actions were not achieved. Moreover, it should indicate whether project execution is following the right path or not.

The Project Steerong Committee decided to approve the progress report on IWRM-Fergana project for 2008 with proposed additions to the reporting format.

After that the chairman accepted an improved format of the project AWP for 2009 with adjustments:

- List WUAs in the hydrographic order in the next WUAs inventory form.
- Proposed training form is subject to completion of the training strategy and impact monitoring (Action A.6.1.)
- Pay attention to the economic analysis of farmer's perspectives.
- Take into account depreciation issues of water assets.
- In the budget provide for transportation costs for national offices.
- International conference on «WUA» should have not only regional character, but also wider perspective, where different governments, donors and international organizations could contribute and discuss about their experiences in different aspects of formation and sustainability of WUAs and their relationships with other levels of water management hierarchy. Such conference should suggest ideas and incentives for increasing the efficiency of WUA and IWRM in different issues – advertise not only IWRM-Fergana project but also IWRM in general.

The Steering Committee decided to approve AWP of the IWRM-Fergana project (Phase IV) for 2009, taking into account two above mentioned corrections/additions: a) proposed program for the training is subject to completion of

the training strategy and impact monitoring (Action A.6.1.); and b) in the budget provide for transportation costs for national offices.

CENTRAL ASIAN REGIONAL WATER INFORMATION BASE (CAREWIB)

On February 26, 2009, a session of the Steering Committee on «Central Asian regional water information base (CAREWIB)» project was held in Tashkent, with participation of committee members:

Maag H. – Director, Swiss Development Corporation in Kyrgyzstan and Uzbekistan

Mamataliyev N. – Authorized representative of the Ministry of Agriculture, Water Resources and Processing Industry, Republic of Kyrgyzstan

Khomidov A. – Authorized representative of the Ministry of Land Reclamation and Water Resources, Republic of Tajikistan

Umarov Kh. – Authorized representative of the Ministry of Agriculture and Water Resources, Republic of Uzbekistan

Sersenbayeva G. – Authorized representative of Water Resources Committee, Republic of Kazakhstan

Mukhammedov A. – Authorized representative of the Ministry of Water Recourses, Turkmenistan

Mukhitdinov Kh. – Head of ICWC secretariat

Other invited people:

N. Guigas – Deputy Director of SDC in Tajikistan

Magnan O. – Consultant on water resources management, Swiss Cooperation Agency

Morger Ch. – Consultant of Swiss Cooperation

Islamova O. – Reagional manager on water programs, Swiss Cooperation Agency in Uzbekistan

Sadykov R. – National Projects Coordinator, Swiss Cooperation Agency in Tajikistan

Makhmudov B. – National Projects Coordinator, Swiss Cooperation Agency in Kyrgyzstan

Dukhovny V.A. –Director of SIC ICWC, Head of CAREWIB project

Ibattullin S.R. – Chairman of IFSA Executive Committee, Kazakhstan, Almaty

29 people from 5 countries, participating in CAREWIB project

Following issues were on the agenda:

1. Overview of the project report for 2008

2. Overview of the CAREWIB project work schedule for 2009

3. Miscellaneous

The steering committee of the project having heard and discussed the report on CAREWIB project for 2008, work plan on CAREWIB project for 2009 and other issues related to the fulfillment of «Central Asia Regional Water Information Base (CAREWIB)» project, had decided on the following:

1. Project Report 2008:

1.1. Approve the project report 2008 with following comments:

- Useful tables related to training and publications, as well as internet links on CAREWIB platform are given in the report.
- Public financing is a key source for ensuring stability of CAREWIB project and therefore it is necessary to direct all possible efforts and possibilities for attracting attention to the project.
- General discussion forums are not very popular and are not adequately used, and therefore it is recommended to stop them.
- For translating into national languages significant resources and efforts are required, as well as strategies concerning the use of national language varies among different countries. So national teams should decide themselves which information they need to translate. Certainly, all materials that are necessary for farmers should be translated.

1.2. The report should be disseminated with abovementioned comments.

2. Work plan of CAREWIB project for 2009

2.1. Approve annual work plan (AWP) on project for 2009 with following comments, explanations which represent an important part of AWP:

- Each country taking into account their conditions, should achieve self-financing, particularly from respective ministries (including Ministry of Finance);
- Each country should consider the possibility of entering information on groundwater, at least for medium-term period;
- Ask EC IFAS to assist in obtaining data from national hydromet services;
- Data – is a fact, and therefore should be used objectively in the project, in order to exclude charges of bias. At the same time, data can be used incorrectly and serve as a tool in politics (polemics), CAREWIB does not take responsibility

for the use of data at any purpose, however it is necessary to be aware and pay attention to such incidents.

- Training journalists is not a mission of CAREWIB.
- National teams have the right to allocate financial sources within the limits of maximal amount of the budget.

2.2. The budget management for 2009 is carried out by SIC ICWC in accordance with a procedure described by the AWP.

2.3. Regional team should agree on budget for holding national seminars with national contact points.

2.4. Regional team should inform the heads of national contact points about semi-annual financial reports.

2.5. Regional teams should disseminate the AWP to the members of the steering committee, as well as to all national contact points together with the protocol of the steering committee within 2 weeks.

OVERVIEW OF WATER SECTOR DEVELOPMENT IN CENTRAL ASIA FOR 2010

On January 15-16, first meeting of the working group on preparing the overview of water sector development in Central Asia for 2010 was held in Singapore under the patronage of Asian Development Bank (ADB). The overview represents a summary of water sector activities in Asia-Pacific region, which will be presented to political leaders and society during the second Water Summit of Asian-Pacific region in Singapore in June 2010. The review mainly aims to show political leaders the dynamics of water problems in the region after the first summit, which was held in December 2007 in Beppu, Japan and for the perspective. First overview of water sector development in Central Asia was published in 2007 and its Russian version in electronic format is available on www.cawater-info.net.

The general subject of the overview 2010 is the improvement of water safety in Asia. The working group in Singapore has formulated the understanding of water safety in the following way:

«The society is provided with water safety, when it manages sustainable the available water recourses and water services aiming at:

- Meeting the demands for water and sanitation
- Development of economic productivity in agriculture and industrial sectors
- Intensive development of urban areas and cities

- Maintaining health of rivers and ecosystems
- Building communities adapted to changes (risk management, readiness to natural disasters and so on).

The working group discussed the conceptual structure of future version in the light of above mentioned five key components of water safety. The cross-cutting priorities were also identified for supporting water safety, particularly:

- Leadership and political responsibility
- Improvement of governance and accountability
- Reduction of poverty and population vulnerability
- Investment into infrastructure and organizational activities
- Implementation of IWRM at basin level
- Protection of environment and ecosystems
- Adaptation to different changes, including climate changes
- Development of knowledge hubs
- Consideration of political economy
- Other aspects

The issue of elaboration of a set of indices and indicators which allows assessing state and dynamics of key components of water safety in the regional countries in the future reviews by the working group was discussed. The next meeting of the working group will be devoted to the set of indicators.

At the same time, it is planned to attract partners from sub regions for preparing basic information for future review, in particular:

- For reviewing progress in five key components – provide links to available material in the sub-regions
- Data set displaying state of the problem
- Indicate main obstacles for each of the components and necessary measures to overcome them.

LOCAL GOVERNANCE AND STATEHOOD IN THE AMU DARYA BORDERLANDS

Hafiz Boboyarov, Brend Kuzmits, Katja Mielke.

Introduction

The ZEF project "Local governance and statehood in the Amu Darya border region" deals with local governance structures in Northern Afghanistan, Southern Tajikistan and Southern Uzbekistan. The aim of this project is to gain a better understanding of local political decisionmaking structures in a region which shares common historical trajectories, but has different political systems today.

Since the 1990s, the approach of "empowering the people" has become a trend in development politics. The core idea was to include local civil society in decision-making processes and to dismantle authoritarian state structures by generating processes of "decentralization" and "good local governance".

At the same time, authoritarian governments all over the world endeavored to gain greater control of local level politics to bolster their power. A strong tendency toward establishing local governance structures could also be observed during the last decade in the three countries where ZEF conducts its research..

Country overview

Afghanistan. Nearly all state structures in Afghanistan became eroded as a result of the protracted (civil) war in the country. The reconstruction process in Afghanistan started following the international intervention in 2001. This process is funded largely by the international community. It soon became clear that administrative structures below the provincial level were completely lacking. A "good local governance program", called the National Solidarity Program, was launched to fill this gap and to establish local representative structures for the development agencies as well as for the Afghan government. The underlying notion of this program is that local communities should democratically elect their own representatives.

Tajikistan. Tajikistan also faced a civil war in the 1990s that eroded local administrative structures. Since the end of the war in 1997 and fostered by international programs for "good local governance", the Tajik government has established village organizations, sometimes building on traditional councils called jamoats that were influential in pre-Soviet times. However, the Tajik government has constantly simultaneously endeavored to strengthen the administrative vertical of power in an authoritarian manner which has had its impact on the democratic quality and inclusiveness of local governance.

Uzbekistan. Immediately after independence in 1991, the authoritarian government in Uzbekistan exploited traditional neighborhood councils, so-called mahallas, for local decision-making processes. Meanwhile, the mahallas have been officially incorporated into the state's structure as the smallest administrative units at local level. However, on occasion influential private interests easily capture state

structures in both Uzbekistan and Tajikistan. Compared with the other two countries, international agencies are least active in devolution programs in Uzbekistan.

ZEF's research approach

This overview shows the completely different ways in which development agencies and governments try to establish local decision-making structures in the area of research: In Afghanistan, the aim is primarily to fill the gap of non-existent state structures; in Uzbekistan, the mahallas strengthen the vertical power of the state on the local level. In Tajikistan, the central state and international development agencies often even follow opposite interests or compete with their own local governance programs.

However, ZEF's research approach goes beyond analyzing the way in which different local governance programs are installed. ZEF's focus is more on local social orders and the ways in which local people are coping with new political structures that were introduced from outside, be it top-down by the state or by international agencies.

ZEF's research findings

There is a general trend in all three countries towards the ruling local elites being able to consolidate their power by influencing or controlling the new decision-making bodies. In the case of elected governance structures— to be observed in Afghanistan and Tajikistan—elites are usually able to influence elections in their favor. However, often enough these new local decisionmaking bodies only attract the participation of local elites if they offer them access to resources or to power. This is why the new local governance bodies became especially attractive in regions with scarce resources or in regions which are highly dependent on central state structures—such as the cotton growing areas in Tajikistan and Uzbekistan.

The research also shows that, in all three countries, the new political structures rarely emerged as dominant institutions where political decisions are taken, but rather created artificial parallel structures. Thus different forms of traditional local institutions continue to exist in Afghanistan, for example the shura, due to the war and to the lack of official administrative structures. In fact, these traditional institutions are still the core political bodies for decision-making processes even today.

In the former Soviet republics of Uzbekistan and Tajikistan, the mahallas and jamoats of the rural borderland areas to Afghanistan have generally only become significant decision-making bodies if there has been continuity in staff and personal contacts with formally dismantled Soviet successor institutions such as kolkhozes. This warrants access to economic resources.

As a first recommendation from this ZEF project, we suggest that local governance programs—both those implemented by the governments as well as those implemented by foreign development agencies—should be adapted more to the highly varied landscape of local institutions. The project thus challenges the general assumption that so-called "failed states" such as Afghanistan and Tajikistan are characterized by chaos and anarchy and consequently do not have legitimate local governance institutions or even any at all. In our view, the opposite is true. A certain

social order always exists, embracing a variety of institutions and expressing a particular mindset of its people.

NEW APPOINTMENTS

The Prime-minister of the Kyrgyz Republic Igor Chudinov has signed an order on the appointment of Ravshanbek Kamchikbekov as a General Director of Water Resources Department at the Ministry of Agriculture, Water Resources and Processing Industry.

NEWLY ELECTED OFFICE BEARERS[3]

President

Prof. Dr. Chandra A. Madramootoo

Prof. Dr. Chandra A. Madramootoo obtained Ph.D in Agricultural Engineering from McGill University, Canada. At present he holds the prestigious position of Dean, Faculty of Agricultural and Environmental Sciences, McGill University, Canada and Associate Vice Principal of Macdonald Campus of McGill University. Dr. Madramootoo has worked as a member of the Canadian National Committee of Irrigation and Drainage (CANCID) during the past 20 years and served in numerous workbodies of ICID. He was also the Vice President of ICID from 2000-2003 and presently holding the position of Chairman, CANCID. He participated in numerous IECs and Congresses and was the key force behind the successful organization of the 18th ICID Congress and 53rd IEC at Montreal in 2002. Prof. Madramootoo is also the member of various professional societies. He has to his credit 15 awards from different organizations and published papers in more than 300 books, Journals, Conferences etc.

Vice Presidents

Dr. (Mrs.) Samia El-Guindy (Egypt)

Dr. Samia El-Guindy obtained her Ph.D in Land Reclamation from Martin Luther University, Germany (1976). Currently, Dr. El-Guindy is an Emeritus Professor in the National Water Research Center, Ministry of Water Resources and Irrigation, Egypt and Director of the Egyptian Dutch Advisory Panel Project on Water Management. She participated in various events of ICID and also served as member on ICID workbodies. She received the prestigious Egyptian National Award in Agricultural Science (Soil and Water Science) in 1986 and Certificate of Honour from H.E. President Hosny Mobarak in 1990. Dr. El-Guindy has published over 200 papers / reports as journal articles and/or scientific research reports in the different fields of water management. She is a member of the Egyptian and Global Water Partnership together with many other national professional organizations and scientific associations.

Mr. Shinsuke Ota, Japan

Mr. Shinsuke Ota graduated in Agricultural Engineering from Kyoto University in the year 1972. He also served as the Secretary General of JNC-ICID from 1997-1998. Mr. Ota has worked for Ministry of Agriculture, Forestry and Fisheries (MAFF) for 32 years and was engaged in Design, Planning and Policy Making concerning agriculture and rural development in Japan. Mr. Ota actively participated in several

[3] News Update. International Commission on Irrigation and Drainage. October-November 2008.

events of ICID including IECs and Congresses. He established the International Network for Water and Ecosystem in Paddy Fields (INWEPF) besides being member in many ICID workbodies.

Prof. Ing. Lucio Ubertini (Italy)

Prof. Ubertini graduated in Engineering from University of Rome in 1966. Presently, he is the Director, Research Institute for Geo-Hydrological Protection of the National Research Council (IRPI/CNR), Italy. He attended various ICID events and actively contributed to various workbodies. Dr. Ubertini was Vice President, ITAL-ICID from 1994-2000 and President, ITAL-ICID from 2000-2007. Over the past 35 years, he has progressively equipped advanced level of knowledge in hydrology, water and environmental resources management within a multidisciplinary context and developed a rich international network of experts both at international and individual levels. He is a member of various professional societies. Prof. Ubertini authored and co-authored more than 150 national and international Scientific and Technical Publications and also edited a number of books.

UZBEKISTAN RECEIVED THE RECOGNITION AWARD FOR ITS CONTRIBUTION TO THE CONSERVATION OF WATERCOURCES

The 5th World Water Forum closed in Istanbul. In the course of events the Environmental Protection Fund presented the "Diploma of World Leaders on the International Water Policy" to Uzbek delegation. About 30 thousand participants took part in the Forum from 130 countries, including the delegation from the Republic of Uzbekistan.

Green Cross International organized in the framework of the Forum together with the World Nature Fund and World Wildlife, European Water Partnership and the Advisory Committee of the UN Secretary-General an event on water and sanitation. It was devoted to the involvement of new countries to become a party to the UN Convention on the Law of Non-navigational Uses of International Watercourses (1997), to enable the Convention to come into effect.

The representatives of the delegations from 14 countries took part in this event and stated their readiness to sign the Convention. The "Green Cross is working under the pressure of natural resources and world challenges. Hence we are very active in the promotion of issues on the transbounary water resources management and it is imperative for us to support the Convention in interaction with WWF" - said Director of the GCI Water Program David Alex. "I believe, you agree with me that the entry into force of the Convention is an urgent task now", - added he, while handing over a symbolic vessel with water to country representatives for keeping.

The representatives of the following countries contracting the ratification act of the Convention on Non-Navigational Uses of International Watercourses received recognition awards: Finland, Germany, Hungary, Iraq, Lebanon, Jordan, Libya, Namibia, Netherlands, Norway, Portuguese, Qatar, SAR, Switzerland, Syria and Uzbekistan. Moreover, official representatives of Slovenia, Bangladesh, Benin, Burkina-Faso, Chad, Czech, Estonia, France, Ghana, Greece, Niger, Sierra-Leone and Spain stated interests of their countries to begin signing in the Convention.

"Since the climate change worsens the water supply crisis, the challenges and costs of increasing and supporting water safety will rise substantially", - declared the President of the GCI Alexander Lihotal.

"The risks of inaction are often considered to be high and involve economic instability, loss of life quality, as well as regress in poverty reduction in addition to more frequent natural disasters and environmental degradation. Therefore, we call for prompt ratification of the Convention".

The UN Convention on Watercourses is a base for common and joint management of rivers, lakes, marshlands and aquifers, crossing and formation of international borders. The overwhelming majority of countries voted within the framework of the Convention at the UN General Assembly in 1997, however, less than half of them have ratified it at the national level.

The UN Watercourses Convention proposes framework conditions for joint management of rivers, lakes, wetlands and watercourses crossing or forming international borders. Unfortunately, the Convention was not recognized in the Ministerial Declaration as one bridging divides for water.

The next World Water Forum will be held in the Republic of South Africa in 2012.

Source: 12.uz

OPEN LETTER TO G-20 HEADS OF STATE FROM AN INTERNATIONAL GLOBAL COALITION FOR A GREEN ECONOMY, COMPRISING ENVIRONMENT, DEVELOPMENT, BUSINESS AND LABOUR GROUPS[4]

The world is facing multiple challenges: a global recession, a broken financial system, job losses, food and fuel shocks, persistent poverty, mounting ecological problems that include an incipient freshwater crisis, loss of species, and dangerous climate change. These interrelated challenges must be tackled swiftly, effectively and in a co-ordinated way. The world has reached a critical tipping point.

Our organisations met recently in Switzerland, to build a shared view on the key decisions that need to be made in a 'global green new deal'. We come from very different backgrounds, but share a common sense of the necessity for clear and decisive action and the unprecedented opportunity that now exists for change.

We call for G-20 moral and practical leadership in making the right decisions on financial reform and the deployment of the stimulus packages when you meet in London in early April. Investments being made now need to address the sustainability of post-recession growth as well as the present recession.

Franklin D. Roosevelt's "New Deal" of the early 1930s offered a comprehensive package of measures for the USA. Today, our problems are global and our key challenge is to ensure the sustainability of any solution, and prosperity for all. Hence today's need is for a "global" and "green" New Deal.

Premier Wen Jiabao of China recently asserted that ethics must be at the heart of business practice for the well-being of all people. UK Prime Minister Gordon Brown, in addressing the US Congress, also said that markets should be free but never value-free, and that the risks people take should never be separated from the responsibilities they meet.

The G-20 represent 66% of the world's population; 90% of global GDP, 80% of global Green House Gas emissions and much of the world's annual $150-250 billion fossil fuel subsidy, so what you decide as a group affects the entire world. The G-20 governments have already marshalled over $2.5 trillion of fiscal stimulus for economic recovery.

We urge you to ensure that the entirety of the G20 emergency package supports three goals: (1) building economic resilience; (2) social justice and distributional equity by promoting decent work for all; (3) protection and sustainable use of the environment.

[4] A newly formed international coalition for an inclusive and green economy met for the first time in Switzerland 2-3 March 2009. The meeting was convened by IUCN in partnership with WWF International UNEP, and IIED. Participants also included representatives from the Bellagio Forum for Sustainable Development, DFID, IISD, ILO, ITUC, Royal Philips Electronics, WBCSD, and The Centre for Human Ecology.

We further recommend that you allocate $750 billion of this stimulus package, which is around 1% of global GDP, to investments that will build an inclusive and green economy, notably by:

• Investing in green infrastructure, such as renewable energy, sustainable transport systems, and environmentally friendly buildings – which would also stimulate the creation of high quality, stable employment across a range of sectors;

• Investing in equitable and sustainable natural resource use, supplemented by education and health care – which would improve the livelihoods of poor people (especially the rural poor);

• Protecting critical habitats, and improving the provision of ecosystem services – which would mitigate systemic ecological risks and build resilience amongst rich and poor alike;

• Introducing new ways of assessing progress of human and environmental well-being (beyond merely financial measures) which would also improve accountability systems.

Many of the above investments can make a significant contribution to short-term job creation and economic recovery in addition to their longer term benefits.

In addition to expenditure, comprehensive international and domestic policy reforms are urgently needed in all G-20 countries to address structural failures. This includes a thorough review of perverse incentives (such as fossil fuel subsidies) that crush the green shoots of recovery; taxing 'bads' such as pollution, and subsidising 'goods' such as employment and local enterprise; renewed efforts to conclude the WTO's Doha Development Round of trade negotiations, accompanied by adequate guarantees that labour, development and environmental issues will be fully addressed; together with a robust and visionary deal on climate change in Copenhagen later this year.

We ask you to ensure that such investment and reforms support a fair and well-managed transition to a sustainable growth path, rather than simply re-starting "business as usual", which has caused the current economic and environmental crises. This requires the full support of G-20 leaders and immediate, co-ordinated action by member governments, together with concerted efforts to enlist and support the other 172 UN member states. We also urge you to engage the energies and resources of responsible business, and the ideas and passions of civil society who share this fragile planet, on which we all depend.

Signatures:

James P. Leape, Director General, WWF International

Julia Marton-Lefèvre, Director General, International Union for Conservation of Nature (IUCN)

Pavan Sukhdev, Study Leader: The Economics of Ecosystems and Biodiversity (TEEB), & Project Leader: Green Economy Initiative, United Nations Environment Programme (UNEP)

Camilla Toulmin, Director, International Institute for Environment and Development (IIED)

Ola Engelmark, Chair, Bellagio Forum for Sustainable Development

John Evans, General Secretary of the Trade Union Advisory Committee to the OECD

Mark Halle, Executive Director, IISD-Europe

R. Andreas Kraemer, Director, Ecologic Institute

Professor Alastair McIntosh, Centre for Human Ecology, Scotland

Guy Ryder, General Secretary of The International Trade Union Confederation (ITUC)

Jan-Olaf Willums, Chair, Inspire Foundation for Business and Society

References:
Wen Jaibao: http://www.fmprc.gov.cn/eng/zxxx/t535283.htm
Gordon Brown: http://www.guardian.co.uk/world/2009/mar/04/gordon-brown-speech-to-congress
G 20: http://www.g20.org/index.aspx

ANALYSIS: INTERNATIONAL RIVERS AND ENERGY A VOLATILE MIX

John C.K. Daly, UPI international correspondent

The scale of issues being discussed at the fifth World Water Forum in Istanbul is vast, ranging from basic sanitation in Third World countries to massive international hydroelectric projects. The event has attracted heads of state, including Turkish President Abdullah Gul, Iraq's Jalal Talabani and Tajikistan's Emomalii Rahmon, five prime ministers and the crown prince of Japan, Naruhito Kotaishi.

Beneath the diplomatic glad-handing, however, serious international issues are being discussed, perhaps none more so and more intractable of a quick fix than the issue of trans-boundary rivers. Certainly none is more contentious, as upriver and downstream users use the forum to explain their positions even as the forum provides a further impetus to a slowly evolving international consensus. The titles of a number of the sessions give an idea of the range of discussions: "Crossing Borders/Seas," "Boundless Basins: What Are the Successes and Failures of Hydro-solidarity?" and "How Can Stakeholders Be Involved in Basin Management and Transboundary Water Cooperation?"

The issue is particularly acute in the Middle East and former Soviet Central Asia, both water-deprived regions with rapidly growing populations along with rising agricultural, industrial and energy requirements. Three basins dominate the region. The first is that of the Nile River, which passes through nine nations before flowing into the Mediterranean through Egypt.

The second important Middle Eastern shared river basin is formed by the Tigris and Euphrates, which originate in Turkey before flowing through Syria and Iraq to join as the Shatt al-Arab before debouching into the Persian Gulf.

Central Asia's Amu Darya and Syr Darya originate in the mountains of Kyrgyzstan and Tajikistan and flow westward through Uzbekistan, Kazakhstan and Turkmenistan before emptying into the desiccated Aral Sea, global poster child for water mismanagement since the 1960s.

While all three basins share common problems, the Amu Darya and Syr Darya water flows are unique in that, until 1991, they were part of a single country, the Soviet Union, with water management policy directed by Moscow.

While the problems of trans-boundary rivers are particularly acute in water-stressed nations, difficulties exist on every continent, as the streams shared by neighboring countries provide an estimated 60 percent of the world's freshwater. Worldwide there are 260 international river basins, covering nearly half of the Earth's surface, along which 40 percent of the world's population lives. With water demand rising in every nation, so are tensions over the limited resource.

The traditional focus in negotiations over shared rivers has been the apportioning of water, with each country attempting to optimize management of its portion within its frontiers rather than across the shared basin. Specialists are increasingly advocating that the emphasis should shift from water parceled out between competing nation consumers to basin-wide benefit sharing.

This shift will prove difficult in the five former Soviet "Stans" of Tajikistan, Kyrgyzstan, Uzbekistan, Kazakhstan and Turkmenistan, as all put their water to different uses. In the first two nations, the highest priority is generating hydroelectricity. In Uzbekistan, which overall consumes more than 50 percent of the two rivers' flow, the emphasis shifts to agriculture, particularly cotton cultivation. In Turkmenistan, the Amu Darya's waters are used exclusively for agriculture as it flows onward through Uzbekistan to the Aral Sea. When asked if Turkmenistan was interested in hydropower, Global Water Partnership Central Asia and Caucasus representative in Ashgabat Arslan Berdiyev replied: "Absolutely not. There is not a sustainable flow of the Amu Darya, as the landscape is steppe and desert. Furthermore, Turkmenistan has huge reserves of natural gas and oil."

According to Berdiyev, Turkmenistan has no new plans for hydroelectric construction, and its experience on joint projects has not been a particularly happy one. Citing Turkmenistan's joint $168 million Dostlyk ("friendship" in Turkmen) hydroelectric project with Iran on the Hariroud (Tejen in Turkmen) River on the Iran-Turkmen border, which opened in early 2005, Berdiyev noted that the initial agreements, signed for the project before construction began in 2000, stipulated an equal sharing of both the water and electricity, "but when the facility opened, Iran wanted 100 percent of the electricity."

Farther east, in water-rich but power-poor Tajikistan and Kyrgyzstan, hydropower is increasingly becoming an element of political influence. Many Russian and European analysts believe the Kyrgyz government's decision last month to expel the United States from its Manas airbase was heavily influenced by Moscow's decision

to grant Kyrgyzstan more than $2 billion in loans, nearly 75 percent of which was earmarked for completing the Karambara-1 hydroelectric cascade, for which Kyrgyzstan for years unsuccessfully sought funding on the international market.

Nor are Russia and the United States the sole outside players in Central Asia. Iran has agreed to assist Tajikistan in the construction of its 670-megawatt Sangtuda-2 hydropower plant on the Vakhsh River, which is scheduled for completion later this year.

The Stans have long realized the need for a coordinated approach to the issue of the Syr Darya and Amu Darya waters even before the collapse of the Soviet Union. In September 1991, three months before the Soviet Union's dissolution, the five republics signed a protocol establishing the Interstate Commission for Water Coordination, which in essence attempted to preserve the Soviet model of water management. Despite the ICWC holding more than 50 meetings since its founding, time and growing economic and political divergences between the five new nations have overwhelmed efforts to fashion a new regional approach.

Accordingly, the only certainty is that, as demand inexorably rises from growing population, agrarian and energy pressures, the ICWC's efforts are more needed than ever. As water flow is unlikely to increase, the Stans must look elsewhere for their solutions, including increased efficiency in irrigation techniques, agricultural diversification away from water-thirsty plants, and new technology to reduce water use. As the Aral Sea, which has lost more than 75 percent of is volume since the early 1960s due to the increasing siphoning off of its water for agricultural use, is an endorheic closed drainage basin with no outflow, nationalist policies pursued in lieu of the ultimate benefits of basin-wide sharing eventually may result in thirst, famine and darkness for all.

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

e-mail: info@icwc-aral.uz

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

Editor
N.D. Ananyeva

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