

Interstate Commission for Water Coordination in Central Asia	BULLETIN No. 2 (87)	June 2021
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MINUTES OF THE 80TH MEETING OF THE INTERSTATE COMMISSION FOR WATER COORDINATION (ICWC) OF THE REPUBLIC OF KAZAKHSTAN, KYRGYZ REPUBLIC, REPUBLIC OF TAJIKISTAN, TURKMENISTAN AND REPUBLIC OF UZBEKISTAN

May 11, 2021

(video meeting)

Chairman:

Shoimzoda Djamshed
Shodi

First Deputy Minister of Energy and Water Resources,
Republic of Tajikistan

ICWC members:

Kozhaniyazov Serik

Vice Minister of Ecology, Geology and Natural
Resources, Republic of Kazakhstan

Mammedov Dovlet

Deputy Chairman of the State Committee for Water
Management, Turkmenistan (by proxy)

Khamraev Shavkat

Minister of Water Management, Republic of
Uzbekistan

EC IFAS

Rakhimzoda Sulton
Nurmakhmadpur

Chairman of IFAS Executive Committee

ICWC executive bodies:

Nazarov Umar

Head, ICWC Secretariat

Makhramov Makhmud

Head, BWO Amu Darya

Kholkhuzhaev Odil

Head, BWO Amu Darya

Dukhovniy Viktor

Director, Scientific Information Center (SIC) of ICWC

Ziganshina Dinara

Deputy Director, SIC ICWC

Invited:**Republic of Kazakhstan**

Zhaxhanov Bakhyt	Deputy Governor of Kyzylorda province
Shalabekova Aliya	Director, Department of Transboundary Rivers, Ministry of Ecology, Geology and Natural Resources
Zhienbaev Musilim	Deputy Director, Department of Transboundary Rivers, Ministry of Ecology, Geology and Natural Resources
Duzbaeva Kalamkas	Head of Transboundary Water Administration at the International Treaty Department, Ministry for Foreign Affairs
Nurymbetov Seilbek	Head of Aralo-Syrdarya Basin Inspection, Committee for Water Resources, Ministry of Ecology, Geology and Natural Resources
Kipshakbayev Nariman	Director, Kazakh branch of SIC ICWC

Republic of Tajikistan

Abdurazokzoda Daler Abdukhalok	Head, Department of Water and Energy Policy, Science and Technology Development, Ministry of Energy and Water Resources
Gafurzoda Tagoymurod	Head, Division of Water Resources, Ministry of Energy and Water Resources

Turkmenistan

Paschyev Yanov Durdyevich	Head, Water Use Division, State Committee for Water Management
Charyev Saparmurad	Chief expert, Division of digital technologies and information security, State Committee for Water Management

Republic of Uzbekistan

Nazarov Azimjon First Deputy Ministry of Water Management

Ishpulatov Zokir Head, Water Resources and Use Administration,
Ministry of Water Management

Agenda of the 80th ICWC meeting

1. Results of the use of water withdrawal limits and operation of the reservoir cascades in the Syr Darya and Amu Darya River basins during the non-growing season 2020-2021.

2. Approval of the country water withdrawal limits and operation regimes of the reservoir cascades in the Syr Darya and Amu Darya River basins for the growing season 2021.

3. Follow up on proposals and initiatives voiced at the Summit of the Heads of IFAS founder-states in the city of Turkmenbashi.

4. Agenda and venue of the next 81st meeting of ICWC.

5. Additional matters

Decision on the first item:

Take into account the reports of BWO Amu Darya and BWO Syr Darya on the results of the non-growing season 2020-2021 in the Syr Darya and Amu Darya River basins.

Decision on the second item:

1. Approve the limits of country water withdrawals in Amu Darya and Syr Darya basins for the growing season 2021 (Appendices 1 and 2).

2. Take into account the proposed by BWOs forecast operation regimes of reservoir cascades in Amu Darya (Appendix 3) and Syr Darya (Appendix 4) basins for the growing season 2021.

3. ICWC members have agreed on the basis of more accurate forecast data on water availability to additionally consider and agree upon the operation modes of the reservoir cascade for the growing season 2021 in the

Syr Darya basin by the end of May.

4. Take into account the information by BWO Syrdarya on progress in drafting proposals for water withdrawal limits for the Karadarya River and the Chirchik River. The proposals are to be submitted to ICWC members for consideration and approval of the water withdrawal limits for 2022.

Decision on the third item:

1. Take note of work done by ICWC bodies as a follow-up to proposals and initiatives put forward in Turkmenbashi at the Summit of the Heads of IFAS founder-states.

2. SIC ICWC is to prepare ToR for development of a feasibility study on automation of gauging stations in the Syrdarya Basin, including small rivers, and submit it to ICWC members in due course.

3. BWO Amudarya and BWO Syrdarya together with SIC ICWC are to define more precisely the actual water losses along the Amudarya and the Syrdarya.

Decision on the fourth:

1. Hold the next meeting of ICWC in Tashkent, Uzbekistan. The date of the meeting will be decided in due course.

2. Propose the following agenda for the 81st ICWC meeting:

1) Results of the use of water withdrawal limits and operation of the reservoir cascades in the Syr Darya and Amu Darya River basins during the growing season 2021.

2) Approval of the country water withdrawal limits and operation regimes of the reservoir cascades in the Syr Darya and Amu Darya River basins for the non-growing season 2021-2022.

3) Follow up on proposals and initiatives voiced at the Summit of the Heads of IFAS founder-states in the city of Turkmenbashi.

4) Additional matters.

5) Agenda and venue of the next regular 82nd ICWC meeting.

Republic of Kazakhstan

S.S. Kozhaniyazov

Kyrgyz Republic

Republic of Tajikistan

D.Sh.Shoimzoda

Turkmenistan

D.S. Mammedov

Republic of Uzbekistan

Sh.R.Khamraev

Appendix 1

Limits of water withdrawal from the Amu Darya River and water supply to the river delta and the Aral Sea for the growing season 2021

River basin, state	Water withdrawal limits, mcm	
	Total annual (1.10.20 to 1.10.21)	including growing season (1.04.21 to 1.10.21)
Total withdrawal from the Amu Darya River	55392	39673
of which:		
Republic of Tajikistan	9822	6953
Republic of Uzbekistan	1570	1200
From the Amu Darya River to the nominal Kerki gauging station	44000	31520
Turkmenistan	22000	15500
Republic of Uzbekistan	22000	16020
Plus:		
- water supply to the river delta and Aral Sea, including irrigation water and CDW	4200	2100
- sanitary and environmental releases to irrigation systems in:	800	
Dashoguz province	150	
Khorezm province	150	
Republic of Karakalpakstan	500	
Total	58822	40573

Appendix 2

Limits of water withdrawal by state in the Syrdarya River Basin

Water-user state	Proposed limits, mcm
Republic of Kazakhstan (Dustlik canal)	903
Kyrgyz Republic	246
Republic of Tajikistan	1905
Republic of Uzbekistan	8800
Total:	11854

Appendix 3

**Forecast operation regimes of Nurek and Tuyamuyun reservoirs
(April 2021 – September 2021)**

Nurek reservoir	unit							total
		Apr	May	June	July	Aug	Sep	
Volume: beginning of the period	mcm	6383	6290	6553	7348	9300	10525	6383
Inflow to the reservoir	m ³ /s	417	787	1000	1435	1290	783	
	mcm	1082	2109	2593	3844	3456	2030	15113
Water releases from the reservoir	m ³ /s	426	702	777	800	853	783	
	mcm	1104	1879	2013	2143	2285	2030	11454
Volume: end of the period	mcm	6290	6553	7348	9300	10525	10520	10520
Accumulation (+) drawdown (-)	mcm	-150	262	795	1952	1143	-5	4137

Tuyamuyun reservoir	unit							total
		Apr	May	June	July	Aug	Sep	
Volume: beginning of the period	mcm	2652	2601	3175	3846	4147	3808	2652
Inflow to the reservoir	m ³ /s	568	1121	1574	1707	1236	728	
	mcm	1472	3002	4080	4572	3311	1887	18324
Water releases from the reservoir	m ³ /s	588	907	1315	1595	1437	884	
	mcm	1524	2429	3408	4272	3849	2291	17774
Volume: end of the period	mcm	2601	3175	3846	4147	3808	3203	3203
Accumulation (+) drawdown (-)	mcm	39	276	643	386	-457	-382	551

**Forecast operation schedule of Naryn-SyrDarya reservoir cascade
for 1 April to 30 September 2021**

		April	May	June	July	August	September	Total mcm
Toktogul reservoir								
Inflow to the reservoir	m ³ /s	252	541	823	708	492	281	8175
	mcm	652	1448	2132	1897	1317	729	
Volume: beginning of the season	mcm	8712	8674	9302	10421	11156	11438	
end of the season	mcm	8674	9302	10421	11156	11438	11650	
Water releases from reservoir (total)	m ³ /s	266	300	384	422	372	190	5107
	mcm	689	804	995	1130	996	492	
including: 1. for domestic needs of the Kyrgyz Republic	m ³ /s	266	300	299	340	310	190	4502
	mcm	689	804	775	910	831	492	
2. additional releases - energy receipt								
Uzbekistan	m ³ /s			42	41	21		275
	mcm			110	110	55		
Kazakhstan	m ³ /s			42	41	41		330
	mcm			110	110	110		
Bakhti Tochik reservoir								
Inflow to the reservoir (Akdjar GS)	m ³ /s	448	388	308	250	254	272	5050
	mcm	1160	1039	797	669	681	704	
Volume: beginning of the season	mcm	3463	3433	3477	2988	2091	1506	
end of the season	mcm	3433	3477	2988	2091	1506	1604	
Water releases from reservoir	m ³ /s	461	347	440	500	392	185	

	mcm	1194	929	1140	1339	1050	480	6131
Shardara reservoir								
Inflow to the reservoir	m ³ /s	505	358	200	180	140	170	4084
	mcm	1309	959	518	482	375	441	
Volume: beginning of the season	mcm	5067	5140	4513	3396	2073	1020	981
end of the season	mcm	5140	4513	3396	2073	1020	981	
Water releases from reservoir	m ³ /s	400	520	520	520	450	150	6764
	mcm	1037	1393	1348	1393	1205	389	
Water supply to the Aral Sea	m ³ /s	80	70	70	70	70	120	1262
	mcm	207	187	181	187	187	311	
Charvak reservoir								
Inflow to the reservoir	m ³ /s	205	373	461	337	190	113	4428
(4 rivers in total)	mcm	532	998	1194	902	508	294	
Volume: beginning of the season	mcm	561	786	1292	1881	1926	1688	1567
end of the season	mcm	786	1292	1881	1926	1688	1567	
Water releases from reservoir	m ³ /s	125	184	233	320	278	160	3437
(water discharge from Gazalkent HPP)	mcm	323	492	605	857	745	415	
Andizhan reservoir								
Inflow to the reservoir	m ³ /s	112	200	142	103	63	52	1772
	mcm	291	536	367	275	169	134	
Volume: beginning of the season	mcm	764	805	965	996	788	674	704
end of the season	mcm	805	965	996	788	674	704	
Water releases from reservoir	m ³ /s	97	140	130	180	106	40	1832
	mcm	251	375	337	482	283	104	

RESULTS OF THE USE OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES IN THE AMUDARYA AND SYRDARYA RIVER BASINS OVER THE 2020-2021¹ NON-GROWING SEASON

I. Amudarya River basin

The actual water availability in the Amudarya River basin at the nominal Kerki gauging station upstream of Garagumdarya was 71.8 % of the norm over the 2020-2021 non-growing season. The estimations were made taking into account the natural flow in the Vakhsh River and regulation by the Nurek reservoir. In the past non-growing season, this value was 74.0 % of the norm.

The use of the approved water withdrawal limits over the non-growing season under consideration is as follows (breakdown by state). Taking into account the current water situation, 85.4 % of the approved water withdrawal limits was used totally in the basin. While the limit was 15,730 mcm, the actually used volume was 13,171 mcm, of which:

Republic of Tajikistan actually used 2,356.9 mcm or 81.8% of the total limit;

Turkmenistan actually used 5,763.5 mcm or 88.7 % of the total limit;

Republic of Uzbekistan actually used 5,050.7 mcm or 79.5% of the total limit.

Water user state	Water withdrawal limits, non-growing season 2020-2021	Actual, mcm	%% of use
Republic of Tajikistan	2,880	2,356.9	81.8
Turkmenistan	6,500.0	5,763.5	88.7
Republic of Uzbekistan	6,350.0	5,050.7	79.5
Total	15,730	13,171	83.7

The use of water limits downstream of the nominal Kerki gauging station upstream of Garagumdarya was 84.5 % of the total limit over the non-growing season, of which:

Turkmenistan actually used 5,763.5 mcm or 88.7 % of the total limit;

¹Information on the first item of the 80th ICWC Meeting's Agenda

Republic of Uzbekistan actually used 4,786.9 mcm or 80.0 % of the total limit.

River section, Water user state	Water withdrawal limits, non-growing season 2020-2021	Actual, mcm	%% of use
Downstream of the nominal Kerki GS	12,480.0	10,550.4	84.5
Turkmenistan	6,500	5,763.5	88.7
Republic of Uzbekistan	5,980	4,786.9	80

The actual use of water against limits is as follows by river reach:

1. Upper reaches – 80.6 % of the total limit, including 81.8 % of total limit in the Republic of Tajikistan and 71.3 % in the Republic of Uzbekistan.

2. Middle reaches – 93.6 % of the total limit, including 92.3 % of total limit in the Republic of Uzbekistan and 94.4 % in Turkmenistan.

3. Lower reaches – 66.3 % of the total limit, including 65.6 % of total limit in the Republic of Uzbekistan and 67.7 % in Turkmenistan.

Water supply to the Amudarya delta and the Aral Sea was planned to be 2,100 mcm for the non-growing season. However, actual supply was 1,050 mcm or 50 %.

River reach, Water user state	Water withdrawal limits, non-growing season 2020-2021	Actual, mcm	%% of limit
Upper reaches	3,250	2,620.8	80.6
Republic of Tajikistan	2,880	2,356.9	81.8
Republic of Uzbekistan	370	263.9	71.3
Middle reaches	8,345	7,809.2	93.6
Turkmenistan	5,100.0	4,815.4	94.4
Republic of Uzbekistan	3,245.0	2,993.8	92.3
Lower reaches	4,135.0	2,741.1	66.3
Turkmenistan	1,400.0	948.0	67.7
Republic of Uzbekistan	2,735.0	1,793.1	65.6

The inflow to the Nurek reservoir was expected to be 3,783 mcm in the given non-growing season; however, the actual inflow was 3,686 mcm or 97.4 %. Water releases from the reservoir were planned to be 7,613 mcm; the actual releases were 7,339 mcm or 96.4 %. By the end of the non-growing season 2020-2021, water storage in the reservoir was planned to be 6,217 mcm. The actual volume was 6,283 mcm or 100.1 %.

The inflow to the Tuyamuyun reservoir was expected to be 7,844 mcm in the given non-growing season; however, the actual inflow was 5,463 mcm or 69.6 %. Water releases from the reservoir were planned to be 7,180 mcm; while the actual water releases were 5,269 mcm or 73.4 %.

By the end of the reporting period, water storage in the reservoir was planned to be 3,122 mcm; however, the actual storage was 2,652 mcm or 84.9 %.

Item		unit	Nurek reservoir	Tuyamuyun reservoir
Volume: beginning of the season		mcm	10,574	2,458
Inflow to the reservoir	forecast	mcm	3,783	7,844
	actual	mcm	3,686	5,463
		%%	97.4	69.6
Water releases from reservoir	forecast	mcm	7,613	7,180
	actual	mcm	7,339	5,269
		%%	96.4	73.4
Volume: end of the season	forecast	mcm	6,217	3,122
	actual	mcm	6,283	2,652
		%%	100.1	84.9
Accumulation (+), drawdown (-)	forecast	mcm	-4,357	664
	actual	mcm	-4,297	194
		%%	98.6	29.2

It should be noted that all the main indicators were lower than planned, especially in the Tuyamuyun reservoir, due to the low inflow of water to it, which affected the water availability of the downstream users.

More detailed information is provided in Tables below.

Analysis of the use of water withdrawal limits in the Amudarya River basin over the non-growing season 2020-2021, mcm

Item	Limit, non-growing season 2020-2021	Actual	%%
Upper Amudarya Administration	3,250.0	2,620.8	80.6
(Upper reaches)			
of which:			
Tajikistan	2,880.0	2,356.9	81.8
Uzbekistan:	370	263.9	71.3
Water withdrawals from the Amudarya River at nominal Kerki gauging station	12,480	10,550.4	84.5
of which:			
Turkmenistan	6,500.0	5,763.5	88.7
Uzbekistan:	5,980.0	4,786.9	80.0
Middle Amudarya Administration	8,345	7,809.2	93.6
(Middle reaches) of which:			
Turkmenistan	5,100	4,815.4	94.4
Uzbekistan	3,245	2,993.8	92.3
Lower reaches:	4,135	2,741.1	66.3
of which:			
Turkmenistan	1,400.0	948.0	67.7
Uzbekistan	2,735.0	1,793.1	65.6
sanitary releases to irrigation systems in:	800	568.2	71.0
Republic of Karakalpakstan	500	339.6	67.9
Dashoguz province	150	123.9	82.6
Khorezm province	150	104.7	69.8
Total for the basin	15,730.0	13,171.1	83.7
of which:			
Tajikistan	2,880.0	2,356.9	81.8
Turkmenistan	6,500.0	5,763.5	88.7
Uzbekistan:	6,350.0	5,050.7	79.5

Information on water supply to the Aral Sea and the Amudarya River delta over the non-growing season 2020-2021, mcm

Name	X	XI	XII	I	II	III	Actual delivery from 01.10.20 to 31.03.21
From the Amudarya River, at Samanbay GS	64	89	111	73	73	80	490
Total water discharge from Dustlik and Suenli canals system	61	77	61	21	76	0	296
CDF	45	39	37	37	43	63	264
Total:	170	205	209	131	192	143	1,050
Cumulative	170	375	584	715	907	1,050	

**Actual regime of operation of the Nurek reservoir
(October 2020 – March 2021)**

	Unit	Actual						TOTAL
		October	November	December	January	February	March	
Volume: beginning of the season	mcm	10574	10313	9781	8759	7734	6928	10574
Inflow to the reservoir	m3/s	289	250	227	192	181	262	
	mcm	774	648	608	515	438	702	3686
Water releases from the reservoir	m3/s	378	427	569	537	451	435	
	mcm	1013	1107	1524	1438	1091	1165	7339
Volume: end of the season	mcm	10313	9781	8759	7734	6928	6283	6283
Accumulation (+), drawdown (-)	mcm	-261	-532	-1022	-1025	-806	-645	-4291

**Actual regime of operation of the Tuyamuyun reservoir
(October 2020 – March 2021)**

	Unit	Actual						TOTAL
		October	November	December	January	February	March	
Volume: beginning of the season	mcm	2458	2416	2825	3611	4092	3180	2458
Inflow to the reservoir	m3/s	444	354	462	351	188	270	
	mcm	1189	918	1237	940	455	723	5463
Water releases from the reservoir	m3/s	460	196	169	172	565	468	
	mcm	1231	507	452	460	1366	1253	5269
Volume: end of the season	mcm	2416	2825	3611	4092	3180	2652	2652
Accumulation (+), drawdown (-)	mcm	-42	409	786	481	-912	-528	194

II. Syrdarya River basin

I. Forecast of inflow

On the 28th of September 2020, UzHydromet provided the forecast for the non-growing season 2020-2021.

On the 6th of October 2020 the expected operation regimes of the Toktogul reservoir were provided by the Coordination Dispatch Center (CDC) “Energy”, including the forecast operation regimes of the Andizhan and Charvak reservoirs by the Ministry of Water Management of the Republic of Uzbekistan.

According to the data, the inflow to upstream reservoirs was as follows:

- 100% to the Toktogul reservoir;
- 88% to the Andizhan reservoir;
- 101% of the norm to the Charvak reservoir (4 rivers in total).

The total lateral inflow was expected to be 99% of the norm.

In total, water content was expected to be 99% of the norm in the Syrdarya basin.

The forecast schedule of the Naryn-Syrdarya reservoir cascades for the growing season was considered at the 79th meeting of ICWC and the Syrdarya Basin water withdrawal limits were approved.

The actual water situation from 1 October 2020 to 31 March 2021 is as follows:

II. Total inflow (Table 2.1)

The norm of total inflow to the Syrdarya River basin is 16,278 mcm over the non-growing season.

According to the UzHydromet’s forecast, it was expected to be 16,075 mcm or 99% of the norm.

The actual inflow amounted to 13,856 mcm or 2,219 less or 86 % of the forecast (85% of the norm) (in 2019-2020, the total inflow was 15,860 mcm)

III. Inflow to upstream reservoirs (Table 2.1)

The norm of inflow to the upstream reservoirs of the Naryn-Syrdarya cascade is 5,203 mcm over the non-growing season.

The forecast inflow was expected to be 5,102 mcm or 98% of the norm.

The actual inflow to upstream reservoirs was 4,804 mcm or 298 mcm less than the forecast or 94% of the forecast (92% of the norm) (in 2019-2020, the inflow to reservoirs was 5,317 mcm for the same period).

- The inflow to the Toktogul reservoir:

the norm of inflow is 2,861 mcm;

the forecast was to be 2,861 mcm;

The actual inflow was 2,892 mcm or 31 mcm more or 101% than the forecast (101% of the norm).

- The inflow to the Andizhan reservoir:

the norm of inflow is 934 mcm;

the forecast was to be 822 mcm;

The actual inflow was 783 mcm or 39 mcm less or 95% than the forecast (84% of the norm).

- The inflow to the Charvak reservoir (4 rivers in total):

the norm of inflow is 1,408 mcm;

the forecast was to be 1,419 mcm;

The actual inflow was 1,129 mcm or 290 mcm more or 80% than the forecast (80% of the norm).

IV. Lateral inflow (Table 2.1)

The norm of lateral inflow to Syrdarya basin is 11,075 mcm. By UzHydromet's forecast the lateral inflow was expected to be 10,973 mcm (99% of the norm).

The actual lateral inflow was 9,052 mcm or 1,921 mcm less than the forecast or 92% of the forecast (82% of the norm) (in 2019-2020, the lateral inflow was 10,543 mcm for the non-growing season).

1. In the Toktogul-Uchkurgan reach:

- the norm of lateral inflow is 398 mcm;

- the forecast was to be 398 mcm.

- the actual lateral inflow was 351 mcm or 47 mcm less than the forecast (88% of the forecast).

2. In the Andizhan-Uchtepa reach:

- the norm of lateral inflow is 2,518 mcm;
- the forecast was to be 2,360 mcm.
- the actual lateral inflow was 2,343 mcm or 17 mcm less than the forecast (99% of the forecast).

3. In the Uchkurgan, Uchtepe – Bakhri Tochik reach:

- the norm is 4,365 mcm;
- the forecast was to be 4,396 mcm.
- the actual lateral inflow was 3,475 mcm or 921 mcm less than the forecast (79% of the forecast).

4. In the Bakhri Tochik-Shardara reach:

- the norm is 2,953 mcm;
- the forecast was to be 2,985 mcm.
- the actual lateral inflow was 2,102 mcm or 883 mcm less than the forecast (70% of the forecast).

5. In the Gazalkent-Chinaz reach (excluding Ugam):

- the norm is 841 mcm;
- the forecast was to be 833 mcm.
- the actual lateral inflow was 780 mcm or 53 mcm less than the forecast (94% of the forecast).

Table 2.1

Item	Non-growing season, mcm											
	1 October 2020 to 31 March 2021						1 October 2019 to 31 March 2020					
	norm	forecast	forecast/norm (%)	actual	actual/forecast (%)	actual/norm (%)	norm	forecast	forecast/norm (%)	actual	actual/forecast (%)	actual/norm (%)
Inflow to upstream reservoirs												
Toktogul	2,861	2,861	100	2,892	101	101	2,875	2,875	100	3,131	109	109
Andizhan	934	822	88	783	95	84	938	813	87	684	84	73
Charvak (4 rivers in total)	1,408	1,419	101	1,129	80	80	1,414	1,425	101	1,502	105	106
Including:												
- Charvak (3 rivers in total)	1,242	1,261	102	1,004	80	81	1,248	1,267	102	1,365	108	109
- Ugam river	166	158	95	125	79	76	166	158	96	137	86	82
Total	5,203	5,102	98	4,804	94	92	5,227	5,113	98	5,317	104	102
Lateral inflow												
Toktogul – Uchkurgan	398	398	100	351	88	88	400	380	95	399	105	100
Andizhan – Uchtepe	2,518	2,360	94	2,343	99	93	2,530	2,610	103	2,681	103	106
Uchkurgan, Uchtepe – Bakhri Tochik	4,365	4,396	101	3,475	79	80	4,391	4,107	94	4,223	103	96
Bakhri Tochik – Shardara	2,953	2,985	101	2,102	70	71	2,971	2,608	88	2378	91	80
Gazalkent–Chinaz (excluding Ugam)	841	833	99	780	94	93	846	870	103	862	99	102
Total	11,075	10,973	99	9,052	82	82	11,138	10,575	95	10,543	100	95
Overall (total inflow)	16,278	16,075	99	13,856	86	85	16,365	15,688	96	15,860	101	97

Table 2.2

Item	Non-growing season, mcm 1 October 2020 to 31 March 2021.				Non-growing season, mcm 1 October 2019 to 31 March 2020.			
	Forecast schedule	Actual	Actual/ schedule (%)	Difference (actual "-" schedule)	Forecast schedule	Actual	Actual/ schedule (%)	Difference (actual "-" schedule)
Inflow to in-stream reservoirs								
Inflow to the Bakhri Tochik reservoir	12,799	11,707	91	-1,092	13,046	12,099	93	-947
Inflow to the Shardara reservoir	11,594	9,734	84	-1,860	12,735	10,347	81	-2,388
Supply to the Aral Sea								
Supply to the Aral Sea	2,402	1,151	48	-1,251	3,009	1,952	65	-1,057

Table 2.3

Reservoir	Water releases, mcm 1 October 2020 to 31 March 2021.		Actual/ schedule (%)	Water releases, mcm 1 October 2019 to 31 March 2020.		Actual/ schedule (%)
	Forecast schedule	Actual		Forecast schedule	Actual	
Upstream reservoirs						
Toktogul	8,679	9,379	108	9,415	8,699	92
Andizhan	480	378	79	618	555	90
Charvak (discharge of the Gazalkent HPP)	1,637	1,748	107	2,477	2,465	100
TOTAL:	10,796	11,505	107	12,510	11,719	94
In-stream reservoirs						
Bakhri Tochik	11,256	11,090	99	11,926	11,896	100
Shardara	7,195	5,078	71	8,443	6,555	78
TOTAL:	18,451	16,168	88	20,369	18,451	91
OVERALL:	29,247	27,673	95	32,879	30,170	92

Table 2.4

Reservoir	Reservoir storage, mcm					
	Actual as of October 1, 2020	Forecast schedule as of 1 April, 2021	Actual as of 1 April, 2021	Difference (actual "-" schedule)	Actual as of 1 April, 2020	Difference (actual 2021 "-" actual 2020)
Upstream reservoirs						
Toktogul	15,202	9,371	8,712	-659	11641	-2,929
Andizhan	383	725	764	39	820	-56
Charvak (4 rivers in total)	1,282	1,055	561	-494	470	91
TOTAL:	16,867	11,151	10,037	-1,114	12,931	-2,894
In-stream reservoirs						
Bakhri Tochik	1,684	3,439	3,463	24	3,070	393
Shardara	829	5,092	5,067	-25	4,879	188
TOTAL:	2,513	8,531	8,530	-1	7,949	581
OVERALL:	19,380	19,682	18,567	-1,115	20,880	-2,313

V. Inflow to in-stream reservoirs and water supply to the Aral Sea (Table.2.2)

The inflow to the Bakhri Tochik reservoir was scheduled to be 12,799 mcm over the non-growing season.

The actual inflow to the reservoir was 11,707 mcm or 1,092 less or 91 % of the forecast (in 2019-2020, 12,099 mcm were supplied to the reservoir).

The inflow to the Shardara reservoir was scheduled to be 11,594 mcm.

Actual inflow to the reservoir was 9,734 mcm or 1,860 mcm less or 84% of the forecast (in 2019-2020, 10,347 mcm were supplied to the reservoir).

The inflow to the Aral Sea and the Aral Sea region was scheduled to be 2,402 mcm. The actual inflow to the Aral Sea and the Aral Sea region as measured at the Karateren gauging station was 1,151 mcm or 1,251 mcm less than the schedule (48% of the schedule).

VI. Water releases from reservoirs (Table 2.3)

According to the forecast operation regimes of the Naryn-Syrdarya reservoir cascade, 29,247 mcm were to be released from reservoirs over the non-growing season (Table 2.3).

The actual water releases were 27,673 mcm or 1574 mcm less than the schedule (95% of the schedule) (in 2019-2020, 30,170 mcm were released from reservoirs).

- 8,679 mcm were to be released from Toktogul reservoir. The actual water releases were 9,379 mcm or 700 mcm more than the schedule (108% of the schedule).

- 480 mcm were to be released from Andizhan reservoir. The actual water releases were 378 mcm or 102 mcm less than the schedule (79% of the schedule).

- 1,637 mcm were to be released from Charvak reservoir. The actual water releases were 1,748 mcm or 111 mcm more than the schedule (107% of the schedule).

- 11,256 mcm were to be released from Bakhri Tochik reservoir. The actual water releases were 11,090 mcm or 166 mcm less than the schedule (99% of the schedule).

- 7,195 mcm were to be released from Shardara reservoir. The actual water releases were 5,078 mcm or 2,117 mcm less than the schedule (71% of the schedule).

VII. Water storage in reservoirs (Table.2.4)

The actual water storage of Naryn-Syrdarya reservoir cascade was 19,380 mcm by the beginning of the non-growing season (as of 1 October 2020).

In the upstream reservoirs, the scheduled water storage was to be 19,682 mcm by the end of the non-growing season (as of 1 April 2020).

The actual water storage was 18,567 mcm or 1,115 less than the scheduled forecast by the end of the non-growing season.

Water storage in the upstream reservoirs:

Toktogul – 8712 mcm or 659 mcm less than the scheduled forecast (9,371 mcm),

Andizhan - 764 mcm or 39 mcm more than the scheduled forecast (725 mcm),

Charvak – 561 mcm or 494 mcm less than the scheduled forecast (1,055 mcm).

In the in-stream reservoirs, the scheduled water storage was to be 8,531 mcm by the end of the growing season. The actual water storage was 8,530 mcm.

Water storage in the in-stream reservoirs:

Bakhri Tochik – 3,463 mcm or 24 mcm more than the scheduled forecast (3,439 mcm),

Shardara – 5,067 mcm or 25 mcm more than the scheduled forecast (5,092 mcm).

VIII. Water supply to the states (Table.2.5)

Water was supplied to the user states based on approved water withdrawal limits and submitted requests over the growing season.

Over the non-growing season, water supply was:

- Republic of Kazakhstan: limit – 498 mcm, actual – 499 mcm;

- Kyrgyz Republic: limit – 47 mcm, actual – 28 mcm;

- Republic of Tajikistan: limit – 365 mcm, actual – 41 mcm;

- Republic of Uzbekistan: limit– 3,347 mcm, actual – 3,362 mcm.

Actual total water withdrawals by user states amounted to 3,930 mcm

Table 2.5

Water user state	Water withdrawals, 1 October 2020 to 31 March 2021, mcm	
	limit	actual
Republic of Kazakhstan (Dustlik canal)	498	499
Kyrgyz Republic	47	28
Republic of Tajikistan	365	41
Republic of Uzbekistan	3,347	3,362
Total	4,257	3,930

Table 2.6 presents schedule-forecast of the Naryn-Syrdarya reservoir cascade for the non-growing season 2020-2021 (as noted at 79th ICWC meeting agenda).

Table 2.7 provides actual operation regimes of the Naryn-Syrdarya reservoir cascade over the non-growing season 2020-2021.

Table 2.6

**Forecast-schedule of the Naryn-Syrdarya reservoir cascade
1 October 2020 to 31 March 2021**

		October	November	December	January	February	March	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	237	202	168	159	158	166	2,861
	mcm	635	524	450	426	382	445	
Volume: beginning of the season	mcm	15,202	14,812	13,944	12,707	11,392	10,274	9,371
end of the season	mcm	14,812	13,944	12,707	11,392	10,274	9,371	
Water releases from the reservoir	m3/s	383	535	630	650	620	500	8,679
	mcm	1,025	1,386	1,687	1,741	1,500	1,339	
Bakhri Tochik reservoir								
Inflow to the reservoir	m3/s	455	871	968	936	941	727	12,799
(Akdjar GS)	mcm	1,218	2,259	2,592	2,507	2,276	1,948	
Volume: beginning of the season	mcm	1,684	2,617	3,037	3,264	3,368	3,472	3,439
end of the season	mcm	2,617	3,037	3,264	3,368	3,472	3,439	
Water releases from the reservoir	m3/s	105	720	900	920	920	750	11,256
	mcm	281	1,866	2,411	2,464	2,226	2,009	
Shardara reservoir								
Inflow to the reservoir	m3/s	175	667	902	950	971	780	11,594
	mcm	470	1,728	2,415	2,544	2,348	2,089	
Volume: beginning of the season	mcm	829	995	2,076	2,790	3,848	4,732	5,092
end of the season	mcm	995	2,076	2,790	3,848	4,732	5,092	

		October	November	December	January	February	March	Total, mcm
Water releases from the reservoir	m3/s	86	247	630	550	600	640	7,195
	mcm	230	639	1,687	1,473	1,452	1,714	
Supply to the Aral Sea	m3/s	18	82	195	225	210	190	2,402
	mcm	49	212	522	603	508	509	
Charvak reservoir								
Inflow to the reservoir (4 rivers in total)	m3/s	109	97	83	73	72	105	1,419
	mcm	292	253	222	196	175	281	
Volume: beginning of the season end of the season	mcm	1,282	1,213	1,169	1,122	1,058	1,015	
	mcm	1,213	1,169	1,122	1,058	1,015	1,055	
Water releases from the reservoir (Releases from Gazalkent HPP)	m3/s	134	113	100	96	90	90	1,637
	mcm	358	294	268	258	218	241	
Andizhan reservoir								
Inflow to the reservoir	m3/s	32	48	65	55	53	60	822
	mcm	85	125	174	147	129	161	
Volume: beginning of the season end of the season	mcm	383	263	290	447	578	693	
	mcm	263	290	447	578	693	725	
Water releases from the reservoir	m3/s	77	38	6	6	6	48	480
	mcm	206	98	16	16	15	129	

Table 2.7

Actual operation regimes of the Naryn-Syrdarya reservoir cascade from 1 October 2020 to 31 March 2021

		October (actual)	November (actual)	December (actual)	January (actual)	February (actual)	March (actual)	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	239	195	171	154	183	162	2,892
	mcm	640	504	458	412	443	433	
Volume: beginning of the season	mcm	15,202	14,815	13,737	12,236	10,652	9,574	
end of the season	mcm	14,815	13,737	12,236	10,652	9,574	8,712	
Water releases from the reservoir	m3/s	383	608	730	746	629	487	9,379
	mcm	1,025	1,575	1,955	1,998	1,522	1,304	
Bakhri Tochik reservoir								
Inflow to the reservoir (Akdjar GS)	m3/s	450	770	962	871	739	677	11,707
	mcm	1,205	1,995	2,576	2,332	1,787	1,813	
Volume: beginning of the season	mcm	1,684	2,614	3,159	3,418	3,463	3,521	
end of the season	mcm	2,614	3,159	3,418	3,463	3,521	3,463	
Water releases from the reservoir	m3/s	105	618	975	918	818	806	11,090
	mcm	281	1,601	2,611	2,460	1,979	2,158	
Shardara reservoir								
Inflow to the reservoir	m3/s	177	543	939	783	563	702	9,734
	mcm	474	1,408	2,515	2,096	1,361	1,880	
Volume: beginning of the season	mcm	829	995	1,681	3,031	3,838	4,200	

		October (actual)	November (actual)	December (actual)	January (actual)	February (actual)	March (actual)	Total, mcm
end of the season	mcm	995	1,681	3,031	3,838	4,200	5,067	
Water releases from the reservoir	m3/s	86	221	403	555	437	243	
	mcm	230	574	1,080	1,487	1,057	651	5,078
Supply to the Aral Sea	m3/s	18	28	39	59	180	124	
	mcm	49	71	106	158	435	332	1,151
Charvak reservoir								
Inflow to the reservoir (4 rivers in total)	m3/s	86	71	62	59	65	87	
	mcm	229	185	166	157	157	234	1,129
Volume: beginning of the season	mcm	1,282	1,129	957	788	648	577	
	mcm	1,129	957	788	648	577	561	
Water releases from the reservoir (Releases from Gazalkent HPP)	m3/s	134	133	116	100	86	97	
	mcm	358	343	310	268	207	261	1,748
Andizhan reservoir								
Inflow to the reservoir	m3/s	33	52	55	44	52	62	
	mcm	88	135	148	119	127	166	783
Volume: beginning of the season	mcm	383	269	335	461	557	666	
	mcm	269	335	461	557	666	764	
Water releases from the reservoir	m3/s	75	24	6	8	6	24	
	mcm	200	62	16	20	15	65	378

APPROVAL OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES DURING THE GROWING SEASON 2021 IN THE AMUDARYA AND SYRDARYA RIVER BASINS ²

I. Amudarya River basin

Limits of water withdrawal from the Amudarya River and water supply to the delta and the Aral Sea for the growing season 2021, mcm

River basin, state	Water withdrawal limits, mcm	
	Total annual (1.10.20-1.10.21)	Including growing season (1.04.21-1.10.21)
Total withdrawal from the Amudarya River	55,392	39,673
Of which:		
Republic of Tajikistan	9,822	6,953
Republic of Uzbekistan	1,570	1,200
From the Amudarya River to the nominal Kerki gauging station	44,000	31,520
Turkmenistan	22,000	15,500
Republic of Uzbekistan	22,000	16,020
Plus: -		
- water supply to the delta and the Aral Sea, including irrigation water and CDW	4,200	2,100
- sanitary and environmental releases to irrigation systems in:	800	
Dashoguz province	150	
Khorezm province	150	
Republic of Karakalpakstan	500	
Total	58,822	40,573

² Information on the second item of the 80th ICWC meeting agenda

**Forecast operation regimes of the Nurek reservoir
(April 2021 to September 2021) mcm**

	Unit	Forecast						Total
		April	May	June	July	August	September	
Volume: beginning of the period	mcm	6,383	6,290	6,553	7,348	9,300	10,525	6,383
Inflow to the reservoir	m3/s	417	787	1,000	1,435	1,290	783	
	mcm	1,082	2,109	2,593	3,844	3,456	2,030	15,113
Water releases from the reservoir	m3/s	426	702	777	800	853	783	
	mcm	1,104	1,879	2,013	2,143	2,285	2,030	11,454
Volume: end of the period	mcm	6,290	6,553	7,348	9,300	10,525	10,520	10,520
Accumulation (+) drawdown (-)	mcm	-150	262	795	1,952	1,143	-5	4,137

**Forecast operation regimes of the Tuyamuyun reservoir
(April 2021 to September 2021) mcm**

	Unit	Forecast						Total
		April	May	June	July	August	September	
Volume: beginning of the period	mcm	2,652	2,601	3,175	3,846	4,147	3,808	2,652
Inflow to the reservoir	m ³ /s	568	1,121	1,574	1,707	1,236	728	
	mcm	1,472	3,002	4,080	4,572	3,311	1,887	18,324
Water releases from the reservoir	m ³ /s	588	907	1,315	1,595	1,437	884	
	mcm	1,524	2,429	3,408	4,272	3,849	2,291	17,774
Volume: end of the period	mcm	2,601	3,175	3,846	4,147	3,808	3,203	3,203
Accumulation (+) drawdown (-)	mcm	39	276	643	386	-457	-382	551

II. Syrdarya River basin

I. Forecast of inflow

According to the UzHydromet's forecast on the 7th of April, water content was expected to be 80-90% (85%) of the norm in the basins of the Naryn River, 100-105% (102.5%) in the rivers of the southern Fergana Valley, 75-80% (77.5%) in the Chirchik River and Akhangaran River, 70-80% (75%) in the Karadarya river and 75-85% (80%) in the rivers of the northern Fergana Valley during the growing season 2021.

On the 12th of April 2021 the expected operation regimes of the Toktogul reservoir were provided by the Coordination Dispatch Center (CDC) "Energy", including the forecast operation regimes of the Andizhan and Charvak reservoirs by the Ministry of Water Management of the Republic of Uzbekistan and of the Shardara reservoir by the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan.

According to the data, the inflow to upstream reservoirs was as follows:

- 85% to the Toktogul reservoir;
- 61% to the Andizhan reservoir;
- 77% of the norm to the Charvak reservoir (4 rivers in total).

The total lateral inflow is expected to be 79% of the norm.

In total, water content is expected to be 79% of the norm in the Syrdarya basin.

II. Total inflow (Table. 2.1)

The norm of total inflow in the Syrdarya basin is 29,286 mcm over the growing season. The forecast inflow is to be 23,051 mcm (79% of the norm).

III. Inflow to upstream reservoirs (Table. 2.1)

The norm of inflow to the upstream reservoirs of the Naryn-Syrdarya cascade is 18,324 mcm over the growing season. It is forecasted to be 14,375 mcm (78% of the norm).

The norm of inflow to the Toktogul reservoir is 9,620 mcm. It is forecasted to be 8,175 mcm (85% of the norm).

The norm of inflow to the Andizhan reservoir is 2,927 mcm. It is forecasted to be 1,772 mcm (61% of the norm).

The norm of inflow to the Charvak reservoir (4 rivers in total) is 5,777 mcm, including 537 mcm to the Ugam river. It is forecasted to be 4,428 mcm (77% of the norm), including 474 mcm to the Ugam river.

IV. Lateral inflow (Table 2.1)

The norm of lateral inflow is 10,962 mcm. The forecast lateral inflow is to be 8,676 mcm (79% of the norm).

V. Water storage in the reservoirs (Table 2.2)

As of 1 April 2021, the total water storage in the reservoirs is 18,567 mcm (including 7,963 mcm of dead storage). The water storage, excluding dead storage, is 10,604 mcm.

Available water resources of the Naryn-Syrdarya reservoir cascade (water storage in the reservoirs, excluding dead storage and plus total inflow) are 33,655 mcm in the growing season 2021.

$$(23,051 \text{ mcm} + 10,604 \text{ mcm} = 33,655 \text{ mcm})$$

VI. Water releases from reservoirs (Table 2.3)

According to the forecast operation regime of the Naryn-Syrdarya reservoir cascade, 23,271 mcm is planned to be released from the reservoirs in the growing season 2021.

Table 2.1

Name of water object	Growing season, mcm								
	2021			2020					
	Norm	Forecast	Forecast/norm (%)	Norm	Forecast	Forecast/norm (%)	Actual	Actual/forecast (%)	Actual/norm (%)
Inflow to upstream reservoirs									
Toktogul	9,620	8,175	85	9,620	8,656	90	8,679	100	90
Andizhan	2,927	1,772	61	2,992	2,083	70	1,200	58	40
Charvak (4 rivers in total)	5,777	4,428	77	5,748	5,176	90	4,399	85	77
Including:									
- Charvak (3 rivers in total)	5,240	3,954	75	5,208	4,702	90	4,042	86	78
- Ugam river	537	474	88	539	474	88	357	75	66
Total	18,324	14,375	78	18,360	15,915	87	14,278	90	78
Lateral inflow									
Toktogul – Uchkurgan	1,216	1,095	90	1,216	1,144	94	1,076	94	88
Andizhan – Uchtepe	2,511	2,053	82	2,521	2,211	88	2,081	94	83
Uchkurgan, Uchtepe – Bakhri Tochik	3,349	2,685	80	3,362	3,159	94	2,227	70	66
Bakhri Tochik – Shardara	2,985	2,211	74	3,020	2,843	94	2,454	86	81
Gazalkent–Chinaz (excluding Ugam)	901	632	70	904	790	87	896	113	99
Total:	10,962	8,676	79	11,023	10,147	92	8,734	86	79
Overall (total inflow):	29,286	23,051	79	29,383	26,062	89	23,012	88	78

Table 2.2

Reservoir	Reservoir storage, mcm		
	Actual as of April 1, 2021	Actual as of April 1, 2020	Dead storage
Upstream reservoirs			
Toktogul	8,712	11,641	5,500
Andizhan	764	820	150
Charvak	561	470	426
TOTAL:	10,037	12,931	6,076
In-stream reservoirs			
Bakhri Tochik	3,463	3,070	917
Shardara	5,067	4,879	970
TOTAL:	8,530	7,949	1,887
OVERALL:	18,567	20,880	7,963

Table 2.3

Reservoir	Water releases, mcm		
	Forecast schedule, 2021	Forecast schedule, 2020	Actual, 2020
Upstream reservoirs			
Toktogul	5,107	5,676	5,154
Andizhan	1,832	2,172	1,611
Charvak (discharge of the Gazalkent HPP)	3,437	3,947	3,236
TOTAL:	10,376	11,795	10,001
In-stream reservoirs			
Bakhri Tochik	6,131	6,645	5,560
Shardara	6,764	8,719	4,890
TOTAL:	12,895	15,364	10,450
OVERALL:	23,271	27,159	20,451

VII. Water withdrawal limits (Table 2.4)

Taking into account requests submitted by water user states, the following water withdrawal limits are proposed for the growing season.

The total water withdrawal limits of all states are 11,854 mcm in the growing season.

Table 2.4

Requests

Water user state	Proposed limits, mcm
Republic of Kazakhstan (Dustlik canal)	903
Kyrgyz Republic	246
Republic of Tajikistan	1,905
Republic of Uzbekistan	8,800
Total:	11,854

According to data by the Committee for Water Resources of the Republic of Kazakhstan, water supply to the Aral Sea and the Aral Sea region is expected to be 1,262 mcm in the growing season.

Taking into account water accumulation in reservoirs, expected low-water period, the protocols on mutual supplies of electricity signed between the Ministries of Energy and Water Management of the Republic of Uzbekistan and the Ministries of Energy, Ecology, Geology and Natural Resources of the Republic of Kazakhstan with the Ministry of Energy and Industry of the Kyrgyz Republic, as well as planned three- and bilateral protocols between the Republic of Kazakhstan, the Republic of Uzbekistan and the Republic of Tajikistan a forecast operation regime of the Naryn-Syrdarya reservoir cascade was developed for the period from 1 April to 30 September 2021 and submitted for consideration by the members of ICWC (Table 2.5).

Table 2.5

**Forecast operation schedule of the Naryn-Syrdarya reservoir cascade,
1 April to 30 September 2021**

		April	May	June	July	August	September	Total, mcm
Toktogul reservoir								
Inflow to the reservoir	m3/s	252	541	823	708	492	281	8,175
	mcm	652	1,448	2,132	1,897	1,317	729	
Volume: beginning of the season	mcm	8,712	8,674	9,302	10,421	11,156	11,438	
End of the season	mcm	8,674	9,302	10,421	11,156	11,438	11,650	
Water releases from the reservoir (total)	m3/s	266	300	384	422	372	190	5,107
	mcm	689	804	995	1130	996	492	
including: 1. Internal needs of the Kyrgyz Republic	m3/s	266	300	299	340	310	190	4,502
	mcm	689	804	775	910	831	492	
2. additional releases - (energy receipt)								
Republic of Uzbekistan	m3/s			42	41	21		275
	mcm			110	110	55		
Republic of Kazakhstan	m3/s			42	41	41		330
	mcm			110	110	110		
Bakhri Tochik reservoir								
Inflow to the reservoir (Akdjar GS)	m3/s	448	388	308	250	254	272	5,050
	mcm	1,160	1,039	797	669	681	704	
Volume: beginning of the season	mcm	3,463	3,433	3,477	2,988	2,091	1,506	
end of the season	mcm	3,433	3,477	2,988	2,091	1,506	1,604	
Water releases from the reservoir	m3/s	461	347	440	500	392	185	

	mcm	1,194	929	1,140	1,339	1,050	480	6,131
Shardara reservoir								
Inflow to the reservoir	m3/s	505	358	200	180	140	170	4,084
	mcm	1,309	959	518	482	375	441	
Volume: beginning of the season	mcm	5,067	5,140	4,513	3,396	2,073	1,020	981
end of the season	mcm	5,140	4,513	3,396	2,073	1,020	981	
Water releases from the reservoir	m3/s	400	520	520	520	450	150	6,764
	mcm	1,037	1,393	1,348	1,393	1,205	389	
Supply to the Aral Sea	m3/s	80	70	70	70	70	120	1,262
	mcm	207	187	181	187	187	311	
Charvak reservoir								
Inflow to the reservoir (4 rivers in total)	m3/s	205	373	461	337	190	113	4,428
	mcm	532	998	1,194	902	508	294	
Volume: beginning of the season	mcm	561	786	1,292	1,881	1,926	1,688	1,567
end of the season	mcm	786	1,292	1,881	1,926	1,688	1,567	
Water releases from the reservoir (Releases from Gazalkent HPP)	m3/s	125	184	233	320	278	160	3,437
	mcm	323	492	605	857	745	415	
Andizhan reservoir								
Inflow to the reservoir	m3/s	112	200	142	103	63	52	1,772
	mcm	291	536	367	275	169	134	
Volume: beginning of the season	mcm	764	805	965	996	788	674	704
end of the season	mcm	805	965	996	788	674	704	
Water releases from reservoir	m3/s	97	140	130	180	106	40	1,832
	mcm	251	375	337	482	283	104	

ON PROGRESS OF WORK AS A FOLLOW UP TO PROPOSALS AND INITIATIVES VOICED BY THE HEADS OF IFAS FOUNDER-STATES AT SUMMIT IN TURKMENBASHI³

General information

On 24th August in Turkmenbashi, the XII meeting of the Council of Heads of IFAS Founder-States was held. The Heads of State put forward a number of initiatives aimed at comprehensively addressing the existing problems. The implementation of these initiatives is discussed at ICWC meetings.

SIC ICWC reported on the item “On implementation of the proposals and initiatives voiced at the Summit of the Heads of IFAS Founder-States” at 77th (November 5-6, Almaty), 78th (April 10, videoconference) and 79th (November 24) meetings. The decision of the last meeting on this subject states: “To take note of the information provided by the SIC ICWC on initiatives of the Heads of IFAS Founder-States voiced at Summit (Turkmenbashi, August 24, 2018)⁴ .”

SIC ICWC’s activity as a follow up to the initiatives over the period from 25.11.20 to 21.04.21

1. Automation of gauging stations in the Amudarya and the Syrdarya basins

Work is continued on the promotion, through UNDP in Uzbekistan, of project proposals prepared by SIC ICWC (1) Automation of Tuyamuyun reservoir’s structures (Amudarya River); (2) Automation of gauging stations and hydraulic structures along the Syrdarya River.

A project proposal on development of a technology for hydroregulation of water diversion from large rivers at hydrotechnical constructions without dams was submitted to the Ministry of Innovations of Uzbekistan under the 35th call for scientific proposals. The project proposals is under consideration.

³ Information of the third item of 80th meeting’s agenda

⁴ Minutes of 79th meeting of ICWC of 24 November 2020

At the initiative of SIC ICWC, meetings were held with the Deputy Minister of Information and Communications Technology Development (MICTD) of the Republic of Uzbekistan and with officials of the Ministry (December 2 and 25). The purpose of the meetings was to familiarize the Ministry with the work of the SIC ICWC on the modelling and automation of the Amudarya and Syrdarya basins and to involve the Ministry in this work.

Although the initiative to resume the Syrdarya basin automation project belongs to Mr. Nazarbayev, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan has not responded to our request to conduct this project with Uzbekistan.

The support of the Ministry of Water Management of the Republic of Uzbekistan is required for the automation of the Amudarya basin.

2. Establishment of an international water-energy consortium

Developed by SIC ICWC “Proposals on the establishment of a water-energy consortium of Central Asia” have been published in the collection of scientific papers of SIC ICWC (issue 17, 2020).

Work on the establishment of a water- energy consortium or other economic mechanism is included in a project as part of theme 4.7 “Regional mechanisms for low-carbon, climate-resilient transformations of energy, water, land nexus in Central Asia” project (Government of German, “International Climate Initiative 2020”, partners - OECD, EBRD, UNECE, SIC ICWC).

It is proposed to set up a working group for the finalization and harmonization of the WEC framework, based on a note prepared by SIC ICWC and sent to all ICWC Members (ref. No. 61 of 04.03.19, ref. No. 73 of 26.03.19).

3. Water diplomacy and IWRM implementation

SIC ICWC developed a policy brief “Legal and institutional aspects of water management in the Central Asian countries” during the reporting period. Preparation of analytical review “Planning IWRM principles: theory, practice, problems, and recommendations” and brochure “Management of operation and maintenance of hydro-reclamation systems” was started. The following articles were published: V.A. Dukhovny “Implementation of IWRM principles in the Aral Sea basin”, N.N. Mirzaev “Experience in implementation of IWRM principles in the Fergana Valley” in EECCA WMO research papers col. “Experience in developing transboundary cooperation in EECCA countries”

(issue 15, 2021).

SIC leadership participated in the “Pan-Asian workshop on Knowledge Sharing on Monitoring and Reporting on SDG 6.5.1, Degree of Implementation of Integrated Water Resources Management” organized by UNEP in partnership with the Global Water Partnership (10 December). SIC ICWC assessed the level of implementation of IWRM in Uzbekistan for 2020 in line with the methodology and approaches proposed by UNEP for SDG 6.5.1. which emphasizes the need to consider all IWRM principles, as well as the actual impact on increasing water and land productivity and water conservation.

The assessment was made of how frequently the water issues have been addressed in CA country statements during general debates of the UN General Assemblies since 1992 to 2020. More details will be provided in “Scientific cooperation” section.

It is suggested to discuss SIC ICWC’s proposals on the development of IWRM at the regional level at the next ICWC meeting.

4. Water conservation and rational water use

As part of the improvement of ICWC activity on Direction 1 “Water Conservation”, SIC ICWC prepared: (1) Analytical review “Experience of Water Conservation in the Republic of Uzbekistan” and the collection of data and materials on water conservation of other Central Asian countries is close to completion; (2) Brochure “Effectiveness of laser leveling of irrigated land”.

Based on the results of the earlier analytical review entitled “Using advanced FAO methodology for assessment of crop water requirements in irrigated agriculture of Central Asia” and the results of the implementation of the methodology in the “IWRM-Fergana” project, SIC ICWC proposed considering a need for complete revision of crop water requirements using the FAO methodology adjusted for contribution from groundwater in the agenda of the 80th meeting of ICWC. The proposal was rejected. We insist on discussing the issue again at ICWC.

5. Water accounting

SIC keeps ten-day monitoring of water balance in the Amudarya and the Syrdarya basins and regularly informs on balance discrepancies in the river basins. Regular analytical reports on the situation in the basins for each ten-day period are published on the SIC ICWC website in the “Water-management situation in the Amudarya basin” and “Water-management situation in the Syrdarya basin” sections.

SIC negotiated terms for more precise definition of the Amudarya river channel balance and development of relevant calculation routine for BWO Amudarya.

Under an agreement with the Ministry of Innovation of the Republic of Uzbekistan, SIC ICWC together with the Institute of Geographical Sciences and Natural Resources Research, the Academy of Sciences of the People's Republic of China and the participation of the BWO Amudarya and its territorial divisions implements the project "Development of E-rules for intra-annual flow management of the Amudarya River".

The two-year research program consists of the following work packages: (1) Modeling the flow of the Amudarya and its tributaries: current level (2020), prospective level (2035); (2) Assessment of the required water withdrawal from the Amudarya and its tributaries for different water users: current level (2020), prospective level (2035); (3) studying river balance and development of dynamic model of water flow transformation of the Amudarya; (4) development of e-rules for water management of the Amudarya and its main tributaries, including: database, web interface.

As part of the work plan IIIA the ICWC Working Group "Improving the Quality and Accuracy of Water Accounting", SIC ICWC prepared: an overview of existing water accounting and reporting practices, an article "Automation of the Syrdarya and the Amudarya rivers".

Proposals by SIC ICWC (1) to the draft decisions of the 79th meeting of ICWC for the establishment of an ad hoc commission of interested parties to determine rates of losses for each section of the Amudarya and Syrdarya rivers; and (2) for the inclusion of an item on the 80th agenda of the ICWC meeting "Progress reports on work carried out by the executive bodies of ICWC on the issue of increasing accuracy of water accounting and compliance with water withdrawal limits" rejected. However, as we have informed all ICWC members, based on RS-based assessments, the rate of water use in all regions is extremely low, averaging 0.55, not counting losses and imbalances in the river main courses, which is another 12-15%. The total loss of water in the basins is between 57 and 60%, mainly as a result of poor water management and accounting.

6. Drafting the Regional program for rational water use in CA

The Regional Program is drafted as a follow up of the initiative of the President of the Republic of Uzbekistan SH.M.Mirziyoyev put forward during the IFAS Summit in 2018.

Strengthening cooperation and interaction between the countries in the

face of increasing climate change, with maximum involvement of national reserves, is included in the program of work under theme 4.7. “Regional mechanisms for low-carbon, climate-resilient transformation of the energy-water-land nexus in Central Asia” (Government of German, International Climate Initiative 2020, partners - OECD, EBRD, UNECE, UN). The preparatory work is scheduled to start in 2021.

In preparation for the launch of this project, SIC ICWC together with national experts from Central Asian countries is preparing a discussion paper to support the dialogue on energy, water and land use nexus in Central Asia: (1) country profiles on energy-water-land nexus, as well as information/feedback in a format agreed with partners are in process of finalization; (2) the list of case studies and regional aspects of the nexus is further developed.

During the 79th meeting of ICWC no consensus was reached on the SIC ICWC proposal to include this item in the agenda. In view of the fact that the initiative to develop the Program was put forward by the President of the Republic of Uzbekistan, Mr.Mirziyoyev, it is proposed that the item be included in the agenda of the forthcoming meeting of ICWC.

7. Mitigation of the Aral Sea disaster

Regular RS-based monitoring (once in a month) is conducted over the status of lakes and wetlands in the Aral Sea and the Aral Sea region. The monitoring results are uploaded on the CAWater-Info Portal (21 February 2021, 27 March 2021). In case of deterioration of the situation, the Center timely informs relevant ministries. In particular, a note was sent to the Ministry of Water Management of the Republic of Uzbekistan (also to the State Committee on Ecology, the Ministry of Emergency Situations, the Council of Ministers of the Republic of Karakalpakstan on Ecology and Development of the Aral Sea Region, UzHydromet, and the Committee on Ecology and Environmental Protection of the Legislative Chamber of the Oliy Majlis of Uzbekistan) “About the state of water bodies and wetlands in the Southern Aral Region as of October 2020 - February 2021”. Attention was drawn to the need to strengthen monitoring of distribution of the Amudarya flow to ensure the necessary water withdrawals below Tahiatash and Samanbai and to address the issue of transfer of flow of the Ozerniy collector in Uzbek territory to the Amudarya Delta (ref. No. 29 of 04.03.21).

Experts of SIC ICWC studied the report of the Uzbek Research Institution for Irrigation and Water Problems, UzNIIVP (No.11/2020) on the improvement of water management in Khorezm province by reducing wastewater discharge in Ozerniy and Daryalik collectors and project materials of OAO “Узсувлойиха” and UzNIIVP on the transfer of the drainage water from Khorezm Province to

the lower Amudarya. The results revealed the need for additional research and exploration work, with particular emphasis on the economic component of the project. Relevant requests have been prepared for submission to ministries and agencies of the Republic of Uzbekistan (ref. 44 of 02.04.21).

Support has been received from the State Committee on Ecology of Uzbekistan.

- In partnership with UNDP/MPHSTF/ISRIC under the President of Uzbekistan on the project “Addressing the urgent human insecurities in the Aral Sea region by promoting sustainable rural development” (1) The consolidated report on the results of the second ground-based expedition to the drained bed of the Aral Sea was handed over to the customer (May 28-June 26, the area - 500-600 thousand ha from Djiltyrbas to Kok-Darya). (2) the UNDP-supported publication titled “Monitoring of the exposed Aral Sea bed” was prepared based on the results of the 2019/2020 expeditions covering 1.2 million ha of land; (3) SIC ICWC leadership and experts made presentations at the roundtable on the results and conclusions of the expeditions to the exposed Aral Sea bed (16 December, videoconference).

- SIC ICWC took part in the kick-off workshop under the GIZ project “Ecologically Oriented Regional Development of the Aral Sea Region” (ECO-Aral) (26 January, Nukus). Negotiations are under way with the management of the GIZ project to resume expeditions on monitoring of the exposed Aral Sea bed (spring and autumn, coverage - 1.5 million ha) and to establish the basis of the GIS information system.

8. Scientific cooperation

As a follow up to Uzbek President’s initiative on undertaking joint multidisciplinary research on the basis of SIC ICWC and SIC ICSD, efforts were continued on the establishment and development of the Central Asian Expert Platform for water security, sustainable development and future studies. In this context, the following work was completed:

- A database of experts on water, environment and sustainable development has been established under a contract with UNECE on the project “Support to the Russian-speaking Network of Water Organizations of Eastern Europe, Caucasus and Central Asia” with the participation of experts from countries of the region (1), Making it available on the Internet for public use, replenishment and development; (2) Generalization of best practices on transboundary water cooperation; (3) Analytical research “Water resources, environment and transboundary cooperation in UNGA general debates: statements of CA countries, 1992-2020” (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) and “Coverage of environmental issues and

transboundary cooperation in presentations by EECCA countries at the UNGA general debate 1992- 2020” (Belarus, Moldova, Russia, Ukraine, Caucasus countries (Armenia, Azerbaijan and Georgia).

- EPFS development is also included in the project under theme 4.7.

The proposal of SIC ICWC to include in the agenda of the 80th meeting of ICWC the question “On progress of work undertaken by SIC ICWC and experts of Central Asian countries on development of scientific cooperation” was rejected.

9. Development of ASBP-4

According to the final document of the 3rd meeting of RWG on ASBP-4 (25-26.11.19, Ashgabat), EC IFAS was to submit the draft ASBP-4 for approval by the countries at the beginning of December 2019 and for further approval by the IFAS Board. At the second consultative meeting of the Heads of CA State (29 November, Tashkent), the chairmanship of IFAS was transferred to Tajikistan for a period from 2019 to 2022.

There was no information on approval or the need to finalize the draft ASBP-4.

10. IFAS reformation

According to the final document of the 3rd meeting of RWG on institutional and legal improvement of IFAS, members of the Group were recommended to submit country proposals.

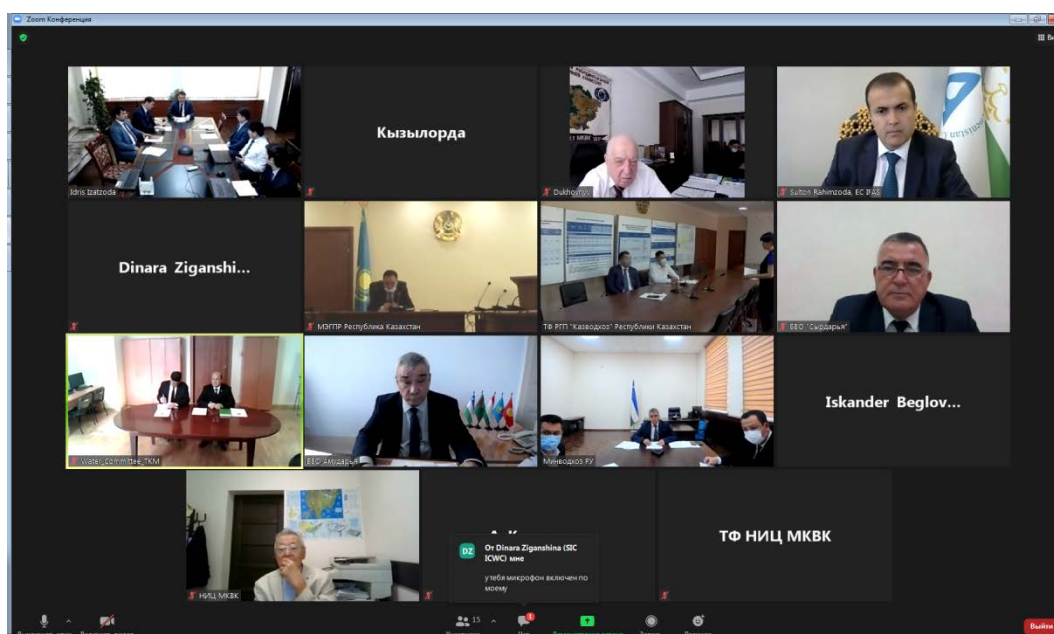
EC IFAS chaired by S.N. Rahimzoda has resumed its work in Dushanbe. Proposals have been made for the quantitative and qualitative formation of RWG to improve the organizational structure and the legal and contractual framework of IFAS. D.R. Ziganshina of SIC ICWC was proposed to take part in RWG (ref. № 180 of 23.12.20).

Proposal by SIC ICWC (1) to include a paragraph in draft decision of 79th meeting of ICWC - “to activate work on the improvement of ICWC activity, make a feedback and comments on two draft procedural documents prepared by SIC ICWC: “Rules of Professional Ethics and Professional Conduct of Employees of ICWC Organizations in Central Asia”, “Rules of interaction of ICWC organizations of Central Asia among themselves and with other organizations” and (2) to include in the Agenda of the 80th meeting of ICWC an item “On primary measures for development of activities of ICWC and its Executive Bodies in line with present challenges” was rejected.

REPORT ON 80TH ICWC MEETING

The 80th meeting of the Interstate Commission for Water Coordination (ICWC) of Central Asia was organized by Tajikistan in the online format and held on 11 May 2021.

The ICWC members, including Mr. S. Kozhaniyazov from Kazakhstan, Mr. Sh. Khamraev from Uzbekistan, and Mr. D. Mammedov (by proxy) from Turkmenistan participated in the meeting chaired by the ICWC member from Tajikistan Mr. J. Shoimzoda. The heads of ICWC executive bodies also took part in the meeting: M. Makhramov (BWO Amu Darya); O. Kholkhujaev (BWO Syr Darya); Prof. V. Dukhovniy (SIC ICWC); U. Nazarov (Secretariat); and S. Rakhimzoda (Chairman of IFAS Executive Committee).



The meeting's agenda included the following:

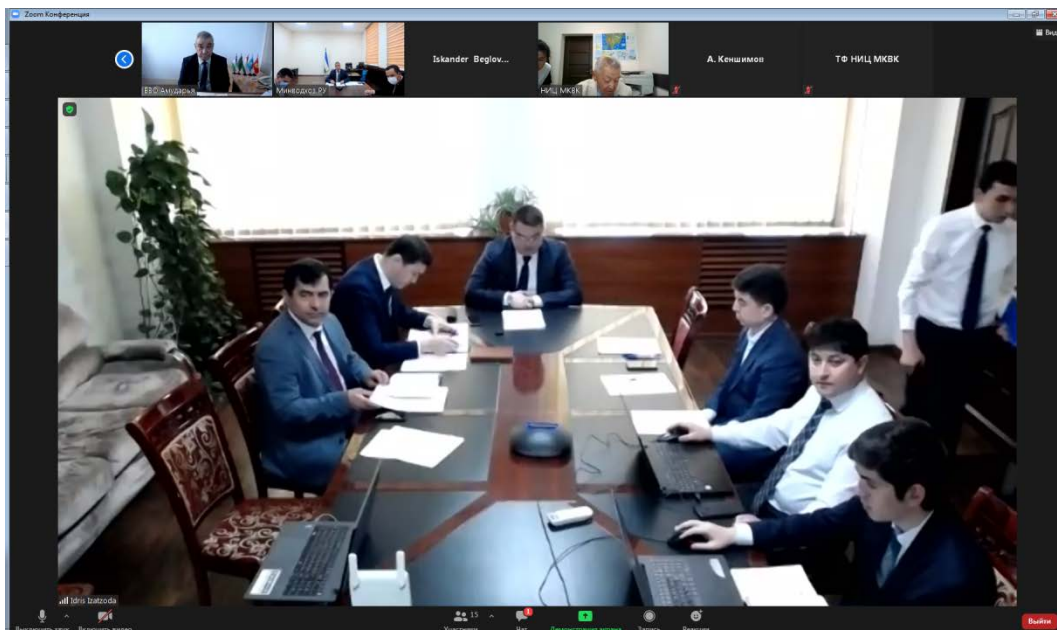
1. Results of the use of water withdrawal limits and operation of the reservoir cascades in the Syr Darya and Amu Darya River basins during the non-growing season 2020-2021.
2. Approval of the country water withdrawal limits and operation regimes of the reservoir cascades in the Syr Darya and Amu Darya River basins for the growing season 2021.
3. Follow up on proposals and initiatives voiced at the Summit of the Heads of IFAS founder-states in the city of Turkmenbashi.

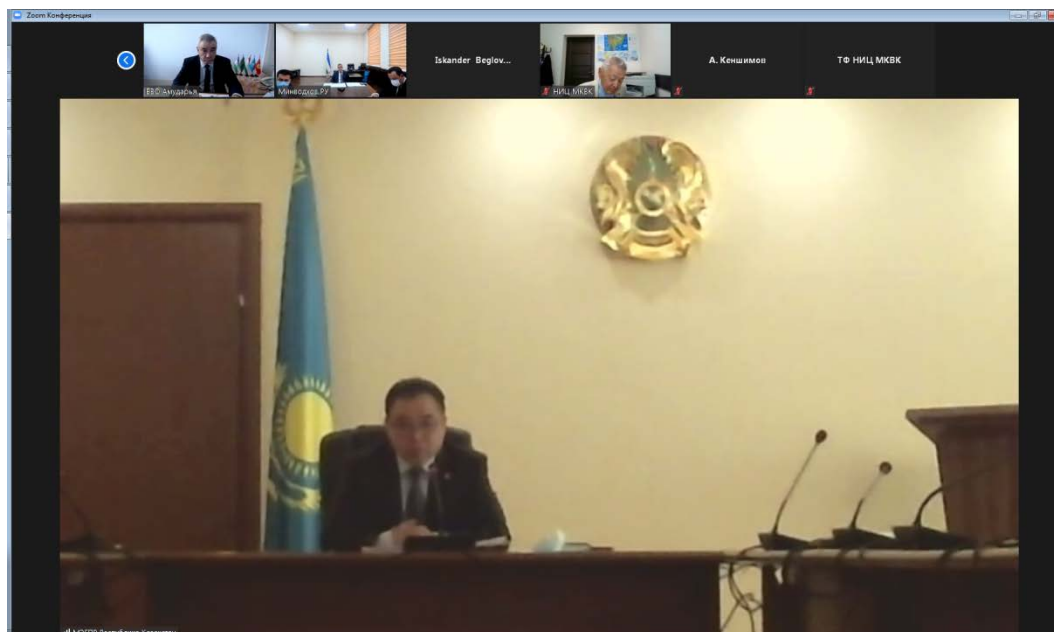
4. Agenda and venue of the next 81st meeting of ICWC.
5. Additional matters

ICWC members approved the agenda and welcomed the meeting.

First Deputy Minister of Energy and Water Resources of the Republic of Tajikistan *D.Sh. Shoimzoda* opened the meeting and underlined the coordinated work of the countries in overcoming the difficult period with low water availability. Given the interconnection of the countries in water, energy and other issues, as well as existence of disputable border territories, he indicated to the need to take measures for enhanced cooperation. Additional protocols were signed and logistical support is expected to be provided to each other to mitigate consequences of expected low water growing season. Unfortunately, the signing of the minutes of the 79th ICWC meeting was delayed; he expressed hope on timely signing of the minutes of the 80th anniversary meeting.

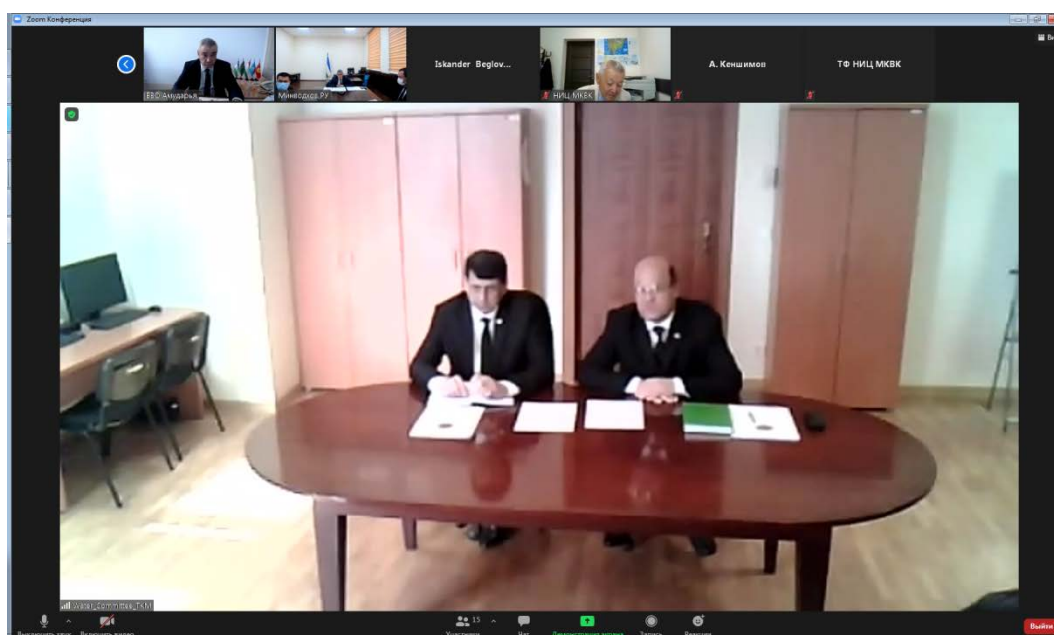
S.S. Kozhaniyazov expressed satisfaction with coordinated interaction of the countries in the period of low water and joint solution of issues with energy agencies. Kazakhstan is ready for cooperation both in multilateral and bilateral formats. The Kazakh party negotiated with the Kyrgyz Republic to resume its participation in ICWC, at least as an observer. The official response from the Kyrgyz party is expected after getting approvals at the national level. Participation of the EC IFAS Chairman at the ICWC meeting is welcomed and work on the institutional improvement of the IFAS is supported.

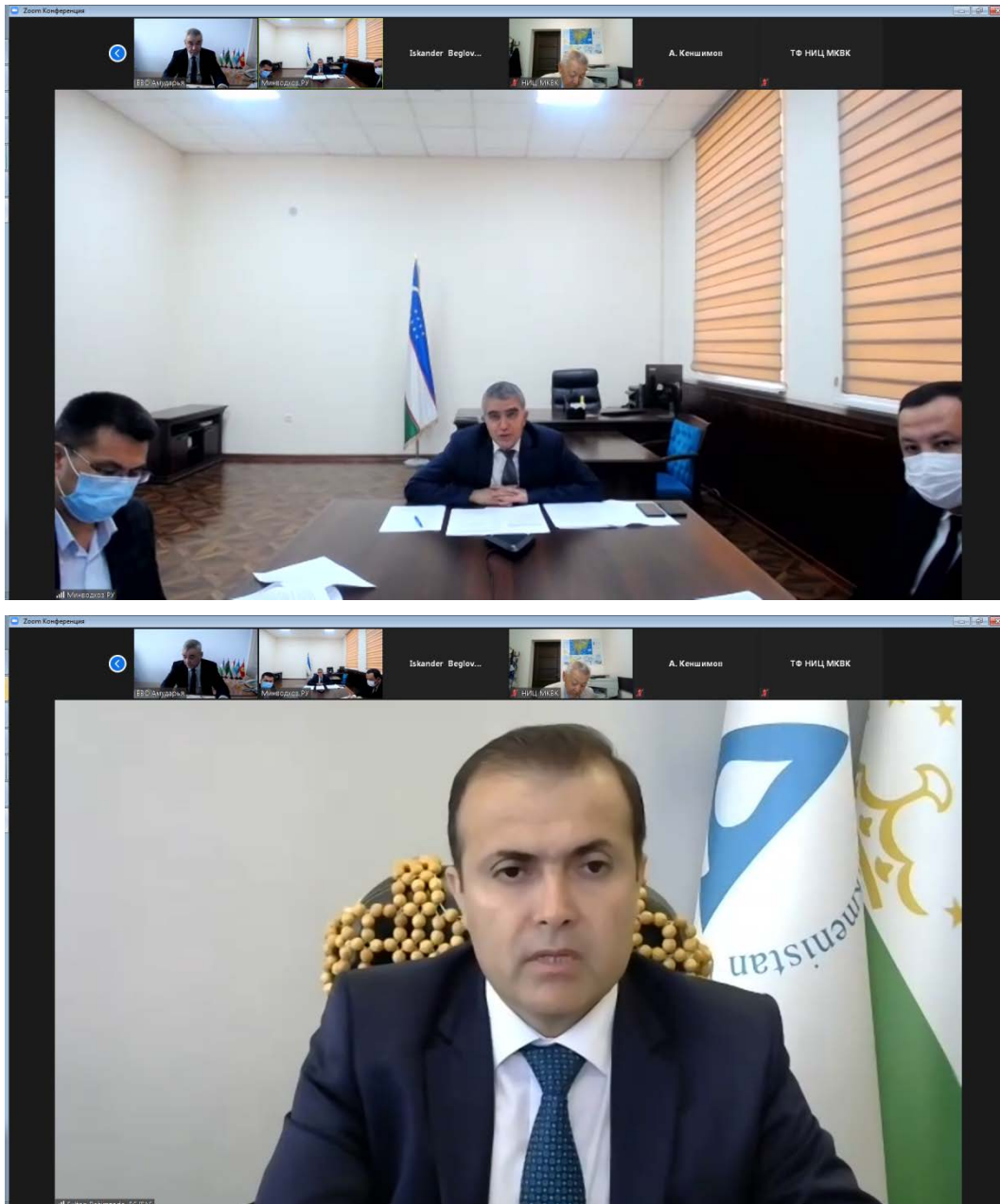




D. Mammedov welcomed the participants and wished productive work to the jubilee ICWC meeting.

Sh. Khamraev noted bilateral cooperation of the countries and, at the same time, emphasized the utmost importance of regional multilateral cooperation under umbrella of ICWC. During the non-growing season, bank-protection and land reclamation measures were taken but it was important to agree on advance on electric energy flows. Thanks to support of Tajikistan, the complex situation in April 2021 was overcome, though some delays with land leaching and watering of crops took place. It is proposed to enhance BWO's powers so that these organizations could execute orders of ICWC in appropriate manner.



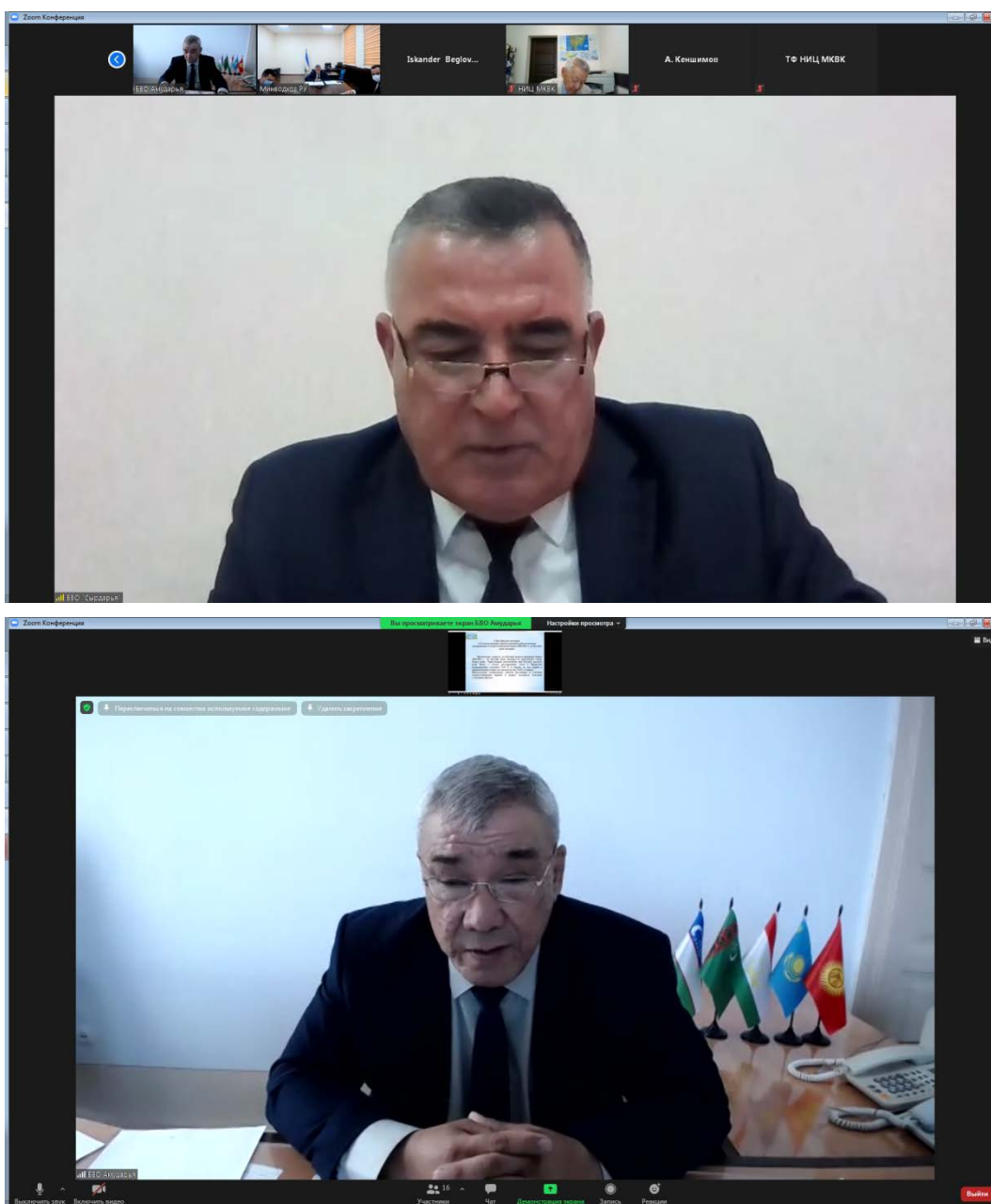


S. Rakhimzoda informed on stepping up activities of the EC IFAS in Tajikistan. Official representatives of Kazakhstan and Uzbekistan to IFAS has started working in Dushanbe since April. Representative of Turkmenistan is expected. There are some negotiations with the Kyrgyz Republic on resumption of its participation in IFAS work. At the IFAS Board meeting to be held in late June 2021 it is envisaged to approve ASBP-4, the draft of which was agreed upon with four countries. A meeting of the regional working group on institutional and legal improvement of IFAS is planned for 27 May 2021. EC IFAS has organized cooperation with the World Water Council and will be the main partner from the region in the preparatory process of the 9th World Water Forum. It is planned to hold a regional meeting in Dushanbe in September or

October 2021 if the COVID situation allows. A Central Asian Climate Conference is under preparation for June 2021 jointly with CAREC. Finally, the Chairman of EC IFAS has expressed hope for cooperation with ICWC and its branches.

First item

BWO Amu Darya and BWO Syr Darya reported on fulfillment of water withdrawal limits and operation of reservoir cascades in the Syr Darya and Amu Darya River basins during the non-growing season 2020-2021.



In the Syrdarya basin, the actual total inflow for the non-growing season was 2.2 billion m³ less than the forecast, the actual releases from the Naryn-Syrdarya reservoir cascade were 1.6 billion m³ less than the forecast, the actual water volumes in the reservoirs as of April 1, 2021 were 1.1 billion m³ less than the forecast schedule. In total, the limits for the basin were used by 92%. Water delivery to the Aral Sea was 1.9 billion m³ or 65% of the plan.

In the Amudarya basin, the actual water availability in the non-growing season 2020-2021 was 71.8% of the norm at the nominal Kerki section upstream of Garagumdarya. The water withdrawal limits were used by 83.7%. In October-March, 1 billion m³ was actually delivered (50% of the planned one) to the river delta and the Aral Sea. Water volume at the end of the non-growing season in the Nurek reservoir corresponds to the plan (6.2 bln m³), while it is 15% less than the planned one in the Tuyamuyun reservoir.

Second item

The heads of BWOs made proposals for the limits of country water withdrawals and the operation regimes of reservoir cascades in Amu Darya and Syr Darya basins for the growing season 2021.

In the Syrdarya basin as a whole, water availability in the rivers of the basin is expected to be 79% of the norm (6.2 billion m³ less than the norm). The water stock in the reservoirs at the beginning of the growing season is 2.3 billion m³ less than on April 1, 2020. To improve water availability, it is planned to conclude three- and bilateral protocols for additional drawdown of the Bakhri Tojik reservoir.

In the Amudarya basin, the water withdrawal limits and forecast regime of the Nurek and Tuyamun reservoirs are proposed based on 90% water availability.

D. Shoimzoda. Two questions to BWO Syrdarya. In the forecast schedule, the inflow to Bakhri Tojik (Akdjar gauging station) of 250 million m³ in July and 254 million m³ in August is indicated taking into account the agreements on increasing water availability? The second question is how the limits of the Kyrgyz Republic are set, if they do not participate in ICWC?

O. Kholkhujaev (BWO Syrdarya). The answer to the first question is yes. As to the second questions, water withdrawal limits of Kyrgyzstan are set on the basis of requests submitted by the Kyrgyz party.

S. Kozhaniyazov. The Kazakh party asked BWO Syrdarya to indicate limits for the Karadarya river and the Chirchik river in the report. Also we consider it necessary to correct inflow to the Chardarya river, taking into account the actual data for today.

O. Kholkhujaev (BWO Syrdarya). We received data from Kyrgyzstan on the Karadarya river (506 mln m³), from Kazakhstan - on the Chirchik river (849 mln m³), and we expect data from Uzbekistan by the end of May. Regarding the second question, the report shows forecast data as of April 1, when the report was sent to ICWC members. If you consider it necessary, we will put the actual data as of today.

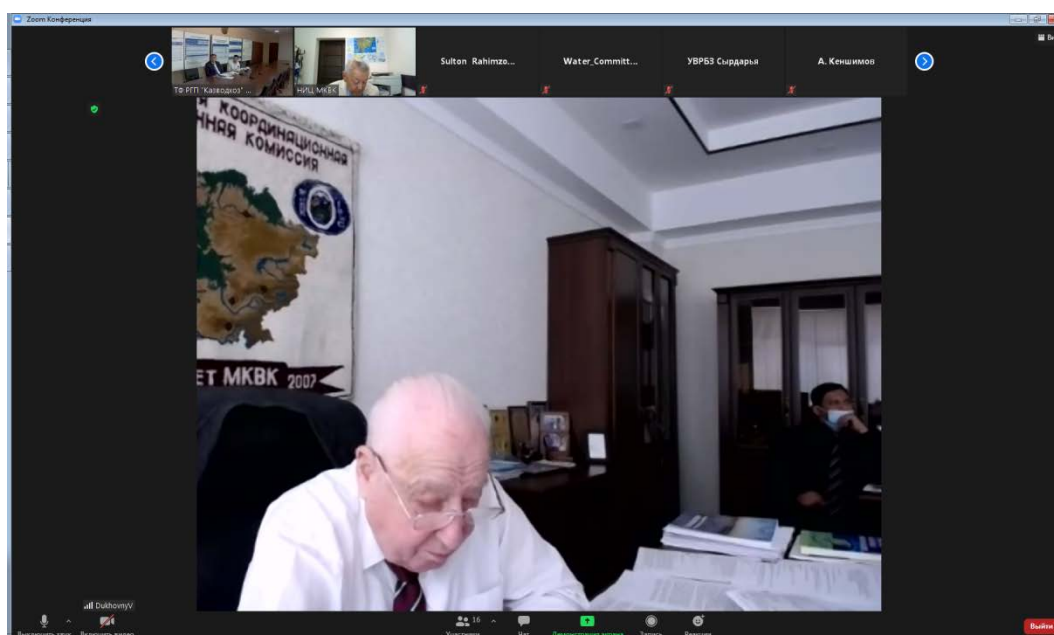
D. Shoimzoda. It is proposed to take note of the projected schedule and agree on it definitively after holding the bilateral and trilateral meetings.

Sh. Khamraev. I consider it necessary to note good work of BWO during the non-growing season 2020-21 under pandemic conditions. I thank BWO for forecast schedule and Tajik colleagues for accumulating water both in Bakhri Tojik and Nurek reservoir, which is good preparation for the growing season.

ICWC members have agreed on the basis of more accurate forecast data on water availability to additionally consider and agree upon the operation modes of the reservoir cascade for the growing season 2021 in the Syr Darya basin by the end of May.

Third item

Prof. Dukhovniy reported on work done by SIC ICWC as a follow-up to proposals and initiatives put forward in Turkmenbashi at the Summit of the Heads of IFAS founder-states.



S. Kozhaniyazov expressed willingness to work on automation. Since last year, a lot of work on digitalization has started in Kazakhstan, and they will give priority to transboundary water sources. Work with water users on water saving is also carried out. They consider it important to organize joint work on establishment of the water-energy consortium.

N. Kipshakbayev congratulated the participants of the 80th ICWC meeting and reminded on 30 years since the establishment of the Commission next year. Perspective issues - such as water conservation and training - should be on the agenda of ICWC meetings. He drew attention of ICWC members to the fact that the Kazakh-German University trained personnel in the field of "Integrated Water Resources Management", but only foreign specialists delivered lectures to them. He considered it important that lectures on problems of the region, including those reported by *Dukhovny V.A.*, would be delivered to students by experts of the Central Asian countries.

D. Shoimzoda supports the importance of automation of gauging stations, but they should cover the whole basin, including small rivers. They propose to take this formulation into account when preparing the Terms of Reference for developing the feasibility study for automation of gauging stations in the Syrdarya basin.

V. Dukhovniy said that they were ready to develop ToR on automation of the Syrdarya and Amudarya and submit it to ICWC members for consideration.

Fourth item

The next meeting of ICWC is to be held in Uzbekistan. The date of the meeting will be decided in due course.

An anniversary meeting on the occasion of the 30th anniversary of ICWC in 2022 was proposed to be held in Turkestan, Kazakhstan.

ANALYSIS OF HYDROLOGICAL CONDITIONS IN THE SYRDARYA AND AMUDARYA RIVER BASINS OVER THE NON-GROWING SEASON 2020-2021

1 Syr Darya River Basin

The actual inflow to the upstream reservoirs in the Syr Darya basin (Toktogul, Andizhan, and Charvak reservoirs) was 4.8 km³ during the non-growing season. Inflow to the Toktogul reservoir was 2.89 km³ or 101% of the forecast. Inflow to the Andizhan reservoir was 5% lower than expected, while inflow to the Charvak reservoir was 20% lower than the forecast. The total water releases from the upstream reservoirs were 11.51 km³. This is 7% less than planned by BWO SyrDarya schedule.

The total lateral inflow in the reach from the Toktogul reservoir to the Shardara reservoir, including discharges from the Karadarya and Chirchik rivers, was 8.37 km³. This is 1.7 times more than the total inflow to the upstream reservoirs but 1.4 times lower than total releases from the reservoirs.

By the end of the non-growing season, 10.04 km³ were accumulated in the upstream reservoirs, including 8.7 km³ in the Toktogul reservoir or 93% of the BWO SyrDarya's scheduled amount, 0.76 km³ (105%) in the Andizhan reservoir, and 0.56 km³ (53%) in the Charvak reservoir. The Toktogul reservoir discharged water in the amount of 6.5 km³, the Charvak reservoir was drawn down by 0.72 km³, whereas the Andizhan reservoir accumulated water in the amount of 0.38 km³. Minor water losses totaling 0.12 km³ were recorded in the reservoirs.

During the non-growing season, inflow to the Bakhri Tochik reservoir amounted to 11.71 km³, which is 1.09 km³ less than scheduled by BWO SyrDarya. Water releases from the reservoir were 11.09 km³, which is 0.17 km³ less than the schedule. The accumulation of water in the reservoir amounted to 3.46 km³. Unrecorded inflow to the reservoir was detected by the balance method in the amount of 0.87 km³. The possible cause is the underestimated inflow to the reservoir.

During the non-growing season, water withdrawal from the Naryn and the Syr Darya rivers in the reach up to the Shardara reservoir was 3.93 km³, of which: for the Kyrgyz Republic – 0.03 km³, for the Republic of Tajikistan – 0.04 km³, for the Republic of Kazakhstan (through the Dustlik canal) – 0.5 km³, and for the Republic of Uzbekistan – 3.36 km³. Water availability was uneven by

state, river reach and in time (Table 1.1). The difference between the actual water supply and the water limit varied from -18% (deficit in the 1st ten-day of March) to 69% (excessive water supply in the 3rd ten-day of November) in the Toktogul-Bakhri Tochik reach and from -49% (2nd ten-day of October) to 53% (1st ten-day of November) in the Bakhri Tochik-Shardara reach (Table 1.3).

During the non-growing season 2020-2021, inflow to the Shardara reservoir was 9.73 km³ or 1.86 km³ less than scheduled by BWO SyrDarya. By the end of the season, the reservoir accumulated water to 5.07 km³ (100%). Water losses amounted to 0.32 km³. The discharge from the Shardara reservoir was 5.18 km³ (67%), including: 5.08 km³ into the river; 0.1 km³ into the Kzylkum canal. Water was discharged into Arnasay.

The actual water supply to the Aral Sea was 0.7 km³, according to KazHydromet's data, while the Kazakh Committee for Water Resources shows 1.15 km³ (48% of the expected volume).

Table 1.2 shows the reservoirs' water balance.

Table 1.1

**Water availability in the Syr Darya River basin countries
in the non-growing season 2020-2021**

№	Water user	Water volume, km ³		Water availability, %	Deficit(-), surplus (+), km ³
		Limit/ schedule	Actual	Season	Season
1	Total water withdrawal	4.26	3.93	92	-0.33
2	Water withdrawal by country:				
	Kyrgyz Republic	0.047	0.03	59	-0.02
	Republic of Uzbekistan	3.35	3.36	100	0.01
	Republic of Tajikistan	0.37	0.04	11	-0.32
	Republic of Kazakhstan	0.50	0.50	100	0.00
3	By river reach				
3.1	Toktogul reservoir – Uchkurgan hydroscheme	1.38	1.35	98	-0.02
	of which:				
	Kyrgyz Republic	0.04	0.02	60	-0.016
	Republic of Tajikistan	0.08	0.04	48	-0.044
	Republic of Uzbekistan	1.25	1.29	103	0.037
3.2	Uchkugran hydroscheme – Bakhri Tochik hydroscheme	0.25	0.17	67	-0.081
	of which:				
	Kyrgyz Republic	0.01	0.007	70	-0.003
	Republic of Tajikistan	0.07	0.002	29	-0.068
	Republic of Uzbekistan	0.17	0.16	94	-0.010
3.3	Bakhri Tochik hydroscheme – Shardara reservoir	2.63	2.41	91	-0.22
	of which:				
	Kyrgyz Republic	0.50	0.50	100	0.00
	Republic of Tajikistan	0.21	0.00	0	-0.21
	Republic of Uzbekistan	1.92	1.91	99	-0.01
4	Inflow to the Shardara reservoir	11.59	9.73	84	-1.86
	Discharge into Arnasay	0.40	0.00	0	-0.40
5	Water supply to the Aral Sea (Karateren gauging station)	2.40	1.15*	48	-1.25

* Data from the Kazakh Committee for Water Resources

Table 1.2

**Water balance of the Syr Darya River basin reservoirs
over the non-growing season 2020-2021**

No	Balance item	Water volume, km ³		Deviation (actual– plan)
		Forecast/pl an	Actual	
1	Toktogul reservoir			
1.1	Inflow to the reservoir	2.86	2.89	0.03
1.2	Water volume in the reservoir:			
	- beginning of the season (1 October 2020)	15.20	15.20	0.00
	- end of the season (1 April 2021)	9.37	8.71	-0.66
1.3	Water releases from the reservoir	8.68	9.38	0.70
1.4	Unrecorded inflow (+) or losses (-)	-0.01	-0.003	0.010
	Including % of inflow to the reservoir	0	0	0
1.5	Flow regulation: recharge (+) or diversion (-) of flow	5.82	6.49	0.67
2	Andizhan reservoir			
2.1	Inflow to the reservoir	0.82	0.78	-0.04
2.2	Water volume in the reservoir:			
	- beginning of the season (1 October 2020)	0.38	0.38	0.00
	- end of the season (1 April 2021)	0.72	0.76	0.04
2.3	Water releases from the reservoir	0.48	0.38	-0.10
2.4	Unrecorded inflow (+) or losses (-)	0.00	-0.02	-0.02
	Including % of inflow to the reservoir	0	3	3
2.5	Flow regulation: recharge (+) or diversion (-) of flow	-0.34	-0.40	-0.06
3	Charvak reservoir			
3.1	Inflow to the reservoir	1.42	1.13	-0.29
3.2	Water volume in the reservoir:			
	- beginning of the season (1 October 2020)	1.28	1.28	0.00
	- end of the season (1 April 2021)	1.05	0.56	-0.49
3.3	Water releases from the reservoir	1.64	1.75	0.11
	Unrecorded inflow (+) or losses (-)	-0.01	-0.10	-0.09
	Including % of inflow to the reservoir	1	9	8
3.5	Flow regulation: recharge (+) or diversion (-) of flow	0.22	0.62	0.40
4	Bakhri Tochik reservoir			
4.1	Inflow to the reservoir from the river	12.80	11.71	-1.09
4.2	Lateral inflow	0.300	0.314	0.01
4.3	Water volume in the reservoir:			
	- beginning of the season (1 October 2020)	1.68	1.68	0.00
	- end of the season (1 April 2021)	3.44	3.46	0.02
4.4	Water releases from the reservoir	11.37	11.11	-0.26
	of which:			
	- releases into the river	11.26	11.09	-0.17

No	Balance item	Water volume, km ³		Deviation (actual– plan)
		Forecast/pl an	Actual	
	- water withdrawal from the reservoir	0.11	0.018	-0.09
4.5	Unrecorded inflow (+) or losses (-)	0.02	0.87	0.84
	Including % of inflow to the reservoir	0	7	7
4.6	Flow regulation: recharge (+) or diversion (-) of flow	-1.73	-0.62	1.11
5	Shardara reservoir			
5.1	Inflow to the reservoir from the river	11.59	9.73	-1.86
5.2	Lateral inflow	0.0	0.0	0.00
5.3	Water volume in the reservoir:			
	- beginning of the season (1 October 2020)	0.83	0.83	0.00
	- end of the season (1 April 2021)	5.09	5.07	-0.02
5.4	Water releases from the reservoir	7.68	5.18	-2.50
	of which:			
	- discharge into Arnasay	0.40	0.00	-0.402
	- water releases into the river	7.19	5.08	-2.12
	- water withdrawal from the reservoir	0.08	0.10	0.02
5.5	Unrecorded inflow (+) or losses (-)	0.35	-0.32	-0.67
	Including % of inflow to the reservoir	3	3	0
5.6	Flow regulation: recharge (+) or diversion (-) of flow	-3.91	-4.66	-0.74
	Total flow regulation by reservoirs: inflow (+) or diversion (-)	0.05	1.43	1.38
	Total unrecorded inflow (-) or losses (+)	0.35	0.42	0.07

Table 1.3

Deviation of actual water supply from limit in the Syr Darya River basin over the non-growing season 2020-2021

Indicator	Unit	October			November			December			January			February			March			Season	
		I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III		
Toktogul-Bakhri Tochik reach																					
Total water withdrawal, of which:	Limit	m ³ /s	189	183	163	82	40	20	6	12	32	69	76	76	89	78	105	193	212	225	1623
	Actual	m ³ /s	159	161	150	87	55	34	8	15	34	66	74	76	84	77	93	158	195	207	1520
	Deviat.	%	-16	-12	-8	6	37	69	38	18	8	-4	-2	-1	-6	-1	-11	-18	-8	-8	-6
Kyrgyz Republic	Limit	m ³ /s	8.5	7.1	6.8	2.5	1.8	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.0	4.7	7.1	47
	Actual	m ³ /s	5.2	5.3	5.7	4.0	2.6	1.1	0.55	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.5	0.8	1.8	28
	Deviat.	%	-39	-26	-16	63	47	-33	-45	-50	-50	-50	-50	-50	-50	-50	-50	-50	-88	-82	-75
Tajikistan	Limit	m ³ /s	23.0	20.0	20.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	8.0	10.0	22.0	25.0	28.0	153
	Actual	m ³ /s	4.0	3.6	3.9	4.1	4.4	1.3	0.0	0.4	1.9	1.1	0.1	0.3	1.0	2.5	4.4	3.7	5.5	4.9	41
	Deviat.	%	-83	-82	-80	-66										-84	-69	-56	-83	-78	-83
Uzbekistan	Limit	m ³ /s	158	156	137	68	38	19	5	11	31	68	75	75	82	69	94	167	182	190	1423
	Actual	m ³ /s	150	152	140	79	48	32	7	14	32	65	74	75	83	74	88	154	188	200	1451
	Deviat.	%	-5	-3	3	16	25	71	55	20	3	-5	-2	-1	1	8	-6	-8	3	6	2
Bakhri Tochik-Shardara reach																					
Total water withdrawal, of which:	Limit	m ³ /s	210	204	201	137	127	121	116	129	136	122	114	120	147	176	183	263	261	250	2635
	Actual	m ³ /s	134	104	124	209	141	126	139	140	130	105	112	150	171	180	182	230	211	181	2410
	Deviat.	%	-36	-49	-38	53	12	5	19	8	-5	-14	-2	25	16	2	0	-12	-19	-28	-9
Kazakhstan	Limit	m ³ /s	0	0	0	0	0	0	8.0	18.0	25.0	27.0	40.0	52.0	75.0	95.0	85.0	65.0	53.0	39.0	498
	Actual	m ³ /s	0	0	0	2.7	3.0	3.0	3.0	3.0	3.0	8.8	33.1	68.4	95.3	103	105	88.9	49.2	20.7	499
	Deviat.	%							-63	-83	-88	-67	-17	31	27	8	24	37	-7	-47	0
Tajikistan	Limit	m ³ /s	36.0	30.0	27.0	16.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	22.0	32.0	32.0	35.0	212	

	Actual	m ³ /s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	Deviat.	%	-	-	-	-	-									-	-	-	-	-	-100
			100	100	100	100	100									100	100	100	100	100	
Uzbekistan	Limit	m ³ /s	174	174	174	121	121	121	108	111	111	95	74	68	72	73	76	166	176	176	1924
	Actual	m ³ /s	134	104	124	206	138	123	136	137	127	96	78	82	76	78	77	141	162	161	1911
	Deviat.	%	-23	-40	-29	71	15	2	25	23	14	1	6	21	5	6	2	-15	-8	-9	-1

2 Amu Darya River basin

The actual water content in the Amu Darya River at the nominal Atamyrat gauging station (upstream of intake to Garagumdarya) was 10.2 km³, which is 11% less than scheduled by BWO AmuDarya.

Inflow to the Nurek reservoir was 3.7 km³ (97% of the forecast), while water releases from the reservoir were 7.3 km³ (96% of that scheduled by BWO AmuDarya). The river received additional 3.65 km³ through discharge from the Nurek reservoir. The reservoir was drawn down to 6.28 km³ by the end of season. Water balance discrepancy that indicates to water losses and/or overestimated inflow to the reservoir was 0.52 km³.

In the reservoirs of Tuyamuyun hydroscheme (TMHS), the water accumulation plan for the non-growing season has not been fulfilled – by the 1st of April the actual water volume was lower than the scheduled one by 0.47 km³ and totaled 2.65 km³. Failure to fulfill the accumulation plan is explained by lower inflow to the in-stream reservoir than was expected – flow at the Bir-Ara section was estimated at 6.69 km³ (82% of the forecast). Water releases from TMHS also were lower than scheduled by BWO AmuDarya – 7.34 km³ (96%). Water disbalance at the Bir-Ata – Tuyamuyun g/s reach (calculated by the balance method) amounted to 1.23 km³ or 18% of river flow at Bir-Ata g/s. This can be attributed to water losses in reservoirs of Tuyamuyun hydroscheme and/or overestimated inflow to the hydroscheme.

The established limit of water withdrawal in the basin was 84% used; water withdrawal amounted to 13.17 km³, including 10.55 km³ downstream of Atamyrat gauging station (starting from the intake to Garagumdarya). Water availability by country changed from 80% to 89 % (Table 2.1). The available water supply was 81% in the upper reaches (up to Garagumdarya intake), 94% in the middle reaches (from nominal Atamyrat g/s to TMHS), and 66 % (68% - Turkmenistan, 66% - Uzbekistan) in the lower reaches. Water deficit was estimated at 523 million m³ (18% of the established limit) in the Republic of Tajikistan, 1.3 km³ (20%) in the Republic of Uzbekistan, and 737 million m³ (11%) in Turkmenistan.

Table 2.4 shows deviations of actual water supply from the established water limit. These deviations varied from -26% (deficit in the 2nd ten-day of March) to 28% (excessive supply in the 1st ten-day of December) in the Nurek-Tuyamuyun reach and from -71% (1st ten-day of February) до 485% (3rd ten-day of January) in the Tuyamuyun-Samanbay reach.

Water losses in the Atamyrat nominal -Bir-Ata reach were insignificant - 0.52 km³ (4% of river flow at the nominal Atamyrat g/s). Water losses in the Tuyamuyun-Samanbay reach amounted to 1.47 km³ (38% of river flow at Tuyamuyun g/s). The total open-channel losses in middle and lower reaches

amounted to 1.99 km³ or 14% of regulated river flow.

The established limit of environmental water releases into canals in the Amu Darya lower reaches was 73% used; the water supply was 0.57 km³. According to the Uzbek Hydromet's data, 1.05 km³ were delivered to Aral Sea region and the Aral Sea or 50% of planned water delivery.

Tables 2.2 and 2.3 show the river's main course balance and the reservoirs' water balance, respectively.

Table 2.1

**Water availability in the Amu Darya River basin countries
in the non-growing season 2020-2021**

N	Water user	Water volume, km ³		Water availability, %	Deficit (-), surplus (+), km ³
		Limit/schedule	Actual	Season	Season
1	Total water withdrawal	15.73	13.17	84	-2.559
2	Water withdrawal by state:				
	<i>Kyrgyz Republic</i>	-	-	-	-
	<i>Republic of Tajikistan</i>	2.88	2.36	82	-0.52
	<i>Turkmenistan</i>	6.50	5.76	89	-0.74
	<i>Republic of Uzbekistan</i>	6.35	5.05	80	-1.30
3	Downstream of the Atamyrat reach	12.48	10.55	85	-1.93
	of which:				
	<i>Turkmenistan</i>	6.50	5.76	89	-0.74
	<i>Republic of Uzbekistan</i>	5.98	4.79	80	-1.19
4	By river reach				
	Upper reaches	3.25	2.62	81	-0.63
	of which:				
	<i>Kyrgyz Republic</i>	-	-	-	-
	<i>Republic of Tajikistan</i>	2.88	2.36	82	-0.52
	<i>Republic of Uzbekistan, Surkhandarya</i>	0.37	0.26	71	-0.11
	Middle reaches	8.35	7.81	94	-0.54
	of which:				
	<i>Turkmenistan</i>	5.10	4.82	94	-0.28
	<i>Republic of Uzbekistan</i>	3.25	2.99	92	-0.25
	Lower reaches	4.14	2.74	66	-1.39
	of which:				
	<i>Turkmenistan</i>	1.40	0.95	68	-0.45
	<i>Republic of Uzbekistan</i>	2.73	1.79	66	-0.94
5	Sanitary and environmental releases into canals within lower reaches	0.80	0.57	71	-0.23
	including:				
	<i>Turkmenistan</i>	0.15	0.12	83	-0.03
	<i>Republic of Uzbekistan</i>	0.65	0.44	68	-0.21
6	Supply to the Aral Sea region and the Aral Sea	2.1	1.05	50	-1.05

Table 2.2

**The AmuDarya River's main course water balance
over the non-growing season 2020-2021**

Balance item	Water volume, km ³		Deviation (actual- plan)
	Forecast/pla n	Actual	
1. Water content in the Amu Darya River - non-regulated flow at Atamyrat g/s nominal*	11.42	10.18	-1.242
2. Flow regulation by the Nurek reservoir: recharge (+) or diversion (-) of flow	3.83	3.65	-0.18
3. Water withdrawal in the middle reaches (-)	-8.35	-7.81	0.54
4. Return CDF (+) in middle reaches	1.23	1.19	-0.04
5. Water losses (-) or unrecorded inflow to the main course (+)	0.06	-0.52	-0.58
<i>% of flow at the nominal Atamyrat GS</i>	0	4	3
6. Flow at the Bir-Ata GS	8.20	6.69	-1.50
7. Water releases from TMHS (including water diversion from the reservoir)	7.18	5.27	-1.91
8. Water withdrawal in lower reaches, including from TMHS (-)	-4.14	-2.74	1.39
9. Return CDF (+) in lower reaches	0.00	0.00	0.00
10. Emergency and environmental water releases into canals (-)	-0.80	-0.57	0.23
11. Runoff losses (-) or unrecorded inflow to the main course (+)	-1.34	-1.47	-0.13
<i>% of flow in the Tuyamuyun GS reach</i>	27	38	12
12. Supply to the Aral Sea region and the Aral Sea (Samanbay GS)	0.91	0.49	-0.42
TOTAL losses:	-1.28	-1.99	-0.71
<i>% of regulated flow</i>	8	14	6

* Minus water withdrawal in upper reaches (Tajikistan and Surkhandarya province)

Table 2.3

**Water balance of the reservoirs in the Amu Darya River basin
over the non-growing season 2020-2021**

Balance item	Water volume, km ³		Deviation (actual- plan)
	Forecast/pla n	Actual	
1 Nurek reservoir			
2.1 Inflow to the reservoir	3.78	3.69	-0.10
2.2 Water volume in the reservoir:			
beginning of the season (1 October 2020)	10.57	10.55	-0.02
end of the season (1 April 2021)	6.22	6.28	0.07
2.3 Water releases from the reservoir	7.61	7.34	-0.27
2.4 Lateral inflow (+) or water losses (-)	-0.53	-0.61	-0.09
<i>% of the inflow to the reservoir</i>	14	17	3
2.5 Flow regulation: recharge (+) or diversion (-) of flow	3.83	3.65	-0.18
2 Reservoirs of TMHS			
2.1 River flow at Bir-Ata GS	8.20	6.69	-1.50
2.2 Water volume in the reservoirs:			
beginning of the season (1 October 2020)	2.46	2.46	0.00
end of the season (1 April 2021)	3.12	2.65	-0.47
2.3 Water release from the hydroscheme	7.18	5.27	-1.91
of which:			
– release into the river	5.00	3.84	-1.16
– water diversion	2.18	1.43	-0.75
2.4 Unrecorded inflow (+) or water losses (-)	-0.35	-1.23	-0.88
<i>including % of inflow to the reservoir</i>	4	18	14
2.5 Flow regulation: recharge (+) or diversion (-) of flow	-1.02	-2.85	-1.83
TOTAL losses in reservoirs (-), unrecorded inflow (+)	-0.88	-1.84	-0.96

Table 2.4

Deviation of actual water supply from limit in the Amu Darya River basin over the non-growing season 2020-2021

Indicator	Unit	October			November			December			January			February			March			Season	
		I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III		
Nurek-Tuyamuyun reach																					
Total water withdrawal, of which:	Limit	m ³ /s	961	924	861	721	671	537	459	500	502	565	607	617	638	757	842	991	1045	1084	11595
	Actual	m ³ /s	837	782	730	672	625	531	586	522	526	496	567	620	675	708	680	768	775	836	10430
	Deviat.	%	-13	-15	-15	-7	-7	-1	28	4	5	-12	-7	1	6	-6	-19	-23	-26	-23	-10
Tajikistan	Limit	m ³ /s	253	231	212	206	206	190	145	129	125	122	128	132	143	160	193	229	241	256	2880
	Actual	m ³ /s	180	152	135	145	164	166	163	155	140	152	150	145	137	149	156	133	131	149	2357
	Deviat.	%	-29	-34	-36	-29	-21	-12	13	20	13	25	17	9	-5	-7	-19	-42	-46	-42	-18
Turkmenistan	Limit	m ³ /s	395	384	360	295	260	230	219	211	205	210	230	246	275	359	406	483	527	552	5100
	Actual	m ³ /s	383	367	352	308	269	233	224	218	213	213	231	264	305	339	333	410	406	447	4837
	Deviat.	%	-3	-4	-2	4	4	1	2	3	4	2	0	7	11	-6	-18	-15	-23	-19	-5
Uzbekistan	Limit	m ³ /s	314	309	289	220	205	117	95	160	172	233	249	239	220	238	243	280	277	276	3615
	Actual	m ³ /s	274	262	243	219	192	131	199	150	173	130	187	212	234	221	191	226	238	240	3258
	Deviat.	%	-13	-15	-16	0	-6	12	109	-7	0	-44	-25	-11	6	-7	-21	-19	-14	-13	-10
Tuyamuyun-Samanbay reach																					
Total water withdrawal, of which:	Limit	m ³ /s	388	363	328	33	0	0	0	5	10	10	10	10	413	565	693	746	659	598	4135
	Actual	m ³ /s	328	283	209	65	24	9	9	9	27	29	26	58	119	451	517	428	337	289	2741
	Deviat.	%	-16	-22	-36	101				84	166	190	163	485	-71	-20	-25	-43	-49	-52	-34
Turkmenistan	Limit	m ³ /s	158	158	158	33	0	0	0	5	10	10	10	10	93	155	195	206	209	211	1400
	Actual	m ³ /s	138	123	97	29	11	5	5	5	5	5	5	5	31	155	163	122	105	100	948
	Deviat.	%	-13	-22	-39	-10				0	-50	-50	-50	-50	-67	0	-16	-41	-50	-52	-32
Uzbekistan	Limit	m ³ /s	230	205	170	0	0	0	0	0	0	0	0	0	320	410	498	540	450	387	2735
	Actual	m ³ /s	190	159	112	36	13	4	4	4	22	24	21	53	89	297	354	305	232	189	1793
	Deviat.	%	-17	-22	-34										-72	-28	-29	-43	-48	-51	-34

JOINT STATEMENT BY THE PRESIDENT OF THE REPUBLIC OF TAJIKISTAN, EMOMALI RAKHMOMONOV AND THE PRESIDENT OF THE REPUBLIC OF KAZAKHSTAN, KASIM- ZHOMART TOKAYEV

(extract)

At the invitation of the President of the Republic of Tajikistan, Emomali Rakhmonov, the President of the Republic of Kazakhstan, Kasim-Zhomart Tokayev, paid an official visit to the Republic of Tajikistan from 19 to 20 May 2021.

During the talks, which took place in the traditional atmosphere of friendship, full understanding and openness, the Heads of State discussed the state of Tajik-Kazakh relations and the prospects for broadening and deepening bilateral cooperation in political, trade, economic, cultural, humanitarian and other spheres and also exchanged their opinions on regional and international agendas.

[...]

Expressing its continued commitment to the principles and obligations enshrined in the treaties on the bases of relations and strategic partnership between the Republic of Tajikistan and the Republic of Kazakhstan, the Heads of State, with a view to further enriching inter-State dialogue on the basis of mutual respect and support, understanding and friendship among fraternal peoples, declare the following:

[...]

They emphasized the special role of the International Fund for Saving the Aral Sea (IFAS), which is a unique organization and a needed platform for solving all socio-economic, water and environmental problems of the Aral Sea basin. They called for greater cooperation between the Central Asian countries and international organizations, donors and environmental funds in implementing specific programmes and projects.

The President of Kazakhstan expressed his readiness to further develop mutually beneficial cooperation within the framework of the current Tajikistan's chairmanship in IFAS.

They reaffirmed their unwavering support for the international and global initiatives of the parties under umbrella of the United Nations and other multilateral structures.

The Head of Kazakhstan commended Tajikistan's chairmanship of the Shanghai Cooperation Organization and the Collective Security Treaty

Organization in 2020-2021, as well as Tajikistan's global water initiatives. Welcomed the UN General Assembly "UN Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action "Water for Sustainable Development", 2018-2028" resolution, adopted on 21 December 2020 and supported the initiative of the President of Tajikistan to declare 2025 the International Year for the Preservation of Glaciers.

[...]

Source: The Embassy of the Republic of Tajikistan
in the Republic of Uzbekistan⁵

⁵ <https://mfa.tj/ru/tashkent/view/7830/sovместное-заявление-президента-республики-таджикстан-емомали-рахмона-и-президента-республики-казахстан-касым-жомарта-токаева>

DECLARING THE ARAL SEA REGION A ZONE OF ENVIRONMENTAL INNOVATIONS AND TECHNOLOGIES

During the plenary meeting of the 75th session of the General Assembly of the United Nations, a special resolution was unanimously adopted on declaring the Aral Sea region a zone of environmental innovations and technologies.

The initiative to develop and adopt the resolution was put forward by the President of the Republic of Uzbekistan Shavkat Mirziyoyev and supported by 60 countries from various regions of the world.

Resolution adopted by the General Assembly:

- declares its support for regional events and initiatives aimed at improving the environmental, social, economic and demographic situation in the Aral Sea region;

- encourages scientific and research advisory activities in the interests of further restoration and improvement of the environment, conservation of natural resources and improvement of the quality life of the population;

- emphasizes the importance of intensifying regional cooperation in the implementation of joint measures to overcome the consequences of the Aral Sea crisis and stabilize the ecological situation in the region;

- calls on all stakeholders to conduct joint interdisciplinary research, develop and introduce environmentally friendly technologies, promote sustainable inclusive and environmentally sustainable economic growth.

In addition, the resolution will lead to joining efforts and improving coordination of projects between specialized agencies, funds and programs under UN umbrella in the context of priorities of regional cooperation and integration.

Source in Russia: CIS Portal⁶

⁶ <https://sng.today/tashkent/17090-region-priaralja-priznan-zonoj-jekologicheskikh-innovacij-i-tehnologij.html>

4th MEETING OF THE REGIONAL WORKING GROUP ON THE INSTITUTIONAL AND LEGAL IMPROVEMENT OF IFAS

On May 27, 2021, under the auspices of the EC IFAS, the fourth meeting of the Working Group (WG) on institutional and legal improvement of the IFAS was held via videoconference.

Members of the Working Group from Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan, representatives of the Executive Committee of the International Fund for Saving the Aral Sea and its branches, ICWC and ICSD structural divisions, as well as the World Bank took part in the meeting. Representatives of the Kyrgyz Republic took part in the meeting of the Working Group as observers.



The meeting participants heard presentations on the background of work on improving the institutional and legal framework of IFAS, examples of the structure, goals and objectives of some river basin commissions in different regions of the world, and discussed the next steps in the work of the WG.

Source: IFAS Executive Committee⁷

⁷ <https://www.facebook.com/Исполнительный-комитет-МФСА-105488058038747>

SPEECH BY THE PRESIDENT OF THE REPUBLIC OF UZBEKISTAN H.E.MR.SHAVKAT MIRZIYOYEV AT THE SECOND INTERNATIONAL SUMMIT “PARTNERSHIP FOR GREEN GROWTH AND GLOBAL GOALS 2030” (P4G)

30 May 2021

Dear Summit Participants! Ladies and Gentlemen!

First of all, I would like to express my gratitude to President of the Republic of Korea H.E.Moon Jae-in for the invitation to take part in this important event.

We welcome and highly appreciate the initiatives and efforts of our Korean partners in solving acute problems of sustainable development and promoting the “green” agenda at the global level.

Taking this opportunity, I sincerely congratulate all of you, and especially H.E.Mr. Ban Ki-moon, on the 10th anniversary of the Global Green Growth Institute.

Dear forum participants!

The pandemic has shown how interrelated human health and the state of the environment, as well as economic and social progress.

We can no longer ignore the signals that nature itself sends us.

Unfortunately, climate change is increasing. In Central Asia, the average annual temperature over the past 30 years has increased by about 1 degree.

We are deeply concerned about the decline in the flow of major rivers and biodiversity in our region. The problems of greenhouse gases and large-scale air pollution are aggravated.

No one doubts that countries' actions to achieve green development goals must be more active and more effective. We have no other choice.

In Uzbekistan, we started this important work.

We are implementing a comprehensive Strategy for the transition to a "green" economy, as well as the Program for the Development of Renewable and Hydrogen Energy.

As part of the Paris Agreement, we pledged to cut greenhouse gas emissions by 10 percent by 2030.

We were the first in the region to join the Global Green Growth Institute and intend to open its office in Uzbekistan.

Answering your question, I would like to outline the key areas of cooperation for us in the field of green recovery.

First. Overcoming the global consequences of the Aral Sea disaster through the widespread introduction of "green" technologies.

On this issue, we intend to actively cooperate with our partners, including within the framework of the specially created UN Trust Fund and at the P4G platform.

I am grateful for the support of our initiative with the recently adopted special UN resolution declaring the Aral Sea region a zone of environmental innovations and technologies.

Second. Aspiration for achieving carbon neutrality through the development of "green energy".

We have started the implementation of large projects for the construction of solar and wind power plants. We intend to more than triple the share of renewable energy sources in the next ten years.

In addition, we are closely cooperating with neighboring states in the development of the large hydropower potential of our region.

We are ready to hold an international conference "Green Energy for Developing Countries" in Uzbekistan next year.

Third. We propose to launch a special program to involve young people in building a "green" economy.

This will allow in the future to form a culture of "green" consumption.

Fourth. We support the establishment of close cooperation to support the growing confidence of the financial sector and investors in green technologies.

To this end, Uzbekistan is ready to join the P4G partnership and become its full-fledged participant.

In conclusion, I want to express my confidence that the results of today's summit will serve to expand our practical cooperation within the framework of this important international environmental platform.

I wish you all the best.

Thank you for attention.

Source in Russian: IA Uza⁸

⁸ https://uza.uz/ru/posts/vystuplenie-prezidenta-respubliki-uzbekistan-shavkata-mirziyoeva-na-vtorom-mezhdunarodnom-sammite-partnerstvo-radi-zelenogo-rosta-i-globalnyx-celey-2030-p4g_271629

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