Interstate Commission for Water Coordination in Central Asia

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CONTENTS

| MINUTES OF THE 75 th MEETING OF THE INTERSTATE COMMISSION FOR WATER COORDINATION (ICWC) OF THE REPUBLIC OF KAZAKHSTAN, KYRGYZ REPUBLIC, REPUBLIC OF TAJIKISTAN, TURKMENISTAN AND REPUBLIC OF UZBEKISTAN | 3 |
|---|---|
| RESULTS OF THE USE OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES IN THE AMUDARYA AND SYRDARYA RIVER BASINS OVER THE GROWING SEASON 2018 | 1 |
| APPROVAL OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES DURING THE NON-GROWING SEASON 2018-2019 IN THE AMUDARYA AND SYRDARYA RIVER BASINS 2 | 7 |
| VISIT OF ICWC DELEGATION TO ROGHUN HPP | 6 |
| JOINT COMMUNIQUÉ: EUROPEAN UNION – CENTRAL ASIA FOREIGN MINISTERS' MEETING | 6 |
| PAN-ASIA REGIONAL TRAINING ON WATER GOVERNANCE: INTERNATIONAL WATER LAW AND MULTI-STAKEHOLDER PROCESSES 5 | 1 |
| UN GENERAL ASSEMBLY RESOLUTION A/RES/73/226 MIDTERM COMPREHENSIVE REVIEW OF THE IMPLEMENTATION OF THE INTERNATIONAL DECADE FOR ACTION, "WATER FOR SUSTAINABLE DEVELOPMENT", 2018–2028 | 3 |
| DECREE OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN NO11 OF 24 JANUARY 2019 "ON AMENDMENTS TO THE DECREE OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN NO689 "ON APPROVAL OF THE LIST OF HOLIDAYS IN THE REPUBLIC OF KAZAKHSTAN" OF 31 OCTOBER 2017" | 8 |
| DECREE OF THE PRESIDENT "ON ESTABLISHMENT OF THE MINISTRY OF AGRICULTURE AND ENVIRONMENT PROTECTION AND STATE COMMITTEE FOR WATER RESOURCES OF TURKMENISTAN" | 9 |
| INTERNATIONAL CONFERENCE "CENTRAL ASIAN CONNECTIVITY: CHALLENGES AND NEW OPPORTUNITIES" IN TASHKENT | 0 |



| SEMINAR "THE PRINCIPLE OF NO SIGNIFICANT HARM – WHAT | |
|--|----|
| IMPLICATIONS FOR WATER DIPLOMACY?" | 62 |
| | |
| 3 rd GENERAL ASSEMBLY OF THE ASIA WATER COUNCIL | 65 |



MINUTES OF THE 75th MEETING OF THE INTERSTATE COMMISSION FOR WATER COORDINATION (ICWC) OF THE REPUBLIC OF KAZAKHSTAN, KYRGYZ REPUBLIC, REPUBLIC OF TAJIKISTAN, TURKMENISTAN AND REPUBLIC OF UZBEKISTAN

27 November 2018

Dushanbe

Chairman:

Rakhimzoda SultonFirst Deputy MinisterNurmakhmadpurResources, Republic or

First Deputy Minister of Energy and Water Resources, Republic of Tajikistan (MEWR RT)

ICWC members:

Khamraev Shavkat Rakhimovich

Nysanbayev Yerlan Nuralievich

Bayramdurdyyev Magtymguly Minister of Water Management, Republic of Uzbekistan

Vice Minister of Agriculture, Republic of Kazakhstan

Deputy Minister of Agriculture and Water Resources, Turkmenistan

ICWC executive bodies:

Dukhovniy Viktor Director, Scientific Information Center (SIC) of Abramovich **ICWC** Deputy Director, Scientific Information Center Ziganshina Dinara Ravilyevna (SIC) of ICWC Nazarov Umar Head, ICWC Secretariat Abdusalomovich Kholkhuzhaev Odil Head, BWO Syrdarya Akhmedovich Makhramov Makhmud Head, BWO Amudarya Yakhshibayevich



| Invited: | |
|--|--|
| Bozjigitov Aimdos Ersainovich | Ambassador-at-large, Ministry of Foreign Affairs of the Republic of Kazakhstan |
| Zhienbaev Musilim Rysmakhanovich | Head, Division of Transboundary Rivers, Department of Transboundary Rivers, Ministry of Agriculture, Republic of Kazakhstan |
| Kipshakbaev Nariman Kipshakbaevich | Director, Kazakh branch of SIC ICWC |
| Kenshimov Amirkhan Kadyrbekovich | Head, Department of Water Resources, Executive Board of IFAS in the Republic of Kazakhstan |
| Suyundikov Maksat Zhumataevich | Advisor at the SCO Administration, Asian Cooperation Department, Ministry of Foreign Affairs of the Republic of Kazakhstan |
| Tanirbergenov Bakhtybay Nasyrbekovich | Deputy Director, South Kazakhstan branch of RSE Kazvodkhoz, Committee for Water Resources, Ministry of Agriculture, Republic of Kazakhstan |
| Abdurazokzoda Daler Abdukhalok | Head, Department of Water and Energy Policy, Science and Technology Development, Ministry of Energy and Water Resources of the Republic of Tajikistan |
| Gafurzoda Tagoymurod | Head, Department of Water Resources, Ministry of Energy and Water Resources of the Republic of Tajikistan |
| Abdullaev Rustam Abdumanonovich | Chief expert, Department of Water and Energy Policy, Science and Technology Development, Ministry of Energy and Water Resources of the Republic of Tajikistan |
| Nazifov Shafoat Gadoevich | Head, Basin Administration for Land Reclamation and Irrigation, Agency for Land Reclamation and Irrigation under the Government of the Republic of Tajikistan |
| Sharofiddinov Khusnuddin Tursunovich | Director, Tajik branch of SIC ICWC |



| Kuchkarov Sharifjon Zikrillayevich | Head, Water Balance and Advanced Water Saving Technologies Division, MWM of the Republic of Uzbekistan |
|---------------------------------------|--|
| Alimov Tulkin Zhuraevich | Head, Amu-Surkhan Basin Irrigation System Administration |
| Mommadov Begench | Head, "Garagumderyasuvkhodjalyk" Association |
| Baydjanov Baygeldi | Head, Land Reclamation Division, Water Use Department, Ministry of Agriculture and Water Resources of Turkmenistan |
| Ovezov Meylis Kydyrovich | Chief expert, Water Use Department, Ministry of Agriculture and Water Resources of Turkmenistan |
| Valiev Ramazon Rakhmonovich | Head, Upper Amudarya Administration, BWO Amudarya |
| Babadjanova Malika Pulatovna | Independent expert |

Agenda of the 75the meeting of ICWC

1. Results of the use of water withdrawal limits and operation regimes of the reservoir cascades in the Amudarya and Syrdarya River basins over the growing season 2018;

2. Approval of the water withdrawal limits and forecast operation regime of the reservoir cascades in the Amudarya and Syrdarya River basins over the non-growing season 2018-2019;

3.Participation of members and executive bodies of ICWC in the development of the Program of Actions aimed at assistance to the countries of the Aral Sea basin (ASBP-4);

4. Agenda and venue of the next 76th meeting of ICWC.

Supplementary item

5. HR-related matters.



Decisions on the first item:

1. Take into account information provided by BWO Amudarya and BWO Syrdarya on the results of the use of water withdrawal limits and operation regimes of the reservoir cascades over the growing season 2018 in the Amudarya and Syrdarya River basins.

2. BWO Syrdarya and Kazakh experts are entrusted to analyze data from gauging stations. The results of work should be reported to the ICWC members.

Decision on the second item:

1. Approve country water withdrawal limits and forecast operation regime of the reservoir cascades in the Amudarya and Syrdarya River basins over the non-growing season 2018-2019 (Annexes 1, 2).

Decisions of the third item:

1. Take into account information of SIC ICWC on participation in the development of ASBP-4.

2. Support active interactions of ICWC executive bodies with EC IFAS and ask the Chairman of EC IFAS to include representatives of all ICWC executive bodies into the Regional Working Group.

3. Entrust SIC ICWC with submitting passports of project proposals to be included in ASBP-4 for consideration by ICWC members by December 1, 2018. The Parties should submit their comments and proposals to SIC ICWC within one month.

4. Consider the participation of the Chairman of EC IFAS in ICWC meetings as appropriate.

Decisions on the fourth item:

1. Hold the next ordinary 76th meeting of ICWC in the Republic of Uzbekistan in the 1st ten-day of April 2019. The date and venue of the meeting are to be approved in due course.

2. Propose the following agenda for the next 76th meeting of ICWC:

1) Results of the use of water limits and the operation regimes of the reservoir cascades in the Amudarya and Syrdarya River basins over the non-growing season 2018-2019;

2) Approval of water withdrawal limits and operation regimes of the reservoir cascades in the Amudarya and Syrdarya River basins over the growing season 2019;

3)Participation of members and executive bodies of ICWC in the development of ASBP-4;

4) Agenda and venue of the next 77th regular ICWC meeting.

5) Supplementary items.

Supplementary item:

Decisions on the fifth item:

1. Release Babadjanova Malika Pulatovna from the position of the Head of the ICWC Secretariat due to transfer to another job.

2. Appoint Nazarov Umar Abdusalomovich as the Head of ICWC Secretariat.

Republic of Kazakhstan

Kyrgyz Republic

Republic of Tajikistan

Turkmenistan

Republic of Uzbekistan

S.N.Rakhimzoda

Y.N.Nysanbayev

M.Bayramdurdyyev

Sh.R.Khamraev

Forecast operation regime of the Nurek and Tuyamuyun reservoirs (October 2018 to March 2019)

| Nurek reservoir | unit | Actual | | Forecast | | | | | |
|-----------------------------------|-------------------|---------|----------|----------|---------|----------|--------|--------|--|
| Nulek reservon | unit | October | November | December | January | February | March | Total | |
| Volume: beginning of the season | mcm | 10,549 | 10,398 | 9,885 | 9,341 | 8,472 | 7,481 | 10,571 | |
| | m ³ /s | 300 | 239 | 226 | 186 | 180 | 202 | | |
| Inflow to the reservoir | mcm | 804 | 619 | 605 | 499 | 435 | 540 | 3,504 | |
| Water releases from the reservoir | m ³ /s | 357 | 436 | 428 | 513 | 588 | 612 | | |
| water releases from the reservon | mcm | 957 | 1,131 | 1,148 | 1,373 | 1,423 | 1,640 | 7,672 | |
| Volume: end of the season | mcm | 10,398 | 9,885 | 9,341 | 8,472 | 7,481 | 6,388 | 6,388 | |
| Accumulation (+), drawdown(-) | mcm | -151 | -513 | -544 | -870 | -991 | -1,093 | -4,161 | |

| Tuyomugan recorvoir | unit | Actual | | | Total | | | |
|-----------------------------------|-------------------|---------|----------|----------|---------|----------|-------|-------|
| Tuyamuyun reservoir | unit | October | November | December | January | February | March | Total |
| Volume: beginning of the season | mcm | 2,201 | 2,249 | 2,784 | 3,319 | 4,216 | 4,216 | 2,201 |
| | m ³ /s | 321 | 337 | 500 | 500 | 500 | 515 | |
| Inflow to the reservoir | mcm | 859 | 874 | 1,339 | 1,339 | 1,210 | 1,379 | 7,001 |
| Water releases from the reservoir | m ³ /s | 303 | 131 | 300 | 165 | 500 | 780 | |
| water releases from the reservon | mcm | 811 | 339 | 804 | 443 | 1,210 | 2,089 | 5,696 |
| Volume: end of the season | mcm | 2,249 | 2,784 | 3,319 | 4,216 | 4,216 | 3,506 | 3,506 |
| Accumulation (+), drawdown(-) | mcm | 48 | 535 | 536 | 896 | 0 | -710 | 1,305 |

Annex 1



Forecast operation regime of the Naryn-Syrdarya reservoir cascade, 1 October 2018 to 31 March 2019

| | | October | November | December | January | February | March | Total, mcm |
|---------------------------------|-------------------|---------|----------------|----------|---------|----------|--------|---------------|
| | | Tokt | ogul reservoir | | | | | |
| Inflow to the reservoir | m ³ /s | 231 | 200 | 166 | 156 | 153 | 162 | |
| | mcm | 617 | 519 | 445 | 418 | 370 | 434 | 2,804 |
| Volume: beginning of the season | mcm | 19,298 | 18,839 | 17,877 | 16,712 | 15,442 | 14,336 | |
| end of the season | mcm | 18,839 | 17,877 | 16,712 | 15,442 | 14,336 | 13,538 | |
| Water releases from reservoir | m^3/s | 400 | 570 | 600 | 630 | 610 | 460 | |
| | mcm | 1,071 | 1,477 | 1,607 | 1,687 | 1,476 | 1,232 | 8,551 |
| | | Bakhri | Tochik reserv | oir | | | | |
| Inflow to the reservoir | m ³ /s | 570 | 864 | 940 | 872 | 870 | 644 | |
| (Akdjar GS) | mcm | 1,525 | 2,239 | 2,517 | 2,335 | 2,106 | 1,726 | 12,448 |
| Volume: beginning of the season | mcm | 2,110 | 2,425 | 2,575 | 2,863 | 3,064 | 3,289 | |
| end of the season | mcm | 2,425 | 2,575 | 2,863 | 3,064 | 3,289 | 3,418 | |
| Water releases from reservoir | m^3/s | 450 | 820 | 850 | 820 | 800 | 611 | |
| | mcm | 1,205 | 2,125 | 2,277 | 2,196 | 1,935 | 1,635 | 11,374 |
| | | Shar | dara reservoir | | | | | |
| Inflow to the reservoir | m ³ /s | 405 | 825 | 982 | 841 | 903 | 765 | |
| | mcm | 1,085 | 2,139 | 2,630 | 2,251 | 2,186 | 2,050 | 12,341 |
| Volume: beginning of the season | mcm | 952 | 1,322 | 2,256 | 3,252 | 4,015 | 4,372 | |
| end of the season | mcm | 1,322 | 2,256 | 3,252 | 4,015 | 4,372 | 5,200 | |
| Water releases from reservoir | m ³ /s | 250 | 450 | 600 | 550 | 750 | 444 | |
| | mcm | 670 | 1,166 | 1,607 | 1,473 | 1,814 | 1,190 | 7,921 |
| Water supply to the Aral Sea | m ³ /s | 64 | 120 | 178 | 238 | 268 | 282 | |

| bulletin | |
|----------|--|

| | | October | November | December | January | February | March | Total, mcm |
|---|-------------------|---------|----------------|----------|---------|----------|-------|---------------|
| | mcm | 172 | 310 | 476 | 638 | 648 | 756 | 3,000 |
| | | Chai | vak reservoir | | | | | |
| Inflow to the reservoir | m ³ /s | 103 | 92 | 78 | 69 | 68 | 99 | |
| (4 rivers in total) | mcm | 276 | 238 | 209 | 185 | 166 | 266 | 1,340 |
| Volume: beginning of the season | mcm | 1,754 | 1,584 | 1,392 | 1,199 | 954 | 756 | |
| end of the season | mcm | 1,584 | 1,392 | 1,199 | 954 | 756 | 701 | |
| Water releases from reservoir | m^3/s | 165 | 165 | 150 | 160 | 150 | 120 | |
| (water releases from the Gazalkent HPP) | mcm | 442 | 428 | 402 | 429 | 363 | 321 | 2,384 |
| | | Andi | zhan reservoii | • | | | | |
| Inflow to the reservoir | m ³ /s | 57 | 62 | 56 | 48 | 47 | 60 | |
| | mcm | 153 | 160 | 149 | 129 | 114 | 161 | 866 |
| Volume: beginning of the season | mcm | 881 | 839 | 852 | 925 | 1,009 | 1,087 | |
| end of the season | mcm | 839 | 852 | 925 | 1,009 | 1,087 | 1,142 | |
| Water releases from reservoir | m^3/s | 73 | 57 | 28 | 17 | 15 | 39 | |
| | mcm | 195 | 147 | 76 | 44 | 36 | 105 | 603 |

RESULTS OF THE USE OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES IN THE AMUDARYA AND SYRDARYA RIVER BASINS OVER THE GROWING SEASON 2018¹

I. Amudarya River basin

The actual water availability in the Amudarya River basin at the nominal Kerki gauging station upstream of Garagumdarya was 80.3 % of the norm over the growing season 2018. The estimations were made taking into account the natural flow in the Vakhsh River and regulation by the Nurek reservoir. In the past season, this value was 107.8 % of the norm. The most severe situation was in April and early May, with the actual water availability within 60% of the norm. In this context, at its 73rd meeting, ICWC members approved the decision to cut limits by 10% in April and May.

The use of the approved water withdrawal limits over the growing season under consideration is as follows (breakdown by state):

Taking into account the current water situation, totally in the basin 82.7 % of the approved water withdrawal limits was used. While the limit was 38,529.3 mcm, the actually used volume was 31,865.5 mcm, of which:

- Republic of Tajikistan actually used 6,186.4 mcm³ or 91.6 % of the total limit;
- Republic of Uzbekistan actually used 12,674.0 mcm or 75.6 % of the total limit;
- Turkmenistan actually used 13,005.1 mcm or 86.7 % of the total limit.

Over the growing season 2018, the use of water limits downstream of the nominal Kerki gauging station upstream of Garagumdarya was 80.5 % of the total limit, of which:

- Republic of Uzbekistan actually used 11,640.8 mcm or 74.6 % of the total limit;
- Turkmenistan actually used 13,005.1 mcm or 86.7 % of the total limit.

¹ Information on the first item of the 75th ICWC Meeting's Agenda



The actual use of the approved water withdrawal limits broken down by river reach is characterized by significant disproportion. For instance, the water limit was used 91-96% in the upper and middle reaches, whereas there was severe water deficit in the lower reaches.

The actual use of water against limits is as follows:

- Upper reaches 91.2 % of the total limit, including 91.6 % in the Republic of Tajikistan and 88.6 % in the Republic of Uzbekistan.
- Middle reaches 95.8 % of the total limit, including 94.7 % in the Republic of Uzbekistan and 96.4 % in Turkmenistan.
- Lower reaches 64.4 % of the total limit, including 63.4 % in the Republic of Uzbekistan and 66.5 % in Turkmenistan.

Water user state Limit, mcm Actual, mcm %% of use **Upper reaches** 7,918.4 7,219.6 91.2 Republic of Tajikistan 91.6 6,752.8 6,186.4 Republic of Uzbekistan 1,165.6 1,033.2 88.6 **Middle reaches** 95.8 15,697.4 15,040.0 Turkmenistan 96.4 10,133.4 9,768.7 Republic of Uzbekistan 5,564.0 5,271.3 94.7 Lower reaches 14,913.5 9,605.7 64.4 Turkmenistan 4,869.8 3,236.3 66.5 Republic of Uzbekistan 10,043.7 6.369.5 63.4

Table 1.1

For the growing season, water supply to the Amudarya delta and the Aral Sea was planned to be 1,400 mcm. However, actual supply was 461 mcm or 32.9%.

The inflow to the Nurek reservoir was to be 18,108 mcm; however, the actual inflow was 16,244 mcm or 89.7 %. Water releases from the reservoir were planned to be 14,243 mcm; the actual releases were 12,353 mcm or 86.7 %.



By the end of the growing season 2018, water storage in the reservoir was to be 10,526 mcm. The actual volume was 10,549 mcm or 100.2 %.

The inflow to the Tuyamuyun reservoir was to be 15,981 mcm; however, the actual inflow was 12,983 mcm or 81.2 %. Water releases from the reservoir were planned to be 16,525 mcm; while the actual releases were 9,695 mcm or 58.7 %.

By the end of the growing season, water storage in the reservoir was planned to be 2,239 mcm; however, the actual storage was 2,201 mcm or 98.3%.

Table 1.2

| Name | | unit | Nurek reservoir | Tuyamuyun reservoir |
|---------------------------------|----------|------|-----------------|------------------------|
| Volume: beginning of the season | | mcm | 6,638 | 2,783 |
| | forecast | mcm | 18,108 | 15,981 |
| Inflow to the reservoir | actual | mcm | 16,244 | 12,983 |
| | | %% | 89.7 | 81.2 |
| | forecast | mcm | 14,243 | 16,525 |
| Water releases from reservoir | actual | mcm | 12,353 | 9,695 |
| | | %% | 86.7 | 58.7 |
| | forecast | mcm | 10,526 | 2,239 |
| Volume: end of the season | actual | mcm | 10,549 | 2,201 |
| | | %% | 100.2 | 98.3 |
| | forecast | mcm | 3,888 | -544 |
| Accumulation(+), drawdown(-) | actual | mcm | 3,911 | -582 |
| | | %% | 100.6 | 107 |

It should be mentioned that water releases from the Nurek reservoir were 86,7% of the planned amount, whereas water inflow was 89.7 % of the forecast.

More detailed information is given in Tables 1.3-1.5.



Analysis of the use of water withdrawal limits in the Amudarya River basin over the growing season 2018, mcm

| Name | Limit for growing season | Actual | %%% | | | | | | | |
|--|--------------------------------|----------|------|--|--|--|--|--|--|--|
| Upper Amudarya Administration | | | | | | | | | | |
| (Upper reaches) | 7,918.4 | 7,219.6 | 91.2 | | | | | | | |
| of which: | | | | | | | | | | |
| Tajikistan | 6,752.8 | 6,186.4 | 91.6 | | | | | | | |
| Uzbekistan | 1,165.6 | 1,033.2 | 88.6 | | | | | | | |
| Water withdrawals from the Amudarya River at nominal Kerki gauging station | 30,610.9 | 24,645.8 | 80.5 | | | | | | | |
| Turkmenistan | 15,003.2 | 13,005.1 | 86.7 | | | | | | | |
| Uzbekistan | 15,607.7 | 11,640.8 | 74.6 | | | | | | | |
| Middle Amudarya Adr | ninistration | | | | | | | | | |
| (Middle reaches) | 15,697.4 | 15,040.0 | 95.8 | | | | | | | |
| of which: | | | | | | | | | | |
| Turkmenistan | 10,133.4 | 9,768.7 | 96.4 | | | | | | | |
| Uzbekistan | 55,64.0 | 5,271.3 | 94.7 | | | | | | | |
| UPRADIK* and Lower Amuda | arya Administra | tion | | | | | | | | |
| Lower reaches: | 1,4913.5 | 9,605.9 | 64.4 | | | | | | | |
| of which: | | | | | | | | | | |
| Turkmenistan | 4,869.8 | 3,236.3 | 66.5 | | | | | | | |
| Uzbekistan: | 10,043.7 | 6,369.5 | 63.4 | | | | | | | |
| Total for the basin: of which: | 38,529.3 | 31,865.5 | 82.7 | | | | | | | |
| Tajikistan | 6,752.8 | 6,186.4 | 91.6 | | | | | | | |
| Turkmenistan | 15,003.2 | 13,005.1 | 86.7 | | | | | | | |
| Uzbekistan | 16,773.3 | 12,674.0 | 75.6 | | | | | | | |

*Amudarya Inter-republican Canal Division



Table 1.4

| | unit | April | May | June | July | August | September | total |
|----------------------------------|-------------------|-------|-------|-------|-------|--------|-----------|--------|
| Volume: beginning of the season | mcm | 6,638 | 6,243 | 6,580 | 7,742 | 9,983 | 10,545 | 6,638 |
| Inflow to the | m ³ /s | 432 | 770 | 1,162 | 1,708 | 1,399 | 668 | |
| reservoir | mcm | 1,119 | 2,063 | 3,011 | 4,574 | 3,746 | 1,731 | 16,244 |
| Water releases | m ³ /s | 598 | 644 | 721 | 865 | 1,187 | 661 | |
| from the reservoir | mcm | 1,549 | 1,725 | 1,868 | 2,318 | 3,180 | 1,713 | 12,353 |
| Volume: end of the season | mcm | 6,243 | 6,580 | 7,742 | 9,983 | 10,545 | 10,549 | 10,549 |
| Accumulation (+), drawdown(-) | mcm | -395 | 337 | 1,162 | 2,241 | 562 | 4 | 3,911 |

Actual operation regimes of the Nurek reservoir (April – September 2018), mcm

Actual operation regime of the Tuyamuyun reservoir (April-September 2018), mcm

| | unit | April | May | June | July | August | September | total |
|----------------------------------|-------------------|-------|-------|-------|-------|--------|-----------|--------|
| Volume: beginning of the season | mcm | 2,783 | 2,332 | 2,342 | 2,796 | 2,314 | 2,416 | 2,783 |
| Inflow to the | m ³ /s | 233 | 655 | 1,138 | 1,025 | 1,052 | 815 | |
| reservoir | mcm | 604 | 1,753 | 2,951 | 2,746 | 2,816 | 2,112 | 12,983 |
| Water releases | m ³ /s | 407 | 651 | 963 | 1,206 | 1,013 | 898 | |
| from the reservoir | mcm | 1,054 | 1,744 | 2,496 | 3,229 | 2,715 | 2,327 | 13,565 |
| Volume: end of the season | mcm | 2,332 | 2,342 | 2,796 | 2,314 | 2,416 | 2,201 | 2,201 |
| Accumulation (+), drawdown(-) | mcm | -451 | 9 | 454 | -482 | 102 | -215 | -582 |



Information on water supply to the Aral Sea and the Amudarya River delta over the growing season 2018, mcm

| | IV | V | VI | VII | VIII | IX | Actual, 01.04.18 to 30.09.18 |
|--|-----|-----|-----|-----|------|-----|------------------------------------|
| From the Amudarya River, at Samanbay GS | 26 | 26 | 23 | 24 | 15 | 13 | 127 |
| Total water discharge from the Dustlik and Suenli canals system | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CDF | 99 | 59 | 41 | 48 | 43 | 44 | 334 |
| TOTAL: | 125 | 85 | 64 | 72 | 58 | 57 | 461 |
| Cumulative | 125 | 210 | 274 | 346 | 404 | 461 | |

Note: Data on water supply to the Amudarya River delta and the Aral Sea are agreed with the Hydromet of Uzbekistan



II. Syrdarya River basin

According to the Hydromet's forecast, water content was expected to be 90-100 % (95%) of the norm in the basins of the Naryn River, south of the Fergana Valley, and the Chirchik River basin, 80-90% (85%) in the Akhangaran River basin, and 70-80% (75%) in the Karadarya River basin during the growing season 2018.

The Coordination Dispatch Center "Energy" provided, the forecast operation regime of the Toktogul reservoir for the growing season on 16 April 2018.

According to the data by KyrgyzHydromet, the forecast inflow to the Toktogul reservoir was 91% of the norm.

According to the data by UzHydromet, the forecast inflow was:

- 87 % to the Andizhan reservoir;

- 91 % to the Charvak reservoir;

- lateral inflow - 91 % of the norm.

Totally in the basin, water content was expected to be 91% of the norm.

At the 73rd meeting of ICWC, the members considered the forecast operation regime of the Naryn-Syrdarya reservoir cascade and country water withdrawal limits in the Syrdarya River basin over the growing season.

Results of the growing season are as follows:

Inflow to upstream reservoirs

Over the growing season, the norm lateral inflow to the upstream reservoirs of the Naryn-Syrdarya cascade is 18,467 mcm.

The forecast inflow was expected to be 16,679 mcm or 90 % of the norm.

The actual inflow to the reservoirs was 17,017 mcm or 102 % of the forecast (Table 2.1).

Lateral inflow

The norm of lateral inflow to the Syrdarya River up to the Shardara reservoir is 11,041 mcm.

According to the Hydromet's forecast, lateral inflow was expected to be 10,089 mcm or 91% of the norm.



The actual lateral inflow amounted to 11,248 mcm, which is 1,159 mcm more than the forecast or 111 % of the forecast.

Total inflow

The norm of total inflow to the Syrdarya River is 29,508 mcm.

According to the Hydromet's forecast, it was expected to be 26,768 mcm or 91% of the norm.

The actual inflow amounted to 28,265 mcm or 106% of the forecast.

Table 2.1

| | (| Browing sea | ason, mcm | n, April 1 | to 30 Sept | ember 2018 | |
|---------------------------------------|-------------|-------------|-----------|------------------|-------------|------------|--------|
| Name | | | | actual/ | actual/ | 201 | 7 |
| | norm | forecast | actual | forecas t (%) | norm (%) | forecast | actual |
| | Inflow to u | ipstream r | eservoirs | | | | |
| Toktogul | 9,617 | 8,754 | 9,853 | 113 | 102 | 11,703 | 13,383 |
| Andizhan | 2,990 | 2,591 | 2,491 | 96 | 83 | 3,240 | 4,132 |
| Charvak (4 rivers in total) | 5,860 | 5,335 | 4,673 | 88 | 80 | 6,173 | 8,694 |
| Total | 18,467 | 16,679 | 17,017 | 102 | 92 | 21,116 | 26,209 |
| | La | teral inflo | W | | | | |
| Toktogul – Uchkurgan | 1,216 | 1,156 | 1,299 | 112 | 107 | 1,277 | 1,901 |
| Andizhan – Uchtepe | 2,529 | 2,213 | 2,324 | 105 | 92 | 2,766 | 3,227 |
| Uchkurgan, Uchtepe - Bakhri Tochik | 3,368 | 3,162 | 3,949 | 125 | 117 | 3,478 | 4,392 |
| Bakhri Tochik – Shardara | 3,020 | 2,688 | 2,631 | 98 | 87 | 3,162 | 2,874 |
| Gazalkent-Chinaz (excluding Ugam) | 909 | 870 | 1,045 | 120 | 115 | 1,029 | 1,561 |
| Total | 11,041 | 10,089 | 11,248 | 111 | 102 | 11,713 | 13,955 |
| Overall (total inflow) | 29,508 | 26,768 | 28,265 | 106 | 96 | 32,829 | 40,164 |



Water releases from the reservoir

According to the operation schedule of the Naryn-Syrdarya reservoir cascade, 26,552 mcm were scheduled to be released from reservoirs over the growing season 2018.

The actual releases were 23,766 mcm, which is 2,786 mcm less than the schedule (Table 2.2).

Table 2.2

| | Water releases, mcm | | | | | | | | | |
|---|---------------------|-------------|---------------------------|---------------------|--------|----------------------------------|--|--|--|--|
| | Growin | ng season 2 | 2018 | Growing season 2017 | | | | | | |
| Reservoir | scheduled | actual | %, actual/ schedule | scheduled | actual | % actual / schedu le | | | | |
| Toktogul | 5,217 | 5,011 | 96 | 4,971 | 6,567 | 132 | | | | |
| Andizhan | 2,686 | 2,800 | 104 | 3,754 | 4,193 | 112 | | | | |
| Charvak (water releases from the Gazalkent HPP) | 4,403 | 3,867 | 88 | 4,966 | 6,842 | 138 | | | | |
| Bakhri Tochik | 6,967 | 7,318 | 105 | 6,890 | 10,849 | 157 | | | | |
| Shardara | 7,279 | 4,770 | 66 | 7,095 | 12,041 | 170 | | | | |
| TOTAL: | 26,552 | 23,766 | 90 | 27,676 | 40,492 | 146 | | | | |

Water storage in the reservoirs by the end of the growing season

In the upstream reservoirs, the scheduled water storage amounted to 20,641mcm by the end of the growing season.

By the end of the growing season, however, the actual water storage was 21,933 mcm (Table 2.3).

Water storage in the upstream reservoirs:

| Toktogul | 19,298 mcm, |
|----------|-------------|
| Andizhan | 881 mcm, |
| Charvak | 1,754 mcm. |



| | | Water volum | ne, mcm | |
|---------------|-------------------------------|------------------------------------|---------------------------------|------------------------------------|
| Reservoir | Actual, as of 1 April 2018 | Scheduled, as of 1 October 2018 | Actual, as of 1 October 2018 | Actual, as of 1 October 2017 |
| | Upp | er reservoirs | | |
| Toktogul | 14,456 | 17,938 | 19,298 | 19,586 |
| Andizhan | 1,218 | 1,112 | 881 | 1,019 |
| Charvak | 676 | 1,591 | 1,754 | 1,768 |
| TOTAL: | 16,350 | 20,641 | 21,933 | 22,373 |
| | In-str | eam reservoirs | | |
| Bakhri Tochik | 3,409 | 1,781 | 2,110 | 3,404 |
| Shardara | 4,265 | 1,145 | 952 | 1,194 |
| TOTAL: | 7,674 | 2,926 | 3,062 | 4,598 |
| OVERALL: | 24,024 | 23,567 | 24,995 | 26,971 |

Water supply to the states

Over the growing season, water was supplied to the user states based on submitted requests (Table 2.4):

- Republic of Kazakhstan: limit 705 mcm, actual 613 mcm;
- Kyrgyz Republic: limit 246 mcm, actual 196 mcm;
- Republic of Tajikistan: limit 1,905 mcm, actual 1,606 mcm;
- Republic of Uzbekistan: limit 8,880 mcm, actual 8,295 mcm.

Actual total water withdrawals by user states amounted to 10,711 mcm.



| Water user state | · - | Water withdrawals, 1 April to 30 September 2018, mcm | | | | | |
|---|------------------|---|--|--|--|--|--|
| | Based on request | Actual | | | | | |
| Republic of Kazakhstan (Dustlik canal) | 705 | 613 | | | | | |
| Kyrgyz Republic | 246 | 196 | | | | | |
| Republic of Tajikistan | 1,905 | 1,606 | | | | | |
| Republic of Uzbekistan | 8,800 | 8,295 | | | | | |
| Total | 11,656 | 10,711 | | | | | |

Inflow to the in-stream reservoirs and water supply to the Aral Sea

The inflow to the Bakhri Tochik reservoir was scheduled to be 6,071 mcm over the growing season 2018. The actual inflow to the reservoir was 6,838 mcm or 767 mcm more than scheduled (Table 2.5).

The inflow to the Shardara reservoir was scheduled to be 5,085 mcm. The actual inflow to the reservoir was 3,539 mcm or 1,546 less than the schedule.

According to the data by the State Committee for Water Resources of the Republic of Kazakhstan, the inflow to the Aral Sea and Prearalie was scheduled to be 1,752 mcm. The actual inflow to the Aral Sea and Prearalie as measured at the Karateren gauging station was 1,149 mcm or 603 mcm less than the schedule.



| Parameter | Scheduled, 1 April to 30 September 2018, mcm | Actual, 1 April to 30 September 2018, mcm | actual/ schedule (%) | Actual, 1 April to 30 September 2017, mcm | | | | |
|---------------------------------------|---|--|----------------------------|--|--|--|--|--|
| Inflow to in-stream reservoirs | | | | | | | | |
| Inflow to the Bakhri Tochik reservoir | 6,071 | 6,838 | 113 | 11,341 | | | | |
| Inflow to the Shardara reservoir | 5,085 | 3,539 | 70 | 9,800 | | | | |
| Supply to the Aral Sea | | | | | | | | |
| Supply to the Aral Sea | 1,752 | 1,149 | 66 | 4,434 | | | | |

Table 2.6 presents schedule-forecast of the Naryn-Syrdarya reservoir cascade for the growing season 2018 taken into account by ICWC at its 73^{rd} meeting.

Table 2.7 provides actual operation regimes of the Naryn-Syrdarya reservoir cascade over the growing season 2018.

Table 2.6

| | | April | May | June | July | August | September | Total, mcm |
|--|-------------------|----------|--------------|--------|--------|--------|-----------|---------------|
| | | Tokto | gul reservoi | r | | | | |
| Inflow to the reservoir | m^3/s | 269 | 579 | 881 | 758 | 527 | 301 | |
| | mcm | 697 | 1,551 | 2,284 | 2,030 | 1,412 | 780 | 8,754 |
| Volume: beginning of the season | mcm | 14,456 | 14,113 | 14,871 | 16,259 | 17,362 | 17,889 | |
| end of the season | mcm | 14,113 | 14,871 | 16,259 | 17,362 | 17,889 | 17,938 | |
| Water releases from the reservoir | m^3/s | 400 | 295 | 344 | 342 | 325 | 275 | |
| (internal needs of the Kyrgyz Republic + additional releases) | mcm | 1,037 | 790 | 892 | 916 | 869 | 713 | 5,217 |
| including: 1. internal needs | m ³ /s | 400 | 295 | 280 | 260 | 263 | 275 | |
| Kyrgyz Republic | mcm | 1,037 | 790 | 726 | 696 | 704 | 713 | 4,666 |
| 2. additional releases | m ³ /s | 0 | 0 | 64 | 82 | 62 | 0 | |
| | mcm | | | 166 | 220 | 165 | | 550 |
| | | Bakhri T | ochik reserv | voir | | | | |
| Inflow to the reservoir | m^3/s | 525 | 418 | 350 | 350 | 316 | 347 | |
| (Akdjar GS) | mcm | 1,360 | 1,120 | 907 | 937 | 847 | 900 | 6,071 |
| Inflow from CDF | m^3/s | 27 | 27 | 20 | 17 | 13 | 15 | |
| | mcm | 71 | 69 | 53 | 47 | 31 | 39 | 310 |
| Volume: beginning of the season | mcm | 3,409 | 3,420 | 3,411 | 2,869 | 2,091 | 1,607 | |
| end of the season | mcm | 3,420 | 3,411 | 2,869 | 2,091 | 1,607 | 1,781 | |
| Water releases from the reservoir | m^3/s | 520 | 390 | 500 | 550 | 432 | 250 | |
| | mcm | 1,348 | 1,045 | 1,296 | 1,473 | 1,158 | 648 | 6,967 |
| Water releases from the reservoir | m ³ /s | 18 | 37 | 51 | 53 | 42 | 27 | |
| (pumping station from Akdjar to reservoir + pumping station from reservoir) | mcm | 47 | 97 | 138 | 142 | 101 | 71 | 596 |



| | | April | May | June | July | August | September | Total, mcm |
|-----------------------------------|-------------------|-------|----------------|-------|-------|--------|-----------|---------------|
| | | Shard | lara reservoii | | • | | | |
| Inflow to the reservoir | m ³ /s | 400 | 550 | 400 | 200 | 181 | 200 | |
| | mcm | 1,037 | 1,474 | 1,037 | 535 | 484 | 518 | 5,085 |
| Volume: beginning of the season | mcm | 4,265 | 4,783 | 4,918 | 4,088 | 2,441 | 1,184 | |
| end of the season | mcm | 4,783 | 4,918 | 4,088 | 2,441 | 1,184 | 1,145 | |
| Water releases from the reservoir | m ³ /s | 150 | 450 | 650 | 700 | 600 | 200 | |
| | mcm | 389 | 1,205 | 1,685 | 1,875 | 1,607 | 518 | 7,279 |
| Supply to the Aral Sea | m ³ /s | 147 | 120 | 68 | 68 | 65 | 200 | |
| | mcm | 380 | 321 | 176 | 182 | 175 | 518 | 1,752 |
| | | Char | vak reservoir | | | L | | ŕ |
| Inflow to the reservoir | m ³ /s | 286 | 436 | 544 | 399 | 225 | 134 | |
| (4 rivers in total) | mcm | 741 | 1,167 | 1,409 | 1,068 | 603 | 346 | 5,335 |
| Volume: beginning of the season | mcm | 676 | 963 | 1,450 | 1,992 | 1,985 | 1,783 | |
| end of the season | mcm | 963 | 1,450 | 1,992 | 1,985 | 1,783 | 1,591 | |
| Water releases from the reservoir | m ³ /s | 175 | 254 | 333 | 400 | 298 | 207 | |
| (Releases from Gazalkent HPP) | mcm | 454 | 679 | 864 | 1,071 | 799 | 536 | 4,403 |
| | | Andiz | han reservoi | r | | | | |
| Inflow to the reservoir | m ³ /s | 176 | 264 | 270 | 149 | 80 | 45 | |
| | mcm | 456 | 707 | 700 | 398 | 213 | 117 | 2,591 |
| Volume: beginning of the season | mcm | 1,218 | 1,418 | 1,748 | 1,703 | 1,429 | 1,175 | |
| end of the season | mcm | 1,418 | 1,748 | 1,703 | 1,429 | 1,175 | 1,112 | |
| Water releases from reservoir | m ³ /s | 99 | 140 | 287 | 250 | 174 | 68 | |
| | mcm | 256 | 376 | 743 | 670 | 465 | 177 | 2,686 |



| | | April, actual | May, actual | June, actual | July, actual | August, actual | September, actual | Total, mcm |
|---|-------------------|------------------|----------------|-----------------|-----------------|-------------------|----------------------|---------------|
| | | Tokto | gul reservoir | ſ | | • | | |
| Inflow to the reservoir | m ³ /s | 367 | 611 | 1,006 | 892 | 540 | 318 | |
| | mcm | 951 | 1635 | 2,609 | 2,390 | 1,445 | 824 | 9,853 |
| Volume: beginning of the season | mcm | 14,456 | 14,500 | 15,401 | 17,259 | 18,669 | 19,208 | |
| end of the season | mcm | 14,500 | 15,401 | 17,259 | 18,669 | 19,208 | 19,298 | |
| Water releases from the reservoir | m ³ /s | 353 | 275 | 293 | 362 | 336 | 283 | |
| (internal needs of the Kyrgyz Republic + additional releases) | mcm | 914 | 736 | 759 | 969 | 900 | 733 | 5,011 |
| including: 1. internal needs | m ³ /s | 353 | 275 | 239 | 273 | 283 | 283 | |
| Kyrgyz Republic | mcm | 914 | 736 | 645 | 731 | 758 | 733 | 4,516 |
| 2. additional releases | m^3/s | 0 | 0 | 54 | 89 | 53 | 0 | |
| | mcm | | | 114 | 238 | 142 | | 495 |
| | | Bakhri 7 | Tochik reserv | voir | | | | |
| Inflow to the reservoir | m^3/s | 651 | 487 | 524 | 303 | 303 | 333 | |
| (Akdjar GS) | mcm | 1,687 | 1,306 | 1,359 | 811 | 812 | 863 | 6,838 |
| Volume: beginning of the season | mcm | 3,409 | 3,403 | 3,502 | 3,453 | 2,506 | 1,804 | |
| end of the season | mcm | 3,403 | 3,502 | 3,453 | 2,506 | 1,804 | 2,110 | |
| Water releases from the reservoir | m^3/s | 623 | 424 | 523 | 534 | 471 | 200 | |
| | mcm | 1,616 | 1,135 | 1,356 | 1,431 | 1,261 | 519 | 7,318 |
| | | Sharc | lara reservoii | • | | | | |
| Inflow to the reservoir | m ³ /s | 531 | 236 | 188 | 159 | 99 | 136 | |
| | mcm | 1,375 | 632 | 488 | 426 | 266 | 352 | 3,539 |
| Volume: beginning of the season | mcm | 4,265 | 4,656 | 4,055 | 3,445 | 1,726 | 758 | |

| bulletin | | |
|----------|--|--|

| | | April, actual | May, actual | June, actual | July, actual | August, actual | September, actual | Total, mcm |
|-----------------------------------|-------------------|------------------|----------------|-----------------|-----------------|-------------------|----------------------|---------------|
| end of the season | mcm | 4,656 | 4,055 | 3,445 | 1,726 | 758 | 952 | |
| Water releases from the reservoir | m ³ /s | 153 | 394 | 298 | 566 | 326 | 60 | |
| | mcm | 397 | 1,055 | 773 | 1,515 | 873 | 157 | 4,770 |
| Discharge into Kyzylkum canal | m ³ /s | 220 | 76 | 34 | 11 | 14 | 86 | |
| | mcm | 569 | 203 | 87 | 30 | 39 | 222 | 1,149 |
| | | Char | vak reservoir | | | | | |
| Inflow to the reservoir | m ³ /s | 296 | 424 | 480 | 323 | 144 | 106 | |
| (4 rivers in total) | mcm | 767 | 1,136 | 1,245 | 865 | 386 | 274 | 4,673 |
| Volume: beginning of the season | mcm | 676 | 978 | 1,548 | 1,991 | 1,992 | 1,893 | |
| end of the season | mcm | 978 | 1,548 | 1,991 | 1,992 | 1,893 | 1,754 | |
| Water releases from the reservoir | m ³ /s | 173 | 217 | 308 | 370 | 229 | 168 | |
| (Releases from Gazalkent HPP) | mcm | 449 | 581 | 799 | 990 | 613 | 435 | 3,867 |
| | | Andiz | han reservoi | r | | | | |
| Inflow to the reservoir | m ³ /s | 173 | 262 | 288 | 136 | 49 | 38 | |
| | mcm | 447 | 703 | 745 | 366 | 132 | 99 | 2,491 |
| Volume: beginning of the season | mcm | 1,218 | 1,411 | 1,688 | 1,760 | 1,475 | 985 | |
| end of the season | mcm | 1,411 | 1,688 | 1,760 | 1,475 | 985 | 881 | |
| Water releases from reservoir | m ³ /s | 98 | 158 | 254 | 242 | 232 | 76 | |
| | mcm | 254 | 424 | 657 | 648 | 620 | 196 | 2,800 |

APPROVAL OF WATER WITHDRAWAL LIMITS AND OPERATION REGIMES OF THE RESERVOIR CASCADES DURING THE NON-GROWING SEASON 2018-2019 IN THE AMUDARYA AND SYRDARYA RIVER BASINS²

I. Amudarya River basin

Table 1.6

Limits of water withdrawal from the Amudarya River and water supply to Prearalie and the Aral Sea for the non-growing season 2018-2019, mcm

| | Water withd | rawal limits |
|---|------------------------------------|--|
| | Total annual (1.10.18 to 1.10.19.) | Including non- growing season (1.10.18 to 1.04.19) |
| Total withdrawal from the Amudarya River | 55,424 | 15,721 |
| Of which: | | |
| Tajikistan | 9,854 | 2,871,1. |
| Uzbekistan | 1,570 | 370 |
| From the Amudarya River to the nominal Kerki gauging station | 44,000 | 12,480 |
| Turkmenistan | 22,000 | 6,500 |
| Uzbekistan | 22,000 | 5,980 |
| Plus: | | |
| - water supply to Prearalie, including irrigation water and CDW | 4,200 | 2,100 |
| - sanitary and environmental releases to irrigation systems in: | 800 | 800 |
| Dashoguz province | 150 | 150 |
| Khorezm province | 150 | 150 |
| Republic of Karakalpakstan | 500 | 500 |

² Information on the second item of the 75th ICWC meeting agenda



Note: Water withdrawal limits include water for irrigation, industrial, municipal and other needs.

If water availability in the basin changes, the limits will be adjusted accordingly.

Forecast operation regimes of the Nurek and Tuyamuyun reservoirs (October 2018 to March 2019)

| Nurek reservoir | unit | Actual | Forecast | | | | | total | |
|-----------------------------------|-------------------|---------|----------|----------|---------|----------|--------|--------|--|
| | um | October | November | December | January | February | March | total | |
| Volume: beginning of the period | mcm | 10,549 | 10,398 | 9,885 | 9,341 | 8,472 | 7,481 | 10,571 | |
| Inflow to the reservoir | m ³ /s | 300 | 239 | 226 | 186 | 180 | 202 | | |
| | mcm | 804 | 619 | 605 | 499 | 435 | 540 | 3,504 | |
| Water releases from the reservoir | m ³ /s | 357 | 436 | 428 | 513 | 588 | 612 | | |
| | mcm | 957 | 1,131 | 1,148 | 1,373 | 1,423 | 1,640 | 7,672 | |
| Volume: end of the period | mcm | 10,398 | 9,885 | 9,341 | 8,472 | 7,481 | 6,388 | 6,388 | |
| Accumulation (+) drawdown (-) | mcm | -151 | -513 | -544 | -870 | -991 | -1,093 | -4,161 | |

| Tuyamuyan rasaryair | unit | Actual | al Forecast | | | | | total | |
|-----------------------------------|-------------------|---------|-------------|----------|---------|----------|-------|-------|--|
| Tuyamuyun reservoir | uIIIt | October | November | December | January | February | March | total | |
| Volume: beginning of the period | mcm | 2,201 | 2,249 | 2,784 | 3,319 | 4,216 | 4,216 | 2,201 | |
| Inflow to the reservoir | m ³ /s | 321 | 337 | 500 | 500 | 500 | 515 | | |
| Innow to the reservoir | mcm | 859 | 874 | 1,339 | 1,339 | 1,210 | 1,379 | 7,001 | |
| | m ³ /s | 303 | 131 | 300 | 165 | 500 | 780 | | |
| Water releases from the reservoir | mcm | 811 | 339 | 804 | 443 | 1,210 | 2,089 | 5,696 | |
| Volume: end of the period | mcm | 2,249 | 2,784 | 3,319 | 4,216 | 4,216 | 3,506 | 3,506 | |
| Accumulation (+) drawdown (-) | mcm | 48 | 535 | 536 | 896 | 0 | -710 | 1,305 | |

II. Syrdarya River basin

UzHydromet's forecast

UzHydromet provided the forecast for the non-growing season 2018-2019 on 26 September 2018.

According to the forecast, the inflow to the upstream reservoirs is expected to be as follows: 97% of the norm to the Toktogul reservoir, 93% to the Andizhan reservoir, and 95% to the Charvak reservoir. The total lateral inflow is expected to be 99% of the norm.

In total, water content is expected to be 98% of the norm in the Syrdarya basin.

Inflow to upstream reservoirs

The nor of inflow to the upstream reservoirs of the Naryn-Syrdarya cascade is 5,233 mcm over the non-growing season. The inflow is forecasted to be 5,010 mcm (96% of the norm) (Table 2.8).

The norm of inflow to the Toktogul reservoir is 2,891 mcm. It is predicted to be 2,804 mcm (97% of the norm).

The norm of inflow to the Andizhan reservoir is 934 mcm. It is predicted to be 866 mcm (93% of the norm).

The norm of inflow to the Charvak reservoir is 1,408 mcm. It is predicted to be 1,340 mcm (95 % of the norm).

Lateral inflow

The norm of lateral inflow is 11.74 billion cubic meter. It is predicted to be 10.915 billion cubic meter (99% of the norm).

Total inflow

The norm of total inflow to the Syrdarya River is 16,307 mcm for the nongrowing season.

The total inflow is predicted to be 15,925 mcm (98% of the norm).

The total inflow to the Syardarya basin was predicted to be 17,425 mcm for the past non-growing season 2017-2018. The actual inflow was 18,658 mcm (1,233 mcm more or 107 % of the forecast).



| Table 2.8 |
|-----------|
|-----------|

| | | Non-growing season, mcm | | | | | | | |
|--|--------|-------------------------|---------------|-----------|--------|--|--|--|--|
| Name | | 2018-2019 | | 2017-2018 | | | | | |
| Ivanie | norm | forecast | % of the norm | forecast | actual | | | | |
| Inflow to upstream reservoirs | | | | | | | | | |
| Toktogul | 2,891 | 2,804 | 97 | 2,985 | 3,655 | | | | |
| Andizhan | 934 | 866 | 93 | 981 | 864 | | | | |
| Charvak (4 rivers in total) | 1,408 | 1,340 | 95 | 1,735 | 1,797 | | | | |
| Total | 5,233 | 5,010 | 96 | 5,701 | 6,316 | | | | |
| Lateral inflow | | | | | | | | | |
| Toktogul – Uchkurgan | 398 | 387 | 97 | 410 | 386 | | | | |
| Andizhan – Uchtepe | 2,518 | 2,518 | 100 | 2,754 | 2,565 | | | | |
| Uchkurgan, Uchtepe - Bakhri Tochik | 4,364 | 4,396 | 101 | 4,710 | 5,686 | | | | |
| Bakhri Tochik – Shardara | 2,953 | 2,828 | 96 | 2,985 | 2,733 | | | | |
| Gazalkent – Chinaz (excluding Ugam) | 841 | 786 | 93 | 865 | 972 | | | | |
| Total | 11,074 | 10,915 | 99 | 11,724 | 12,342 | | | | |
| Overall (total inflow) | 16,307 | 15,925 | 98 | 17,425 | 18,658 | | | | |

Water storage in the reservoirs

By the beginning of the non-growing season, water storage in the reservoirs is 24,995 mcm (17,032 mcm excluding dead storage).

By October 2017, water storage in the reservoirs was 26,971 mcm (19,008 mcm excluding dead storage). This is 1,976 mcm more than the amount by October 2018 (Table 2.9).

Available water resources of the Naryn-Syrdarya reservoir cascade (water storage in the reservoirs, excluding dead storage and plus total inflow) are 32,957 mcm.

(17,032 mcm + 15,925 mcm = 32,957 mcm)



| Reservoir Actual as of October 1, 201 | | Actual as of October 1, 2017 | Dead storage | | | | | |
|--|--------------|---------------------------------|--------------|--|--|--|--|--|
| Upstream reservoisr | | | | | | | | |
| Toktogul | 19,298 | 19,586 | 5,500 | | | | | |
| Andizhan | 881 | 1,019 | 150 | | | | | |
| Charvak | 1,754 | 1,768 | 426 | | | | | |
| TOTAL: | 21,933 | 22,373 | 6,076 | | | | | |
| | In-stream re | servoirs | | | | | | |
| Bakhri Tochik | 2,110 | 3,404 | 917 | | | | | |
| Shardara | 952 | 1,194 | 970 | | | | | |
| TOTAL: | 3,062 | 4,598 | 1,887 | | | | | |
| OVERALL: | 24,995 | 26,971 | 7,963 | | | | | |

Water releases from the reservoir

According to the forecast operation regime of the Naryn-Syrdarya reservoir cascade, 30,833 mcm is planned to be released from the reservoirs in the non-growing season.

Last year, actual water releases amounted to 35,480 mcm (Table 2.10).

Table 2.10

| iled, 1 October 2018 to 31 March 2019 | Actual, 1 October 2017 to 31 March 2018 | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| | March 2018 | | | | | | | |
| ostream reservoirs | | | | | | | | |
| Upstream reservoirs | | | | | | | | |
| 8,551 | 8,782 | | | | | | | |
| 603 | 657 | | | | | | | |
| 2,384 | 2,561 | | | | | | | |
| 11,538 | 12,000 | | | | | | | |
| | 603 2,384 | | | | | | | |



| | Water releases, mcm | | | | | | |
|----------------------|------------------------------|------------------------------|--|--|--|--|--|
| Reservoir | Scheduled, 1 October 2018 to | Actual, 1 October 2017 to 31 | | | | | |
| | 31 March 2019 | March 2018 | | | | | |
| In-stream reservoirs | | | | | | | |
| Bakhri Tochik | 11,374 | 13,250 | | | | | |
| Shardara | 7,921 | 10,230 | | | | | |
| TOTAL: | 19,295 | 23,480 | | | | | |
| OVERALL: | 30,833 | 35,480 | | | | | |

Water withdrawal limits

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

The total water withdrawal limits of all states are 3,361 mcm in the nongrowing season (Table 2.11).

Table 2.11

| Water user state | Based on request, mcm |
|-------------------------------|-----------------------|
| Republic of Kazakhstan | 475 |
| Kyrgyz Republic | 37 |
| Republic of Tajikistan | 365 |
| Republic of Uzbekistan | 2,484 |
| Total from the Syrdarya River | 3,361 |

Over the non-growing season, water supply to the Aral Sea and Prearalie is expected to be 3 billion cubic meter.

The forecast operation regime of the Naryn-Syrdarya reservoir cascade over the period from 1 October 2018 to 31 March 2019 was developed according to the Hydromet's forecast and based on water storage in the reservoirs and requests submitted by water user states. This schedule is submitted to the ICWC members for consideration (Table 2.12).

Table2.12

| | | October | November | December | January | February | March | Total, mcm |
|-----------------------------------|-------------------|----------|----------------|----------|---------|----------|--------|---------------|
| | | Tokto | gul reservoir | | | | | |
| Inflow to the reservoir | m^3/s | 231 | 200 | 166 | 156 | 153 | 162 | |
| | mcm | 617 | 519 | 445 | 418 | 370 | 434 | 2,804 |
| Volume: beginning of the season | mcm | 19,298 | 18,839 | 17,877 | 16,712 | 15,442 | 14,336 | |
| End of the season | mcm | 18,839 | 17,877 | 16,712 | 15,442 | 14,336 | 13,538 | |
| Water releases from the reservoir | m ³ /s | 400 | 570 | 600 | 630 | 610 | 460 | |
| | mcm | 1,071 | 1,477 | 1,607 | 1,687 | 1,476 | 12,32 | 8,551 |
| | | Bakhri 🛛 | Fochik reserve | oir | | | | |
| Inflow to the reservoir | m ³ /s | 570 | 864 | 940 | 872 | 870 | 644 | |
| (Akdjar GS) | mcm | 1,525 | 2,239 | 2,517 | 2,335 | 2,106 | 1,726 | 12,448 |
| Volume: beginning of the season | mcm | 2,110 | 2,425 | 2,575 | 2,863 | 3,064 | 3,289 | |
| End of the season | mcm | 2,425 | 2,575 | 2,863 | 3,064 | 3,289 | 3,418 | |
| Water releases from the reservoir | m^3/s | 450 | 820 | 850 | 820 | 800 | 611 | |
| | mcm | 1,205 | 2,125 | 2,277 | 2,196 | 1,935 | 1,635 | 11,374 |
| | | Sharc | lara reservoir | | | | | |
| Inflow to the reservoir | m ³ /s | 405 | 825 | 982 | 841 | 903 | 765 | |
| | mcm | 1,085 | 2,139 | 2,630 | 2,251 | 2,186 | 2,050 | 12,341 |
| Volume: beginning of the season | mcm | 952 | 1,322 | 2,256 | 3,252 | 4,015 | 4,372 | |
| End of the season | mcm | 1,322 | 2,256 | 3,252 | 4,015 | 4,372 | 5,200 | |
| Water releases from the reservoir | m ³ /s | 250 | 450 | 600 | 550 | 750 | 444 | |
| | mcm | 670 | 1,166 | 1,607 | 1,473 | 1,814 | 1,190 | 7,921 |
| Supply to the Aral Sea | m^3/s | 64 | 120 | 178 | 238 | 268 | 282 | |
| | mcm | 172 | 310 | 476 | 638 | 648 | 756 | 3,000 |



| | | October | November | December | January | February | March | Total, mcm | | |
|-----------------------------------|-------------------|---------|----------------|----------|---------|----------|-------|---------------|--|--|
| Charvak reservoir | | | | | | | | | | |
| Inflow to the reservoir | m ³ /s | 103 | 92 | 78 | 69 | 68 | 99 | | | |
| (4 rivers in total) | mcm | 276 | 238 | 209 | 185 | 166 | 266 | 1,340 | | |
| Volume: beginning of the season | mcm | 1,754 | 1,584 | 1,392 | 1,199 | 954 | 756 | | | |
| End of the season | mcm | 1,584 | 1,392 | 1,199 | 954 | 756 | 701 | | | |
| Water releases from the reservoir | m ³ /s | 165 | 165 | 150 | 160 | 150 | 120 | | | |
| (Releases from the Gazalkent HPP) | mcm | 442 | 428 | 402 | 429 | 363 | 321 | 2,384 | | |
| | | Andiz | zhan reservoir | | | | | | | |
| Inflow to the reservoir | m ³ /s | 57 | 62 | 56 | 48 | 47 | 60 | | | |
| | mcm | 153 | 160 | 149 | 129 | 114 | 161 | 866 | | |
| Volume: beginning of the season | mcm | 881 | 839 | 852 | 925 | 1,009 | 1,087 | | | |
| End of the season | mcm | 839 | 852 | 925 | 1,009 | 1,087 | 1,142 | | | |
| Water releases from the reservoir | m ³ /s | 73 | 57 | 28 | 17 | 15 | 39 | | | |
| | mcm | 195 | 147 | 76 | 44 | 36 | 105 | 603 | | |

VISIT OF ICWC DELEGATION TO ROGHUN HPP

On 28 November 2018, upon the invitation of the Tajik party ICWC delegation visited the Roghun HPP, which is under construction.

OFFICE OF THE ROGHUN HPP

First, the participants visited the office of OJSC Roghun HPP. Mr. Anvar Rakhmonov, chief operations officer, described the constructed facility and provided detailed information on key structures of the HPP. The layout of subsurface structures showcases that the Roghun hydroscheme is a huge underground city indeed. This fact undoubtedly makes its construction and operation complicated.

Before the collapse of USSR, larger efforts were completed, namely, construction base prepared; construction camp built; more than 20 km of tunnels constructed; turbine and transformer houses completed by 70-80%. Currently, 67 companies are engaged with construction and assembly work, including contractors from Russia, Iran, Ukraine, China, and Germany. Mr. Rakhmonov underlined that all activities are based on the design of Roghun HPP developed by the Central Asian branch of the Gidroproekt Institute (Tashkent) in the Soviet period. The World Bank also highly assessed that design.

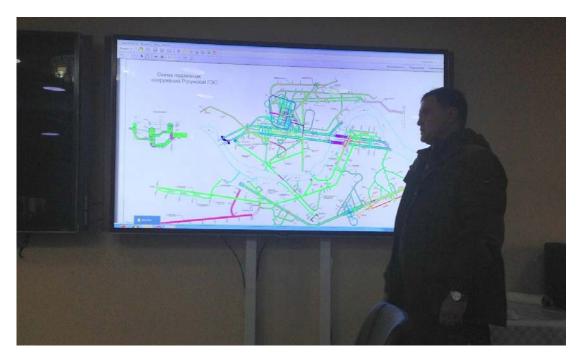
By present, 52 km of the tunnel have been constructed out of planned 74 km.

The cost of completed work, including during the Soviet period, is 3.2 billion USD. Additionally 4.5 billion USD will be required to end the construction.





ICWC delegation at the office of OJSC Roghun HPP



Rakhmonov M., chief operations officer, demonstrates the layout of subsurface structures



HEADWATER CREATED BY TEMPORARY DAM

On 26 November 2016, the Vakhsh River was dammed. At the moment, the dam is erected out of 42 million tons of filling material, and the accumulated water volume is 254 million m³. Water is retained by a temporary dam. The construction is planned to be completed by 2027. The design normal reservoir water surface is to be achieved by 2032.



On the right, headwater created by temporary dam and the construction site, which will be flooded in the future







The delegation asked about measures taken to protect the salt dome at the bottom of the dam. It is well known that salt formation is linked to the Ionaksh fault, which goes under the upstream fill of the dam. Mr.Rakhmonov explained that the salt dome will be blocked by bored piles and sheet piling. It is also planned to build an additional tunnel for permanent monitoring.

CONVEYER SYSTEM

For filling of the dam and delivery of construction materials to the site, a 9 km conveyer system is constructed. Its capacity is to be 3,000 tons per hour. At present, 5 km of the system has been completed.





Beginning of the conveyer system







Part of the conveyer system for construction of the Roghun HPP

INDOOR SWITCHGEARS

Indoor switchgears with gas insulation designed for all six aggregates of Roghun HPP were put into operation on 16 November 2018. 220 kV and 500 kV gas insulated switchgears were installed. 220 kV switchgears will be used for internal needs of the enterprise. Electricity will be supplied from the distribution hub to the single energy system through six 500 kV transmission lines. On 16 November 2018, a 500 kV Dushanbe-Roghun transmission line was put into operation. Installation of the equipment bought at \$50 million, including from the German Siemens was started in February 2018 and completed by November 2018.



Indoor switchgears



ESCAPE

The initial project design planned escape for a flood flow of $5,400 \text{ m}^3/\text{s}$; now the maximum discharge of spillway tunnels is increased to $7,800 \text{ m}^3/\text{s}$ in total.



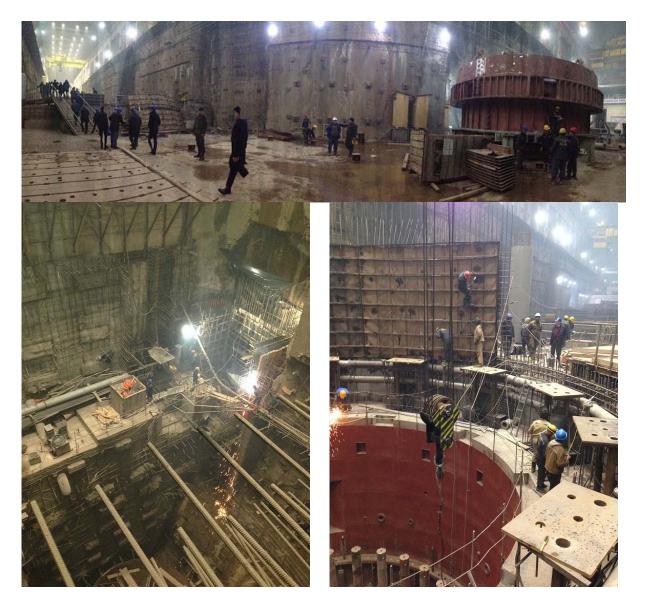
TURBINE HALL

The first aggregate (No.6) of the Roghun HPP was launched on 16



November 2018. Now, it operates on temporary blade wheel and generates 100-115 MW. Aggregate No.5 is planned to be launched in April 2019. These two aggregates will operate at lower head.

Six aggregates, 600 MW each, are to be installed at the hydropower plant. All six aggregates are to be commissioned in December 2024.



Runner of aggregate No.5 (125 rotations per minute)





Aggregate No.6 launched on 16 November 2018



CORE



Core of the dam on the horizon

RECREATION ZONE

A recreation zone is arranged around the reservoir to attract tourists in the future.



View over the future reservoir; water will flood the road on the left



JOINT COMMUNIQUÉ: EUROPEAN UNION – CENTRAL ASIA FOREIGN MINISTERS' MEETING

Brussels, 23 November 2018

EU-Central Asia – Working together to build a future of inclusive growth, sustainable connectivity and stronger partnerships

The Foreign Ministers of the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, the Republic of Uzbekistan, the European Union's (EU) High Representative for Foreign Affairs and Security Policy/Vice-President of the European Commission (HRVP) met on 23 November 2018 in Brussels for the 14th EU-Central Asia Ministerial Meeting.

The Participants discussed the key opportunities and challenges facing their respective regions at a time of particularly significant changes on the global scene and in Central Asia. They agreed that reforms and the positive regional dynamics in Central Asia had created new opportunities for taking the EU-Central Asia partnership forward.

The High Representative confirmed the intention of the EU to bring its current Strategy on Central Asia in line with these important changes. The Participants underlined the importance of the adoption of a new EU Strategy on Central Asia in early 2019 to guide the development of region-to-region relations in a way that brings mutual, tangible and long-term benefits.

The Participants welcomed the increased frequency of meetings at leaders' and ministerial level between the EU and individual countries of Central Asia as well as between the Central Asian countries themselves. They stressed the importance of the annual *EU-Central Asia High-level Political and Security Dialogue* as an important forum to strengthen region-to-region ties and to address common challenges.

The Central Asian Foreign Ministers briefed the EU side about the followup to the first working meeting of Central Asian leaders held in March 2018 in Astana. The EU acknowledged and further encouraged the development of regional dialogue and cooperation in Central Asia on all transnational challenges calling for collective solutions and reaffirmed its commitment to share its own experience and partnership in regional integration and cooperation.

The Participants reaffirmed their commitment to work together for peace, security, democracy, sustainable development and prosperity, based upon respect for international law, including the promotion and protection of fundamental freedoms and human rights in accordance with the UN Charter, the Universal Declaration of Human Rights and the relevant international Human Rights treaties and instruments. In this regard, the Participants also referred to the important role of the Organization for Security and Cooperation in Europe (OSCE). The participants welcomed the organization of the Asian Forum on Human Rights, held in Samarkand on 22-23 November 2018. The Participants stressed their commitment to the implementation of the 2030 Agenda for Sustainable Development (SDGs) and the Addis Ababa Action Agenda with the aim of eradicating poverty and building an inclusive future for all. They stressed the importance of civil society participation in public decision-making. They reiterated that gender equality and the empowerment of women and girls, including the full participation of women in political, economic and other decision-making processes, are crucial for sustainable development. They emphasized the particular importance of sustainable development for young people and their role in achieving the 2030 agenda. They stressed the importance to support initiatives that bring opportunities to youth in Central Asia.

In line with the EU Strategy on Connecting Europe and Asia adopted on 15 October 2018, the HRVP emphasized the commitment of the EU to strengthen connectivity between Europe and Asia and at the regional level by creating transport links, energy and digital networks and fostering people-topeople connections as well as looking for synergies with connectivity cooperation with the Eastern Partnership and within the Asia-Europe Meeting (ASEM). The Participants stressed the importance of promoting economically, environmentally, socially and fiscally sustainable as well as rules-based connectivity and delivering quality infrastructure based on international standards and innovative solutions. They called for a level-playing field for business, equal treatment and non-discrimination in market access and transparency in public procurement. They welcomed the progress achieved in the development of Trans-Caspian transport corridors linking Europe and Asia through Central Asia. In this regard, the Participants noted the importance of the International conference "Central Asia in the system of international transport corridors: strategic perspectives and untapped opportunities" held in Tashkent in September 2018.

The Participants stressed their commitment to ensure that the *Geneva Ministerial Conference on Afghanistan* of 27-28 November 2018 helps to formulate a forward-looking agenda for development, reform, peace and stability in Afghanistan. They agreed to work closely together to further develop



the international consensus around support to an Afghan-led and Afghan-owned peace process and welcomed the outcome of the Tashkent International Conference on "Peace Process, Security Cooperation and Regional Connectivity in Afghanistan" held in March 2018, as well as the agreements reached at the Regional Economic Cooperation Conference on Afghanistan (RECCA-VII) in November 2017 in Ashgabat. The participants also welcomed the regional conference on "Empowering Women in Afghanistan" on 5 September 2018 in Astana highlighting that improved living conditions and education of girls and women will contribute to the country's economic recovery, jobs creation, countering of violent extremism and of the appeal of radicalization in the region. The participants supported the initiative of the European Union, the Republic of Kazakhstan and the Republic of Uzbekistan to launch the first phase of a project providing education and vocational training to Afghan women at higher education institutions in Kazakhstan and Uzbekistan. They agreed to intensify dialogue and cooperation to secure Afghanistan's long-term stability and stressed the importance of promoting further connectivity between Central Asia and Afghanistan. The EU invited Central Asian Ministers to attend a meeting on Regional Connectivity and Infrastructure to be held in the margins of the forthcoming Geneva Ministerial Conference on Afghanistan.

Central Asian Foreign Ministers stressed the commitment of their countries to develop intra-regional trade, closer and wider economic cooperation in the region, as well as continuation of economic reforms. The EU intends to continue supporting the implementation of programs aimed at ensuring efficient border management, improving the business and investment climate and supporting private sector development, promoting the rule of law and good governance, and developing human capital through education and training, building in particular upon the positive experience of the EU-Central Asia Cooperation Platform for Education and of the EU Rule of Law Initiative for Central Asia. The EU also stressed its willingness to continue to enhance the bilateral framework for relations with Central Asian countries and to support the WTO membership of all Central Asian countries. The Participants stressed the importance of the strong involvement of the private sector in the EU-Central Asia partnership.

The Participants expressed their resolve to enhance their cooperation to tackle the growing threats to the environment and the serious challenges posed by climate change. They expressed their deep concern about the new evidence on the negative impact of climate change presented by the *Intergovernmental Panel on Climate Change* (IPCC), which unequivocally confirmed that current global efforts to meet the goals of the Paris Agreement adopted under the *United Nations Framework Convention on Climate Change*. They stressed the need for urgent and effective action in line with the Paris Agreement. They highlighted



49

that the outcome of the Talanoa Dialogue should be a commitment for all Parties to reflect on their levels of ambition and inform the preparation of all Parties' nationally determined contributions (NDCs) pursuant to Article 4 of the Paris Agreement. The participants also emphasized that mitigation of, and adaptation to, climate change represent immediate and urgent priorities. They reaffirmed their full commitment to swiftly and effectively implement the Paris Agreement and to complete its work program this year at COP24 in Katowice (Poland). The EU reaffirmed its commitment to intensify cooperation with Central Asia in renewable energy, energy efficiency and other low-emission technologies, industry, transportation, agriculture and forestry, innovation, mobilization of finance, environmental governance, circular economy. prevention of desertification, including water scarcity, disaster management and risk reduction. The Foreign Minister of Kyrgyzstan informed about the outcome of the London Conference on Environmental Remediation in Central Asia coorganized by the Kyrgyz Republic, the European Bank for Reconstruction and Development (EBRD) and the EU on 8 November 2018, which helped to mobilize international financing for resolving the legacy of uranium mining in the region. The Participants welcomed the adoption on 21 November, at the Second Committee of the 73d session of the UN General Assembly, of the resolution "The role of the international community in the prevention of the radiation threat in Central Asia".

The Participants welcomed the positive momentum in regional cooperation in water management. Participants also noted the importance to develop in this regard a constructive regional cooperation based on international law, that takes into account interests of all countries in the region and with the broad participation of international organizations. In this context, the Foreign Minister of Uzbekistan, as host of the event, and all Participants stressed the importance of an adequate level of participation in the next EU-Central Asia High-level Meeting of the Platform for the Environment, Climate and Water Cooperation, to be held on 24-25 January in Tashkent, which will be organized by Italy and EU institutions. As confirmed at the *Eighth Meeting of the Parties* to the Water Convention on 10-12 October 2018 in Astana, transboundary water cooperation is essential to share limited surface and ground water resources and thereby to prevent conflict and to ensure peace and stability. The Foreign Minister of Turkmenistan informed about the outcome of the Summit of the International Fund for Saving the Aral Sea(IFAS) held on 24 August 2018 in Awaza, Turkmenbashi, and of its follow-up, emphasizing the need to develop the UN Special Program for the Aral Sea Basin. The Foreign Minister of Kazakhstan briefed participants about the implications of the *Convention on the* Legal Status of the Caspian Sea signed on 12 August 2018 in Aktau. The Foreign Minister of Tajikistan presented the main conclusions of the first Highlevel International Conference on the International Decade for Action "Water



for Sustainable Development" 2018-2028, co-organized by the Government of Tajikistan and the United Nations on 20-22 June 2018 in Dushanbe in the context of the UN Decade on Water, which will serve as a platform to advance sustainable development, energize implementation of existing programs and projects towards the implementation of water-related goals and targets, and mobilize action to achieve the 2030 Agenda. The EU underlined its commitment to promote international cooperation on the sustainable management of water resources at the global level, as reaffirmed in its *Council Conclusions on Water Diplomacy* of 19 November 2018. The parties stressed the importance of further improving the legal framework for cooperation in the field of water use in Central Asia. The participants welcomed the EU's efforts to share best practices in the field of transboundary water cooperation, as well as relevant financial, technical and advisory assistance to the Central Asian countries in this area.

The Participants stressed the importance of their cooperation on a broad range of security challenges, including counter-narcotics and border security, conflict prevention and crisis management. They stressed the need for the implementation of the *UN Global Counter-Terrorism Strategy*, in particular the Joint Plan of Action for its implementation in Central Asia with the new phase of realization announced on the High-level Meeting held on 30 April 2018 in Ashgabat. In line with the Declaration adopted at the *Dushanbe High-level Conference on Countering and preventing Violent Extremism*, organized by Tajikistan in May 2018 in cooperation with the EU and OSCE, the participants committed to enhancing cooperation in preventing and countering violent extremism. They emphasized that education and women empowerment play key roles in that respect and stressed that measures taken to counter terrorism must comply with international law and Human Rights. They called for progress in the negotiation of the *UN Comprehensive Convention on International Terrorism*.

The Participants welcomed Iran's continued full and effective of its nuclear-related commitments under implementation the Joint Comprehensive Plan of Action (JCPOA), as confirmed by the International Atomic Energy Agency (IAEA) in its latest report of 31 August 2018. They stressed the importance of the preservation of all aspects of the JCPOA, which includes sanctions lifting and the consequences arising from it. The JCPOA is a key element of the global non-proliferation architecture and a significant diplomatic achievement endorsed unanimously by the UN Security Council in its Resolution 2231 (2015).

The Participants expressed their deep appreciation to the EU for hosting the Meeting and agreed to meet in the Kyrgyz Republic in 2019.

PAN-ASIA REGIONAL TRAINING ON WATER GOVERNANCE: INTERNATIONAL WATER LAW AND MULTI-STAKEHOLDER PROCESSES

On 13-15 December 2018, Kunming, China hosted the Pan-Asia Regional training on Water Governance: International Water Law and Multi-Stakeholder Processes. It was organized by the Global Water Partnership in cooperation with the Institute of International Rivers and Eco-Security and the Asia International Rivers Center at the Yunnan University, and the Network of Asia River Basin Organizations (NARBO). UNECE and the World Bank also supported the event.

In the first section of the training, Prof. Huiping Chen, Xiamen University and Dr. Dinara Ziganshina, SIC ICWC introduced participants to the general concept of the international transboundary water law. They explained key substantial and procedural obligations, including equitable and reasonable water use, no significant harm, cooperation, information exchange, consultations, notifications, impact assessments and peaceful settlement of disputes.

The second section of the training was dedicated to the dispute settlement mechanisms, negotiation techniques, and stakeholder engagement in transboundary cooperation. Key speakers were Lingjie Kong, Wuhan University and Aaron T. Wolf, Oregon State University.

The third section of the training was focused on different institutions engaged in transboundary cooperation, including activities of various river basin commissions and Implementation Committee under the UNECE Water Convention.

In the conclusion, results of the first round of monitoring of SDG 6.5 on IWRM, including at the transboundary level, were discussed. D.R. Ziganshina reported on the results of reporting on SDG 6.5.2, which is monitored by UNECE and UNESCO and is determined as a percentage of transboundary basins which have efficient transboundary cooperation mechanism in place.

The theoretical part was complemented by case-studies, including those presented by the participants themselves, as well as through group work.

The training was held at the Asia International Rivers Center of the Yunnan University, which was established in 2000. This is the first specialized non-profit research institute dealing with international river studies. The Center places its focus on 6 directions:

• climate change and catchment hydrology



- water management and international water policy
- biodiversity protection and ecosystem management
- freshwater ecosystems and their protection
- regional environment and eco-security
- changes and impacts of aquatic environment

Information on the Center is available on: lancang-mekong.org

D.R. Ziganshina

UN GENERAL ASSEMBLY RESOLUTION A/RES/73/226 MIDTERM COMPREHENSIVE REVIEW OF THE IMPLEMENTATION OF THE INTERNATIONAL DECADE FOR ACTION, "WATER FOR SUSTAINABLE DEVELOPMENT", 2018–2028

62nd Plenary meeting, 20 December 2018

General Assembly,

Recalling its resolution 71/222 of 21 December 2016, by which it proclaimed the period from 2018 to 2028 the International Decade for Action, "Water for Sustainable Development",

Recalling also Economic and Social Council resolutions 1980/67 of 25 July 1980 on international years and anniversaries and 1989/84 of 24 May 1989 on guidelines for international decades in economic and social fields and General Assembly resolutions 53/199 of 15 December 1998 and 61/185 of 20 December 2006 on the proclamation of international years,

Reaffirming the sustainable development goals and targets related to water resources, including those contained in the 2030 Agenda for Sustainable Development,1 and determined to achieve the goal of ensuring the availability and sustainable management of water and sanitation for all and other related goals and targets,

Emphasizing that water is critical for sustainable development and the eradication of poverty and hunger, that water, energy, food security and nutrition are linked and that water is indispensable for human development, health and well-being and a vital element of achieving the Sustainable Development Goals and other relevant goals in the social, environmental and economic fields,

Noting that the world is not on track to achieve water-related Sustainable Development Goals and targets at the global level by 2030 at the current rate of progress,

Reaffirming its resolution 70/1 of 25 September 2015, entitled "Transforming our world: the 2030 Agenda for Sustainable Development", in which it adopted a comprehensive, far-reaching and people-centred set of universal and transformative Sustainable Development Goals and targets, its commitment to working tirelessly for the full implementation of the Agenda by



2030, its recognition that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development, its commitment to achieving sustainable development in its three dimensions — economic, social and environmental — in a balanced and integrated manner, and to building upon the achievements of the Millennium Development Goals and seeking to address their unfinished business,

Reaffirming also its resolution 69/313 of 27 July 2015 on the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, which is an integral part of the 2030 Agenda for Sustainable Development, supports and complements it, helps to contextualize its means of implementation targets with concrete policies and actions, and reaffirms the strong political commitment to address the challenge of financing and creating an enabling environment at all levels for sustainable development in the spirit of global partnership and solidarity,

Reaffirming further that the high-level political forum on sustainable development, convened under the auspices of the General Assembly and the Economic and Social Council, has a central role in overseeing the follow-up and review of the implementation of the 2030 Agenda at the global level,

Recognizing synergies between the 2030 Agenda, the Addis Ababa Action Agenda, the Paris Agreement adopted under the United Nations Framework Convention on Climate Change³, and the Sendai Framework for Disaster Risk Reduction $2015-2030^4$,

Emphasizing that the achievement of the water-related goals and targets would contribute to the successful implementation of the New Urban Agenda⁵, the Paris Agreement, the Sendai Framework for Disaster Risk Reduction, the SIDS Accelerated Modalities of Action (SAMOA) Pathway⁶, the Convention on Biological Diversity⁷ and the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa⁸,

Recognizing that the implementation of the Sendai Framework for Disaster Risk Reduction contributes to the achievement of the objectives of the International Decade for Action, "Water for Sustainable Development", 2018– 2028, and acknowledging that disasters, many of which are exacerbated by

³ See FCCC/CP/2015/10/Add.1, decision 1/CP.21, annex.

⁴ Resolution 69/283, annex II.

⁵ Resolution 71/256, annex.

⁶ Resolution 69/15, annex.

⁷ United Nations, Treaty Series, vol. 1760, No. 30619.

⁸ Ibid., vol. 1954, No. 33480.



climate change and are increasing in frequency and intensity, significantly impede progress towards sustainable development,

Taking note of the report of the High-level Panel on Water established by the Secretary-General and the President of the World Bank, entitled "Making Every Drop Count", the Sustainable Development Goal 6 Synthesis Report on Water and Sanitation, issued in 2018, and the United Nations World Water Development Report 2018,

Noting with concern that climate change is one of the factors that can exacerbate the global water stress and the need for climate adaptation strategies to address water issues,

Recognizing that water-related issues, including the relevant Sustainable Development Goals and targets, need to be better reflected in the agendas of the General Assembly and the Economic and Social Council,

Taking note of the Final Declaration⁹, the Co-Chairs' summary¹⁰ and the Call for Action and Partnerships of the High-level International Conference on the International Decade for Action "Water for Sustainable Development", 2018–2028, co-organized by the Government of Tajikistan and the United Nations, held in Dushanbe from 20 to 22 June 2018,

Noting the outcomes and the Ministerial Declaration of the eighth World Water Forum, held in Brasilia from 18 to 23 March 2018, and the outcomes of the United Nations special thematic sessions on water and disasters,

1. *Welcomes* the Secretary-General's Plan: Water Action Decade 2018–2028, launched during the high-level event of the seventy-second session of the General Assembly, held at the initiative of the President of the General Assembly on 22 March 2018, World Water Day;

2. *Also welcomes* the activities related to water undertaken by Member States, the Secretariat and the organizations of the United Nations system, inter alia, through inter-agency work, as well as contributions from major groups, for the observance and implementation of the Decade;

3. *Reaffirms* its decision, in accordance with its resolution 71/222 on the International Decade for Action, "Water for Sustainable Development", 2018–2028, to review the implementation of the Decade at its seventy-seventh session;

4. *Decides* to convene, in New York, from 22 to 24 March 2023, coinciding with World Water Day, the United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, "Water for Sustainable Development", 2018–

⁹ A/73/166, annex I.

¹⁰ Ibid., annex II.



2028, which are a greater focus on the sustainable development and integrated management of water resources for the achievement of social, economic and environmental objectives, the implementation and promotion of related programs and projects, as well as on the furtherance of cooperation and partnerships at all levels, in order to help to achieve the internationally agreed water-related goals and targets, including those contained in the 2030 Agenda for Sustainable Development, 1 which will result in a summary of the proceedings of the conference, to be prepared by the President of the General Assembly, as its outcome document, that will feed into the high-level political forum on sustainable development;

5. *Requests* the President of the General Assembly, through voluntary contributions, to convene in New York, in 2021, a one-day high-level meeting to promote the implementation of the water-related goals and targets of the 2030 Agenda, in support of the implementation of the Decade and the high-level political forum on sustainable development;

6. *Requests* the Secretary-General, with the support of UN-Water, the specialized agencies, the regional commissions and other entities of the United Nations system, to prepare a report for the seventy-seventh session of the General Assembly, to assess progress in the implementation of the first half of the Decade, including the Secretary-General's Plan: Water Action Decade 2018–2028, and, taking into account best practices and lessons learned, to identify obstacles and constraints encountered, actions and initiatives needed to overcome them during the second half of the Decade and activities planned by Member States, the Secretary-General and other relevant organizations of the United Nations system, as appropriate, which will serve as an input to the high-level political forum on sustainable development;

7. *Decides* that the Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action shall be preceded by regional and global preparatory meetings, as appropriate, and informed by existing water-related meetings at the regional and global levels, and that all costs relating to the Conference and its preparation shall be financed through voluntary contributions, and in this connection requests the Secretary-General to coordinate the preparatory process and to invite all relevant organizations of the United Nations system, including the regional commissions and other relevant organizations, within their respective mandates, to provide support to the review process;

8. *Encourages* Member States, relevant United Nations bodies, the specialized agencies, the regional commissions and other organizations of the United Nations system, as well as other relevant partners, including the private sector, to contribute to the review and implementation of the



Decade, including through capacity-building, in order to support the implementation of the 2030 Agenda;

9. *Reiterates* the critical importance of effective review of the implementation of the Decade at the national, regional and international levels, as appropriate, and in this regard invites Governments, intergovernmental and non-governmental organizations, financial institutions, private sector and other relevant stakeholders and donors to support the preparations for the Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action through voluntary contributions to a trust fund¹¹, including for the purpose of assisting developing countries in participating fully and effectively in the review and implementation of the Decade;

10. *Stresses* the importance of the participation and full involvement of all relevant stakeholders, including women, children, young people, older persons, persons with disabilities, indigenous peoples and local communities, in the implementation of the Decade at all levels;

11. *Decides* to finalize the arrangements for the comprehensive review during its seventy-fifth session, taking into account the process of follow-up and review of the 2030 Agenda at the global level after the first cycle of the high-level political forum on sustainable development;

12. *Invites* the Secretary-General, with the support of UN-Water, to continue taking appropriate steps, within existing resources, to support and organize the activities of the Decade at the global, regional and country levels, taking into account the work of the high-level political forum on sustainable development and other relevant United Nations structures, and to support those Member States which lack capacity, at their request, in the implementation of the Decade and the 2030 Agenda.

¹¹ High-Level Political Forum on Sustainable Development Trust Fund



DECREE OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN No.11 OF 24 JANUARY 2019 "ON AMENDMENTS TO THE DECREE OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN No.689 "ON APPROVAL OF THE LIST OF HOLIDAYS IN THE REPUBLIC OF KAZAKHSTAN" OF 31 OCTOBER 2017"

According to Article 4 of the Law of the Republic of Kazakhstan of 13 December 2001 "On holidays in the Republic of Kazakhstan", the Government of the Republic of Kazakhstan establishes to:

1. Introduce amendments to the Decree of the Government of the Republic of Kazakhstan No.689 of 31 October 2017 "On approval of the list of holidays in the Republic of Kazakhstan" (Compendium of Acts of the President and Government of the Republic of Kazakhstan, 2017, No. 53, Article 343) as follows:

in the list of holidays in the Republic of Kazakhstan approved by the Decree:

insert paragraph 17-2 stating that:

"17-2. 9th of July is the Day of Water Sector Professionals".

2. The present decree shall enter into force after the day of its first official publication.

Prime Minister of the Republic of Kazakhstan

B.Sagintayev

DECREE OF THE PRESIDENT OF TURKMENISTAN "ON ESTABLISHMENT OF THE MINISTRY OF AGRICULTURE AND ENVIRONMENTAL PROTECTION AND THE STATE COMMITTEE FOR WATER RESOURCES OF TURKMENISTAN"

To fundamentally reform the national agriculture and further improve its efficiency through integrated management, I hereby decree to:

1. Establish the Ministry of Agriculture and Environmental Protection of Turkmenistan and the State Committee for Water Resources of Turkmenistan on the basis of merging the Ministry of Agriculture and Water Resources and the State Committee for Environmental Protection and Land Resources.

2. Determine the Ministry of Agriculture and Environmental Protection of Turkmenistan as the legal successor in agriculture of the Ministry of Agriculture and Water Resources of Turkmenistan, as well as the State Committee for Environmental Protection and Land Resources.

3. Determine the State Committee for Water Resources of Turkmenistan as a successor in water management of the Ministry of Agriculture and Water Resources.

4. Assign control over implementation of the present Decree for the Deputy Chairmen of the Cabinet of Ministers of Turkmenistan E. Orazgeldiyev and G. Myradov, Minister of Agriculture and Environment Protection of Turkmenistan, Minister of Finance and Economy of Turkmenistan, Chairman of the State Committee for Water Resources of Turkmenistan, and Chairman of the Supreme Control Chamber of Turkmenistan.

G.Berdymukhamedov President of Turkmenistan

Ashgabat, 29 January 2019



INTERNATIONAL CONFERENCE "CENTRAL ASIAN CONNECTIVITY: CHALLENGES AND NEW OPPORTUNITIES" IN TASHKENT

On 19-20 February 2019, in Tashkent, the United Nations Regional Centre for Preventive Diplomacy for Central Asia (UNRCCA) and the Ministry of Foreign Affairs of the Republic of Uzbekistan jointly organized an international conference entitled "Central Asian Connectivity: Challenges and New Opportunities". Nearly 200 experts from 36 countries, including the leading analytical and scientific institutions of all of the Central Asian countries participated.

The aim of the conference, which followed up on the Central Asian Experts Forum that took place in November 2018 in Tashkent and Bukhara, was to debate key issues on the regional agenda and discuss possible responses. The results of the conference will be transmitted to the Heads of State of the five countries of the region as a contribution to their upcoming summit, which will be held in April 2019 in Tashkent.

The agenda of the conference covered the full spectrum of issues on the regional agenda, including security, trade, transport, water and the environment, energy, tourism, culture and humanitarian affairs.

In her opening speech, SRSG Natalia Gherman recalled a number of significant achievements in regional cooperation in 2018, highlighting that the intensive pace of high-level bilateral visits and bilateral agreements among the Central Asian countries continues apace. At the same time, real progress required much more intensive cooperation, support and resources from international partners. SRSG Gherman highlighted that the strong and sustained political will of the leadership of all five Central Asian countries in the region is instrumental for solving issues like counter-terrorism and extremism or transboundary water management.





A session of the Conference was focused on water and environment cooperation. Here, Joop de Schutter (Water Partnership, the Netherlands) presented an idea on establishment of a Central Asian think tank on water security and sustainable development. The idea was presented amid the call of the President of the Republic of Uzbekistan Sh.Mirziyoyev to improve scientific cooperation and conduct joint inter-sectoral research during the IFAS Summit in Turkmenbashi. Prof. V.A. Dukhovniy, SIC ICWC Director, spoke on new opportunities provided by fresh positive dynamics of regional cooperation. In this context, he proposed to: develop a regional program for rational water use, improve the system of public access to information, engage in sustained dialogues on transboundary water cooperation, strengthen scientific and analytical base, and train regional experts and future water professionals.

In his closing remarks, Uzbek Foreign Minister Abdulaziz Kamilov said that the "exchange of views held during the conference has a deep historical background and confirmed that strengthening interaction in Central Asia is an objective, stable and irreversible trend, based on the firm political choice of all countries in the region." He added that investing in regional cooperation contributes to developing Central Asia into a stable and prosperous region, making it a reliable and predictable partner.

SRSG Gherman suggested that the leaders of the region might consider bringing cooperation to a higher, more structured level. "Regular, ongoing meetings at all levels, including at the level of Government, Parliament, civil society and academia can become permanent. This could help to make the current positive dynamics in Central Asia irreversible. But regardless of what you choose, the United Nations and the international community as a whole will proudly stand with you and do what we can to support your efforts".



She also called on participants to bring the lessons of Central Asia to the wider world, stressing that "the ongoing development of regional cooperation throughout Central Asia – including with Afghanistan and other neighboring states – stands as a positive example".

"Regional cooperation is the key to long-term peace, stability and sustainable development. Together we are stronger – is the best lesson learnt" - emphasized SRSG Natalia Gherman summarizing the results of the Conference.

Based on materials of UNRCCA unrcca.unmissions.org

SEMINAR "THE PRINCIPLE OF NO SIGNIFICANT HARM – IMPLICATIONS FOR WATER DIPLOMACY?"

On 21-22 February 2019, the seminar "The principle of no significant harm – what implications for water diplomacy?" was organized by the IHE Delft Institute for Water Education with the support of the Ministry of Foreign Affairs of the Netherlands in the Hague, the Netherlands. During the seminar, the principle of no significant harm was discussed with regard to different disciplines, including international law, water resource management, security and with account of different locations of countries (upstream or downstream).

Prof. Joyeeta Gupta, University of Amsterdam presented legal and ethical issues associated with harm in the transboundary context. The concept and meaning of harm (damage) is transformed depending on temporal and spatial aspects and context of the area, country, and region. In fact, all activities lead to harm. The main question is where one draws the line between reasonable use of resources and impermissible damage from the use. What compensation mechanisms are available and whom should we compensate to? In many cases, compensation does not take into account the ethical dimensions of amends for the poor, vulnerable and affected, rather than for the country as a whole.

Prof. Aaron Wolf, Oregon State University, spoke on "Significant harm in the perception of riparian states -A water diplomacy perspective" (in the negotiation room). He focused on the following issues:

• Customary law comes from practice, *not* the other way around;



- International law does not determine allocations, but rather can determine boundary conditions for dialogue;
- Legal principles offer umbrella for negotiations; negotiations determine solutions;
- If the parties agree, harm is not significant;
- Resilient agreements allow for evolving values & conflict mitigation;
- Problem is not lack of guidelines or principles (or, really, lack of water), but lack of process.

Joseph Dellapenna, Villanova University School of Law, presented the history of the principle of no significant harm. He focused on the development of this principle in the Roman law rule (*sic utere tuo ut alienum non laedas* - so use your own as not to injure others), court decisions (Legality of the Threat or Use of Nuclear Weapons, ICJ, 1996), and codifications of international law (the 1966 Helsinki Rules and the 2004 Berlin rules elaborated by the International Law Association, as well as the draft UN Convention on the Law of Non-Navigational Uses of International Watercourses developed by the International Law Commission).

Sherri Goodman, Wilson Center, spoke on the security implications for "harmed" states. He focused on large-scale conflicts, the emergence of which, among others, were linked with water scarcity or other water-related problems (for instance, the severest drought in Syria preceded the public discontent). Together "conflict sensitivity" and the "do no harm" approach require understanding of the context and origins of the conflict and no exacerbation of conflicts by external interferences with a view to facilitate.

Anoulak Kittikhoun, Mekong River Commission, spoke on the role of no harm principle in planning and developing water resources in the Mekong basin. The speaker shared lessons learnt during the consultations between the riparian countries on the construction of new hydropower facilities, including Xaiyaburi HPP in Laos (Lao-Thai joint investment) and Pak Beng HPP (Lao-Chinese joint investment). He underlined that joint work facilitated better understanding of prior notification, which is neither a right to veto the use nor unilateral right to use water by any riparian but a focus on the need to negotiate and cooperate. Better understanding of the "right to development" "reasonable and equitable use" and the acceptance of "some harm" was achieved. Finally, more recognition of the need to address "transboundary" impacts (harm) by focusing on measures to "avoid, mitigate and minimize" (but not to block the project) was achieved.



Other speakers highlighted the important role of the third party (mediators, development partners, courts), the late reaction between hydrological and response processes at the political and social levels, the need to address harm in the context of different generations, social and vulnerable groups, and the critical role of the media.

D.R.Ziganshina



3rd GENERAL ASSEMBLY OF THE ASIA WATER COUNCIL

On 14-16 March 2019, Makati City, the Philippines, hosted the 3rd General Assembly of the Asia Water Council (AWC). As of January 2019, AWC is composed of 133 organizations from 36 countries. Some 200 delegates from 30 countries participated in the Assembly.

The Assembly was hosted by the Metropolitan Waterworks and Sewerage System (MWSS) – Administrator Reynaldo V. Velasco. Co-organizers and sponsors of the event are Manila Water Co. Inc., Maynilad Water Services Inc. and Luzon Clean Water. Development Corp.

On the first day, the General Assembly reviewed the results of AWC work over three years (2015-2018).

The presented report demonstrated the Asia Water Council as a global water network aimed at providing real solutions to water problems in Asia and facilitating multilateral discussions among stakeholders. Additionally, AWC became the main organizer and sponsor of the Asian International Water Week - a forum to exchange professional achievements, as well as knowledge with experience and networks of other specialists.

The 3rd General Assembly also approved amendments to the AWC Constitution, namely to Article 33 (AWC Special Committees). It was decided to retain only six Special Commissions instead of seven ones:

1. Strategy and policy

2. Integrated water resource management and smart water management (IWRM / SWM)

- 3. Water and climate change
- 4. Water-Energy-Food Nexus
- 5. Water for Environment
- 6. Knowledge base and dissemination

The Director of the GEF Agency of IFAS Mr. V.I.Sokolov was elected as the Head of the AWC Special Committee for Water-Energy-Food Nexus for 2019-2021.

Then the Board of Council members were elected for 2019-2021.

According to the AWC Constitution, the Board of Council members



includes one permanent representative – President of the K-Water Corporation (Korea) - and 26 elected members (for three years). Based on the results of the secret ballot of the active Board of Council members, the new Board of Council was approved for 2019-2021.

On the second day, the 9th meeting of the Board of Council (in the new composition) was held. Its agenda mainly focused on institutional matters.



Participants of the 9th meeting of AWC BoC (in the new composition)

On 15 March 2019, a special session was held under the umbrella of the AWC Advisory Council of National Parliaments in Asia (ACNPA) to promote the legal framework needed for solution of key water problems in Asia.

Declarations on the establishment of the Advisory Council of National Parliaments in Asia were signed by representatives of the Parliaments of Indonesia, Korea, Pakistan, the Philippines and the leadership of AWC. The Declaration is open for accession by all Asian parliaments.

The AWC General Assembly also continued its work on the second day. The three-year work plan was adopted for the period of 2019-2021.

V.I.Sokolov Director of GEF Agency of IFAS





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