

RECOMMENDATIONS

on the results of the Regional Central Asian Conference "Innovative approaches and solutions in the system of sustainable water resources management and possibilities of their use in the Central Asian conditions" 18-19 December 2019, Almaty, Kazakhstan

Executive Board of the International Fund for Saving the Aral Sea in the Republic of Kazakhstan jointly with the United Nations Development Programme in Kazakhstan held a regional conference for Central Asian countries on innovative approaches and solutions to sustainable water resources management. The conference was attended by representatives of Central Asian countries, the Executive Committee of the International Fund for Saving the Aral Sea, international donor/financial organizations, as well as scientists and experts of the water industry. The conference covered issues of several directions: inter-basin water flow redistribution, use of hydropower potential of rivers, small low-pressure HPPs, restoration and reconstruction of river valleys to improve water quality, modern methods of water accounting, application of geothermal water, water drainage systems in small towns, etc.

The conference served as a platform for regional dialogue on sustainable water resources management to exchange knowledge and experience in applying innovative approaches and solutions to sustainable water resources management. On the second day of the conference, the participants worked out the basis for new project proposals to address pressing water and environmental problems in the Central Asian region.

The Executive Board of the International Fund for Saving the Aral Sea in the Republic of Kazakhstan was the organizer of the regional conference.

Financial support was provided by the United Nations Development Programme in Kazakhstan.

Relevance of the regional conference. Water as the basis of human civilization is the only natural resource and driving force in the development of any state, determined in most cases by the degree of accessibility to it.

Demand for water is constantly growing far ahead of world population growth and if water and ecosystem management is not improved, two thirds of humanity will experience significant water shortages in the coming years.

Currently, over 1 billion people do not have access to clean drinking water and sanitation, and about 40% of diseases are related to the use of poor quality drinking water.

Drawing the attention of the world community to this problem:

- In September 2015, the 70th session of the UN General Assembly adopted the Sustainable Development Goals until 2030.

- In December 2016, the 71st session of the United Nations General Assembly adopted a resolution to adopt the International Decade for Action, "Water for Sustainable Development", 2018-2028.

- In March 2018, at the 8th World Water Forum, the Ministerial Conference adopted a statement entitled "Urgent Call for Strong Action on Water", which was the result of discussions among ministers and heads of delegations from over 100 countries. The document outlines priority actions to address key water issues;

At present, Central Asia is witnessing a progressive growth in water consumption, mainly due to population growth, for example: 15 million in 1960, 37.5 million in 1994 and in 2015 - 69 million people, in 2050 according to UN data it is projected 96 million people.

In addition, global climate change, glacier degradation and extensive natural resources use have an impact on increasing water scarcity, which can undoubtedly lead to increased conflict between sectors of the Central Asian economies, new sources of environmental instability and depressed areas.

On August 24, 2018, a meeting of the Council of Heads of States - founders of the International Fund for Saving the Aral Sea was held in the city of Turkmenbashi.

In the atmosphere of friendship and mutual understanding, the Heads of State discussed a wide range of cooperation issues related to further improvement of water, environmental and socio-economic situation in the Aral Sea basin. They also noted the significant contribution of the International Fund for Saving the Aral Sea in this area during 25 years of its existence.

The countries reaffirmed their commitment to previously adopted decisions on joint and integrated management and rational use of water resources and environmental protection in the Aral Sea basin, taking into account the interests of all countries in the region on the basis of the principles of good neighborliness and mutual respect.

It should be noted that between 2019 and 2021 Kazakhstan holds the chairmanship of the Water Convention ("Convention on the Protection and Use of

Transboundary Watercourses and International Lakes", Helsinki, 1992), which for more than a quarter of a century has been the legal and intergovernmental platform for transboundary water cooperation.

To date, 41 countries in the world have acceded to the Water Convention, including countries from Central Asia - Kazakhstan, Turkmenistan and Uzbekistan, thus confirming their commitment to the use of transboundary watercourses on the basis of international water law.

Given the urgency of the issue of improving water resources management efficiency in Central Asia, the Regional Central Asian Conference is a logical continuation of a series of major international high-level events aimed at improving the welfare of Central Asian peoples.

The conference was attended by representatives of Central Asian ministries and agencies concerned:

There were welcoming speeches:

Iskakov Erlan Uzanovich - Head of the Representative Office of the Ministry of Foreign Affairs of the Republic of Kazakhstan in Almaty;

Guzgeldy Nazargeldiyevich Baidzhanov - Chairman of EC IFAS;

Giovanni Capannelli is Director of the ADB Permanent Mission in Kazakhstan;

Nikolay Nikolaevich Pomoshnikov, Acting Head of the ESCAP Subregional Office for North and Central Asia;

Firuz Ibrogimov - Chief Technical Adviser, UNDP;

Makhtumkuli Kiyasovich Akmuradov - representative of the Ministry of Foreign Affairs of Turkmenistan made a presentation on the progress in preparing the UN Special Programme for the Aral Sea Basin;

The moderator of the conference was Bekniyaz Bolat Kabykenuly - Director of EB IFAS in Kazakhstan.

Representatives of the countries in the Executive Committee of IFAS:

Bayalimov Dauletiyar Aimaganbetovich - from the Republic of Kazakhstan;

Eebergenov Serdar Durdyevich - from Turkmenistan;

Zhuraev Ilkhom - from the Republic of Uzbekistan;

Representatives of ministries and agencies of Central Asian countries:

Adilkhan Karlikhanovich Karlikhanov - Head of Aral-Syrdarya Basin Inspectorate on Regulation of Use and Protection of Water Resources of the Republic of Kazakhstan;

Mukatayev Serikali Mukhammetkarimovich - Head of Balkhash Alakol basin inspection on regulation of use and protection of water resources of RK;

Zhadrina Saule Zhamaugaliyeva - Chief Expert of the Water Supply and Disposal Department of the Committee for Construction, Housing and Utilities of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan;

Pulatova Gulnora Alamovna, Mulloev Marufchon Mahmadrachabovich - Chief specialists of the Department of Economy, Water Resources Forecasting and Management of the Ministry of Energy and Water Resources of the Republic of Tajikistan;

Abdulaliev Latofat - Chief specialist of the Department of International Relations, Science and Scientific Achievements of the Ministry of Agriculture of Tajikistan;

Ernazarov Nazimjon - Head of the State Inspection "Gosvodkhoznadzor" under the Ministry of Water Resources of Uzbekistan;

Djuraev Shuhrat - Head of the Syrdarya-Zarafshan Basin Irrigation Systems Department at the Ministry of Water Resources of the Republic of Uzbekistan;

Gapparov Samandar - Head of the Laboratory of Irrigation Engineering and Technology at the Research Institute of Irrigation and Water Problems of the Republic of Uzbekistan.

Authorized representatives of UN structural units, international organizations and financial institutions:

UNDP, UNEP, UNESCO, ESCAP, OSCE, World Bank, Asian Development Bank, Regional Environmental Centre for Central Asia, UNECE International Water Assessment Centre, International Centre for the Safety of Hydraulic Structures, SIC ICWC, SIC ICSD, Regional Centre for Hydrology.

Eminent scientists, experts in the field of water resources from 10 countries, including Central Asian countries, Russia, Belarus, Ukraine, Germany, Finland.

In the context of solving actual regional water problems, 6 representatives from ministries and international organizations of the UN made a welcome speech.

The conference was attended by over 125 people. The participants of the conference discussed topics vital for the Central Asian region in the following areas (reports, presentations are attached):

1. Inter-basin water flow redistribution as one of the methods to increase the volume of available water resources

Since ancient times mankind has been dealing with issues of inter-basin water resources management, for example, the "Great Canal" - a navigable canal in China with a length of more than 1,782 km, one of the oldest currently operating hydraulic structures in the world. It was built two thousand years - from VI century BC to XIII century AD. At present, it is one of the most important inland waterways of China, connecting the major ports of Shanghai and Tianjin.

Today there is already a huge world experience in inter-basin water resources management and such countries as Russia, USA, Canada, Mexico, China, India, Turkey, Egypt, Libya, Turkmenistan have achieved certain results in this direction.

More than 100 research, development and design institutes have been involved in the transfer of Siberian rivers to Central Asia in the former Soviet Union since the mid-70s, but with the collapse of the Union this issue was frozen.

At the same time, the issues of river transfer have become more complicated with the establishment of independent states and the need to take into account social and environmental consequences. Implementation of such mega-projects also requires a more thorough analysis of capital and current costs compared to other options for water saving, especially in irrigation.

Presentations were made at this session:

- Ryabtsev Anatoly Dmitrievich, Director of LLP "Kazgiprovodkhoz Institute", on the theme "World experience of inter-basin water flow redistribution";

- Dinara Ravilievna Ziganshina, Deputy Director, SIC ICWC, on the topic: "Prospects of water management in Central Asia and transfer of part of the Siberian rivers flow to the south";

- Medeu Ahmetkal Rakhmetullaevich, Director, Institute of Geography, on the theme: "Trans-Kazakhstan Canal Project";

- Abuov Kenzhekhan, Project Implementation Coordinator, ADB Permanent Mission in Kazakhstan, on the theme: "ADB contribution to water resources management in Central Asia";

- Nariman Kipshakbaev, Director of the Kazakhstan Branch of SIC ICWC, Chairman of the National Water Partnership of Kazakhstan, on the theme: "The cost of water during river transfer, in comparison with measures to reduce water losses during irrigation and in river deltas".

After the speakers' presentations, conference participants asked questions and participated in discussions.

2. Low-pressure small hydropower plants as a guarantee of careful treatment of river ecosystems

Solving the problems of sharing water and energy resources in Central Asia is not only of great economic, but also ecological, political and international importance. It is one of the main factors in maintaining stability, economic growth and environmental security in the region.

The weakness of existing water and energy organizations in Central Asia, both at the national and regional levels, is the lack of cooperation and their actions are narrowly focused. Decisions are mostly dictated by short-term economic benefits. The lack of a regional legal and economic mechanism in the water and energy sector makes it impossible to solve the problems of shared use of transboundary rivers. They are conditioned by natural and economic conditions of water use.

According to the United Nations Programme for the Economies of Central Asia (SPECA), renewable hydropotential capacity in Central Asia is only 10% utilized.

Presentations were made at this session:

- Nikolaenko Alexander Yurievich, Regional Advisor of the TWRMCA GIZ project, on the topic: Experience of construction and operation of small HPPs in Central Asia (on the example of Tajikistan and Kyrgyzstan);

- Bakenov Kairat Asangalievich, Director of the Kazakh Scientific-Research Institute of Energy named after Sh. Chokin, on the topic: "World experience in construction and operation of small hydroelectric power plants;

- Alpysbaev Marat Tokashevich, National Expert on Water Resources, on the theme: Issues of placement of small HPPs on existing hydraulic engineering structures (on the example of Syrdarya river);

After the speakers' presentations, conference participants asked questions and participated in discussions.

3. Restoration and reconstruction of river valleys-methods for increasing river water availability and improving water quality

In recent years, due to non-compliance with the regime of use of water protection strips and zones, river valleys have been degraded, conditions for the formation of river runoff have deteriorated, and water quality has been declining.

Under these conditions, one of the directions for increasing river water availability and improving water quality is the development of public-private river basin management and regulation of productive forces in the basin.

Regulation of the riverbed is another and already fairly well-tested direction, the effectiveness of which has been proved by the implementation of the large-scale project "Regulation of the Syrdarya riverbed and preservation of the Northern Aral Sea". In addition, innovative approaches to solving the problems of the Southern Aral region are currently being implemented, which take into account the experience of Kazakhstan in preserving the Northern Aral Sea.

An important condition for the preservation of river basin ecosystems is the transition to river basin management and water users and the private sector in water and land management.

The social corporations established today in many countries are a promising form of such management based on IWRM and sustainable development principles.

Presentations were made at this session:

- Yesekin Bulat Kamalbekovich, international expert, Global Water Partnership for Central Asia, Caucasus and Mongolia, on the theme: "Creation of basin social corporations - a condition for ecosystem conservation and achievement of SDG in Kazakhstan";

- Alibayev Karimzhan Urinbayevich, Chief engineer of the project "Kazgiprovodkhoz", on the theme: "Implementation of the project on Regulation of the Syrdarya Riverbed and the Northern Aral Sea";

- Vadim Ilyich Sokolov, Director of the IFAS Agency at the Republic of Uzbekistan, on the topic: "Innovative approaches to solving the problems of the Southern Aral region".

After the speakers' presentations, conference participants asked questions and participated in discussions.

4. Modern methods of water saving and water accounting

Integrated water resources management, taking into account the interests of all countries in the region, among others, also involves improving and strengthening the system of transboundary water resources management and improving the reclamation status of irrigated land. Work in this direction predetermines a significant increase in the efficiency of water resources by reducing unproductive losses, increasing the efficiency of irrigation systems, the technical level of operation of irrigation systems.

World experience suggests that the use of water-saving technologies can reduce the huge losses that occur in agriculture, resulting in a multiplier effect of agricultural production growth and export potential of the region.

In order to form a water consumption control system, it is necessary to provide all sectors of the economy with modern water accounting devices. The availability of meters in the agricultural sector, which is the main water consumer, accounts for less than 60%. However, taking into account the fact that most of the measurement technologies are outdated, it can be said that over 30% of the total water consumption is not measured.

Presentations were made at this session:

- Mirdadaev Mirobit Salimovich, Deputy Director of the KazSRI of Water Economy, on the theme: "Sustainable management of water resources through the use of modern automated systems of water accounting and water distribution";

- Vladimir Oleshchenko, International Expert, Finnish Water Forum, on the theme: "Automation of water resources monitoring";

- Leibelt Peter, Head of the Central Asian Bureau for Sustainable Investment, Federal Ministry of Education and Research (BMBF), Germany, on the topic: "Ways and technologies for monitoring water use efficiency in the Aral Sea Basin (WUEMoCA)";

- Ekaterina Sakhvaeva, Head of the Laboratory of the Kyrgyz Research Institute of Irrigation, on the topic: "Experience in developing basin plans for small transboundary rivers: Aspara, Kurkureu, Padshaat, Aksu+Isfana and Isfara".

After the speakers' presentations, conference participants asked questions and participated in discussions.

5. Methods and perspectives of geothermal and industrial groundwater use

The total geothermal energy resources in the world, contained at depths up to 10 km, are $3\text{-}10^{26}$ cal. Geothermal energy resources are almost 3.5 thousand times more than mineral hydrocarbon fuel resources.

Geothermal waters are widely used in international practice to generate heat and electricity and for balneological purposes.

In recent years, their projects were successfully implemented in the USA (six new stations with a total capacity of 181 MW), Indonesia (137 MW), Turkey (47 MW) and Italy (40 MW). The most powerful of them was The Geysers (1517 MW) in California. The European leaders in generating heat from geothermal sources are Italy (636 MW), Hungary (614 MW) and France (345 MW).

In Russia, geothermal energy is in all three forms. Exploration for geothermal resources began back in the post-Soviet period in 1957, when the first wells were drilled in the Pauzhetka geothermal field in Kamchatka. The Kamchatka Peninsula and the Kuril Islands have the largest geothermal resources and are estimated at 5,000 MW.

Numerous geothermal associations and societies (International Geothermal Association, East European Network for Cooperation in Geothermal Energy, Thermal Center in Oregon (USA), Russian, Swiss and other geothermal associations) have now been established. National and international conferences are regularly held, including under the auspices of the United Nations.

Central Asia is also developing the use of geothermal water, for example, in Kazakhstan the potential of thermal water resources is 4,500 MW, while for electricity production (Panfilov Field) is 12 MW / year.

In Kyrgyzstan, geothermal energy is mainly used for balneological purposes, and the explored resources of thermal water (geothermal energy sources) with temperatures of 40-60 degrees Celsius are 613 million GJ per year.

In Tajikistan, the total resource of geothermal sources is 17.2 MW/year.

In Turkmenistan, hydrothermal energy resources are about 31 MW per year.

The total potential of geothermal waters in Uzbekistan is estimated at about 2000 MW.

Presentations were made at this session:

- Nurbol Mergenbayuly - Chief Specialist of the Laboratory of Industrial and Geothermal Waters, Institute of Hydrogeology and Geoecology named after U.M. Ahmedsafin, on "Methods and prospects of using geothermal and industrial groundwater" (author of the report, Kan Sergei Mikhailovich - Head of the Laboratory of Industrial and Geothermal Waters);

- Dulat Kazhkenovich Kalitov, General Director of "Geotherm" LLP, on the theme: "Examples of geothermal groundwater use in Kazakhstan".

After the speakers' presentations, conference participants asked questions and participated in discussions.

6. New methods of local sewerage systems in small towns and rural settlements

Wastewater disposal and treatment in small towns and rural areas has always been a challenge. The damage caused by the discharge of untreated water into the terrain and into natural water bodies is difficult to overestimate, as it leads to the

pollution of the environment and water sources with biogenic substances, water in the water bodies begin to bloom and causes the water to fade away.

At the same time, in today's world, with the development of small and medium-sized businesses and, consequently, an increase in water consumption and wastewater disposal, there is a need to utilise wastewater. Therefore, there is a widespread search for effective ways to recycle waste water, including the method of aeration systems (aeration basin), as well as the use of biological treatment (biotechnology).

The use of attached microorganisms in the form of biofilm is also promising. One of the ways to purify water to the level of clean is hydrowave treatment, but it is still an author's know-how, which has no analogues in the world. This type of cleaning is still at the level of experimental tests.

Presentations were made at that session:

- Zhadrina Saule Zhamaugaliyevna, Chief Expert of the Water Supply and Wastewater Treatment Department of the Committee on Construction and Housing and Municipal Services of the Ministry of Industry and Infrastructural Development of the RK, on the topic: "Water Supply and Wastewater Treatment in Small Cities and Rural Settlements (RS)";

- Eduard Brazovsky, Director, LOSBEL, Belarus, on the topic: "Treatment facilities in small towns";

- Firuz Ibrogimov, Chief Technical Adviser, UNDP, on the topic: "New methods of local drainage systems in small towns and rural settlements (on the example of Akshi)";

- Bazarbayev Almas Tlekovich, associate professor of the department "Water resources and reclamation" of the Kazakh National Agrarian University, on the theme: "The results of the survey of engineering and technical condition of the Kokaral dam of the Northern Aral Sea".

After the speakers' presentations, conference participants asked questions and participated in discussions.

At the end of the first working day of the regional conference Sarsenbaev Zhumabek Baigunusovich, member of the CIS football team, announced the International Children's Football Tournament "Aral Cup - 2020" in Kyzylorda.

On the second day of the regional conference in the framework of the next section, the issues of applying modern methods and technologies to increase water and land productivity, strengthening adaptation measures to global climate change

processes and improving mechanisms for regional water resources management were considered.

7. Innovative adaptation practices in water conservation, drainage and use of remote sensing (ERS) techniques, the following presentations were made:

- Polevoy Anatoliy Nikolaevich, professor of Odessa State Ecological University, on the theme: "Modeling of forecast of sugar beet and corn yield on grain in conditions of irrigated agriculture (Almaty region)";

- Saken Sovetovich Baisholanov, associate professor of the International Scientific Complex "Astana", on the theme: "The impact of climate change on agro-climatic conditions and irrigation norms of crops in southern Kazakhstan (Almaty region)";

- Yakhya Arystanbayev, Head of the Laboratory of Regional Hydrogeology and Geoecology, Institute of Hydrogeology and Geoecology named after U.M. Akhmedsafin, on the theme: "Prospects for radical improvement of water supply conditions in the eastern Aral Sea region by underground waters";

- Abdulalieva Latofat, Chief Specialist of the Department of International Relations, Science and Scientific Achievements of the Ministry of Agriculture of the Republic of Tajikistan, and

Shagarova Lyudmila Valentinovna, Head of the Laboratory of GIS-Technologies and Earth Remote Sensing, Institute of Hydrogeology and Geoecology named after U.M. Ahmedsafin, on the theme: "Efficient water resources management in Central Asia based on modern space remote technologies";

After the speakers' presentations, conference participants asked questions and participated in discussions.

At the end of all presentations, questions and discussions, the regional conference participants divided into 6 working groups for further discussion and elaboration of the basis (project ideas) of innovative approaches and solutions in the system of sustainable water resources management and possibility of their use in the Central Asian conditions.

As a result of the work of the working (creative) groups, the following project ideas were proposed for further submission to the donor community:

The first working group proposed to consider the possibility of preparing scientifically based schemes for the transfer of water resources of Siberian rivers to

Central Asia in the current geopolitical and economic conditions and global climate change processes.

The second working group proposed to intensify the promotion and introduction of small hydropower plants in remote rural areas.

In addition, it was proposed to explore opportunities for the establishment of modular small hydropower plants in Central Asia and the training of specialized mid-level personnel for the maintenance of small hydropower systems.

The third working group expressed interest in countries to continue active work on integrated rehabilitation of the drained bottom of the Aral Sea (DBAS) and preservation of wetlands of the Amudarya River and Syrdarya River based on innovative solutions.

The fourth working group made proposals on the need to restore and expand hydrometeorological stations and hydrometric posts; on the relevance of developing the Concept on adaptation of Central Asian countries to the global process of climate change; on the interest of countries in using modern water management and accounting systems to increase water and land productivity.

The fifth working group presented proposals on the necessity to carry out works on prospecting, exploration and confirmation of underground water resources in Central Asia; gave enlarged substantiations on huge energy potential and hidden economic opportunities of geothermal water resources in Central Asian countries; showed the possibility of heating supply of large megacities by the example of Almaty.

The sixth working group expressed interest in wide introduction (application) of sewerage systems, collector treatment facilities and wastewater disposal based on modern methods and technologies; popularization of water recycling and wastewater re-use.

It should be noted that the proposed project ideas in further practical implementation will contribute to the project proposals of the Programme of Action for Assistance to the Aral Sea Basin Countries (ASBP-4) and, accordingly, will contribute to the achievement of global Sustainable Development Goals - 2030.

Presented project ideas have aroused a certain practical interest among international organizations and financial institutions, and they will be taken into

account when UNDP specialists prepare project proposals to the Global Water Facility (Stockholm, Sweden).

As a result of the regional conference, the following decisions were taken:

1. The work of the conference has made a significant contribution to strengthening cooperation between Central Asian countries in solving water resources management in the Joint Communiqué of the Summit of Heads of State of Central Asia from August 24, 2018 to achieve the target indicators of the International Decade of Action "Water for Sustainable Development", The 2018 - 2028 years of implementation of the Concept of the "Aral Sea - zone of environmental innovation and technology" and achievement of global sustainable development goals to promote the UN Special Programme for the Aral Sea Basin project:

- in the political aspect - in the atmosphere of friendship and mutual understanding discussed a wide range of cooperation issues on further improvement of water, environmental and socio-economic situation in the Aral Sea basin;

- in the economic aspect - stressed the need for further development and strengthening of relations of equal and mutually beneficial cooperation in the use and protection of interstate watercourses on the basis of wide implementation of innovations;

- in the environmental aspect - recognized the importance of consolidating efforts to comprehensively address the problems associated with the recovery of socio-economic and environmental conditions in the Aral Sea basin, especially in areas prone to environmental crisis.

2. In order to achieve the goals of sustainable development in Central Asia, it is necessary to consolidate the scientific and production potential, integrate scientific communities and water management organizations, and cooperate with the leading sectors of the countries' economies in a mutually beneficial manner:

- raising awareness on the actual state and dynamics of water resources of Central Asian countries in the context of climate change through modernization of the monitoring system, development of new technologies, methods and models of hydrological calculations and forecasts;

- Development and introduction of integrated water resources management methods taking into account advanced world experience, ensuring reliable, sustainable and safe functioning and development of national water management

complexes in Central Asian countries (i.e. taking into account environmental requirements and factors, including climate change);

- development and introduction of geoinformation technologies and methods of optimization-imitation modeling of functioning and development of water management complexes as an effective tool for scientific research, project development and operational management of water resources;

- Development of methods for assessment and prediction of hydrological extremes, ensuring effective measures to prevent and manage the consequences of their occurrence and development;

3. The Conference considers that further collaborative work is needed in the areas of: provision of clean drinking water to rural populations; integrated water and energy resource management; increased use of renewable energy sources and geothermal water; water accounting automation and water conservation; water pollution reduction; preservation of water and water-related ecosystems; land degradation reduction; expansion of forest plantations; reduction of disaster risks, including floods, mud flows.

4. Participants of the Conference note high organizational level of the Regional Conference "Innovative approaches and solutions in the system of sustainable water resources management and opportunities for their use in Central Asian conditions" and great contribution of the Executive Board of the International Fund for Saving the Aral Sea in the Republic of Kazakhstan and UNDP in Kazakhstan.

5. The Conference considers it necessary in the direction of developed RECOMMENDATIONS of the Regional Central Asian Conference "Innovative approaches and solutions in the system of sustainable water resources management and possibilities of their use in the conditions of Central Asia" of 18-19 December 2019, Almaty, Kazakhstan, for information of the Board Members of the International Fund for Saving the Aral Sea.

23 December 2019, Almaty