Interstate **C**ommission for **W**ater **C**oordination in Central Asia

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HIGH-LEVEL SYMPOSIUM ON SDG 6 AND TARGETS: ENSURING THAT NO ONE IS LEFT BEHIND IN ACCESS TO WATER AND SANITATION

High-Level Symposium on SDG 6 and targets: Ensuring that no one is left behind in access to water and sanitation was held on August 9-11, 2016 in Dushanbe, Tajikistan. The President of the Republic of Tajikistan His Excellency Emomali Rakhmon participated in the opening ceremony.

The Symposium was attended by more than 700 high-level representatives from 90 countries of the world, 47 international and regional organizations, including UN and its 17 agencies, SCO, CIS, Economic Cooperation Organization, World Bank, Red Cross, etc.

The participants discussed such issues as capacity building to promote integrated water resources management; sharing best practices on improved access to water, sanitation and hygiene; improvement of water-use efficiency; reduction of water pollution; protection of river basins and ecosystems; international cooperation and partnership; regional and multilateral cooperation and partnership initiatives to achieve SDG 6 and targets.

Two planning sessions (opening and closing) and 8 thematic sessions were organized:

- TC 1. Launching partnership initiatives, including the proposal on an International Decade on Water for Sustainable Development
- TC 2. Universal and equitable access to safe and affordable drinking water for all
- TC 3. Access to adequate and equitable sanitation and hygiene for all
- TC 4. Improvement of water-use efficiency
- TC 5. Integrated water resources management
- TC 6. Protection and restoration of aquatic ecosystems
- TC 7. Improvement of water quality by reducing pollution
- TC 8. New and innovative water cooperation mechanisms for sustainable development

In conclusion, the participants adopted the Declaration.

STATEMENT BY THE PRESIDENT OF THE REPUBLIC OF TAJIKISTAN, HIS EXCELLENCY EMOMALI RAKHMON AT THE OPENING CEREMONY OF THE HIGH-LEVEL SYMPOSIUM ON SDG 6 AND TARGETS: ENSURING THAT NO ONE IS LEFT BEHIND IN ACCESS TO WATER AND SANITATION

August 9, 2016. Dushanbe, Tajikistan

Distinguished UN Under-Secretary-General,

Ladies and Gentlemen,

At the outset, I would like to sincerely welcome all participants of the High-Level Symposium on SDG 6 and Targets: Ensuring that No One is Left Behind in Access to Water and Sanitation**.**

Today's Forum, which is being held by the initiative of the Republic of Tajikistan and the United Nations, will provide a good opportunity to discuss the ways and methods of overcoming challenges, related to implementation of the global development agenda by focusing on water related goals.

Exchange of opinion on the issues related to implementation of our commitments in sustainable development is the requirement of the day.

In this regard, I would like to extend my gratitude to the United Nations and other relevant institutions for their assistance and support in preparation for this Symposium.

The year of 2015 was memorable in terms of development and approval of the Global Development Agenda.

Last year the world community has adopted a number of important documents, constituting the main framework of the global development agenda.

The Sendai Framework for Disaster Risk Reduction 2015-2030, the Addis-Ababa Action Agenda on Financing for Development for post 2015 period, the Sustainable Development Agenda to 2030 and the Paris Agreement on Climate Change are among those documents.

All of these documents are interrelated with each other in terms of goals and objectives and they identify the direction of humanity development for the next decades.

In this regard, the above-mentioned documents are the logical continuation of the global programs such as the MDGs, the Hyogo Framework for Action and the

Kyoto Protocol, which complement the scope of objectives and commitments reflected in them with new joint initiatives.

I would like to avail myself of this opportunity to outline some points about the United Nations' final document on sustainable development.

In our opinion, the new sustainable development agenda, which is developed on the basis of the United Nations' Charter, Human Rights and Development Declaration, as well as other UN documents, covers the dreams and desires of all people of the world and every citizen of the globe for the decent and secure future.

One of the peculiarities of the new document is the integration of goals and objectives related to socio-economic development and protection of environment, which are three main pillars of sustainable development.

The agenda also covers the diversity of our world, which is of key importance for development and expansion alongside with the biodiversity.

At this point, I would like to emphasize about the SDG 6, which is dedicated to the issue of everybody's access to water and sanitation.

This goal alongside with the necessity of ensuring everybody's access to drinking water and sanitation also covers the issues of water quality, its effective use, implementation of integrated water resources management, protection of water ecosystem, as well as expansion of water cooperation and partnership.

In addition to this, water related part of SDGs identifies separate objectives ensuring the integration of the Goal 6 with other goals of SDGs.

Thus, a conclusion can be made that water resources management is a key point in the new global development agenda.

We consider this achievement as a significant result of the joint efforts made by Governments, UN agencies, international financial institutions, academia and the civil society over the recent years.

It is worth noting that our joint efforts in this regard started as early as within the preparation for Rio+20 Conference.

Particularly at that time, more than fifty UN member states came together within the Water Friends Group in New York to work on promotion of water issues reflected in the new development agenda.

I would like to avail this opportunity to thank all esteemed members of the Water Friends Group and its Steering Committee, whose representatives are present here, for their effective efforts in development and approval of the global water agenda.

The High-level International Conference on implementation of the International Decade for Action "Water for Life" 2005-2015 was held in Dushanbe in June 2015.

The Conference final document – Dushanbe Declaration – emphasized the important role of the "Water for Life" Decade in achievement of water related goals and objectives of MDGs.

In our opinion, the Decade has promoted to the improvement of awareness of the civil society, expansion of cooperation at the national, regional and international levels, public-private partnership, involvement of women, youth, representatives of academia and businesses in addressing the challenges related to water resources management.

At the same time, we need to review the Decade's achievements and success, as well as shortcomings and gaps in the process of implementation of its objectives while implementing the new global development agenda.

For this purpose, last year in April, we proposed to launch a new International Decade under the motto "Water for Sustainable Development" to continue the world community's efforts in addressing water related issues.

In our opinion, such an initiative would facilitate drawing more thorough attention to implementation of SDG 6 and Targets.

I hope that the participants of the Symposium will provide their concrete recommendations to support this initiative.

Distinguished Participants,

Last year the UN Secretary General's Advisory Board on Water and Sanitation completed its activities.

This Board, having summarized its operation over the recent years, provided its recommendations and proposals to strengthen the global water architecture.

Given the importance of continuing efforts in implementation of SDG 6, the Board's recommendations and proposals meet the requirements of the modern time and promote addressing water related challenges.

Therefore, we need to make further efforts to ensure coordination between the new decade and other international initiatives in this area.

The experience shows that the objectives can be achieved only in case when effective tools and specific plans for the implementation are in place.

In this regard, it is necessary to incorporate the SDG 6 into the national sustainable development strategy of countries as a core component by taking into account the specific features of each country.

For Tajikistan, which has scarce land resources, rational and effective use of water resources is of fundamental importance to enhance socio-economic sustainable development, particularly, to reduce poverty, ensure food and energy security, as well as develop the industry and agriculture.

Therefore, the issue of water resources management is of particular importance in our National Development Strategy, which is currently being improved and finalized by experts.

At the beginning of this year by the initiative of the UN Secretary General and the President of the World Bank the High Level Panel on Water was established by involvement of the heads of ten UN member states, including Tajikistan.

I hope that the Panel will play a significant role as a platform for discussion and consideration of the key global issues on water

Honorable Participants,

In our opinion, while discussing the SDG 6, the following issues need to be taken into account:

First**,** negative impact of climate change on water resources may impede our efforts in achieving SDGs.

According to reliable assessments, including studies of the UN relevant agencies, the temperature is increasing at the global level.

This trend can cause up to two trillion USD of loss to the global economy annually.

Tajikistan, where almost 60% of Central Asia's water resources get accumulated, is also affected by the negative impact of climate change.

Almost, 30% of Tajikistan's glaciers have melted during the last decades, and this trend is continuing.

In this period, only the Fedchenko glacier, the biggest continental glacier in Tajikistan has reduced by 2 cubic kilometers.

At the same time, this year due to the low water season in the main rivers of the region, including in Amudarya and Syrdarya, it is expected that water accumulation will reduce by 30%, and this situation will affect the water supply process in the countries of the region.

This means that the countries of the region need to introduce specific regional programs on regional water resources management based on equality and mutual understanding.

With regard to the impact of climate change, the frequency of water related natural disasters in Tajikistan has increased over the recent years, which annually causes significant financial loss and casualties.

Natural disasters cause unexpected loss to the country's economy and create barriers against our efforts in ensuring socio-economic sustainable development.

Second, growth of the world population and growing demand in water resources create new challenges for the world community.

Thus, growing demand in water may lead to serious challenges in relations between various sectors of economy, which in its term, can lead to serious negative consequences even within one country.

In such a situation, in our opinion, introduction of integrated water resources management would provide new opportunities for improvement and strengthening of existing water cooperation formats at different levels.

Third, it is necessary to take into account the gender aspect in water resources management.

Accordingly, we need to make more efforts to involve women and girls in the process of development and strengthen their role in management and protection of water resources.

Fourth, implementation of all plans and actions depend on ensuring the relevant financial, investment and technical resources in a timely manner.

It is obvious that in the current situation, the world community needs to reform the global cooperation and bring it line with the new reality for the sake of future sustainable development.

With regard to this, enhancement of scientific and technological cooperation is one of the important aspects of our joint efforts for effective implementation of programs and projects on effective use of water resources.

Wide use of the latest technologies in this process is one of the efficient tools for water saving and water loss reduction.

Fifth**,** transboundary water cooperation is one of the key factors to ensure peace, stability and development.

At present there are more than 276 transboundary river basins in the world covering 148 countries and more than 70% of the world's population.

Ensuring effective water cooperation may serve as a driver for the development of countries in these basins.

In contrary, lack of such cooperation may cause serious threats, which will negatively affect the countries' economic and social situation.

Countries in our region use water resources from two main rivers – Amudarya and Syrdarya and also a number of small transboundary rivers.

The region's water resources are formulated mainly in two countries and they are mostly used in the other downstream countries.

In this context, decent cooperation in sustainable management and use of water resources is a key factor to ensure sustainable socio-economic development of the countries of the region.

By signing several important agreements, the countries of the region managed to ensure water supply activities acceptable for all stakeholders in the difficult period of transition to the market economy.

At the same time, we still have a great platform for regional cooperation on the use of water and energy resources by taking into account the interests of all countries in the region.

The use of this potential in its full capacity may become an influential factor towards leading the countries of the region to sustainable development.

By committing to just and rational use of water resources, we consider the constant implementation of water cooperation diplomacy as the only efficient tool for achievement of these noble objectives.

Accordingly, Tajikistan stands ready to establish and expand mutually beneficial cooperation with all interested countries at the regional and international levels.

Distinguished participants,

In the current context, it is clear that the process of transition to sustainable development will be challenging and complicated for a number of countries in the world.

Therefore, undertaking joint efforts and supporting the countries, which face challenges in this process, would guarantee successful implementation of the new global development agenda.

In this regard, supporting the group of countries with special needs, including landlocked and small island developing countries, is important for implementation of their national development programs.

In conclusion, I would like to wish to all of us progress in achieving the noble goals of the Sustainable Development Agenda and success to the Symposium.

Thank You for Your attention.

DECLARATION OF THE HIGH-LEVEL SYMPOSIUM ON SDG 6 AND TARGETS: ENSURING THAT NO ONE IS LEFT BEHIND IN ACCESS TO WATER AND SANITATION

CALL FOR ACTION

9-10 August 2016, Dushanbe, Tajikistan

Welcoming the adoption of the 2030 Agenda for Sustainable Development, which includes Sustainable Development Goal Six, "Ensure availability and sustainable management of water and sanitation for all", and stressing the vital importance of water and sanitation as a keystone for sustainable development and poverty eradication,

Building on the proceedings related to water and sustainable development of, inter alia, the United Nations General Assembly, the United Nations Commission on Sustainable Development and the United Nations High Level Political Forum on Sustainable Development, on Agenda 21, the Millennium Development Goals and the Sustainable Development Goals, as well as on the achievements and lessons learnt of the International Decade for Action "Water for Life", 2005-2015, the International Year of Sanitation, 2008, and the International Year of Water Cooperation, 2013,

Saluting the multi-stakeholder discussions that took place during the High Level Symposium on SDG 6 and Targets "Ensuring that No One is Left Behind in Access to Water and Sanitation", held in Dushanbe, Tajikistan, on 9-10 August 2016, and the contribution of this platform aimed at ensuring that no one is left behind in access to water and sanitation and at achieving SDG 6 and the water related targets by 2030,

Expressing appreciation for the role of the United Nations in supporting the development and implementation of SDG 6 and in contributing to the progress on the availability and management of water and sanitation for all, including supporting the progressive realization of the human right to safe drinking water and sanitation within states, for the leadership of the United Nations Secretary General and of the President of the World Bank, who established a High Level Panel on Water with the aim to mobilize effective action to accelerate the implementation of SDG 6 and the water-related targets, and for the continuous support of the Group of Friends of Water at the United Nations General Assembly,

Acknowledging that much progress has been made on access to water and sanitation with substantial benefits for human development throughout the world,

Recognizing that much still needs to be done, reaching out not only to regions and countries where significant progress is still needed, but also within countries to ensure that even the most vulnerable populations, such as children, women and marginalized groups, as well as populations in remote areas and conflict zones, and

those vulnerable to disasters and extreme events, have access to acceptable and usable water and sanitation,

Expressing concern that many ecosystems are threatened by poor water management, unsustainable development, increased uncertainty and risk due to climate change and other factors, and that this represents a significant risk for the many ecosystem services they provide,

Considering pollution as one of the main causes of the widespread reduction in water quality and that preventing pollution is much more cost-effective than repairing the damage it causes,

Being convinced that increased water-use efficiency and appropriate structural and non-structural infrastructure are core elements to ensure the availability and sustainable management of water and sanitation for all, which requires integrating water efficiency planning across all sectors and the protection of water sources, but also innovative technical solutions, water storage, green infrastructure, financing and good governance together with inter alia greater gender balance, policy effectiveness, getting the most value for money from investments including, but not limited to, infrastructure and clarity about costs of drinking water and sanitation services provision, including all social, economic and environmental externalities, positive and negative alike,

Highlighting the key role of integrated water resources management and of approaches that take into account the nexus between water, food, energy and the environment for all basins and aquifers, at all levels, and the need to support implementation, especially in Least Developed Countries, Land-Locked Developing Countries and Small Island Developing States also in the context of transboundary cooperation and disaster risk reduction,

Stressing the need for the all-of-society engagement and partnership that the 2030 Development Agenda envisages and that fits the specificities of places, situations and governance on the ground as one-size-fits-all and top-down solutions often do not produce the desired outcomes,

Acknowledging the prolonged process of establishing and maintaining effective and efficient multi-stakeholder platforms for consultations and for building partnerships for water and sustainable development,

The representatives of governments, international organizations, local governments and civil society who met at the High Level Symposium on SDG 6 and Targets,

Call upon the international community:

1. To deepen cooperation at all levels and across all sectors through strengthening and creating effective multi-stakeholder initiatives to support the implementation of SDG 6 and the water-related targets,

2. To address emergent water issues, such as, but not limited to, increasing water scarcity, water-related disasters, water-related environmental problems, as well

as new patterns of variability and increased risk and uncertainty,

3. To improve the capacity of countries to implement and monitor integrated water resources management plans at the local, national and regional level through, inter alia, improved institutions and partnerships related to financing, technology, capacity building, data and access to information,

4. To consider the further support that the proposed International Decade for Action “Water for Sustainable Development” can provide to achieve SDG 6 and the water-related targets by 2030 and therewith contribute to equitable and sustainable development overall.

Encourage governments and other stakeholders to build on the outcomes of the thematic sessions and side events to be reported in the Chair's Summary, and to translate, to the extent possible, the visions contained therein into concrete actions;

Recommend the Government of Tajikistan to submit this Call for Action accompanied by the Chair's Summary of the Symposium to the United Nations General Assembly for further consideration;

Express sincere appreciation to the Government of Tajikistan and to the United Nations Department of Economic and Social Affairs for organizing this High Level Symposium on SDG 6 and Targets and for the warm welcome and generous hospitality extended to all participants.

INBO 10TH WORLD GENERAL ASSEMBLY

June 1-4, 2016, Merida, Mexico

10th World General Assembly of the International Network of Basin Organizations (INBO) was held in Merida in Yucatan. Just 20 years ago, in 1996, the first INBO World General Assembly took place in Morelia, Mexico and adopted the Declaration of Association and the Charter of Organization and Operation.

INBO was established during the constitutive assembly in 1994 at Aix-les-Bains, France, by organizations whose common goal was to implement integrated basin water resource management, which made a voluntary act of joining the charter adopted in 1996 at Morelia, Mexico. On this occasion, the INBO 10th World General Assembly was organized in Mexico.

INBO World Liaison Bureau meeting was held on the 1st of June. Permanent Technical Secretary Jean-Francois Donzier and Regional network secretaries (ANBO,

LANBO, NANBOM NARBOM EECCA-NBO, CEENBO, and MENBO) reported at this meeting. For the first time, countries of the American continent had so broad representation – more than half participants from the North America Regional Network (NARBO) and the Latin America Regional Network (Brazil, Mexico, Peru, etc.) totaling 88 delegates out of 150 participants.

In his speech at the Liaison Bureau Meeting Prof. V. Dukhovniy (Secretary of the Eastern Europe, Caucasus, and Central Asia Network of Water Organizations) underlined that, despite financial constraints and the only support from UNECE, Uzbekistan, the Russian Government, and GWP CACENA, the Network unites 83 organizations from 12 countries, while disseminating best practices through conferences, workshops, its web-site www.eecca-water.net, and publications and fostering the sense of common interests in efficient water management, environmental conservation, and sustainable development among all water organizations in this region. In this context, of importance is the initiated by SIC ICWC rubricator of Knowledge base supported by all member countries as a tool for collection, systematization, and storage of a wealth of knowledge and best practices.

INBO activity at the global scale would provide wider opportunities for the Knowledge base; hence, it would be practical to change it into a bilingual tool (Russian and English) and involve expertise and publications of other regional networks in it.

The official opening ceremony of the 10th World General Assembly took place on the 2nd of June 2016 and brought together, among other participants, local and federal authorities. The Mexico Secretary of the Environment Rafael Pacchiano Alaman noted in his speech that Mexico compensates the lack of capital investments in water infrastructure through enhanced water management, wider involvement of water users, and cooperation with national agencies from other countries within the High-Level Panel, which is represented by the President of the Republic Enrique Pena Nieto and 9 other Heads of State.

The governor of the State of Yukatan Rolando Zapata Bello underlined the importance and the need for provision of sustainable water supply in the state, taking into account that the country had monsoons and typhoons 3 months a year and drought the remaining 9 months.

The INBO President Lupercio Ziroldo Antonio marked the importance of the network in promotion of IWRM in river basins as a means of sustainable development. He underlined that "water is an integrative subject and INBO sees its role as the promoter of this idea all over the world."

Mr. P. Kovacs, State Secretary of Water, Hungary, Mr. M. Faye, Minister of Water and Sanitation, Senegal, Mr. R. Ramirez, Director General of National Water Commission of Mexico, and Prof. J. Ganoulis, Special Secretariat for Water, Greece also took the floor during the opening ceremony.

Then, the President L.Z. Antonio presented the activity report, where put the greater focus on Basin Councils as a means to involve expertise and knowledge of water professionals and water users and mobilize funds for water. The practices of Basin Councils encourage enhanced control over operations of water administrations, more attention to complexities in their work and lead to stronger responsibility for decisions made, where the Councils should take part as equal partners.

The Director General of National Water Commission of Mexico Prof. Roberto Ramirez de la Parra reflected on the role of Community Councils in water management and use in Mexico. The country is located in the desert zone and, at the same time, receives 2/3 of water during three months of monsoons a year. Rainfall is unevenly distributed over the country from less than 500 mm to more than 2,000 mm a year. Annual available water is 447.3 km^3, of which 92 billion m^3 is used. Rivers stretch to 633,000 km in 731 basins. These river basins and 653 aquifers are grouped in 13 hydrological-administrative regions. Twenty six large river basins are managed by Basin Councils, while groundwater control and planning is performed by 88 technical committees. Water management is among top national priorities. National Water Authority includes all ministers and state secretaries at the head of Prime Minister. The basin water use planning system was adopted. In addition, for water security, 3 water forecast service centers were established, alongside with the National

Disaster Prevention Center. Particular attention is paid also to development of rural extension services and conservation services that are strongly subsidized by the state.

The round table "Adaptation to climate change in basins" was opened by Bob Pietrowsky, Director of the Institute for Water Resources, U.S. Army Corps of Engineers, who presented the Institute's initiative on the development of Climate risk informed decision analysis for various basins. To this end, they used the SIWI work of 2010 on «AGWA Network for Global Water Adaptation». The main point there was the assessment of potential economic damage or limitations in terms of water supply, irrigation and other uses, depending on the degree of risk.

The Director General of the Adoure-Garonne Water Agency (France) Laurent Bergeot demonstrated the basin planning system SDAGE combined with the long-term forecast for 2050-2070 and including the assessment of current water management in the basin and its changes in the future. Assessment was also made for a coastal area to study an impact of ocean level rise and changes in internal water quantity with temperature growth and rainfall increase (or decrease). This assessment was provided for each river, coastal zone, and basin as a whole. Water Committees take active part in this work by providing relevant data and evaluating financial potential to improve capacities for adaptation to various challenges.

Prof. V. Dukhovniy in his speech underlined that currently, along with the climate change that was generally recognized and the adaptation, the boost of hydropower development following purely commercial interests, which is in conflict with IWRM principles, and the poor influence of the international water law on this process represent equal risks. "This idea was developed in my presentation at the session 'Governance – key for IWRM success' and was welcomed by Cambodia as a response to China's actions along the Mekong River", said V.Dukhovniy.

The Office of Mayor Belinda C. Constant (Louisiana) presented the coordinator of the new basin initiative "Mississippi River Cities & Towns Initiative", which drafted a treaty on river basins to reduce climate risk and achieve food and water security. The status of rivers, lakes and aquifers is a direct indicator of sustainability of urban planning, industrial development, and food supply. Ineffective water use as a result of excessive diversions and pollutants damage this status. Thus, the treaty envisages that the parties conserve quality and quantity of water and discharge only treated wastewater so that to maintain environmental flows and reduce industrial, municipal, and agricultural pollutant load in water bodies. To this end, the parties should strictly follow the water monitoring strategy, while preventing point and non-point pollution, increasing capacities of treatment plants and improving quality of treatment. The treaty also envisages a green zone along rivers, development of polders, periodical siltation of deltas, and adoption of sustainable mudflow protection practices. The initiative, under which the treaty was drafted, brought together 68 mayor's offices of different cities and towns.

Mr. Marco Antonio dos Santos, Basin Committee of the Piracicaba-Capivari-Jundiai River (Brazil) underlined the role of basin agencies, especially during drought. The Committee has 22 people in its staff and represents the interests of various

population groups (54 million people) and territories in the basin. The Committee organized active collection and dissemination of information, particularly on water allocation, drought tracking, etc. This work is supported by local municipalities that make significant contribution to the budget of water-related measures undertaken by the Committee.

Mr. Mhamed El Fasskaoui, Director, Souss Massa and Draa basin agency (Marocco) spoke about the importance of the community Council, especially in dry years, when the general procedure for reduction of water quotas of the users is needed. The Council makes appropriate decisions based on communities' explanations on the potential damage that could be caused to specific zones. The Council proposes distribution of water deficit among the users, based on equal discrimination of the interests of all stakeholders, and such distribution is then approved by the director of the basin agency. Currently, the Council is going to develop a plan to account for climate change.

Another round table was dedicated to mandates, composition, role and means of the Basin Councils and Committees.

In France (Mr. Joel Pelicot, President, Loire Brittany Basin Committee), Basin Committees have been established since 1964. Since 1992, they have gained support from the Ministry of Environment and have been involved in SDAGE – master plans for basin water development and management. At present, the Basin Committees work for the European Water Framework Directive to achieve good ecological status of water bodies. This target should have been achieved by 2015; however, some delays were caused by the lack of funds.

In Mexico, the Lerma-Chapala Basin Council (Mr. Jorge Jimenez Campos) was created in 1989. Besides water and agricultural organizations, it comprises municipalities and hydropower entities. The Council deals with water allocation among users, approves the schedule of water releases, including for irrigation, which is the main user, and for energy. The Council is also represented by federal and provincial governments. In 2000, it adopted the ongoing IWRM plan.

The Spanish reporter presented the long history of basin councils referred to as Hyrdographic confederations. The oldest Confederation of the Guadalquivir River Basin was established in 1923 to serve water users on an area of more than 1.5 Mha. The Confederation is financed and managed by public, provincial, and private agencies and has quite large budget of 160 million Euro. Owing to such budget they succeeded to reconstruct water infrastructure on 866,400 ha in the last 15 years. Recently, the Confederation has been dealing also with ecosystem protection from floods, droughts, and climate change.

The First Vice President of the Seine Normandy Basin Committee Mr. Christian Lecussan came back to French experience. Particularly, he talked about French water policy, which, in his opinion, was based on 3 pillars: national water committee (main water decision making agency in the country); basin committees; and, water users. Thanks to such organized system, industrial pollution was reduced by 24%, salmon stock was restored, and drought and flood risk was mitigated.

The Special State Secretary for Water (Greece) Mr. Jaques Ganoulis described the national water management framework in Greece – "from public to local water committees". In particular, the upper level is represented by a National Assembly comprised of the representatives of concerned ministries and all 14 main Greek basins. The river water use and protection committees are established at the local level.

Prof. V.Dukhovniy from SIC ICWC presented the decision of the Uzbek Government on the transition to hydrographic basin management approach and the development of respective laws. He described the results on the improvement of water use, reduction of unit water inputs, and involvement of local communities. Activity of the Water Council at the South-Fergana Main Canal (WC SFMC) was particularly noted. Owing to joint actions of WC SFMC and local authorities and involvement of WUAs, they managed to improve equitability of water distribution, reduce water conflicts, increase stability of water supply, and reduce by 20% the total water diversion. This helped to overcome drought in 2008 without limiting water user demands.

Next day of the General Assembly was started with the discussion of basin management planning and funding.

Mr. Oscar Santana, Director General of the Rio Bravo Basin Organization (Mexico) in his presentation demonstrated the record of public participation in basin organizations. This has two positive aspects: (1) participation of various stakeholders contributes to democratization of governance, while involvement of water professionals from different levels of water hierarchy promotes better awareness and consensus between water professionals and water users; (2) contribution to funding that implies mutual responsibility. Initially, there was even a rule that water benefits would be provided proportionally to financial contribution. In addition, public participation implies such advantages as transparency in all kinds of relations, equity, equitability, and anti-corruption.

Burkina-Faso has started late to adopt the above practices, as said Mr. Fofana from OMVG. However, they have already succeeded in SDAGE and co-financing (52% from the public budget and 48% from water users). Same practices are applied by Martinique, which despite being an island state with the population of 1 million people, has already organized the Water Parliament.

The last topic discussed during the Assembly dealt with the Forum of international cooperation organizations. Vice-President of the Board of International Water Resources Association (IWRA) Prof. Gabriel Eckstein proposed to seek for more sustainable solutions in all spheres of the international water law, while disseminating best solutions. Particularly, he noted the positive role of interstate relations in the US and the US Supreme Court in this respect.

Ms. Aziza Akhmouch, Head of the Water Governance Programme, OECD presented the content 12 OECD principles on water governance that were unanimously adopted by all the OECD member countries. These principles address such points, among many others, as:

- clear distinguishing governance and management roles at institutional level;

- long-term growth;
- water management within hydrographic boundaries;
- openness and transparency of information;
- long-term sustainability;
- stakeholder engagement;
- greater involvement of investments;
- anti-corruption, including water stealing;
- water monitoring and protection;
- IWRM;
- environmental demands;
- adaptation to climate change.

Mr. A. Mamadzhanov, Secretariat of the UNECE Water Convention drew attention to opening of the Water Convention for accession by any UN member-state and called upon the participants to start organizing the accession to the Convention. While presenting work in the Aral Sea basin, he demonstrated the UNECE efforts in solving the sensitive issues of transboundary cooperation in Central Asia. He noted successes of UNECE in the promotion of cooperation in the Chu-Talas basin and intensive work in support of joint activities of the five countries regarding dam safety, environmental improvement, and water quality. He also underlined the UNECE assistance to IFAS in the development of common information space.

The Permanent Secretary of the Ibero-American Water Directors Conference Mr. Adriano Garcia-Loygorri characterized the work of this newly established cooperation body between the Spanish and Portuguese speaking countries of the American continent. The mandate of this body supported by the Inter-American Development Bank includes exchange of information between the countries in these two languages.

Cooperation between Bolivia and Peru was organized for sharing of Lake Titicaca. Mr. Alfredo Salinas from the Autonomous Binational Authority of Lake Titicaca said the two countries felt that they could not manage effectively the lake without each other. “We estimated the added value of cooperation, enhanced exchange of information, and maintain joint actions”, he added.

Prof. V.Dukhovniy in his speech demonstrated successful development of water cooperation among the Central Asian states during the first decade of their joint activities and further rise of aspirations towards absolute national sovereignty, particularly from the side of upstream countries. Despite a number of signed Agreements and adopted Declarations, some setback is observed in cooperation, as well as orientation to current immediate tasks rather than to long-term ones. Nevertheless, Uzbekistan, Kazakhstan and recently Turkmenistan, while guiding by

the UNECE 1992 Convention to which they acceded, have taken some measures to promote cooperation even in new realities. Particularly, Uzbekistan and Kazakhstan organized the development of a common information system, all three countries take active part in funding of the interstate basin organizations, and they implemented the program of joint capacity building for upper and middle level staff of water hierarchy. Uzbekistan also is an initiator and active promoter of IWRM in the Fergana Valley. This work allowed avoiding grave consequences of the dry year 2008 and saving more than 200 Mm^3 of water a year.

Finally, the Assembly adopted the Declaration and nominated the new INBO President (Mr. Roberto Ramirez de la Parra, Mexico), who took over the mandate from the former INBO President (Mr. Lupercio Ziroldo Antonio, Brazil).

The final day was the technical visit to familiarize the participants with the ancient Maya traditions of irrigation and water management.

Conclusions drawn from the World General Assembly:

1. The basin approach is increasingly applied all over the world as the main tool for improvement of river basin management.

2. Basin Councils are widely functioning to promote stakeholder engagement in water allocation control, water monitoring, management, and financing.

3. This global campaign is accompanied by the development of Master plans for basin water development and management in each basin, with adaptation to climate change and future challenges as a part of such Plans.

Prof. Dukhovniy V.A.

Director, SIC ICWC

MERIDA DECLARATION "TAKING ACTION"

Taking into account the Dakar Declaration adopted in Senegal in 2010 organized by the active contribution of INBO member organizations in the efforts to adapt to the effects of climate change in the basins of rivers, lakes and aquifers;

Considering the Fortaleza Declaration 2013, which requires an unprecedented institutional mobilization of public authorities, economic stakeholders and citizens to win "the water battle" today and for the future and the subsequent ones coming to the most recent: the Paris Pact launched on the occasion of the COP21 on 2 December 2015;

This **Merida Declaration** calls for action in the context of the High Level Panel Water; the Post 2015 Agenda, especially Sustainable Development Goal (SDG) 6.

The following should be considered:

The importance of water management at the river basin level increases with the challenges of adaptation to climate change and the challenges that the Sustainable Development Goals represent, particularly SDG 6.

Water security in the basins is a great challenge as scarcity and floods trends are compounded by the increased intensity and frequency of extreme hydrometeorological events affecting the quality of life and safety of communities, economic development, and natural heritage conservation that cause occurrence of new diseases and plagues as well as conflicts between users and even migration.

Population growth, even faster than initially foreseen, entails stronger demands from the population on water supply and sanitation in rural and urban areas.

This gives meaning to embarking on a new path to channel global and effective policies on integrated water resources management at the river basin level.

Greenhouse gas emissions have strong consequences on freshwater in basins, impinging on the rainfall distribution, water cycle, levels of terrestrial and marine evaporation, water temperature and water risks impacting water quality and availability, which influence economic development and the conservation of aquatic ecosystems.

This call aims to provide some of the key elements to strengthen action and position the importance of the Integrated Management of Water Resources at the Basin level as a nexus.

Water resources availability and quality, are key elements to all processes related to life that in turn require processes to adapt to the challenges of sustainable development, from the environmental, social, political and economic perspectives, focusing on the physical and planning unit called basin.

Undoubtedly, climate change is the most important challenge facing society in the 21st Century and implementing adaptive strategies should be strengthened

considering the importance of integrated management of water resources either national or transboundary basin, since their increasingly intense impacts in human activities jeopardize the natural balance of the basin and hence of survival.

Changing weather patterns affect both the quality and quantity of water available in the basins for humans and the environment; the expected impact on island countries or communities living in vulnerable areas, have inevitable repercussions to be further considered in detail in all dimensions, and is derived from the migration of entire populations to other territories to ensure water and food security as well as a decent living place with better conditions, representing socio-economic and political costs in adaptation processes of catchment basins.

Incorporating adaptation into planning and decision-making of basin management can generate synergies to improve the protection of vulnerable groups, support economic diversification, provide information to define policies and legal frameworks, coordinate financial support and reduce disaster risks in basins. It is equally important to incorporate adaptation into planning of the provision of public water and sanitation services, as well as the productive uses particularly the agricultural use.

Planning and implementation of adaptation at all governance levels depend on social values, objectives and risk perception. Recognizing the social capital of a basin regarding the various interests, circumstances, sociocultural contexts and expectations can encourage the decision-making processes.

Economic tools can generate incentives and resources for water management at basin level, most notably the implementation of user-polluter-payer principles, public-private partnerships, payment for environmental services, establishment of efficient and equitable tariffs, optimization of subsidies, adequacy of rules and regulations, as well as compensation mechanisms for overexploitation and pollution.

Innovation is essential to foster stability, sufficiency, equitability, integrity and transparency in the definition and implementation of financial resources in the sector.

Decision implementation is more effective when multiple interests are incorporated in development; therefore encouraging organizations that bridge the different partners, science and policy to facilitate decision-making, will transcend in better communication, acquisition, transfer and evolution of knowledge in water management at basin level.

Food security

Meeting food needs of present and future generations also involves strategies for preserving soil quality and of large quantities of water for production.

At the basin level, water for food production in the agricultural sector has major losses due to evaporation and infiltration, inadequate management systems, lack of infrastructure and efficient technologies, as well as lack of knowledge about the consequences and risks that pollution, waste and overexploitation generate.

A fourth of arable land is affected by serious degradation problems from overexploitation due to monoculture plantations, deforestation, land use changes, use of agrochemicals and toxic substances in agriculture, extensive cattle raising, mining activities, displacement of communities to new urban areas with no planning and land management systems, among others, affecting the production capacity of ecosystems and basins.

One of the priority strategies for the water sector is change in the patterns of water extraction and consumption in each of the basins.

Water extraction volumes are considerably higher than those of recorded consumption, which indicates that it is necessary to implement strategies to control and reduce extractions and consumption losses through stricter management mechanisms in the different economic sectors of the basins, particularly in the agricultural sector.

Such strategies must include both technical and institutional reforms through innovations in the financing, social organization and capability development mechanisms.

Health security

Changing rainfall, economic and population growth, pollution and/or snow and ice melting, and the destruction of ecosystems are altering the hydrological systems, impacting water resources and aquatic environments of the basins in terms of quantity and quality.

These impacts affect the health of populations and ecosystems in the basins, deteriorating the quality of life due to the onset of new and epidemic diseases that fuel the proliferation of new invasive species.

Health impacts in basins are already evident in the increased number of deaths from heat waves, disease impact variations from the proliferation of microorganisms transmitting infections due to contaminated water consumption, increasing temperature that increases evaporation, reduced productivity, and agricultural losses, which directly affect the quality of life of communities.

The increasing rainfall variability in the basins affects freshwater supply, and its scarcity jeopardizes hygiene and increases the risk of diarrheal diseases each year, causing 600,000 deaths of children under five years old. In extreme cases, water scarcity causes droughts and famine.

In contrast, floods originate many losses of human and animal life and damages to the collective and individual goods are estimated at one billion dollars per year.

Problems in the access to clean water are originating over 3.350 million disease cases a year; 80% of the most common diseases in the basins of developing countries (diarrhea, fever, dengue, malaria, etc.) are related to water quality.

The accelerated development process, increasing population concentration, and discharges of industrial, urban and agricultural pollutants are creating delicate situations in the basins, which are detrimental to human health.

The SDG 6 is a major challenge, since the sanitation target agreed upon for the Millennium Development Goals was not achieved.

In this case it is also needed to simultaneously drive the development of new technologies and institutional innovation.

Water security

The complexity of river basin management is increased by higher water consumption in agricultural activities. Economic development, population growth, tourism, and energy production are major water consumers generating high pollution levels with inefficient and insufficient treatment systems.

Over 80% of wastewater in the basins of developing countries is discharged untreated, affecting social groups that have lower coping capacities.

Use, treatment, pollution and depletion trends in aquifers are hardly encouraging and in a few years will face major problems due to their implications in the water cycle and their impact from climate change.

There are considerable differences coexisting in the availability of water for human consumption, based on inequality gaps and consumption patterns, thus water security must be considered a crosscutting topic in the agendas of integrated water management at basin level, in attaining sustainable development.

Water stress is a primary factor for management at basin level models, since derived from population growth, a third of the world basins are overexploited due to the high human consumption, which does not consider the available and regenerating volumes, losing recharging capacity at high speed.

Sustainability as a model for future development and basis for water management can only be achieved in a water secure world, which is why it requires an effective governance scheme at the basin level to ensure reliable water supply. Development should be consistent with the limits of nature taking into account aspects such as ecological land-use planning, water resources management, restoration of ecosystems, ecological flow and recharging capacities, among others.

Designing management at the basin level should ensure quantitative and qualitative water security of populations and ecosystems, and the participation of all stakeholders involved in sustainable development.

A world where water security is ensured reduces poverty, promotes education and increases living standards. A substantial improvement in knowledge of the water cycle, uses, means, and climate variables, the use of systems supporting the collaborative decision, transparent and adaptive implementation of integrated management policies and effective mechanisms for benefit and cost allocation are prerequisites for achieving a higher level of water security.

Water Governance

It is necessary to maintain the proper operation of the hydrological cycle in the basin and create technical alternatives for a more equitable access in the specific socio-political context that implies an actual involvement of all social stakeholders to build decision-making under an unrestricted respect of local traditions and needs.

The productive activities developed in each basin are diverse and define their economic structure and social context. Based on their socio-environmental characteristics, some basins have agricultural, industrial or services vocations. However, all economic activities are directly dependent on the availability and quality of water, therefore it is very important to analyze usage patterns impacting on each production water footprint. This indicator is the benchmark for designing new sector strategies and integrated management systems for national or transboundary basins.

Water scarcity is one of the major challenges of the century, the problem already affects every continent, one-fifth of the world's population lives in basins of physical water scarcity, while 500 million people approaches this situation. Another one-fourth of the world's population faces economic water shortages because they lack the necessary infrastructure to take water from rivers and aquifers. By 2025, two-thirds of the world population will live in water-stressed basins. It is therefore important to foster a new culture that requires less water volume for production, along with optimal integrated management and sanitation systems.

Water scarcity is both a natural and human-made phenomenon, caused by a deficit of governance: Currently, 748 million people lack access to safe clean water with women, the poor and disadvantaged groups of people being the most affected... and probably two-thirds of the global population today lack access to drinking water services that are really safe and meet WHO guidelines.

Flood risks already causing devastations in some regions of the world will get worse and entail increasingly important human and economic losses.

A new governance system with all stakeholders' cooperation on Integrated Water Resources Management at the river basin level has broad potential to contribute meeting the Sustainable Development Goals adopted as part of the Post-2015 Development Agenda. Developing specialized human, institutional and technical capacities is central to achieving such cooperation, particularly in basins and aquifers.

The Call to Action!

Drawing up public policies and strategies for integrated water resources management of national or transboundary basin, a broad participatory process must be considered, given the diversity of interests and needs of each of the sectors comprising the basin community, including their institutional and governance aspects to generate consensus and the commitment of each of them to maintain the quality of life and the environment.

Cooperation among national or transboundary basin organizations in each region of the world must be strengthened so as to facilitate the implementation of the best alternatives, transfer experience and institutional, technical and environmental knowledge on the best practices in basin management and adaptation to climate change.

Integrated water resources management of national or transboundary basins must ensure meeting the present and future needs, reducing threats to survival. It requires a special approach from the standpoint of complex systems and close linkages among the factors involved, all interdependent.

For all this it is necessary to develop reform processes and institutional organizations that give genuine power of decision-making to new groups of stakeholders who can change relationships, customs and practices through an unavoidable mechanism: knowledge and information.

A world with water shortages is intrinsically unstable!

The economy of a basin depends on its natural capital that provides all the environmental and economic services, thereby generating its social capital.

Scientific efforts should highlight the problem solving processes, including participation and mutual learning among different stakeholders, developing technological but economic, social and environmental approaches.

INBO aims to shape this community of knowledge on integrated water resources management at the river basin level.

Given the pressing interrelation of specific data and foreseeable future scenarios henceforth, it is necessary to provide elements to decision-making. Thus, the focus should be on creating a special task force on water management at the river basin level, SDG6 and climate change, capable of delving into the topic with a water managers' vision and linked to the High Level Panel on Water, which has among its objectives:

a) Integrate and strengthen water management at the river basin level focused on adaptation, emphasizing water security and the achievement of SDG6.

b) International cooperation commitment to address the issues related to water security in high-level policy decision-making.

c) Solidarity and Ethical commitment to ensure good water governance of the basins with increased exposure and water stress risk levels, some of them already under the weight of migrant populations in search of more stable areas in terms of climate risks.

d) Create regional networks for sharing knowledge, innovations and technologies that provide the necessary scientific evidence for decision-making and foster effective participation of all stakeholders to yield rise to a new culture of efficiency and human right to water.

e) Identify elements for drawing up public policies at the river basin level that promote innovative use and extraction patterns based on the rational use and

awareness, education and dissemination of knowledge, comprehensive management, technological innovation and environmental conservation to meet future demands of all sectors and of a preserved environment, and reverse the alteration trends affecting the water cycle.

Participation and commitment of each and every one of the stakeholders are essential requirements that must be accompanied by feasible economic instruments.

It is desirable for the High Level Panel on Water to support them.

Economic and social development of populations and conservation of ecosystems should be the pillars underpinning integrated management policies at the river basin level.

In conclusion, the INBO General Assembly hopes for water resources management at the river basin level to be considered as a priority in both the Climate Change Adaptation Action Plan, adopted at COP21 Paris, and in the works of the High Level Panel on Water and Sustainable Development.

INBO proposes:

1. To strengthen its regional networks to become real resource centers supporting the professionalization of the technical and administrative staff of basin organizations and their partners, and to encourage adaptation to climate change studies at the river basin level aimed at implementing simulation and optimization models of physical, ecosystem and socio-economic processes to support collaborative decision-making processes.

2. Endeavor access to international resources linked to reducing gaps related to institutional development and infrastructure equipment towards increasingly sound basin management, strengthening alliances with other bodies such as the High Level Panel on Water.

3. Build national, regional and international capacities seeking the gradual implementation of new models of water resources and basin management, particularly on information management transparency and budgetary resources.

4. Promote the modernization and efficient operation of metering systems of the hydrological cycle and climatic variables and to a greater extent on formulating and creating Water Information Systems (WIS) and on the aquatic environment, at the river basin level and at national and transboundary levels.

5. Improve result indicators on sustainable basin management and water use systems, especially within the OECD Water Governance Initiative.

Adopted unanimously on 3 June 2016 in Mérida

ROUND TABLE TALKS ON THE COMING CHAIRMANSHIP OF TURKMENISTAN IN IFAS

The round table talks on the coming chairmanship of Turkmenistan in IFAS were held on the 23rd of August 2016 in Ashgabad.

The meeting was opened by Mr. Guizgeldi Baidjanov, Deputy Minister of Agriculture and Water Resources of Turkmenistan. Welcome speeches were delivered by:

- Djoshmurad Sedekov, Deputy Chairman, Committee for Environmental and Land Conservation, Turkmenistan
- Shukhrat Talipov, Acting Deputy Chairman of EC IFAS
- Margret Maria Uebber, Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany to Turkmenistan
- Marton Krasznai, UNECE Regional Adviser
- Volker Frobarth, Transboundary Water Management in Central Asia, Programme Director, GIZ

The meeting started with the "Concept of Turkmenistan chairmanship in IFAS" presented on behalf of the Turkmen Ministry for Foreign Affairs by Mr. Mered Akmyradov, Turkmenistan's representative at the Executive Committee of IFAS.

This Concept of Turkmenistan chairmanship in IFAS for 2016-2019 stipulates the following:

Program of actions to provide assistance to the countries of the Aral Sea basin (ASBP). New ASBP will include next focus areas:

- Integrated use of water resources
- Environment
- Socio-economic improvement in the region
- Improvement of IFAS institutional and legal mechanisms

The socio-economic focus area should include:

- Improvement of quality and sustainability of drinking water supply systems
- Establishment and development of small and medium enterprises in rural area
- Improvement of healthcare services
- Enhancement of quality and effectiveness of rural preschool and school education

The focus area of improvement of IFAS institutional and legal mechanisms is to solve problems related to institutional development, legal framework and capacities of IFAS regional bodies.

Mr. Abaev, Head of Water Use Division at the Ministry of Agriculture and Water Resources (Turkmenistan) made presentation on the "Elaboration of a new Program of

actions to provide assistance to the countries of the Aral Sea basin (ASBP) – Integrated use of water resources". He underlined that the focus area on integrated use of water resources will include projects related to transboundary water management, irrigated land reclamation, new water conservation technologies, irrigation system performance improvement, monitoring systems and databases, modeling, basin plans, and hydraulic structure safety.

Mr. M.Durikov, Director of the Scientific-Information Center, Interstate Commission for Sustainable Development, presented "Regional plan of actions on environmental conservation (RPAEC) as a single environmental program for the Central Asian countries". He noted, particularly, that:

- it was necessary to focus on environmental matters in IFAS activities. In 2003, as part of ICSD activity, a Regional plan of actions on environmental conservation was developed and approved as a single environmental program for the Central Asian countries;
- however, till present, most of the projects included in this plan, have not been implemented due to a lack of financing;
- it was advisably to revisit the RPAEC and start working with donors to implement the program.

Mr. Durikov in his report also underlined that it was very important to create such a financial and legal mechanism in the region that considered the interests of all the states in the water and energy balance. A guiding document in making decisions in this matter could be a Central Asian Water Strategy developed by the riparian countries. This strategy should lay main guiding principles and rules in the interests of all states in the region. All environmental provisions in this document would be the basis for policy decision making among the states.

With the UNEP support a Framework Convention on Environmental Protection for Sustainable Development in Central Asia was developed. It is necessary to stress that the Convention will help to integrate legislative frameworks and mechanisms of existing interstate agreements in this area, formulate additional priorities, and identify prospects of continued regional cooperation for sustainable development in CA countries. Coordination activity of Turkmenistan during its chairmanship in IFAS will be directed at socio-economic and environmental improvement in the Aral Sea basin and at sustainable use of its natural resources with the aim of achievement of Sustainable Development Goals.

Also it is proposed to establish a Regional Center for Climate Change related Problems under umbrella of IFAS. The main objectives of the Regional Center will be encouraging technical cooperation and stepping up development and transfer of technologies, developing and implementing relevant programs and projects, and assisting the Central Asian and Caspian region countries based on their requests and according to their potential, national conditions and priorities.

The second part of the round table was dedicated to the role of international organizations in IFAS activity. The following presentations were made during the session:

"Results achieved in the "Transboundary Water Management in Central Asia" Programme, Berlin Process, phases I-II and projects planned for phase III for 2015-2017 (V. Frobarth)

"Cooperation of the UN Regional Center for Preventive Diplomacy for Central Asia (UNRCCA) with IFAS for assistance to Central Asian countries in transboundary water management in the Aral Sea basin" (P. Draganov, Special Representative of the United Nations Secretary-General for Central Asia, the Head of the UN Regional Center for Preventive Diplomacy for Central Asia).

"Global water partnership – a neutral platform for water and sustainable development knowledge" (V. Sokolov, Regional Coordinator of Global Water Partnership for Central Asia and Caucasus - GWP CACENA)

"Possibilities to enhance EC IFAS through regional cooperation: CAREC case-study" (I. Abdullaev, Executive Director, Central Asian Regional Environmental Center).

"Water and environmental cooperation between the World Bank Group and Turkmenistan" (S. Dzhepbarov, Acting manager for Turkmenistan, World Bank)

"Environmental conservation and sustainable development in Central Asia – UNEP supported processes" (N. Alexeeva, Head of Sub-regional office of UN Environmental Program for Central Asia)

Presentation on forthcoming activities of the EU WECOOP II Project (R. Bosch, project officer)

"UNDP collaborative activities in the area of environmental conservation and water management" (R. Nurmukhamedov, Head of environmental and energy program, UNDP)

Representatives of the European Union, UNECE, and Swiss Development and Cooperation Agency (SDC) also took the floor.

Other participants also contributed to the debate:

Shukhrat Talipov (EC IFAS Turkmenistan) who noted that RPAEC should be linked with ASBP-3, especially with its water-related components. The report on implementation of ASBP-3 is available on the EC IFAS web-site. In future work, one should take into account the shortcomings related to monitoring of implementation of programs under the aegis of IFAS.

Saghit Ibatullin (ex-Chairman of EC IFAS, Kazakhstan) thanked Uzbekistan for strong governance of IFAS during the last three-year period. He pointed to a need for development of a common information space under umbrella of IFAS in order to enhance regional cooperation. Attention should also be paid to coordination among international donors.

Normukhamad Sheraliev (Ministry of Agriculture and Water Resources of Uzbekistan) noted that Turkmenistan faced a difficult task to rejoin Kyrgyzstan to living cooperation under umbrella of IFAS. The new IFAS strategy should be based on those areas that were already approved by the Heads of State and be concise and well-defined.

V.I. Sokolov
Deputy Director, SIC ICWC

UN NEWS CENTER: “KYRGYZSTAN STANDS FOR REGIONAL COOPERATION TO MITIGATE CLIMATE CHANGE”

Having addressed the 71st session of the United Nations General Assembly, Mr. Erlan Abdyldayev, Minister for Foreign Affairs of Kyrgyzstan, has mentioned that the country stood for regional cooperation, particularly in environmental issues, and intercultural dialogue as the basis to prevent extremism and intolerance.

Minister Abdyldayev underlined main activities of Kyrgyzstan taken under the 2030 Agenda for Sustainable Development, namely poverty reduction, food security, high-quality education and health care, economic growth, effective energy and environmental protection.

Concerning environmental issues, he told that the global temperature rise is already causing natural disasters, flow fluctuations in mountainous rivers, glacier melting, degradation of unique mountainous ecosystems and, consequently, negative social effects.

“As forecasted, by 2025 the total glacier area may decrease by 30-40% on the average in Kyrgyzstan”, told the Minister and called for joint projects in upstream countries.

He believes that the Central Asian countries should arrive to a common understanding of integrated use of water and energy resources.

"Today Central Asia has substantial potential to switch to "green" energy", said Mr. Abdyldayev. "The construction of HEPS in Kyrgyzstan and Tajikistan may fully meet energy needs of the Central Asian countries, and thus create favorable conditions for sustainable development in our region".

Speaking further about regional cooperation in various spheres, the Minister expressed concerns about some countries that try to pursue their development at the expense of other countries. "In order to fully ensure the right to development, it is important that influential states and transnational companies do not dictate their will and hamper the development of other countries and implementation of the efficient projects and moreover intervene into their internal affairs", he said.

Turning to the topic of global peace and security, the Minister called global powers to put aside their differences and jointly find solutions to resist threats to global security as conflicts affect even those countries who are not involved in them. According to him, Kyrgyzstan is not the exception.

"Such phenomena as terrorism, extremism, religious intolerance and radicalization, which originated and developed far from Kyrgyzstan, unfortunately have been occurring in my country", complained the Minister. "We have to act to protect our interests and citizens. However, we consider it effective to localize them primarily in direct spots."

Intercultural dialogue is an important tool to prevent radicalization and intolerance in Kyrgyzstan. For the purpose of promotion of culture and traditions of nomads, in 2011 Kyrgyzstan proposed to organize the World Nomad Games. Mr. Abdyldayev informed that two weeks ago the second World Nomad Games were held on the shore of Lake Issyk-Kul and gathered together participants from 62 countries.

Kyrgyzstan suggested to include proposals on promotion of regular World Nomad Games into the UN General Assembly Resolution "Promotion of interreligious and intercultural dialogue, understanding and cooperation for peace".

Source: UN News Center (in Russian)

UN NEWS CENTER: "TAJIKISTAN CONSIDERS IT POSSIBLE TO ACHIEVE WATER TARGETS"

In the new 2030 Agenda for Sustainable Development, water is among the main elements of development. Water-related targets are ambitious but achievable, said the Minister of Foreign Affairs of the Republic of Tajikistan Mr. Sirojiddin Aslov.

Speaking during the general debates of the UN General Assembly, Mr. Aslov mentioned particular problems included in the new Global Agenda. These are the lack of access to drinking water sources and basic sanitation and hygiene services, wastewater problems, water scarcity and its negative effects for energy supply and food security.

The Minister added that climate change, urbanization, and population growth will only aggravate these problems.

"Moreover, climate change will further contribute to water scarcity in many countries of the world, first of all, due to shrinkage of glacier areas and snow cover", warned the Minister. "In Tajikistan, more than 1,000 glaciers (of 13,000) melted for the last 35-40 years". "This, in turn, has led to frequent and intensive natural disasters, damaged ecosystems, and hence to financial losses, let alone human losses".

However, Mr. Aslov considers that water related problems may be solved through stronger political will and cooperation and coordination.

“We noticed that when countries or regions prioritize water related problems, the solution of the latter is feasible”, told Mr.Aslov. “It is clear that states and international community should work together on the basis of coordinated efforts and adopt both urgent and long-term measures in this area”.

According to him, it particularly concerns water resources used in such sectors, as health, agriculture, energy, etc., as well as deep and shallow groundwater shared by various communities and countries.

The Minister reminded about the Call for Action on water and sanitation, which was launched during the recent High-Level Symposium organized by Tajikistan and UN in August in Dushanbe. He also believes that the General Assembly will support the initiative “Water for Life” decade for 2018-2028.

Source: UN News Center (in Russian)

TURKMENISTAN VOICED INITIATIVES AT THE 71ST SESSION OF THE UN GENERAL ASSEMBLY

On September 24, 2016 during the second day of the Turkmenistan's delegation visit to the 71st session of the UN General Assembly, the Minister of Foreign Affairs of Turkmenistan informed about the country's policy aimed at strengthening peace and security, implementing Sustainable Development Goals, tackling climate change related challenges and problems of migrants, refugees and stateless persons.

He mentioned that the Turkmen Government officially approved targets, tasks and indicators for SDGs. Thus, the country is among the first to approve global indicators at the national level. These indicators will be used in developing and implementing national programs for social and economic development.

Concerning climate change, the minister informed that on September 23 Turkmenistan signed the Paris Agreement and called upon a special conference to be held next year under the UN auspices and dedicated to improvement of environmental situation in Central Asia.

The Minister also mentioned that this year Turkmenistan will chair the International Fund for Saving the Aral Sea. He told that water issues are important for building peace and development in Central Asia. In this context, he called upon the development of a Common Strategy for conservation and use of water resources.

Source: UN News Center, MFA of Turkmenistan (in Russian)

ADDRESS BY THE MINISTER OF FOREIGN AFFAIRS OF THE REPUBLIC OF UZBEKISTAN H.E. MR. ABDULAZIZ KAMILOV AT THE GENERAL DEBATES OF THE 71ST SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

Dear Mr. Chairman!

Esteemed heads of delegations!

Ladies and gentlemen!

I would like to begin my speech with the words of deep gratitude to the Secretary General of the United Nations Organization Mr. Ban Ki-moon, all heads of states and governments, who have sent their condolences to the Uzbek people on the occasion of untimely passing of the First President of Independent Uzbekistan Islam Abduganievich Karimov.

Under the leadership of Islam Karimov, Uzbekistan took on the path of confident independent development and was recognized as a sovereign state and full-fledged member of the United Nations.

President of Uzbekistan spoke many times from this high rostrum. It was this very place where he had enunciated a number of important international political initiatives aimed at establishing a Central Asia nuclear weapon free zone, advancing a peaceful process in Afghanistan, overcoming the consequences of ecological

catastrophe of the Aral Sea and raising efficiency of international cooperation in the struggle against international terrorism, extremism and drug trafficking. All of the proposals put forward by the Leader of Uzbekistan were fully supported by the world community and today are making a tangible practical contribution to ensuring common peace, stability and sustainable development.

For over the 25 years, under the leadership of Islam Karimov, Uzbekistan turned into a modern and dynamically developing state. As Interim President of Uzbekistan Shavkat Mirziyoev has underscored at the recent joint session of chambers of our Parliament, during the years of Independence Uzbekistan's economy grew almost 6 times. The real incomes per capita rose more than 9 times. For over the last 11 years the GDP growth rates are steadily remaining on the level not less than 8 percent. According to estimates, the growth rates will remain on the same level this year, as well.

As the United Nations Secretary General has acknowledged in his congratulatory message on the occasion of the 25th anniversary jubilee of Independence of our country, Uzbekistan also attained a firm progress in implementation of the Millennium Development Goals. The maternal mortality in the country has decreased 3.2 times, the child mortality – 3.4 times, the average life expectancy increased from 66 to 73.5 years and among women – up to 76 years. The aforementioned vividly testifies about the steady growth of living standards and well-being of our people.

Dear participants of the session!

I would like to briefly draw Your attention to the following, as we believe, important issues in principle.

First, Uzbekistan will preserve the continuity and consistency in its foreign policy aimed at protection and advancement of the country's fundamental interests. The inviolability of Uzbekistan's foreign policy course is stipulated by a firm commitment to fundamental principles of international law enshrined in the United Nations Charter and Constitution of the Republic of Uzbekistan, as well as all international legal obligations which have been adhered to earlier. As the Interim President of the Republic of Uzbekistan Shavkat Mirziyoev has stated, Uzbekistan will continue to follow the course aimed at strengthening friendship and constructive cooperation with all foreign countries on the basis of principles of mutual respect, equality and consideration of interests of one another.

Uzbekistan is a solid supporter of non-interference in internal affairs of other states and addressing the emerging contradictions and conflicts only by peaceful and political way. Our country has made a principle and unambiguous choice – not to join any military-political blocs and alliances, not to allow for stationing of foreign military bases on its territory and not to send our servicemen beyond frontiers of the country. We believe such approach to be only the right one for us.

Second, Afghanistan was and continues to remain as one of the key problems of international security and stability. The internal dynamics of the Afghan conflict is not fading, but rather is flaring up and in many aspects it is getting complicated. The

prospect of resolving contradictions, which are accumulated in this country, unfortunately is not seen.

The settlement of the Afghan conflict is possible exclusively on the basis of intra-Afghan national accord and through peaceful political negotiations among major confronting parties under auspices of the United Nations and without any preliminary conditions.

It is utterly important so that the donor countries and international institutions confirm their commitments in terms of allocating assistance to Afghanistan aimed at real improvement of the social and economic situation in the country and living standards of the population, and above all, - the assistance must be channeled to the sphere of education and enlightenment.

Peace in Afghanistan will bring to all countries of the Eurasian continent the colossal and tangible benefit. The sustainable peace and stability in Afghanistan will stimulate the construction of motorways and railroads, development of regional and trans-regional commerce and laying the pipelines in all directions.

In this regard, the international community should start looking at Afghanistan not as a source of regional problems, threats and challenges, but rather a unique strategic opportunity capable to break the established status quo once and for all, shape the fundamental and solid grounds for a multilateral interaction, which will serve the goals of our common prosperity and well-being.

Third, the protection of ecology and preserving environment take on an enormous significance in achieving the Sustainable Development Goals for 2016-2030 approved by the United Nations General Assembly last year, especially in the conditions of modern anomalous changes of nature.

The tragedy of the Aral Sea is a vivid example. On its ecologic-climatic, social-economic and humanitarian consequences this tragedy is a direct threat to the sustainable development of the region, health, gene pool and future of the people residing in it. The extremely unfavorable ecological state, drying up of the Aral Sea and ongoing humanitarian catastrophe around it, the lack and declining quality of potable water and the growth of dangerous diseases – this is a just short list of consequences of the Aral tragedy.

Today's most important task is to preserve the natural biological fund of Prearalie, reduce the baneful impact of the Aral crisis to environment, and most importantly, on the life activity of millions of people residing here.

Uzbekistan firmly adheres to the principle position in terms of management of water and energy resources in Central Asia. These issues must be resolved in line with universally recognized norms of international law, which guarantee the reasonable and fair distribution of water resources and ensure consideration of interests of all states in the region.

Fourth, the Republic of Uzbekistan stands up for strengthening of the entire system of the United Nations, reinforcing the role of its structures in addressing the

problems of regional and international security and ensuring the sustainable development.

Uzbekistan for several times stood up for an institutional reform of the United Nations, which must provide for efficiency of the work and interaction of its basic bodies – the General Assembly and Security Council. Along with this, the General Assembly must preserve its central role as a major advisory, directive and representative body and the Security Council must be reformed stage by stage, including by way of its expansion.

Thank you for your attention.

Source: “Jakhon” news agency

CENTRAL ASIAN WATER FUTURE: A WORLD BANK FORUM AND EXPO

19-23 September 2016, Almaty, Kazakhstan

During a four-day conference on water management practices in Central Asia, participants explored progress on water management in Central Asia and got acquainted with the showcased global good practices on modernization of water management information systems. The conference intended to capture best practices to better refine activities proposed for the Central Asia Water Management (CAWaRM) Project.

The World Bank organized this event in three directions titled as 'III' – Information, Institutional Framework, and Investments.

The event brought together over 200 participants; however, parallel organization of the Scientific-Practical Conference by UNESCO and the Kazakhstan's Ministry of Agriculture and Water Resources and invitation of policy and decision makers to this Conference allowed attracting the heads of water management organizations from Kazakhstan, Turkmenistan, Uzbekistan and the lower level officials from Tajikistan. It is characteristic that the representatives of the Afghanistan's Ministry of Energy and Water Resources in the person of Director of Department and Deputy Minister participated in this event.

Contrary to usual conference agenda, the event began from training rather than

from plenary meeting. The training was focused on four areas, such as data and modeling, weather and climate, observation and monitoring network, and data management.

The report by Dr.Harshadeep attracted apparent interest. He talked about an interesting World Bank's apps "Spatial Agent", which serves as a 'library' of global datasets related to water resources and other fields of sustainable development. This tool integrates all developed datasets with free access on socio-economy and water and land use. However, this tool mainly covers global level and to lesser degree – regional level, thus making it usable for comparison of mainly these two levels.

D.Fields focused the training on two models. The first model is a modeling platform AralDIF developed at the Washington University. AralDIF models the Aral Sea basin with yearly, seasonal and even daily time step by using global data; however, during demonstration, the model produced output that did not agree with actual flow hydrograph. The second product was presented by Abdulkarim Seid, the Nile Basin Secretariat. The presented by him decision support system was interesting since the model considered 11 countries. It is based on the well-known modeling software, such as MIKE, SWAT, and WEAP but is limited to only long-term basin management.

The Forum was welcomed by a representative of the World Bank Headquarters, Global Water Practice Manager Mr. M.Haney, who particularly underlined a need to combat drought, taking into account conclusions in the working paper «High and dry» that indicated to population reaching 9 millions, agricultural products demand growing by 40-50 % and energy demand increasing by 50 %. According to him, by 2050, water scarcity would increase by 40 %, especially due to ever increased consumption of proteins.

Prof. V.A. Dukhovniy, Director of SIC ICWC underlined in his speech about application of remote sensing (RS) that RS cannot replace collection, analysis, and organization of ground-derived data, taking into account their usability for on-line control and accuracy of observations, especially noting that higher resolution images are not free of charge. A representative of Kazakhstan added that the country launched a number of satellites with higher accuracy that provided free images.

Two keynote reports differed in their content and focus. Acting Deputy Director of IWMI Ian Makin, despite location of his institution in Central Asia, organized his report in form of a mosaic of IWMI's global experience rather than around concrete tasks in the region.

On the contrary, ex-chairman of EC IFAS Prof. S.Ibatullin, who now chairs the World Bank's Central Asia policy group of experts, made a very good report on the work of this group. In particular, he focused on 2012 proposals of the EC IFAS working group regarding establishment of Central Asia information space and development of institutional mechanisms that would have their impact on country relations in the region and enhancement of cooperation.

Some technical approaches on water resource estimation in catchment areas were addressed in the report of the U.S. researcher Dr.Bair, particularly estimation of snow water equivalent by using radars.

Mark Heggli presented methods for non-contact measurements of flow rates as used in the USA and gave assessment of capabilities to use these mechanisms in CA based on his survey of the state-of-affairs in BWO Syrdarya.

Head of regional PMU for Central Asia Hydromet Modernization Project Yerdos Kubakov reported that the accuracy of flow forecast increased to 71% for Kyrgyzstan and to 75% for Tajikistan as a result of the project under consideration.

Kyrgyz researcher Dr. Ryskul Usubaliev reported on the results of CAIAG work related to monitoring of glaciers in context of climate change.

A few reports were dedicated also to monitoring of natural environment and water resources in the Central Asian countries: Ms. G.Tilyavova (BWO Amudarya), Mr. F.Irmatov (BWO Syrdarya), and Ms. E.Sahvaeva (Chu-Talas Commission).

Report by Mr. A.Sorokin about the improvement and free use of the ASBMM model arouse interest. The model was presented in context of present-day approaches and practices of water resource management by basin water organizations.

Although Kazakhstan continues their efforts in the Aral Sea basin as a whole, drastic deterioration of water education level is observed in Kazakhstan, stated Mr. A.Kenshimov. At the same time, he stressed the importance of the development of information network and information on water management to be accessible online and the support of water cooperation.

A participant from Egypt spoke about capacity building activities on the western bank of Nile that involved 16 universities developing jointly an interactive toolbox.

Barbara Janusz-Pawletta, Kazakh-German University, took stock of the five-year University activity related to preparation of masters for IWRM. She underlined that KGU has become a member of UNESCO. While developing a new master program, KGU popularizes life-long training. She also noted that the Russian-speaking audience decreases in Central Asia, while the English-speaking one does not increase. Education in native languages is an advantage; however, knowledge of either Russian or English or the both languages critically increases the ability to gain knowledge on a global scale.

Water practices in Pakistan and Afghanistan were presented by the experts from these countries. The presentation by Deputy Minister of Energy and Water (Afghanistan) Mr. Fahimullah Ziaie and the following report by Mr. Anvar Khamidov (Tajikistan) about UNECE-supported cooperation between Tajikistan and Afghanistan on information system in Upper Pyandj, which lacked water observations for already 18 years, aroused particular interest. In November 2014, an agreement was signed on information exchange and then a joint expedition was undertaken to Tigrovaya Balka, several automatic gauging stations were installed in the area of Horog, and the Afghan-Tajik Cooperation Atlas was published.

The representative of Turkmenistan spoke about preparation of a new Water code and formation of dekhkan associations (similar to WUAs in other countries).

The next session was opened by the new Central Asia Country Director of the World Bank Ms. Lilia Burunciuc, who underlined that the World Bank would continue supporting cooperation, information exchange, innovations, and e-learning.

An interesting report was read by the Under Secretary of the Ministry of Agriculture (Nepal) Mr. Sh.N. Prasad Shah about the agro-advisory systems. A special portal was opened for farmers and included the early warning system. 1300 small measurement stations were installed, farmers were provided with smartphones, and the central advisory center was established to answer farmers' questions. Publication of monthly agro-information newsletters was organized. The system covers 5500 agricultural units, trains farmers, and provides recommendations for marketing matters.

Ms. S.Shivaryova (RHC) and Yu. Komagaeva (World Bank) in their

presentations demonstrated activities done under the WB's CAWDEP. In particular, a Kazakhstan intersectoral group of 11 persons for water disasters was established, the Inventory of risks in Kazakhstan and Kyrgyzstan was composed. The WB's training program is focused mainly on master's degree (implemented by CAREC). In this context, a competition of master's studies is undertaken to exchange technologies and knowledge.

Prof. V.Dukhovniy in his presentation underlined the role of SIC ICWC in the development of a unique regional information system. Unfortunately, the World Bank and other donors did not pay attention to the program of common information space developed by EC IFAS working group and agreed by ICWC. KDC Energy, RHC and a number of other organizations take part in this common space.

An interesting message was delivered by a representative of Afghanistan. They established a national Water council to coordinate water activities, develop programs for water assessment, flow forecasting and water development. It is planned to build 25 monitoring stations.

The round-table meeting was also held on the CAWaRM Program context. Deputy Minister of Agriculture and Water Resources of Uzbekistan Mr. Sh.Khamraev took the floor and appealed to the World Bank to start the project as soon as possible as the preparatory phase was too prolonged. He also criticized figures from academia who called to neglect the Aral Sea Basin Program. It is not a matter of the sea itself but of the future of its basin. We may not forget that irrigation feeds, waters, and gives jobs to more than 50% of population in the region!

Prof. V.A.Dukhovniy
Director, SIC ICWC

INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE "WATER RESOURCES OF CENTRAL ASIA AND THEIR USE"

22-24 September, 2016, Almaty, Kazakhstan

Focus areas of the Conference:

- Water resources of Central Asia in the context of climate change;
- Water resources management: principles, methods and results;
- Geoinformation systems (GIS) and mathematical modeling;
- Transboundary water cooperation;
- Hydrological extremes.

The aim of the scientific-practical Conference was to demonstrate and discuss the existing experiences in water resources management as a basis for sustainable development at the regional and national levels.

The parallel organization of the Forum and Conference "Water resources in Central Asia and their use" arouse great scientific and practical interest. This allowed attracting not only scientists and practitioners, but also the heads of water management organizations from Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan in the persons of Deputy Ministers of Agriculture and Water Resources (excluding of Tajikistan). The Conference was organized by the Ministry of Agriculture and Water Resources of Kazakhstan and the Institute of Geography of Kazakhstan with the support of the Swiss Agency for Development and Cooperation and participation of many foreign speakers.

At the opening ceremony of the Conference, Deputy Minister of Agriculture of Kazakhstan Mr. E.N.Nysanbayev, Deputy Minister of Agriculture and Water Resources of Turkmenistan Mr. G.Baydjanov, Deputy Minister of Agriculture and Water Resources of Uzbekistan Mr. Sh.Khamrayev, the representative of the Ministry of Energy and Water Resources of Tajikistan Mr. T.Gulov, the President of the National Academy of Sciences of Kazakhstan Mr. M.Zh.Zhurinov and others delivered their speeches.

In his speech Mr. Sh.R.Khamrayev highlighted the contribution of Uzbekistan

to water conservation, particularly noting the installation of drip irrigation technique on an area of 24,000 ha, flexible hose irrigation on 150,000 ha, the reduction of cotton area in favor of crops consuming less water, in particular orchards.

The representative of Turkmenistan mentioned that available water resources decreased in his country and forced the Government to revise the legal water framework in 2004.

Foreign participants shared their experience in financing the water sector in the arid areas in France (F. Pintus, IOWater), implementing water-saving technologies in Asia (A. Shrivastava, India), Switzerland's vision for cooperation in Central Asia and the role of donors (V. Meyer, SDC), role of UNECE in the development of cooperation (B. Libert), adopting advanced water technologies in the world (A.Amani, UNESCO), developing national Water law (S.Burchi, International Association for Water Law), joint use of water infrastructure (Professor T.Mara, University of Geneva), etc.

In conclusion, the participants adopted the Conference Resolution.

Professor V.A.Dukhovniy,
Director, SIC ICWC

RESOLUTION OF THE INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE "WATER RESOURCES OF CENTRAL ASIA AND THEIR USE" DEVOTED TO SUMMARIZING RESULTS OF THE UNITED NATIONS DECADE FOR ACTION "WATER FOR LIFE"

September 22-24, 2016

On 22-23 September, 2016 the International scientific-practical conference "Water Resources of Central Asia and Their Use" devoted to summarizing results of the United Nations Decade for Action "Water for Life" took place in Almaty, Kazakhstan. The event was organized by the Ministry of Agriculture and Ministry of Education and Science of the Republic of Kazakhstan, Kazakh National Research Technical University named after K.I.Satpayev, Kazakh National Agrarian University, Committee on Water Resources at the Ministry of Agriculture of the Republic of Kazakhstan, Swiss Federal Department of Foreign Affairs jointly with the Institute of Geography of Kazakhstan, supported by UNESCO, as well as partners from the World Bank, UNECE, OSCE, Executive Committee of the International Fund for Saving the Aral Sea (IFAS).

Problems related to sustainable water supply in Central Asia became acute in socio-economic, environmental and political terms in the last years. This is explained, on the one hand, by growing anthropogenic factors related to water consumption by population, industry and agriculture and, on the other hand, by natural factors.

Among the main water threats and challenges in the Central Asian countries are global and regional climate change, underoptimal interstate water relations, wide spread water-intensive technologies and inefficient engineering facilities for water regulation. These may lead to emergence of new spots of environmental instabilities and disruption of socio-economic development programs.

The aim of the scientific-practical conference is to discuss accumulated experience and prospects for water resource management as the basis for sustainable development at the regional and national levels.

The conference was attended by water experts from the CIS and other countries (Belarus, Great Britain, Germany, Italy, Kyrgyzstan, Netherlands, Russia, Serbia, USA, Tajikistan, Turkmenistan, Uzbekistan, France and Switzerland).

In the context of pressing water issues at the regional and national level, five reports of water-management agencies from Central Asia were presented and speeches of representatives from UNESCO and Swiss Federal Department of Foreign Affairs were delivered.

The participants also discussed critical regional issues in the following areas.

Session 1. Water resources of Central Asia in light of climate change

Taking into account climate trends in Central Asia, river runoff may decrease in the future. In light of the predicted decrease of available water resources, water consumption pattern may significantly change, with consequent conflicts among some water consumers.

Eleven reports were presented on assessment of water resources, climate effects on river runoff, pollution of surface water and assessment of groundwater.

Session 2. Water resource management: principles, methods and results

In context of growing water problems in Central Asia, the functions, principles and mechanisms for water management are changed. The new water paradigm combines "supply management" and "demand management" through conservation of water and improvement of water-use efficiency. Water priorities are set for communities and environment rather than for industry. Environmental aspects of management are realized by meeting ecosystem water requirements and preventing harmful water effects.

Fourteen reports were presented on integrated water resources management in transboundary basins, legal and institutional aspects of water cooperation, methodologies to determine maximum permissible impact on river systems, constructive schemes of hydraulic structures on the canals, and impact of hydrological regime on fish populations and fish breeding in reservoirs.

Session 3. Geoinformation systems (GIS) and mathematical modeling

Currently, the development of systems of water management in Central Asia demands much from the decision-making process because of significant growth of available data. The key tool for searching development paths of water management systems in Central Asia is the geoinformation systems and mathematical models. Such tool will be efficient for making operational and reliable decisions on water management.

Thirteen reports were presented on numerical modeling of water resources in the lake-river system, simulation modeling of water supply system development in transboundary basins, geoinformation system of operational assessment of water accumulation in the reservoirs, geoinformation and map support of basin research, hydrodynamic modeling of wind-induced phenomena, and satellite monitoring of environmental condition of catchment basins.

Session 4. Transboundary water cooperation in the basins of surface water and groundwater: water diplomacy, geopolitics and water law

All transboundary waters serve as a hydrological, social and economic interconnection among Central Asian countries. Drinking water is a strong incentive for cooperation and dialogue to reconcile opposing parties. Equitable water sharing and mutual responsibility for water protection should be a conceptual framework for transboundary cooperation.

Six reports were presented on Central Asian countries' policy in water sharing,

the basis for water cooperation development, capacity building of interstate water institutions in the Aral Sea basin and research of the Tashkent transboundary aquifer. Political will of the countries at the highest level is the basis for successful transboundary water cooperation.

Session 5. Hydrological extremes

Water resources may lead to extremes and damages. In light of global and regional climate change, water-related extremes, such as droughts, floods, mud flows, landslides and breaking of glacier lakes has become more frequent and intensive in Central Asia. This makes it difficult to interact between communities and aquatic environment.

Six reports were presented on problems related to hydrological extremes, assessment of water disasters, forecast of seasonal high-water and floods and assessment of risk of hydrological extremes.

CONFERENCE DECISION

1. The outcomes of the conference serve as a significant contribution to water cooperation among the Central Asian countries for solving water issues and achieving aims set during the International Decade for Action “Water for Life” (2005-2015) and the International Year of Water Cooperation (2013) declared by UN in:

– politics – prevention and pacific settlement of transboundary water disputes;

– economics – mutually beneficial use of transboundary water based on integrated water resources management;

– environment – preservation of resources and ensuring of environmental sustainability of aquatic systems in transboundary basins.

2. To ensure sustainable development in Central Asian countries, it is necessary to consolidate available scientific, technological and production capacities, engage scientific communities in cooperation at the national and international levels, build institutional capacity and increase awareness while conducting new or continuing ongoing research, particularly in:

– Improvement of knowledge on actual condition and dynamics of water resources in Central Asia by modernizing monitoring systems, developing new technologies, methods and models for hydrological calculations and forecasts.

– Development and implementation of integrated water resources management taking into account global best practices, as well as water-food-energy-ecosystems nexus ensuring reliable and safe functioning and development of national water management systems in Central Asia.

– Development of science-based methods and mechanisms for sustainable water management by building reservoirs with the least non-productive losses and taking into account the interests of all riparian countries and environmental flow.

– Development and implementation of geo-information technologies and methods for modeling of functioning and development of water management systems as an efficient tool for research, project design and operational water management.

– Development of methods for assessment and forecast of hydrological extremes and water disasters to support effective decision making for prevention of the latter and mitigation of their consequences.

– Development of science-based economically sound and environmentally safe models for hydropower development in the Central Asian region.

– Education and capacity building, as well as awareness raising at all levels.

The International Fund for Saving the Aral Sea is playing a key role in addressing scientific and practical problems related to sharing and protection of water resources and ecosystems in the Aral Sea basin. The Fund should be enhanced taking into account the interests of all countries in the region.

The Conference considers it necessary to continue strengthening and developing mutually beneficial regional cooperation on common scientific, technical, institutional and investment aspects in the water management system of Central Asia.

3. The Conference renewed its thanks to the Ministry of Agriculture of the Republic of Kazakhstan, the Swiss Federal Department of Foreign Affairs, UNESCO-IHE and UNESCO Almaty Cluster Office for their financial support to the event.

4. The Conference considers it necessary to continue studies on pressing issues of Central Asia through budget funds of these countries and with donor's support.

5. The Conference underlines high scientific level and good organization of the event.

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