



Meeting under the Marrakech International Summit on Water Security, INBO members held their General Assembly from 30 September to 3 October 2019.

The meeting was honoured with the effective presence of 9 ministerial personalities in charge of Integrated Water Resources Management (IWRM) at basin level in the following countries: Burkina Faso, Finland, Guinea, Greece, Kenya, Malta, Morocco, Palestine and Romania.

The Assembly gathered more than 400 registered delegates, representing the Member Organizations, water administrations or observers from 62 Countries, as well as the representatives of several interested bi or multilateral organizations and International Commissions or Authorities of transboundary basins.

Considering the urgency to meet the many challenges facing the world in the field of water and in the sectors that depend on it, recalling the terms of the Declaration of Merida (2016) which recommends an unprecedented mobilization and which calls for action, the following points should be dealt with.

Integrated water and energy management for food security and rural development:

Water management is at the crossroads of many areas essential for humanity. This is the case for energy development, rural development and food security. It is of prime importance to improve water resources management by integrating these dimensions and ensuring that the water needs of populations and ecosystems are met.

To achieve this goal, integrated management should be implemented at national and transboundary basin level, through the development of basin management plans carried out with the participation of all stakeholders and the various sectors.

Since agriculture is the biggest water consumer everywhere, solutions should be found through effective farming and water saving systems, adapted to the region and having the minimum impact on natural resources. Knowledge in this field is still insufficient or poorly disseminated. Research is needed to have an agriculture that produces the necessary food with fewer inputs and less water. All over the world, rural areas are often poorly equipped with vital services such as those related to water: drinking water, sanitation, protection against floods. To enable the development of these spaces, access to these services must be made possible. Water security is a necessary condition for reducing poverty, especially in rural areas, and raising the standard of living.

Finding the right positioning of IWRM at the basin level to meet food and economic development needs while respecting the environment is a big challenge that requires complex strategies and beyond that, strong political will.

This entails the development of control systems and strategies for reducing withdrawals and losses of all kinds – supply systems, evaporation, infiltration, runoff - increasing the degree of purification of polluted water, reducing pollution at the source in order to have a positive impact on the environment and to increase the available volumes. There is a need for demand management mechanisms for any water user sector. All this must be accompanied by institutional and technical reforms that facilitate the work of basin organizations.

• Challenges of adapting water to climate change in river basins:

Climate change is one of the most significant challenges facing humanity in this century. Worsening water scarcity and floods, as a result of the increasing intensity and frequency of extreme events, affect people's security and quality of life, economic development and natural heritage. Added to this is the resurgence of conflicts and migration of populations fleeing areas at risk.

Adaptation strategies need to be developed in all areas and at all levels.

For the water sector, efficiency requires that the adaptation strategy be thought out and implemented at the national and transboundary basin level, while falling within the national guidelines of the plans for climate change.

Adaptation to climate change should be integrated into basin management planning, based on the various sectors and users concerned and enabling synergies for the protection of vulnerable populations, supporting diversification of the economy, improving the flow of information to define policies and legal frameworks, and coordinating financial support.

Climate change impacts all the water resources of the basins in quantity and quality and the entire water cycle: for example, evapotranspiration of plants, evaporation, water temperature, rainfall intensity and distribution. The water supply is affected, shortage threatens hygiene and health and excess water causes mortality and damage. Solutions must be sought in all components of the water cycle. In addition, climate change induces changes in other sectors (energy, agriculture, consumption, transport...), an iterative approach between water and other sectors is to be preferred.

Considering the time needed for making institutional changes, investments for adaptation, or changing behaviours (one generation), there is an urgent need to take action to adapt to climate change.

• Knowledge, innovation and information sharing in the water sector:

The complexity of water resources management, its relationship with other areas, in a context of big changes, such as climate change, population growth, concentration of populations, evolution of food consumption, requires new knowledge on water, its uses, the various impacts as well as on the prospects for evolution.

In addition to day-to-day management and medium-term planning, it is necessary to build a long-term vision (10 - 30 years) of water resources management in basins. This requires increasing knowledge, especially on long-term trends, to better understand the uncertainty of the future and the modes of interaction between the various sectors and the water sector.

It is also necessary to innovate in the instruments of information management, to encourage the sharing of knowledge and data by highlighting the possible added value of these exchanges, and to innovate in the way of producing and implementing planning.

Global changes have never been so fast. They generate significant changes in the demand for and supply of water resources and in the pressures on water quality in rural and urban areas. This implies taking a cross-cutting approach to water security and adopting comprehensive policies for integrated and efficient water resources management in basins.

Improving knowledge on the water cycle, uses, environments, climate variables, sectoral interactions is an essential condition for progress

Hydro-diplomacy, international and transboundary cooperation for water security:

A big volume of the water resources is shared by several countries. To achieve water security in these transboundary basins, it is essential to develop cooperation between the riparian countries, especially as the trend is a decrease in water availability and an increase of extreme events impacting the populations and properties in the considered basins. This cooperation must lead to an equitable and reasonable distribution between upstream and downstream areas, between riparian countries and between uses and encourage compliance with quality monitoring and discharges control programmes.

The 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes, and the 1997 United Nations Convention are the relevant framework for improving transboundary cooperation in the field of water in the basins based on a shared governance

Where cooperation agreements, conventions or treaties exist, these should be consolidated, and their content expanded given the new or foreseeable pressures on water resources.

Where there is no agreement, the riparian countries should lay the foundations for hydrodiplomacy, most often starting from technical and scientific agreements and exchange of practices, to establish joint transboundary basin management bodies, which are essential for negotiations on water. These basin bodies or international commissions, when they function, allow dialogue, the exchange of useful information, the resolution of conflicts ahead and facilitate an approach to sharing the benefits of transboundary joint management.

International organizations should support the establishment and strengthening of these river basin institutions so that they have clear mandates and acute skills through sufficient and sustainable human, technical and financial resources.

• Funding of water security

Water security cannot be guaranteed without financial resources. The investments required to sustainably manage, administer, preserve and control resources and ecosystems, as well as to build and operate community facilities, require huge financial resources.

In the context of deep changes, the resources devoted to the management of water resources and aquatic ecosystems are notoriously insufficient. Adaptation requires additional funding to be found at basin level, with the adoption of mechanisms such as the introduction of basin fees, insurance systems or market instruments or the development of public-private partnerships in the case of heavy investments.

Specific financial resources should be sought by combining national or local administrative taxes, the pricing of community services, social, geographical and cross-sectoral equalization mechanisms, payment for environmental services and fees allocated to the objectives set by consultation in accordance with the "polluter pays" and "user pays" principles. These mechanisms can also enable water saving and pollution removal by modifying behaviours, while ensuring solidarity between user categories and between upstream and downstream areas

• Conclusions of the workshop on the transfer of innovative solutions of the AfriAlliance project on water and climate

The workshop was guided by the need to increase knowledge sharing on social innovations related to water and climate.

This knowledge-sharing event is a platform for innovators from academia, research centres, municipalities, youth organizations, intergovernmental organizations and private organizations. It presents the technologies, economic models and potential governance structures that exist and that can provide solutions to the water-climate challenge in Africa, with a focus on West and North Africa. Panellists from basin organizations, the banking sector and international organizations provided information on the structural bottlenecks of some of these social innovations.

Recommendations

INBO General Assembly members reaffirm the need to take into account water resources management in basins as a fundamental basis for progress in water management and governance.

The participants in the General Assembly consider that special attention should be paid to the following recommendations:

- Water security needs to be addressed at the national and transboundary basin level as this is the physical unit for implementing, within a reasonable time, realistic and true solutions to meet all challenges related to water resources and to the ecosystems that depend on them;
- In the action plans of international organizations, it is necessary to focus on the basins in the world that are highly vulnerable to water insecurity, especially as a result of foreseeable evolutions related to climate change;

- Since knowledge is the basis of all progress in water management, it is necessary to increase support to the implementation of water information systems and the expansion of existing ones needed to address the issues of interactivity between sectors. The functioning and modernization of hydrological cycle and climate variables measurement systems and the design of real WISs at the national and transboundary basin level are to be promoted;
- At the basin level, there is a scientific need to address the links and interactions between the water sector and other dominant sectors in the basin concerned, such as energy, agriculture, transport, biodiversity and the environment;
- National, regional and international capacity building is needed to develop the new basin water resource management tools;
- There is a need to promote the use of the water governance indicators developed in the OECD Water Governance Initiative, as these indicators are useful for defining priorities for action at basin or country level;
- Cooperation between national or transboundary basin organizations in different regions of the world needs to be supported and developed to facilitate the transfer of experiences and knowledge on best basin management practices.

The General Assembly hopes that INBO's regional networks will be strengthened in their skills and actions in order to play a role of resource centre for basin organizations.

Conclusions

INBO General Assembly in Marrakech is an important step in the process of preparing the 9th World Water Forum in Dakar in 2021 with the theme "Water Security for Peace and Sustainable Development".

This forum will include four themes: water and rural development, water security, resources and tools, cooperation.

INBO, co-facilitator of the "cooperation" theme with OMVS and the Korean Water Forum, participated in several meetings and co-facilitated this theme at the kick-off meeting for the preparation of the Forum in June 2019, from which three priority issues arose:

- Transboundary cooperation, water sharing and common infrastructures;
- Dialogue and cooperation at all institutional levels;
- Water for peace.

INBO, its members and INBO regional networks want to be active in the preparation and implementation of the next Forum.

The workshop organized on 30 September as a side event of the General Assembly enriched the first working documents with operational inputs and the vision of the basin organizations.

Enhancing the commitment of policy makers to water security, reaffirming the need for dialogue between stakeholders at the basin level and strengthening integrated management are issues that INBO supports at its own level.

The INBO 2019 - 2021 action plan, approved by the members of the General Assembly, aims to contribute to the implementation of solutions that will lead to guarantee worldwide water security, the cornerstone of sustainable development. This means initiating a series of consistent actions that focus on the following issues:

- Improving, developing and strengthening basin-level information and data systems, especially by enabling the exchange of experience and knowledge on WISs and the dissemination of the handbook and by participating in the World Water Data initiative and in the activities of the Global Hydrometry Support Facility led by WMO. Cross-peer-to-peer expert projects will be sought;
- Adapting basin management plans to the impacts of climate change, especially by strengthening exchanges of know-how between Basin Organizations on the preparation of plans for adaptation to climate change and by taking actions to make the water project incubation platform sustainable. INBO will continue incubating projects, especially through the "100 projects for Africa" initiative;
- Improving water governance: INBO will co-ordinate the production of a handbook dedicated to the water police and continue its contributions to the OECD's Water Governance Initiative on the indicator and capacity development components;
- As part of IWRM, increasing the interaction between water management, economic activities and environmental conservation, by relying on practical examples from national or transboundary basins and by leading a debate on the operational relationship between the agricultural use of water and the management of water and fish resources. INBO will focus on taking ecosystems and biodiversity into account in basin water management;
- Strengthening the city-basin dialogue through the "Basin-connected Cities Agenda" developed by the International Water Association and the production, in partnership with IWA, of a handbook dedicated to the city / basin dialogue;
- Developing citizen participation in the management of basins and sub-basins by continuing to disseminate the Handbook on Participation and producing a compendium of achievements in national and transboundary basins targeted on specific topics, such as the development and implementation of management plans for instance or the definition of financial terms and conditions for water management;
- Strengthening partnerships and enabling the transfer of research results.

Through the seven priorities of the action plan, INBO intends to provide answers to the many challenges raised during the General Assembly and whose solutions are largely found in integrated basin management.

Unanimously approved in Marrakech on 2 October 2019