



# RESEAU INTERNATIONAL DES ORGANISMES DE BASSIN INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS RED INTERNACIONAL DE ORGANISMOS DE CUENCA

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## 10th WORLD GENERAL ASSEMBLY OF THE INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS MERIDA – YUCATAN (MEXICO) – FROM 1<sup>st</sup> TO 4<sup>th</sup> JUNE 2016



**"Faced with global challenges, water management at basin level is needed throughout the world!"**

ANNEXE  
**"DECLARATION OF MERIDA"**

## PROPOSITION FROM THE ROUND TABLES

The General Assembly of the International Network of Basin Organizations (INBO) which took place from 1 to 4 June 2016 in Merida, Mexico, was organized around major strategic topics to ensure, in the basins of local, national or transboundary rivers, lakes and aquifers, the necessary implementation of measures for facing major global challenges that are essentially population growth, food and energy demand or adaptation to the effects of climate change, in the context of the Sustainable Development Goals.

Four roundtables allowed dealing with the following topics:

- Adaptation to climate change in basins,
- Mandates, composition, role and means of the Basin Councils and Committees,
- Sustainable basin management: planning and funding
- Participation of the economic sectors and citizens.

More than ever, the situation is now alarming. While the status of surface water and groundwater resources around the world reveals many quantitative and qualitative problems related to the impact of human activities, the announced global changes will increase these difficulties.

These developments combined firstly with population growth and increasing food and energy demands and secondly with the degradation of water quality are already showing their effects in many parts of the World and foreseeable impacts will require, in the medium term, a quick response from all concerned, especially those in charge of the management of river, lake and aquifer basins.

- **ROUND TABLE 1: ADAPTATION TO CLIMATE CHANGE IN BASINS**

By increasing the frequency and intensity of hydro-meteorological phenomena, the first effect of climate change will be to rapidly change hydrological cycles worldwide, impacting at the same time the availability of surface water and groundwater. Extreme events of floods and droughts will affect more and more the populations' quality of life, natural heritage conservation, and will result in new diseases and conflicts between users.

Adaptation to the effects of climate change is a global and local priority and requires an unprecedented mobilization to quickly prepare the adaptation programs necessary in each river basin, while taking into account both surface water and groundwater, and also the consequences of probable changes in demography, food and energy.

Launched, on the request of the Peruvian and French Governments under the "Lima-Paris Action Agenda" - LPAA - by INBO, jointly with UNECE, the "Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers" was proposed to the signature of organizations concerned at the COP21 of Paris in December 2015.

To date 348 organizations around the world have committed themselves by signing the Pact.

In anticipation of the upcoming COP22, to be held at the end of this year in Marrakech, Morocco, an operational prospect should be made for turning commitments into practical field actions.

Updating the content of the signatories' projects is in progress and will allow for a better understanding of their characteristics in order, firstly, to consider circumstantial support to these projects (expertise ...) and also to share with the INBO members the progress made on this issue.

In parallel to the efforts made for mitigating climate change (reducing greenhouse gas emissions), the results of which will be felt in the long term, it is now accepted that we should look quickly for means to adapt to the adverse effects of climate change on water resources.

Beyond the global, regional and national strategies, that must be established, adaptation to the effects of Climate Change must be effective in national and transboundary basins. INBO and UNECE established a platform of basin organizations working on the issue of adaptation to climate change in the basins, especially transboundary, of rivers, lakes and aquifers, to share their approaches, test measurements and disseminate good practices and developed tools. Using this network and with the support of many partners, UNECE and INBO produced a publication "Water and adaptation to climate change in transboundary basins: lessons learned and good practices" in 2015. The latter, available in French and English, was launched at the World Water Forum in Korea.

This document presents, through practical examples, actions to be implemented for adaptation in the basins, the steps ranging from the understanding of vulnerabilities and impacts to the development of adaptation measures based on baseline scenarios up to their implementation.

INBO members consider that this platform for exchanging practices of adaptation to climate change, developed by national and transboundary basin organizations, should be supported at global level, so that management plans quickly integrate the dimension of climate change adaptation.

Concretely, it is essential to quickly evaluate, under various scenarios, the consequences of this change on water resources while taking into account other expected changes (demography, urbanization, desertification, food, energy).

The consequences should be studied in detail in all possible dimensions, including the population migration to other lands for safe water, food security and better living conditions. The socioeconomic and political costs of the adaptation process in the receiving basins should be evaluated.

Each basin organization should be able to test the sensitivity of its area to climate change and the relevance of management plans under the various assumptions provided by climate models in order to establish, as best as possible, the combinations of measures to take, with better cost - effectiveness, especially in the case of transboundary basins, which require coordination and increased exchanges between riparian countries.

Research efforts should be amplified to give local field decision makers the elements needed to design appropriate measurement programs, flexible enough to take into account the medium to long-term uncertainties and to be modulated whenever necessary.

Adaptation should not only concern the water resources management policies and mechanisms but also investments related to water and areas that have impact on water resources to make them flexible and resilient to the effects of climate change.

To meet these challenges, capacities must be developed and strengthened especially in case of very long-term prospective, the time step with climate change is much longer than that usually used in defining strategies and developing multi-year management plans. Similarly, it is urgent to learn to anticipate the impacts and future damage and to take the necessary measures to prevent or minimize their negative effects. Learning should also include consideration of the increasing uncertainty with climate change.

It is also essential to quickly build a solid base of reliable knowledge about the impacts of climate change, and about other global changes and the vulnerability of regions and economic sectors. It is urgent to develop knowledge acquisition programs to assess the consequences of these changes on resources according to various scenarios.

In this sense, water information systems must integrate new data and offer new services related to adaptation to climate change; the systems for warning against floods, drought and accidental pollution must be strengthened and coordinated especially for better facing the natural disasters caused by water and for protecting human lives and property. We must also invest in the production and collection of data on water resources and their uses, as well as in modern and integrated monitoring systems, including using the possibilities offered by the new tools of earth observation.

In the basins, the "upstream-downstream" common cause must be the basis of a coherent management of floods and droughts.

In transboundary basins in particular, we must encourage cooperation between riparian States for jointly looking for coordinated solutions with a "win-win" approach and sharing information and responsibilities based on the knowledge of risks and vulnerabilities .

Climate change will exacerbate the structural problems leading to water shortages. This requires, in each basin, a long-term planning of preventive actions to avoid the overall degradation of water resources.

INBO members recommend that all these actions be supported to accelerate the adaptation process in the basins and ultimately get prepared for solving critical problems in current and future events in the field of water and water-related activities.

They also recommend that the exchange platform on adaptation to climate change in the basins be strengthened and expanded.

- **ROUND TABLE 2: MANDATES, COMPOSITION, ROLES AND MEANS OF THE BASIN COUNCILS AND COMMITTEES**

INBO members reminded that the basins of rivers, lakes and aquifers, are natural areas in which water runs on the soil or in the ground, from upstream to downstream, regardless of frontiers and administrative limits. In this sense, they are the most relevant areas to ensure sound water resources management.

That is why the establishment and proper functioning of basin organizations, at both national and transboundary level, is imperative for good water governance. The OECD Water Governance Initiative (WGI), to which INBO contributes, reminds this crucial principle, which is based on several years of positive basin policy experiences in many countries and a real expertise and field operational practice.

Water knows no administrative or national borders and management of national and transboundary rivers, lakes and aquifers requires a joint, coordinated and consistent approach from all water stakeholders, from the areas located in the basin and, where appropriate, from the riparian countries

Whatever the historical, political and socioeconomic context, integrated water resources management requires the establishment of structures with a clear and precise mandate, which cover all the basin waters: surface water, groundwater and coastal water. The responsibility and the jurisdiction of the basin structure, adapted to each situation, taking the form of basin organization, agency, commission or authority, should include knowledge of water resources and associated elements, through management of the water information system, the establishment of a basin commission or committee that can fulfill water management functions, through the planning and coordination of initiatives carried out by stakeholders in the basin.

The basin commission, whatever its powers, must gather qualified representatives of all stakeholders and interested people and it must have the necessary means to carry out its activities. It should contribute to the definition of long-term goals in the basin, the drafting of the management plan, the prioritization of facilities and equipment, the implementation of programs of measures and multi-year priority investments, and to the definition of the financing principles and bases.

Obviously, all this requires a political will to support the establishment and strengthening of basin organizations in their various assignments related to efficient management of water resources and aquatic ecosystems.

In transboundary basins, effective cooperation between the countries must be developed. Many agreements do exist in the world but they are often limited to one or two areas (inland waterways, building of dams, flood control, flow sharing...) and do not include all the issues of water resources management. Given the impending effects of climate change, it is now urgent that these cooperation agreements, conventions or treaties should be expanded and strengthened to take into account, for example, pollution control, environmental protection, integrated management of the shared basin and adaptation to the effects of climate change on water resources.

Where there is still no agreement, it is essential that the riparian countries cooperate to establish a joint body for water resources management in the basin.

The Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes of 17 March 1992, sets an appropriate framework for cooperation in this area, valid for all countries of the world.

Furthermore, the United Nations Convention of 21 May 1997, on the Law of Non-Navigational Uses of International Watercourses defines recognized principles as the basis of relations between riparian States concerned.

For groundwater, Resolution A/Res/63/124 adopted by the UN General Assembly in December 2008 offers to the States a legal framework for transboundary aquifer management.

For its part, the European Water Framework Directive (WFD) of 2000 is a remarkable regional legislative framework whose contents can inspire other regions of the world to initiate regional cooperation in the field of water, based on the principles of integrated river basin management and performance targets.

Considering the critical importance of basin management to improve water governance, the delegates at the General Assembly of the International Network of Basin Organizations in Merida required that ODA for international development in the water sector be directed primarily towards projects that aim to establish, strengthen and develop river basin organizations and establish cooperation agreements in accordance with the above principles and to exchange know-how, to implement twinning arrangements between basin organizations, knowledge transfer, proper training of personnel, decision makers and water users and the pooling of tools through exchange platforms to disseminate the good practices acquired in the field.

### • **ROUND TABLE 3: SUSTAINABLE BASIN MANAGEMENT: PLANNING AND FUNDING**

Basin-wide and sustainable management of water resources is based on a medium-term vision that is expressed through the basin management plan and the program of measures associated with the plan. To cope with the challenges brought by global and climate change and achieve the new Sustainable Development Goals, which the international community adopted in 2015, the basin plan must contain all the elements relating to global change, i.e. prospective on climate change and demographic trends, trends in land use and economic development that will impact water resources. In the light of new research data on climate change, basin organizations must quickly update their management plan.

Before any planning is been done, the production and provision of information and reliable data through an integrated information system allow having a good knowledge of water resources, aquatic environments and their use, which is essential to enable a constructive dialogue between partners in the diagnostic process and river basin planning and to facilitate decision-making, the evaluation of the undertaken actions, and the effective participation of the population in water policy making.

Basin management plans, established in close cooperation with all stakeholders to set goals to be achieved in the medium and long term, are the foundation for the implementation of practical actions for resource management, through the implementation of programs of measures and successive multi-year priority investments.

Many countries, including the European Union, have implemented this basin management by introducing it into their national legislation or by experimenting in a transboundary basin.

Experience shows that it is necessary to develop more highly integrated approaches regarding surface water, groundwater and coastal water, to take more strongly into account the effects of climate change and to seek cross-cutting solutions for reducing pressures on available resources, restoring the hydro-morphology of rivers and protecting or restoring aquatic ecosystems, whose role as a self-purifier and regulator must be recognized and which operate as a natural "green or blue" infrastructure (restoration of wetlands, migratory fishways, ecological continuity, grassy or wooded buffer strips along watercourses, measures for aquifer protection and recharge, etc...).

Similarly, management plans should promote the protection, at national and international level, of surface areas located above the catchment areas of surface waters that feed aquifers in a stable manner.

In the process of developing integrated basin management plans, discussions should be expanded addressing food security and health safety of the basin populations. Aspects such as losses caused by evapotranspiration or by inadequate management and control systems, lack of infrastructure or efficient technology, the risks generated by produced waste must be better understood. Similarly, analysis of the impacts of climate change on human and ecosystems health must lead to actions for achieving the Sustainable Development Goals, including numbers 6 and 14.

The basin management plan and its associated program of measures have any value only if they are accompanied by sustainable funding.

This funding must always be guaranteed for operation and investment in a sustainable way based on the "water pays for water", "polluter pays" and "user pays" principles, ensuring all necessary equalization, both geographical and intersectoral, as well as real solidarity between all classes of users.

While financial resources needed for sustainable management, conservation and control of water resources and ecosystems, as well as for the operation of public services and facilities, their maintenance and renewal, are considerable, INBO members found that in the current context of mutation and adaptation, financial resources devoted to the management of water resources and aquatic ecosystems are clearly insufficient and their amount will not help address global challenges.

Additional resources need to be found through the adoption of new mechanisms such as the establishment of basin taxes, insurance systems or market instruments, or by combining national or local administrative taxes, the pricing of collective services by applying cost recovery, transfers from other sectors (electricity, navigation, oil, mining, gas ...) as described by the rule of the three "T" of the OECD, all accompanied by social, geographical and intersectoral equalization mechanisms.

The development of public-private partnerships can also provide effective solutions. The establishment of additional financing systems based on the participation and solidarity of the users is also a path to explore.

Such arrangements can improve resources and environments while promoting access to water and sanitation for all, while ensuring solidarity between the users and between the upstream and downstream parts of basins.

It should be reminded that the financial system to be established has to encourage the reduction of consumption, the limitation of waste and pollution by inducing a change in users' behavior.

It is essential to clearly identify the institutions responsible for the organization and the permanent operation of such systems and to guarantee not only sufficient means for the corresponding investments, but also to ensure their continued operation in the long term.

- **ROUND TABLE 4: PARTICIPATION OF THE ECONOMIC SECTORS AND CITIZENS**

The new resource management approach, based on approval by all basin stakeholders, should be developed for the protection of water resources and aquatic environments, the rational use of water in all areas, the management of wastewater and pollution.

The first stakeholders concerned are national and local political powers and local authorities, including municipalities, whose approval should lead to continued support from them. The users' participation in institutional water management is accompanied by a decentralization process that can lead to transferring the concession of hydraulic structures, thus making local authorities the key stakeholders in investment planning and management.

The need for contracting authorities that can both cope with the challenges and adapt to the management of catchment areas, which are not always compatible with the pre-existing administrative limits, should encourage the creation of bodies in which local officials are represented. Decentralization at the basin level is the basis of effective water policy.

Given the diversity of interests and needs of each sector, the active participation of representatives of different classes of users, citizens and associations for the protection of nature or of public interest, must be organized on the basis of an institutional framework established by local governments, through basin committees or councils, in which representatives of stakeholders have access to information and power of expression, or even actual decision.

Users, professional or not, such as farmers, foresters, fishermen, environmental associations, hydropower producers, navigation managers, urban planning managers ... must adopt corporative or associative structures in basins and sub-basins to facilitate their involvement in the basin committees. Many examples show the difficulty of involving non-federated individuals or individuals whose representatives are not legitimate. Conversely, the partners who can get organized, once an agreement is found, are able to relay messages to the mass of individuals they represent or facilitate the implementation of the decisions made. But it is not enough to involve representatives of users, they have to be competent. It is indeed this "informed" participation that will ensure, in the consultation process, the social and economic acceptability of decisions, taking into account the real needs, the willing to act and the contribution capabilities of stakeholders in social and economic life. The before-the-act implication of the partners is a condition for ownership of decisions, acceptance of measures to take. This is particularly crucial with regard to the definition of a real intersectoral adaptation strategy to climate change.

Regarding transboundary basins, national legal and institutional frameworks should allow for the application of these principles in each country and in the transboundary basin. They should especially facilitate transboundary cooperation including the representation of users and facilitate conflict management and peaceful settlement in a sustainable manner for all.

Whatever the national or transboundary level, it is necessary that the decision be based on objective grounds, understandable by all. Stakeholders' participation requires access to information on the status and evolution of water resources and uses. The Water Information System when properly constituted, enables the appropriate dissemination of data and information on basin waters and practices, and gains the trust of partners.

Furthermore, it should establish inter-sector bridges that facilitate the exchange of information and experience between professionals and the institutions responsible for surface and ground water, as well as the coordination of actions in each basin. In this sense, non-specialists in water in the sectors, having an impact on water, should be able to participate in the discussions initiated by the basin committees.

Finally, significant means should be devoted to public awareness and participation, including women and youth, as well as to the training of their representatives in decision making. We find this kind of participation in the organization of large public discussions, local public forums, or wide consultation. Many working groups and advisory committees or knowledge groups (epistemic communities) also allow representatives of the civil society and users to extensively participate in the consultation process and can help reduce the threat linked to uncertainty.

## **CONCLUSION**

While water resources are already a limiting factor for sustainable development in many countries of the world and while the impact of global and climate change will worsen the situation, improving the governance and management of water resources appears more than ever a priority, both at the country level and at the level of transboundary basins.

Achieving the new Sustainable Development Goals of the United Nations set in 2015, (poverty, zero hunger, good healthy, clean water and sanitation, clean energy, fight against climate change, aquatic life) necessarily requires an unprecedented mobilization on water resources management, as this resource increasingly scarce is fundamental to economic, social and environmental development of the planet

A political and citizen commitment, accompanied by viable institutional and economic instruments, is essential for humanity to win the water battle, now and for the future.

Water management in the basin, when supported in the long term by a strong political will, allows considering realistically the necessary measures for adapting water management to the effects of global and climate changes, beyond academic discourse, through the establishment of a suited institutional and financial framework.

This is why INBO is continuing to participate in international events and to offer its basin management expertise to international institutions and future international projects.

INBO intends to offer the active contribution of all its members for the improvement of water governance respectful of the national specificity and provide practical responses for adaptation to the effects of global changes in national and transboundary basins, by building the participation of the civil society and youth in decision-making and management processes.

With their practical field experience and the positive results already achieved, they want to convince and mobilize policy makers and all their fellow citizens that we must bequeath to our children and grandchildren a "Blue Planet" where water is pure and sufficient in the basins around the world.

Unanimously approved in Merida in Mexico on 03 June 2016