“Best Practices from European and French River Basin Management: High Points of French Water Cooperation in Asia”

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Floods, shortages, pollution, wastage, destruction of ecosystems: the seriousness of the situation in many countries requires that comprehensive, integrated and consistent management of water resources is implemented urgently to preserve the future and the human heritage.

Worse, freshwater resources will be also directly affected in the coming years by the consequences of climate change.

Quick action will allow reducing costs and damage. Cooperation between countries will facilitate and speed reforms which are needed everywhere and are real development opportunities.

**In particular, Integrated water resources management at the level of rivers, lakes and aquifers basins is obviously essential worldwide, as they are the natural territories in which water runs on the soil or in the sub soil, whatever are the national or administrative boundaries or limits crossed!**

**Significant progress has already been made:**

River basin management experienced a quick development in many countries, which made it the basis of their national legislation on water or experimented it in national or transboundary pilot basins.

It is now widely recognized that water resources management should be organized:

1) **on the scale of** local, national or transboundary basins of rivers, lakes and aquifers, as well of their related coastal waters;

2) **with the participation in decision-making of** the concerned Governmental Administrations and local Authorities, the representatives of different categories of users and associations for environmental protection or of public interest. Indeed, this concerted participation will ensure the social and economic acceptability of decisions taking into account the real needs, the provisions to be acted upon and the contribution capabilities of the stakeholders in social and economic life.

3) **based on integrated information systems,** allowing knowledge on resources and their uses, polluting pressures, ecosystems and their functioning, the follow-up of their evolutions and risk assessment. These information systems will have to be used as an objective basis for dialogue, negotiation, decision-making and evaluation of undertaken actions, as well as coordination of financing from the various donors;

4) **based on management plans** or master plans that define the medium and long-term objectives to be achieved;

5) **through the development of Programs of Measures and successive multiyear priority investments;**

6) **with the mobilization of specific financial resources,** based on the « polluter-pays » principle and « user-pays » systems; by looking for geographical and inter-sectoral equalizations to gather the necessary amounts;

Legal and institutional frameworks should allow the application of these six principles in each country and at the regional level.
Cooperation between riparian Countries should be strengthened in particular for good management of transboundary rivers, lakes and aquifers.

**In these regards, experiences and knowledge acquired in Europe could be share with all other interested countries.**

**In France,** in particular, solutions that have been found for almost 50 years, since the national Law of 1964, updated in 1992 and 2006, provide the opportunity for all the partners involved in water management and utilization to act in concert, in the interest of all concerned.

The French national territory has been divided into six large “River Basins”:

- Adour and Garonne,
- Artois and Picardy,
- Loire and Brittany,
- The Rhine and the Meuse,
- The Rhone, the Mediterranean Sea and Corsica,
- Seine and Normandy.

Water Policy is defined by the State, in partnership with all local Communities and users - industrialists, large regional developers, farmers, suppliers, fishermen and fishfarmers, associations for the protection of nature - associated at every level, with a view to organize a global management of the resource, so as to ensure the optimal satisfaction of all requirements, while respecting aquatic ecosystems.

**Dialogue is institutionalized at national, basin and local levels:**

**At national level,** the **National Water Committee,** chaired by a member of Parliament, is composed of representatives of the National Assembly and the Senate, and of important institutions and national federations involved. It is consulted on the trends of the national water policy and on drafts of legislative and regulatory texts.

**at the level of each of the six large river basins,** the **River Basin Committee**, chaired by a local elected official, plays a fundamental role as regards trends and incentives:

- It prepares and adopts the **Masterplan for Water Development and Management** (SDAGE), which fixes for each basin or group of basins, the fundamental trends for a balanced, quantitative and qualitative water management.

- It is consulted on the rates and bases of water charges levied for water withdrawals and discharges. It is also consulted on the priorities for the Water Agency’s 6-year action programmes for its basin.

**at the level of tributaries and sub-basins,** a **Local Water Commission** prepare and follow up the implementation of the local **Water Development and Management Scheme** (SAGE).

Whether it be for surface or groundwater, the State Administrations authorize and control concessions for the use of watercourses and falls, water withdrawal for various uses, wastewater discharges, etc....
Within the framework of the Water Law of 1964, a “Water Agency” was set up in each of the six river basins as an administrative public establishment endowed with a civil status and financial autonomy.

The aim of these agencies is to facilitate the various actions of common interest to the basin...

Their competences are:

- financial contributions in order to complete the construction and operation of structures which meet the requirements determined by the River Basin Committee,

- surveys and research on water, that they can undertake or subcontract.

The Agencies’ resources are founded on the application of the “user-polluter-pays” principle. This led them to levy water charges on withdrawals and discharges from all users who affect water quality and modify water regime.

The rates applied for calculating charges are determined for each Agency with the agreement of the River Basin Committee, in order to balance priority action programmes. They are geographically modulated, according to priorities and to the quality objectives defined by the River Basin Committee.

The organization of needed data and information production and management has been progressive and is concentrated at present within a coherent National Water Information System.

In France, the organization of potable water supply services, waste and storm water collection and treatment is under the responsibility of municipalities or groups of communities.

Since the decentralization laws of March 1982 and January 1983, the operational role of the State in the field has been limited to water law enforcement (withdrawal and discharge authorizations), and to guarantee public health and safety.

Local communities may, either entrust the management of their water supply services to a specialized private company or directly manage them by way of a Water Authority.

Public services for water supply and sanitation are of an industrial and commercial nature: they must balance their budget, using water tariffs, regarding income and expenditure, whatever the management method chosen.

The European Union Water Framework Directive (WFD) lays down an objective of good status in the national or international Water Districts of the 27 current Member States and the Countries applying for accession to the European Union.

This Directive of 23 October 2000 intended proposing for the water European Community policy and to the Member States « a transparent, effective and consistent legislative framework ».

It consequently reorganizes the European water policy with the objective of long term protection of the aquatic environment and water resources.

Therefore, the challenges are both simple and very ambitious:

- stopping the deterioration of water resources,
- reducing the discharges of substances,
- and achieving a « good status » for water and aquatic environments.

The Directive proposes an overall approach, with a precise timetable, methods and a progressive development of the tools.

The Water Framework Directive plans for a similar system to the one that has been existing for several decades in France or in Spain, with the determination, on the scale of each large river basins, or districts, of « Management Plans », defining the objectives to achieve, and of « Programs of Measures », defining the necessary actions up to 2021.

Indeed, the Directive clearly stipulates that the water stakeholders must actively participate in all the steps of the successive Management Plans formulation.

The Directive concerns all the environments: rivers, lakes, groundwater, coastal water, etc. It asserts the principle of wholeness of the water resource.

It introduces obligations of results.

Incentive, the Directive makes pricing a tool for action and contributes to the achievement of the environmental objectives. It combines the necessary financing of the infrastructures and water utilities with a strategy of mastering demands with an incentive to water saving or to pollution removal at the source.

The Directive firstly has required the identification of « Water Bodies », i.e. homogeneous aquatic bodies. Quality indicators and reference values of the « good status » have been defined for each type of « Water Bodies » enabling the comparison between Member States. Inter-calibration procedures are also planned for to calibrate the data provided by the Member States.

As regards groundwater, a Directive for the implementation of the Framework Directive (called « Daughter Directive ») specifies concentration limits for pollutants to achieve « Good Status ».

**French cooperation in Asia:**

This French experience, and now its extension through Europe by the Water Framework Directive, should not be regarded as a model, but, due to its precedence and results, could inspire authorities of other countries to set up diversified organizations, adapted to meet their local needs.

**The Mekong-HYCOS project** has been developing since 2006, with the support of the French Development Agency (AFD) and French Global Environment Facility (FFEM).
The main target of Mekong-HYCOS is to ensure the availability of hydro meteorological data on the basin, both at the MRC Secretariat and in the four Member States (Cambodia, Laos, Thailand and Vietnam).

49 hydrometric stations are now complying with HYCOS standards and a data management system is operational and accessible through the MRC portal.

**In Viet Nam, the Dong Nai Basin pilot project**, funded by the French Loire-Brittany and Seine-Normandy Water Agencies, as well as by "FASEP", was structured under the Cooperation Agreement, signed on 6 June 2007 by the French and Vietnamese Ministers in charge of the Environment.

In this context, nearly 200 men/days of training on the integrated water management process, with the establishment and operation of Basin Organizations, were given by experts from the French Agencies and IOWater to the Vietnamese executives.

Methodological support to water data management and to the strengthening of measurement networks was also provided.

Finally, a first Management Plan covering the entire river basin has been prefigured as well as the preparation by the Vietnamese Ministry of Natural Resources of documents for establishing a pilot Basin Organization in the Dong Nai Basin.

**The Lao Government is pursuing a proactive policy in this area, The pilot Nam Ngum River Basin project, launched last year, aims to support it in this process.**

Seven assignments have already been carried out by experts from the French Loire-Brittany and Rhine-Meuse Water Agencies and International Office for Water, which is in charge of coordinating the project, in close relation with the Secretariat of the Nam Ngum Basin Committee and the Department of Water Resources of MONRE.

Efforts are focused on the definition of actions to be implemented, their location and cost estimate and on the study of potential sources of funding.

At the same time, thinking on the functioning of the Nam Ngum Basin Committee, created late 2012 by decree of the Prime-Minister, was completed.

**In Cambodia, a pilot project was launched in 2012 in the Stung Sen River Basin, main tributary of the Tonle Sap Lake.** The Tonle Sap Authority (TSA) is the partner in this project.

The project, whose kick-off seminar was held in October 2012, will allow building the capacities of the TSA, the Ministry of Water Resources and Meteorology (MOWRAM) and of its representations in the Provinces and Districts to make it possible and to support:

- The technical and methodological strengthening of the Cambodian institutions and stakeholders involved in water resources management;

**In China, the Hai River Basin was selected to develop a pilot 4-year project.**
It especially aims to test the application in China of some mechanisms for basin management, water pollution control and ecosystem protection, used in France since the 1964 Act, which created the Water Agencies.

The first phase of the project (April 2011/March 2012) contributed to the development of a mutual understanding of the functioning of basin institutions and of the procedures and means they use in France and China.

The second phase of the project (October 2012/October 2015) will mainly focus on the Zhou River sub-basin, where an assessment of the resource, an in-depth legal and institutional analysis of water management, the establishment of an operational coordinating group inspired from the French Basin Committees and adapted to the local context, and the development of a Management Plan for the sub-basin will be tested.

France is also supporting the International Network of Basin Organizations – "INBO", of which headquarters are located in Paris and which is now regrouping more than 200 organization- members in 72 Countries around the World.

INBO is a non-profit association, which has the following objectives:

- to develop lasting relations between the organizations interested in, and favor exchanges of experiences and expertise among them,
- to promote the principles and means of sound water management to reach sustainable development,
- to facilitate the implementation of the suitable tools,
- to promote information and training programs,
- to encourage education of the population,
- to evaluate on-going actions and disseminate their results.

The network relies on its members’ willingness to work together. The following legal entities may be members of INBO:

- “basin organizations”, indeed,
- the governmental administrations interested in applying “IWRM.” at basin level,
- bi and multilateral co-operation agencies supporting activities related to “IWRM.”.

INBO members, belonging to the same geographic region, may create their own “BO Regional Network”. In Asia it is cooperating with NARBO, but some Asian Basin Organizations are direct INBO Members.

All INBO activities are open to all interested water organizations around the World.

To Conclude:
Integrated and sound water resources management is more than ever a priority when this scarce resource is already a limiting factor for sustainable development in many countries of the world.

Mobilization is essential for humanity to win the water battle and prepare the future. Organizing this management on a basin scale is an effective solution which deserves to be developed, fostered and supported.

France intends to actively contribute to the efforts for better Basin management and for adapting to the effects of climate change.

Investing in water management is profitable! This produces immediate advantages but also creates a social, economic and environmental strength in the long term.

French water and basin organizations have experience and expertise which they intend to pool at the disposal of all the countries and institutions which would like to follow them in an effective basin management approach.

Thank you for your kind attention!

www.iowater.org
www.inbo-news.org