

GENERAL ASSEMBLY MARCH 27-29, 1996 MORELIA (MEXICO)

INFORMATION NECESSARY FOR DECISION-MAKING

RECOMMENDATIONS

The representatives of administrations in charge of water management and of basin organizations -established or in the process of being so- of 40 countries, together with the international cooperation agencies concerned, gathered in Morelia (Mexico) on the 28th of March 1996, within the framework of the International Network of Basin Organization's General Assembly. Their aim was an exchange of experiences and a reflection on the best means of access to the «information necessary for decision-making» in the water sector.

In order to attain an overall management of water resources, at river basin level in particular, they emphasized the prime importance for decision-makers (Directors of River Basin Organizations and Administrations, Basin Committee members, representatives of the Local Authorities and associations of users) to have easy access to complete, representative and reliable information on the following :

- * the state of surface and groundwater resources, from both a quantitative and a qualitative viewpoint, also the seasonal and yearly fluctuations,
- * the situation concerning biotopes and the aquatic media and their degrees of sensitivity,
- * water utilization (withdrawals) and particularly, drinking water supply for population and pollution sources (discharges) whether point or non-point,
- * the risks of recurring extreme phenomena such as floods or drought and accidental pollution.

It was established that this information is often dispersed, heterogeneous and incomplete ... and that it is rarely comparable and adapted to the prerequisites for objective decision-making. Moreover, it is a fact that public, para-public and even private organizations can have access to this information but lack of sufficient means for exchanging, gathering, standardizing, summarizing and for capitalizing it amongst them. The participants recommend that, in each situation and considering all the national and local characteristics, special reflection should be devoted to the organization of the prime contracting of monitoring networks and data banks, to financing, as well as to a suitable role for specific basin organizations with regard to other possible actors.

It is absolutely necessary to examine the :

- * nature (parameters , indexes, integrators, frequency, representativity, standards) of useful information,
- * means used for collecting, monitoring and analyzing, as well as for controlling the quality of data produced, of their transmission (in real-time, when necessary, for major risks forecasting) and for their storage,
- * forms in which information should be made accessible to decision-makers (data banks, reports, maps, diagrams, ...) or to technicians and scientists,
- * broadcasting and circulating means (tele-processing, publications, diffusion to the general public, ...),

Real and complete «systems» must be designed and used to assess the resource and uses, especially regarding quality, and organized to constitute global observatories. The exact definition of each actor's role as well as the question of financing and its

continuity is of prime importance.

Gathering this information, requires a complex and consistent organization of monitoring networks, analyses laboratories, data transmission and their checking and monitoring, management of data banks, their accessibility and their «products». For this, permanent means must be made available and their optimizing ensured, in order to obtain at minimum public cost, all the relevant information, limiting this however, to the strict necessary.

It should be pointed out that if investment costs for obtaining appropriate information (stations, laboratories, tele-transmission, automatization ...) are high, the qualification of intervening experts (training) and the functioning and operating costs are, by far, at medium and long-term, the most important and recurring items of expenditure. Thus, it appears unreasonable to invest without ensuring positive means for optimum and continuous functioning of the systems over a long period of time which, of course, requires substantial, appropriate and unceasing financial resources.

It is important to avoid using highly sophisticated tools that favour the use of advanced technologies to the detriment of a real reflection on a suitable organization and of using simple solutions that are most often very efficient. Information systems only operated when able men are responsible; satellite links, models, automatic analyzers, etc... are only there to facilitate the task of the services not to be used instead. The solution is never to use technological gadgets.

Moreover, if the information is to be useful, it must not remain in the form of raw data, but be retrieved in the form of easy-to-understand data which can be handled by all the different categories of users.

The information must be organized according to requirements, whether it be for the study of a « white book », master plans for water management and development, for action programmes, budgetary simulations or the basis for water charges, for delivering administrative authorizations or studying projects, for regulation of public works, warning systems or even for informing the general public ...

In addition, if the data is to be utilized, it must be made available in the most appropriate forms.

If it is generally considered that Public Authorities must be the contracting authorities for monitoring networks and associated information systems and that from then on, access to them must be open and free for the various users. However, due to additional costs for processing and circulating the information, it would appear quite normal that the processed data be paid for.

Information systems on shared rivers and aquifers would gain by being designed in a consistent and global manner at the scale of the whole catchment area, within the framework of agreements between riparian countries.

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To conclude, the participants of the INBO General Assembly held in Morelia, recommend that concerned Public Authorities and bi- and multi-lateral cooperation agencies supporting projects related to water resources management and utilization :

- consider that setting up complete information systems, corresponding to the above-mentioned specifications, is a prerequisite,
- precise clearly which institutional bodies are responsible for the permanent organization and operation of such systems,
- guarantee not only sufficient means for corresponding investments, but also the compulsory financial techniques which will secure their long-term continuity,
- encourage the development of means and specific engineering proficiency in this field.
- support the works that aim at defining common standards and nomenclatures for data administration in order to exchange, compare and summarize the information between partners at all relevant observation levels,
- promote the setting up of observatories for water resources and their use at river basin level, should these basins be national or transboundary, and the

organization of national and coherent information systems with these basin observatories.