Conference Report

Workshop on Innovative Approaches for Water Management

Mexico City, 29-30 October, 1999

Water has become one of the most critical resources for long term sustainable development in the world as a whole, Mexico not being an exception. It is now clear that water cannot be considered as an abundant good with no value from the social, economic and environmental viewpoints. Water management is increasingly becoming a more complex and expensive task due to increasing population growth and its increasing demands on water for domestic and industrial uses, as well as agricultural production and power generation. Furthermore, the increase in population and economic activities will result in increase of solid and liquid wastes, which, if not properly managed, will bring increasingly pollution of surface and ground waters. Experience has shown that the present traditional approach for water resources management, which considers mainly technical solutions, has been overwhelmed by problems of pollution, scarcity and conflicts for ownership of water resources. The main challenge in the future years would be how to maximize the positive impacts of water-related projects and minimize the negative ones in all social, political, economic, environmental and cultural aspects.

With the objective to analyse these complex relations and discuss better alternatives for management of water resources, the Autonomous Metropolitan University in Xochimilco, the Third World Centre for Water Management and the Mexican National Committee of International Water Resources Association co-sponsored a seminar on innovative approaches for water management in Mexico City, 29 and 30 October 1999.

Participation to the seminar was open to public and private organisations, NGOs and public interested on water management-related issues. Fifteen papers were selected for presentation and discussion. The presentations included aspects on development of scenarios, instruments for planning and economic issues, integral management of natural resources, project evaluation, environmental education and case studies on technical, economic, social, environmental, legal and institutional aspects of water resources development.

Some of the papers of the seminar directly and indirectly emphasized the lack of qualified human resources who can approach water resources management from an integral viewpoint. Research centres as well as universities develop “experts” with the traditional disciplinary, sectoral and disarticulated approaches, which unfortunately fit well within the jobs offered by both the public and private sectors. The rapidly changing conditions and present and future problems related to water resources management require professionals which are capable to handle both management and planning of resources from an integral viewpoint, to interact with experts of different disciplines, as well as with the necessary vision to detect and face the different scenarios at the

national, regional and local levels. In order to achieve this goal, universities located in the north-western part of Mexico are working jointly with Canadian universities on development of post-graduated programmes which will allow the professionals to analyse water-related problems from the political, social, economic, environmental and cultural perspectives. It has also been developed the so-called "Networks of water" which have taken advantage of information and communication technologies, like internet, to develop fora for discussion and exchange of information. Through these networks, it is expected to improve one of the most acute problems in Mexico: lack of data and information.

The management of water resources has been controlled so far by the engineering profession, with a main focus on technical and financial solutions and with very few contributions from experts on natural and social sciences. However, the complexities of the problems related to water resources management, mainly from the social viewpoints, demand a holistic perspective in the management of water. Traditionally, social participation in the development and implementation of projects has been very limited, with the decisions taken at the governmental level with no consideration of the local populations. Experiences at the rural level have demonstrated that the success of specific water projects depends on the acceptance of the people towards the project, their direct participation in all stages of the projects (including administration aspects), economic benefits, and improvement in their quality of life. Thus, in order to ensure long-term sustainability of water projects, participation and decision-making should be encouraged at the local level and not only taken by the top-most governmental levels, where many needs and alternatives are simply unknown.

The traditional approaches on economic issues have generally been on the immediate financial resources needed mainly for the development of the projects. Future needs are only partially considered, mainly on projects for rural areas. This lack of consideration for further issues others than immediate financial resources, like market tendencies, has resulted in the repeated failure of projects, with the consequent lack of interest of the communities in any further participation. Success of projects in the long-term and improvement in the quality of life of the population, requires broader financial considerations which ensure the economic success of the projects so that the populations involve has benefits and incentives and takes financial responsibilities. The governmental agencies would then secure those funds for another development projects.

In the case of Mexico, the administration of the water resources relies on the federal government. However, it is clear that the federal entities have not been able to implement their functions fully, with the consequent increasingly lack of services. Clearly, the best alternative for a better management is decentralization, which has so far been unsuccessful, mainly because the state governments have not been able to take full responsibilities of the administration of the resources, and because of the excessive control from the central institutions. Problems should be solved at the same level in which they are generated, the roles and attributions of the levels of government should be decided, and as much participation as possible of the population should be encouraged, with the government establishing the regulatory frameworks but delegating responsibilities at the different levels.

A country with hundred million users of water should have an effective management for the resources of the country, which relies on a proper administration, the re-assignation of roles for the different levels of government, promotion of informed social participation in the sectoral decisions

and understanding of the fact that the challenge implies a joint work between government and society. Mexico has simply no other option.

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