



## **Conference Report**

### **Second Asian Conference on Water and Wastewater Management**

*Teheran, Iran, 8-10 May 2001*

The Second Asian Conference on Water and Wastewater Management was convened in Teheran, Iran, 8-10 May 2001. In his opening statement, President Mohammed Khatami of Iran pointed out that over the long term, peace and security of the Middle Eastern countries, where already serious water crisis exists, will be influenced by the mechanisms to solve the water problems of the region. The performances of the governments to solve the water problems will determine the levels of economic and social development of the region. The President pointed out that despite the serious attempts made in the past, depletion and destruction of water resources are continuing unabated in many places. It is not enough to raise public awareness of the water crisis: actions must be taken to confront the existing and future challenges so that the welfare and security of the future generations could be assured. The President urged the development of suitable mechanisms for enhanced regional cooperation to ensure greater transfer of technology, experience and knowledge to solve the multifaceted water problems.

In an address to the Conference, Minister of Energy, Mr. Bitaraf, pointed out the Iranian Constitution stipulates public ownership of water resources. The ministry of Energy is responsible for the provision, development and protection of water resources, as well as for urban water supply and wastewater management systems. The Ministry of Agriculture and Jihad are responsible for rural water supply and wastewater disposal.

The following three are the basic principles the Iranian Government is following:

- construction of necessary infrastructures to ensure availability of good quality water and proper wastewater disposal services for each citizen of the country;
- handover of management to NGOs, and encourage more public participation; and
- privatisation of water supply and wastewater services to create suitable environment for fair competition, increased investments, and better quality of services.

Minister Bitarak also promoted the need for demand management, which has not received adequate attention in the past.

In his key-note address, G.R. Manoochchri, Deputy Minister of Energy for Urban Water and Wastewater Affairs, said water has always been considered to be important in Iran. For example, Herodotus noted that “the Persians do not allow anyone to pollute water, and they respect it highly.” However, as the population of the Middle East has doubled over the past 30 years, and it is estimated to reach from the present 270 million to 500 million over the next thirty years, the

region's limited water resources are under unprecedented threat. The negative water balance of the region is estimated at 17,000 MCM per year, of which Iran alone contributes to 5,000 MCM. Desalination has been practiced in Iran since the 1950s. It is estimated that desalination capacity will increase from 2300 in 1996 to over 3000 MCM by 2020.

Mr. Manoochehri noted that investments in the wastewater sector have been inadequate in the past, mainly because it received little attention. Furthermore, existing installations are not properly maintained and operated. These two factors have seriously affected water quality. He pointed out the importance of regional cooperation to improve the existing water management practices significantly.

In a second key-note address, Prof. Asit K. Biswas said that water management practices are likely to change more during the next 20 years compared to the past 2000 years. Unlike the past, many of these changes will be driven by factors outside the control of water profession, like globalisation, technological advances in areas like biotechnology and desalination, and information and communication revolution. These are issues to which the water profession has given scant attention in the past.

Most of the important advances in water management practices are now occurring in the field (in contrast to academia in the past), and in developing countries like Brazil, China, India and Turkey. This is not surprising since major water development projects have generally not been constructed during the past two decades in the United States or Western Europe, but in Brazil, China, India, Iran and Turkey. However, these advances in developing countries are generally not well-known, many times even within the country itself. He thus recommended that the Teheran Conference be made the main venue for technology, knowledge and experience transfer between developing countries on a regular basis.

The Conference considered seven main topics for discussion. These were on water crisis: effective factors and consequences, trends in water sector structural and managerial changes, demand management, financial resources and water sector economy, technological developments in water and wastewater industry, health and environment, and regional and international cooperation. The Conference thus covered a wide ground, with important contributions by the foreign and the Iranian participants. It was very well-organised, and the hospitality of the organisers was simply overwhelming.

At the end of the Conference, the participants unanimously approved the following Declaration.

## **TEHERAN DECLARATION**

2nd Asian Conference on Water and Wastewater Management  
8-10 May 2001

We, the participants of the 2<sup>nd</sup> Asian Conference on Water and Wastewater Management, held in Teheran, Islamic Republic of Iran, during 8-10 May, comprising of 1600 individuals

from 39 different countries, firmly believe that freshwater is indispensable for human survival, and is an essential requirement for sustainable development.

We further believe that appropriate quantity and quality of water must be available at reasonable costs to satisfy various human needs and activities, and for ecosystem conservation. Accordingly, water resources of each nation must be managed efficiently, equitably and sustainably for all human uses and environmental needs.

We stress that the foundation of rational water and wastewater management should be based on the conclusions and recommendations of the United Nation Water Conference held at Mar del Plata, Agenda 21 of the Earth Summit of Rio de Janeiro, and the report of the World Commission on Water. However, progress in implementing these recommendations have been painfully slow so far, and thus must be significantly accelerated.

We are also concerned with the deterioration of water quality, continuing depletion of groundwater, and the lack of adequate investments which is making rational management of water quantity and quality difficult, especially in developing countries.

We believe firmly that the efficient management and the rational development of water resources are important means to an end: the end being poverty alleviation, employment generation, sustainable regional development and environmental conservation. For the Asian countries, storages works are essential to account for high variations in intra-annual and inter-annual precipitations. Properly planned and managed storage works will ensure reliable water availability for all purposes on a regular basis. These objectives can only be achieved by forming functional partnerships between government agencies, other public sector institutions, private sector, NGOs and people, within overall policy and regulatory guidelines formulated by the governments.

Many important issues were discussed at the Conference. The participants wish to stress the following:

- At the national level, the budget available for water and wastewater management needs to be increased very significantly so that needs of the present and future generations can be met successfully. At the household level, people have to be made aware that water is not a free commodity, and they should be prepared to pay more for water and wastewater services. In this connection, the needs of the poor should be properly addressed, with appropriately targeted subsidies.
- For each river basin, long term water management plans should be prepared, with due consideration of integrated water management principles, future demands for all purposes, including ecosystem conservation, and sustainability of water resources in terms of quantity and quality.
- Developing countries are becoming increasingly urbanised. For all urban centres of more than 200,000, long-term development plans should be formulated for provision of good quality drinking water and collection, treatment and disposal of wastewater and urban

runoff, with special emphasis on protecting the quality of groundwater and surface water within and around them.

- The efficiency of management of all water resources systems must be significantly increased. For municipal water supply systems, priority should be given to reduce the current losses due to leakages and for unaccounted use. Equally, losses from the irrigation systems should be reduced.
- The present capacities of public and private sector institutions; industries; research, development, and training institutions; and NGOs must be significantly improved.

Emphasis must be given to capacity building and institutional strengthening, with special consideration of the needs for the future.

- All activities related to the water sector, ranging from policy making to institutional development, financial mobilisation and capacity building, both within and around the sector, must be managed systematically and holistically within an overall approach of project management.

Establishment of a regional centre on urban water management in Teheran is most desirable. Such a centre should give priority to the solution of regional water and wastewater management problems. Such a centre should be established as soon as possible.

We further believe that knowledge, experience, technology transfer between developing countries is absolutely critical so that we can learn from each other as to how best to develop and manage our water resources in a cost-effective and sustainable manner. Unfortunately, however, no mechanism currently exists where the latest advances and experiences from various developing countries could be reported, reviewed, and assessed on a regular basis. The first and the Second Asian Conferences on Water and Wastewater Management have played important roles in facilitating South – South knowledge transfer.

The participants thus respectfully request the Iranian Ministry of Energy to consider the possibility of making the Teheran Conference on Water and Wastewater Management a regular event, which could be organized every second year at specific time. Iranian Association of Water and Wastewater Experts (IAWWE) could be given the overall responsibility for the coordination of the organisation of these Conferences. The major international water associations and institutions could be requested to co-sponsor these Conferences, and also to provide appropriate funding support. An International Scientific Programme Committee could be formulated under the chairmanship of H.E. G.R. Manoochchri to formulate a long-term strategy to ensure the success of the proposed Conferences, and also to initiate the process to organise the next.

The participants wish to express their sincere appreciation to the Ministry of Energy, Government of the Islamic Republic of Iran, and H.E. G.R. Manoochchri for organizing an outstandingly successful Conference.

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