

## **Conference Report**

## Workshop on Water-based Development Projects: Global Experiences Sanliurfa, Turkey, 8-11 November, 1999

The President of the Southeastern Anatolia Project (GAP), Dr Olcay Unver, with the collaboration of Prof. Asit K. Biswas, Chairman of the Committee on International Collaboration, International Water Resources Association (IWRA) and the President of the Third World Centre for Water Management, convened a Workshop on Water-based Development Projects: Global Experiences, in Sanliurfa, Turkey, 8–11 November, 1999. Among the eminent personalities who participated in the workshop were Prof. Benedito P.F. Braga, President of IWRA; Prof. George Verghese, Centre for Policy Research in Delhi; Naser Bateni, California Department of Water Resources; Prof. Yutaka Takahasi, University of Tokyo; Claude Salvetti, French Water Academy; and Prof. Fang Ziyuan, Yangtze Water Resources Protection Bureau.

The objective of this workshop was to assess the impacts of selected important water resources development projects in the world, especially in terms of their overall impacts at the regional level. Global experiences of water-driven regional developments were presented, and the case of the Southeastern Anatolia Project (GAP) was analysed in depth. The programme of the Workshop was very well structured and the discussions were both intensive and extensive. Presentations included experiences of major water development projects in the world: present situation of river management in Japan; the history, planning and development of the Three Gorges Dam on the Chang Jiang, China; the Sardar Sarovar project, India; environmental, social and economic impacts of the construction of the Ataturk Dam; Californian experiences of water-based development; Brazilian experiences of water transfer; French experiences of river basin management; and the North Sinai Development project in Egypt.

Water resources development is a means to an end, the end being improving the quality of life of people and protecting the environment. All the papers at the workshop directly or indirectly emphasized this issue. Regrettably this fundamental objective of water development is often not well understood by society as a whole. Not surprisingly, there is at present an intensive global movement against the construction of large dams and water infrastructures, and for technical solutions. Currently, the opponents deny that the dams have any positive socioeconomic benefits. So far, the water profession has only reacted to the agenda set up by these activist opponents. It is high time the water profession established its own agenda for global discussions, instead of reacting to some other group's agenda. The Sanliurfa workshop was a positive step in this direction, where the water profession for the first time objectively discussed

the benefits and costs of major water development projects in terms of improvements in the standard of living of people and preserving the environment.

The GAP project, an integrated regional development project in south-eastern Turkey, has already contributed to the improvement of the economy and the lifestyle of the population living not only in that region, but also in the country as a whole within a period of only a few years. The project includes 22 reservoirs and 19 irrigation schemes from the waters of the Euphrates and the Tigris rivers. The GAP considers all sectors of development including agriculture, industry, transportation, housing, rural and urban infrastructures, health, education, tourism and the environment. Some aspects of the projects that are under implementation are regulation of water in irrigation canals; management, operation and maintenance of irrigation systems; recycling of urban wastewater; development plans and infrastructure projects in the region; regional environment study (Tigris basin); agricultural research and development projects; participatory urban zoning and planning, participatory resettlements as a result of the construction of reservoirs; establishment of multipurpose community centres for women; etc. Some indicators of the improvement in the lifestyle of the population in the area of the GAP project are literacy (increased from 55% in 1985 to 67% in 1997); infant mortality (decreased from 111 per 1000 in 1985, to 62 per 1000 in 1995); landless population (from 40% in 1985; to 25% in 1997); rural and urban water supply (from 57% and 15% to 67% and 57%, respectively), decrease in outmigration and very significant improvement in the regional economy.

Opposition and misinformation on major water development projects such as the Sardar Sarovar, Three Gorges and Aswan Dams were reviewed. Misinformation, ignorance and manipulation by groups whose overall interests could be threatened by these dams have disseminated erroneous information to the world on their overall costs to the people and the environment. These activist groups do not consider the substantial benefits to society due to the construction and operation of these projects. For example, owing to widespread misinformation, many people in the world now believe that the Aswan Dam is an environmental and economic disaster. However, the truth is the Aswan Dam has been the backbone of Egypt's socioeconomic development in recent decades, and without this project the lifestyle of the Egyptian people would have been significantly worse than it is today. Regrettably, this important fact is not very well known in the global arena at present.

Sardar Sarovar in India is one of the dams which has aroused the most controversy in recent years. While the dam has been accused of exterminating the indigenous population and devastating the environment, not much has been mentioned concerning the resettlement process that was initiated some 10 years ago, and which has significantly improved the lifestyle of the resettled people in terms of income, literacy, health facilities, etc. The contributions of the Sardar Sarovar project in improving the economy and lifestyle of the region are likely to be very substantial. For such mega-projects, it is essential that every attempt is made to maximize their positive impacts and minimize the negative ones so that the overall benefits to society and the environment are significantly higher than the costs.

As Dr Unver, President of GAP, emphasized, "water resources development of this size [GAP] is bound to have effects and implications that go far beyond irrigation-related activities, touching every facet of life and involving all social

and economic sectors. On-farm development, farmer training and extension programmes, agricultural input provision, credit and marketing arrangements, agro-processing, related rural infrastructure, operation and maintenance of the extensive irrigation system, environmental protection, presentation of historical and cultural heritage, social attitudes and expectations are some of the issues that need to be addressed in the water sector."

The experiences from countries such as Brazil, China, France, the USA and various Turkish projects were also reviewed. The most impressive aspects of the workshop were the authoritative nature of the papers, intensive and extensive discussions during and outside the workshop sessions and the incredible hospitality of the GAP. By restricting the number of participants to some 25 selected invitees, ensuring the quality of the commissioned papers was high, and providing a very suitable environment within which the workshop was organized, GAP assured a memorable event, which others will be hard pressed to duplicate. The water profession needs more such well-organized events for advancement and dissemination of knowledge, which will be essential to solve the water problems of the 21st century.

The papers and results of the workshop will be published in the year 2000, with Olcay Unver and Asit K. Biswas as editors.

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