

Foreword



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The Kingdom of Saudi Arabia has an area of about 2.25 million square kilometres and a population of about 20 million. It is located within arid regions where water resources are limited. Groundwater resources, in addition to seawater desalination, are the major water supply sources for the increasing water demands in the Kingdom. Satisfying the future increase in water demands in the Kingdom cannot be resolved by continuous mining of non-renewable groundwater resources and expansion of desalination plants. Adoption of new technologies is essential to improve both demand management and supply augmentation, to optimize water allocation, to enhance wastewater treatment and recycling and to improve water conservation in the Kingdom. Professors and scientists at King Fahd University of Petroleum and Minerals and at other universities and research centres in the Kingdom have developed effective and novel technologies in different aspects of water resources management. These technologies have helped in achieving better water resources assessment, development, utilization, operation, control, and protection for industrial, agricultural and domestic sectors in the Kingdom. Examples of these technologies were presented in the Third Annual Water Conservation Workshop, which was organized by the University on 3–5 April, 2000 to celebrate the International Water Day as announced by the United Nations on 22 March every year.

We would like to express our appreciation and thanks to Professor Asit K. Biswas, the Chief Editor of the *International Journal of Water Resources Development* for devoting a special theme issue to: "Water Management in Saudi Arabia". This special issue contains eight selected technical papers, presented at the Third Workshop. The papers contain technical and advanced scientific research contributions of local and international concerns in the field of water resources

management. We hope that the dissemination of new technologies and the experience of Saudi Arabia presented in this issue will help in improving water resources management, and will benefit water specialists, researchers, engineers, and decision-makers in all countries especially in arid regions.

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