

Preface



HRH Prince Mohammed Bin Fahd Bin Abdulaziz

Most of the Kingdom of Saudi Arabia is located in arid regions, where water resources are limited. The country has experienced comprehensive developments, especially during the past two decades, in social, industrial and agricultural sectors coupled with rapid population growth and rise in standards of living. This has resulted in major and accelerated increases in water demands. The government has been expending great financial and technical efforts to cope with these increasing water demands, using seawater desalination plants to produce more than one thousand million cubic meters per year for drinking purposes, and developing wastewater collection and treatment. Presently, more than 98% of the population in the Kingdom receive clean drinking water at house level, and there are no records of child deaths due to polluted water. According to United Nations standards, this achievement exceeds that of several of the world's developed countries.

As the Kingdom enters the 21st century, it faces increasing challenges in

maintaining long-term and secure water supplies of suitable quality and quantity for satisfying the increasing demands for different purposes. Hence, new technologies and advanced scientific approaches are essential to improve both demand management and supply augmentation and to enhance wastewater recycling and water conservation.

Applied research in water resource areas and dissemination of advanced scientific knowledge and technologies are important means for achieving the above goals. Understanding this fact, and with continuous support and encouragement from the Government, scientists and researchers at King Fahd University of Petroleum and Minerals and other universities and research centres in the Kingdom have contributed effectively during the past two decades, through applied research, to the improvement of water management and conservation, and towards solving the immediate and long-term water problems in the domestic, industrial, and agricultural sectors. Their successful accomplishments and developed technologies in water research have gained recognition for their scientific excellence.

Since 1997, King Fahd University of Petroleum and Minerals has been organizing an Annual Water Conservation Workshop, where advanced water technologies in Saudi Arabia are presented and discussed to disseminate novel technologies and original research findings on local and international levels. I would like to thank Professor Asit K. Biswas, Chief Editor of the *International Journal of Water Resources Development* for devoting a special theme issue of the journal to: "Water Management in Saudi Arabia", to help in the dissemination of advanced technologies and knowledge of water management in Saudi Arabia on an international level. This issue includes selected technical papers authored by leading water specialists especially from Saudi Arabia. I hope that the technical articles published in this issue will help in improving water utilization and management for sustainable development throughout the world.

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