

## THE BUSINESS OF WATER AND SUSTAINABLE DEVELOPMENT

Edited by Jonathan Chenoweth, University of Surrey, UK  
Juliet Bird, University of Melbourne, Victoria, Australia

August 2005 | 234 x 156 mm | 277 pp  
Hardback | ISBN 1 874719 30 6 | £40.00 US\$75.00

\*\*\*\*\*

To place an order for this title at a discount of 10%, or to view the 'Introduction' by Jonathan Chenoweth, University of Surrey, UK and Juliet Bird, University of Melbourne, Victoria, Australia and the chapter 'Incorporating demand-side information into water utility operations and planning' by Steven Renzetti, Brock University, Canada online

please visit the Greenleaf website at:  
<http://www.greenleaf-publishing.com/catalogue/water.htm>

You can also request a review copy or inspection copy from this site - see the home page:  
<http://www.greenleaf-publishing.com>

\*\*\*\*\*

A RENEWED COMMITMENT to improved provision of water and sanitation emerged in the 2002 Johannesburg Declaration on Sustainable Development. Although many of the statements in the Declaration were vaguely worded, making it hard to measure progress or success, the Plan of Implementation of the Summit, agreed by the delegates to the conference, clearly stated that: 'we agree to halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water and the proportion of people who do not have access to basic sanitation'.

Given the United Nation's predicted growth in global population from 6.1 billion in 2000 to 7.2 billion by 2015, this commitment will pose formidable challenges. To meet it, by the end of just a decade and half, approximately 6.6 billion people will need to have access to safe drinking water supplies. This is more than the current population of the world, and involves not only maintaining existing levels of supply but also providing new or upgraded services to 1.7 billion people. The challenge for sanitation is equally daunting: 5.8 billion people will need to be serviced, including new access provision for 2.1 billion. Even if these ambitious targets are met, representing a major achievement for the global community, there will still be approximately 650 million people in the world without access to safe drinking water and 1.4 billion without sanitation.

What is clear from the is the magnitude of the problem facing the international community in terms of water supply and sanitation. Continuation of the status quo and the type of progress made during the 1990s will not permit the Johannesburg targets to be met. Instead it will be necessary to promote a combination of many different, new and innovative approaches, each of which will contribute towards the overall targets. These approaches must include technological advances that identify new sources and improve the quality of those already in use; managerial techniques that increase the efficiency and effectiveness of service delivery at

both micro and macro scale; and fiscal approaches that tap into additional financial resources to make improvements affordable.

In the past each of these aspects was seen as primarily the responsibility of government, which supported research into technology, managed supply and disposal systems and provided the funds to pay for them. This view has changed — beginning in the 1980s and increasing in the 1990s with growing moves towards privatisation of many aspects of the water sector. Underpinning this has been a shift away from seeing water as a public good that is essential for life, with subsidised supply provided as part of an overall welfare system, to a more market-oriented approach where the state, although still responsible for maintaining universal access to water services, uses market forces to meet this aim.

‘The Business of Water and Sustainable Development’ aims to illustrate the range of approaches that will be necessary if the percentage of the global population having access to adequate and safe water and sanitation is to be increased in line with the brave assertions from Johannesburg World Summit on Sustainable Development. Some of approaches will be large-scale ‘Western-style’ improvements involving the creation of new business models, their effectiveness assessed by traditional approaches of fiscal and social analysis. Such schemes may be instigated and partly funded by governments, but are increasingly turning to the private sector for money and expertise. In contrast, many smaller communities would be better served by following another path to improved water supply and sanitation. Because of their size, location or traditions they may achieve better results through the adoption of local small-scale solutions. Non-governmental organisations have been very active in this area, but to extend their operations many are seeking to adopt a more business-like model. All water supply and waste disposal agencies, large or small, need to support and encourage continued research into technological solutions that seek out better, more sustainable ways to use our increasingly scarce supplies of good-quality fresh water.

## TABLE OF CONTENTS

### \* Introduction

Jonathan Chenoweth, University of Surrey, UK

Juliet Bird, University of Melbourne, Victoria, Australia

### Part 1: General theory

#### \* 1. Incorporating demand-side information into water utility operations and planning

Steven Renzetti, Brock University, Canada

#### \* 2. The price of water: separating the natural from the optimal in water supply - ensuring the broadest community access to safe water

Daniel Terrill, ACIL Tasman, Australia

#### \* 3. Balancing the cost implications and benefits of compliance with advanced risk analysis

Davide Bixio, Chris Thoeys and Greet De Gueudre, Aquafin NV, Belgium

#### \* 4. Environmental management with the balanced scorecard: a case study of the Berlin Water Company, Germany

Carl-Ulrich Gminder, Institute for Economy and the Environment, Switzerland

## Part 2: Privatisation

\* 5. The private sector and service extension

David Lloyd Owen, Envisager, UK

\* 6. Private-sector participation in water and sanitation reviewed: insights from new institutional economics

Dieter Rothenberger and Bernhard Truffer, Swiss Federal Institute for Environmental Science and Technology, Switzerland

\* 7. Ownership and performance of water utilities

Steven Renzetti and Diane Dupont, Brock University, Canada

\* 8. The involvement of the private sector in water servicing: effects on the urban poor in the case of Aguascalientes, Mexico

Leslie Morris, Consultant, Canada

Luis Fernando Gallardo Cabrera, IMPLAN, Mexico

\* 9. Joint-use municipal–industrial infrastructure: an innovative approach to expanding urban water services in the developing world

Jennifer Bremer, University of North Carolina at Chapel Hill, USA

Steven Nebiker, Hydrologics Inc., USA

## Part 3: Technology

\* 10. Autonomous water supply of a remote island community: the case of geothermal water desalination on Milos, Greece

Thomas Nowak, Heinrich-Heine-University Düsseldorf, Germany

\* 11. Ecological sanitation: reaching for the MDGs

Mayling Simpson-Hebert, Catholic Relief Services, Regional Office, Kenya

Arno Rosemarin, Stockholm Environment Institute, Sweden

Uno Winblad, Kyoto University, Japan

\* 12. A measured step toward sustainability for rural water supply: one metering strategy that works

Eric Johnson, Aquasanitas, USA

\* 13. Sustainable water supply for a remote rural community in Mozambique: Oxfam

Australia and the Chicomo Rural Development Project

Elizabeth Mann, Oxfam Australia

## Part 4: Regionally focused case studies: rural environments

\* 14. Indigenous people, women and water: the importance of local knowledge for project planning in an African context

Fenda A. Akiwumi, Texas State University, USA

\* 15. The commitment of the chlorine industry to sustainable societies: a partnership case

study in Guatemala  
C.T. 'Kip' Howlett Jr, Chlorine Chemistry Council, USA

\* 16. Water-pricing policies and the Water Framework Directive 2000/60/EC: a first approach concerning the agricultural sector in the Axios River Basin  
Konstantinos Sarantakos and Elias Dimitriou, Institute of Inland Waters, Greece  
Areti Kontogianni and Michalis Skourtos, University of the Aegean, Greece

\* 17. Reducing water and sanitation backlogs in rural areas: Umgeni Water's response as an implementing agent within KwaZulu-Natal, South Africa  
David A. Stephen, Umgeni Water, South Africa

#### Part 5: Regionally focused case studies: urban environments

\* 18. The demand-side versus the supply-side approach: the case for sustainable management of water supply in developing countries  
Lingappan Venkatachalam, Institute for Social and Economic Change, India

\* 19. Water supply in Singapore: challenges and choices  
Kim Chuan Goh, National Institute of Education, Singapore

\*\*\*\*\*

To place an order for this title at a discount of 10%, or to view the 'Introduction' by Jonathan Chenoweth, University of Surrey, UK and Juliet Bird, University of Melbourne, Victoria, Australia and the chapter 'Incorporating demand-side information into water utility operations and planning' by Steven Renzetti, Brock University, Canada  
Online

please visit the Greenleaf website at:  
<http://www.greenleaf-publishing.com/catalogue/water.htm>

You can also request a review copy or inspection copy from this site - see the home page:  
<http://www.greenleaf-publishing.com>

\*\*\*\*\*

Alternatively, please contact:

Jayney Bown  
Greenleaf Publishing Ltd  
Aizlewood Business Centre  
Aizlewood's Mill  
Nursery Street  
Sheffield S3 8GG  
UK

+44 (0)114 282 3475 - Telephone  
+44 (0)114 282 3476 - Fax  
[sales@greenleaf-publishing.com](mailto:sales@greenleaf-publishing.com)