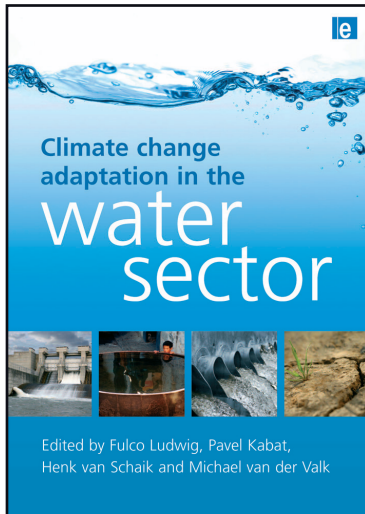


Climate Change Adaptation in the Water Sector



Edited by **Fulco Ludwig, Pavel Kabat, Henk van Schaik and Michael van der Valk**



Today's climate variability already has a large impact on water supply and protection. Millions of people are affected every year by droughts and floods. Future climate change is likely to make things worse. Many people within the water sector are aware that climate change is affecting water resource management, but they are unsure how to incorporate climate information into their management structures.

Currently no book is available for students and practitioners in the water sector on how to adapt to climate change and variability. So the main purpose of the book is to offer a compendium of specific adaptation strategies for students, water managers and decision makers. After reading this book, water professionals and advanced students should feel much more comfortable in using climate data in decision support and/or managing water resources. They will know what kind of data or information on climate change and variability are available and how they can be used within the water sector.

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Introduction * Part I: Water and Climate Adaptation * Climate Variability and Change * Using and Specifying Climate Scenarios in Water Resource Management * The Impacts of Climate on Water * Managing Current Climate Variability * Improving Management of Current Variability through the use of Seasonal Forecasts * Adapting to Climate * Climate Proofing * Part II: Case Studies * Climate Change and Spatial Planning in the Netherlands * Climate Change and Alluvial Aquifers in a (Semi-)Arid Environment - Yemen * Climate Change and Umgeni Water Supply Company * Adaptation to Climate Change and Social Justice: Flood and Disaster Management in Thailand * Adaptation Measures in Metropolitan Water Supply in Perth, Australia * Seasonal Forecasts and Water Distribution in the Philippines * Climate Change and the Great Lakes of the US * Index

The book consists of two parts: the first part describes the general issues and the second part contains specific case studies. These are drawn from a wide range of contrasting countries, including Australia, Thailand, The Netherlands, Germany, Philippines, South Africa, and Yemen.

Fulco Ludwig is currently a research scientist at the Earth System Science and Climate Change Group (ESS CC) of Wageningen University and Research Centre (WUR), The Netherlands, formerly at the Co-operative Programme on Water and Climate (CPWC). **Pavel Kabat** is Full Professor and Chair Holder of ESS CC and Science Director of CPWC. **Henk van Schaik** is Programme Coordinator of CPWC. **Michael van der Valk** is a hydrologist and CPWC's Communication and Information Coordinator.

This book is a product of the Co-operative Programme on Water and Climate (CPWC).

Hb • £49.95 42.00 • 320 pages • 978-1-84407-652-9 • December 2008

Books to read with *Climate Change Adaptation in the Water Sector*



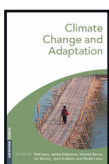
Managing Water Resources: Methods and Tools for a Systems Approach

By **Slobodan P. Simonovic**

'The great novelty of this book is that it presents in detail how fuzzy-set theory can be used in water resource system management. The author was one of the pioneers who opened up this new field and is considered to be one of the greatest experts in it.' *Rodolfo Soncini Sessa, Politecnico di Milano, Italy*

Managing Water Resources introduces system dynamic simulation as a tool for integrated modelling and contains coverage of the use of fuzzy sets for incorporating objective and subjective uncertainties. The book combines theory with many practical examples, as well as including programs and exercises on an accompanying CD-ROM. It composes both an advanced text for students of water resources and civil or environmental engineering and a practical guide for professionals. in water management, agriculture, conservation, and development.

Pb • £39.95 £34.00 • 576 pages • 978-1-84407-544-6 • July 2008



Climate Change and Adaptation: Urbanization, Poverty and Environment in the 21st Century

Edited by **Neil Leary, James Adejuwon, Vicente Barros, Ian Burton, Jyoti Kulkarni and Rodel Lasco**

While climate change mitigation is vital, it is clear that the world must also begin to adapt - but how best can this be achieved? This book covers current practices for managing climate risks, deficits between current practices and needs for effective management of climate risks, the changing nature of the risks due to human caused climate change, strategies for adapting to climate change to lessen the risks, and the need to integrate these strategies into development planning and resource management. The book also identifies obstacles to effective adaptation and explores measures needed to create conditions that are favourable to climate change adaptation. This authoritative volume (along with its companion on vulnerability), resulting from the work of the Assessments of Impacts and Adaptations to Climate Change (AIACC) project launched by the IPCC in 2002, is the first to provide a comprehensive investigation of the issues at stake.

Pb • £34.95 £30.00 • 400 pages • 978-1-84407-689-5 • November 2008

