

International Water Security

DOMESTIC THREATS AND OPPORTUNITIES

EDITED BY
NEVELINA I. PACHOVA
MIKIYASU NAKAYAMA
AND LIBOR JANSKY



International water security: Domestic threats and opportunities

Edited by Nevelina I. Pachova, Mikiyasu Nakayama and
Libor Jansky



**United Nations
University Press**

TOKYO • NEW YORK • PARIS

Contents

Figures	vii
Tables	viii
Contributors	x
1 Introduction: From domestic to international water security ... <i>Libor Jansky, Mikiyasu Nakayama and Nevelina I. Pachova</i>	1
Part I: Treaties and institutions	7
2 The Indus water dispute and its relation with domestic policies	9
<i>Shuntaro Yamamoto</i>	
3 Domestic issues in developing international waters in Lesotho: Ensuring water security amidst political instability	35
<i>Naho Mirumachi</i>	
4 Domestic drivers of international water security on the Danube	61
<i>Nevelina I. Pachova and Libor Jansky</i>	
5 Transboundary cooperation vs. internal ambitions: The role of China and Cambodia in the Mekong region	79
<i>Marko Keskinen, Katri Mehtonen and Olli Varis</i>	

6	The role of domestic security in the functioning of the Lake Chad Basin Commission	110
	<i>Virpi Stucki and Madiodio Niasse</i>	
	Part II: Emerging security threats	127
7	People's encroachment onto Sudan's Nile banks and its impact on Egypt	129
	<i>Mahmoud El Zain</i>	
8	Inter-basin water transfers as a technico-political option: Thai–Burmese projects on the Salween River	161
	<i>Bastien Affeltranger</i>	
9	The implications of domestic security policy for international water issues in the context of “virtual” and “real” water: The Aral Sea and Mekong River basins	180
	<i>Mikiyasu Nakayama</i>	
	Part III: Opportunities for cooperation	193
10	Water governance of the Mekong River Basin and Chinese national problems	195
	<i>Kayo Onishi</i>	
11	Transboundary water issues in the Euphrates–Tigris River Basin: Some methodological approaches and opportunities for cooperation	223
	<i>Aysegül Kibaroglu, Anthi D. Brouma and Mete Erdem</i>	
12	The politics of security in the Okavango River Basin: From civil war to saving wetlands (1975–2002) – a preliminary security impact assessment	252
	<i>Jeroen F. Warner and Richard Meissner</i>	
	Part IV: Conclusions	287
13	National sovereignty and human security: Changing realities and concepts in international water management	289
	<i>Nevelina I. Pachova, Mikiyasu Nakayama and Libor Jansky</i>	
	Index	296

1

Introduction: From domestic to international water security

Libor Jansky, Mikiyasu Nakayama and Nevelina I. Pachova

Water is essential for all aspects of life. Ensuring water security – i.e. adequate protection from water-related disasters and diseases and access to sufficient quantity and quality of water, at affordable cost, to meet the basic food, energy and other needs essential for leading a healthy and productive life without compromising the sustainability of vital ecosystems – has emerged as an overarching global goal over the past decade.

Integrated water resources management (IWRM), defined as the coordinated planning, development and management of water, land and related resources, through multi-level and multi-sectoral dynamic and interactive problem-solving approaches, has been proposed as a mechanism for maximizing the economic and social welfare benefits from water development and use in an equitable and sustainable manner. IWRM recognizes basins as the natural water management units and encourages the development of integrated basin-wide water use and management strategies, action plans and institutions.

Initially proposed in Chapter 18 of Agenda 21, the plan of action adopted at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, the concept of integrated water management has become a widespread national policy framework since then. Over the past decade, notable progress has been made in developing national IWRM strategies and action plans and integrating them in the broader development strategies of states aimed at achieving the Millennium Development Goals (MDGs), a time-bound set of goals agreed

upon by world leaders in 2000. However, the application of the concept of IWRM to transboundary water resources, i.e. surface and groundwater resources shared by two or more states, has proved a challenging task.

Indeed, cooperation among riparian states over the use of shared waters has a long history. The numerous instances of and benefits from cooperation in the past have weakened fears of water wars, raised in the mid-1990s in light of the expected growth in water needs, particularly in developing states. Unresolved political tensions over the use of transboundary waters, however, continue to simmer and new ones continue to emerge along with changing water needs, values and governance structures in riparian states. These tensions constitute significant obstacles to undertaking the often much-needed development and utilization of international waters, on which the water security of more than half of the world's population depends.

The national sovereignty and security considerations of states have long been noted as critical causes of international water tensions and disputes. In the context of the processes of post-Cold War democratization and globalization, non-state domestic actors have come to play a much more prominent role in national decision-making on traditionally foreign policy debates. Furthermore, the definitions of the concepts of sovereignty and security have evolved. These changes entail new threats but also new opportunities for ensuring international water security.

This book explores some of them through a set of case studies analysing the multi-faceted and dynamic nature of the interplay between domestic and international water security. A range of past, ongoing and emerging international water disputes from the Middle East, Africa, Asia and Europe are examined. Well-known cases are revisited from new perspectives and new approaches are suggested as analytical frameworks and practical tools for understanding and coping with emerging security threats.

The book is divided into three parts. The first examines the impacts and implications of domestic security considerations for the negotiation and implementation of international water treaties and for the functioning of water management institutions in international basins. The second part highlights emerging water security threats in international basins driven by domestic security dynamics. The third proposes a range of new analytical frameworks and approaches for engaging domestic actors in the search for solutions to both long-standing water management disputes and emerging security threats.

Part I begins with three chapters that examine from a historical perspective the role that domestic factors, actors and processes have played in both facilitating and hindering the signature and subsequent implementation of important international water management agreements in

Asia, Africa and Europe. In Chapter 2 Yamamoto revisits the classic Indus water dispute and the agreement between India and Pakistan facilitated by the World Bank, highlighting the often overlooked role that communal divides, regional inequalities and national development policies in the two states have played in shaping their positions on international water management in the course of the negotiations.

In Chapter 3 Mirumachi brings out the role of domestic political leadership in a small landlocked country such as Lesotho in designing and negotiating a water management agreement with a large regional hegemon that was beneficial for the national economy. The author also highlights the importance of civil society activism in subsequently negotiating a more equitable sharing of the benefits from the international water management scheme.

In Chapter 4, Pachova and Jansky examine a case in which a civil society movement in a transitional context in Europe managed to forestall the implementation of an international treaty on water development in the Danube because of its expected environmental damage. Environmental activism coupled with political aspirations and ethnic minority concerns, however, triggered the escalation of an international dispute, whose alleviation has taken up significant efforts and resources.

In the last two chapters of Part I, the establishment and functioning of international water management institutions are examined from the viewpoint of domestic security challenges. Keskinen et al. (Chapter 5) analyse hindrances to the functioning of the Mekong Commission associated with domestic developments, priorities and capacities in China and Cambodia, the upstream and downstream riparian states. While noting the challenges, the authors also highlight the potential for strengthened regional cooperation in a broader development framework that the economic power and national priorities of the regional hegemon entail.

Stucki and Niasse (Chapter 6) follow up a similar line of research but take an extreme case, that of the Lake Chad Basin Commission, whose functioning has been severely constrained by the widespread civil strife and poverty affecting all of the riparian states. In the absence of an economically powerful regional hegemon, as in the case of the Mekong, the authors argue that international support is crucial for ensuring the functioning of the Commission.

In Part II of the book the domestic security lens is employed to identify emerging international water security threats. El Zain (Chapter 7) warns of an impending political conflict over the use of Nile waters owing to rapid population growth in riparian provinces in Sudan, as a result of refugee flows from regions disrupted by civil war, and to ill-conceived development policies deepening structural inequalities and socially constructed water scarcity.

In Chapter 8 Affeltranger pinpoints the Salween River Basin as an emerging hotspot of regional tensions in the Mekong region owing to a water development and transfer scheme between Myanmar and Thailand, aimed at alleviating growing domestic water demand in Thailand without incurring domestic opposition to the construction of new hydraulic infrastructure on the territory of the country. The author forewarns that the project, currently politically endorsed owing to the overlap of national and regional security and development objectives, entails hidden threats to the water security of the inhabitants of the Salween Basin as well as the Mekong region as a whole.

In Chapter 9 Nakayama proposes “virtual” water, i.e. water embedded in key water-intensive commodities, as an alternative approach for meeting water needs in the context of water scarcity, and argues that trade-offs between real and virtual water need to be examined before large-scale water transfer schemes in the Mekong Basin are undertaken. He also employs the concept of virtual water to highlight a looming water security threat in Central Asia, where the stabilization of Afghanistan is likely to lead to increased water demand for agricultural production, which is currently met through food imports and international aid.

Part III of the book introduces some new perspectives and practical tools for engaging domestic actors in the search for solutions to both domestic and international water security concerns. In Chapter 10 Onishi draws attention to the potential benefits from situating international water security debates in a broader framework of regional cooperation, which allows international water debates to become non-zero-sum games. The author suggests that, although domestic security considerations in China (including energy needs, regional inequalities and associated separatist threats) might make it difficult to reach a compromise on international water management in the Mekong, regional cooperation, motivated by the potential gains from trade and the growing importance of good reputation in the context of increasing economic and political interdependence globally, may provide an alternative avenue for meeting the water security and economic development needs of the downstream states.

For the benefits of regional cooperation to reach those who most need them, however, human security has to be situated at the centre of it according to Kibaroglu et al., who pursue the idea in Chapter 11. Taking up the case of the management of the Tigris and Euphrates river basins shared by Turkey, Syria and Iraq, the authors argue that, in contrast to negotiations focused narrowly on water, regional development cooperation could help address the pressing human security needs of the people inhabiting the basins in question, while fostering the capacities and potential for long-term partnership over transboundary water management

through improved efficiency in water use and enhanced trust among the riparian states.

In Chapter 12, starting from the idea that perceptions of both water needs and security threats do matter in international water management disputes, Warner and Meissner propose a tool called security impact assessment (SIA) for analysing the redistribution of actual and perceived security as a result of water development interventions and projects among the key stakeholder groups involved. They employ SIA to examine water security trade-offs in the Okavango Basin, highlighting the positive role of information and knowledge exchange as a means for alleviating actual as well as perceived insecurity.

The authors of the individual chapters come from a range of disciplinary and professional backgrounds and approach the issue of water management from diverse theoretical perspectives. Their findings highlight the varied aspects of the multifaceted interplay between domestic and international water security. Furthermore, they bring to the fore the need to change the way we think of and deal with associated threats to international water security, which are discussed in more detail in the concluding chapter of the book.

© United Nations University, 2008

The views expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations University.

United Nations University Press
United Nations University, 53–70, Jingumae 5-chome,
Shibuya-ku, Tokyo 150-8925, Japan
Tel: +81-3-3499-2811 Fax: +81-3-3406-7345
E-mail: sales@hq.unu.edu general enquiries: press@hq.unu.edu
<http://www.unu.edu>

United Nations University Office at the United Nations, New York
2 United Nations Plaza, Room DC2-2062, New York, NY 10017, USA
Tel: +1-212-963-6387 Fax: +1-212-371-9454
E-mail: unuona@onu.unu.edu

United Nations University Press is the publishing division of the United Nations University.

Cover design by Mea Rhee

Printed in Hong Kong

ISBN 978-92-808-1150-6

Library of Congress Cataloging-in-Publication Data

International water security : domestic threats and opportunities / edited by
Nevelina I. Pachova, Mikiyasu Nakayama and Libor Jansky.

p. cm.

Includes index.

ISBN 978-9280811506 (pbk.)

1. Water-supply—Management—Political aspects. 2. Water resources
development—International cooperation. 3. Integrated water development.

I. Pachova, Nevelina I. II. Nakayama, Mikiyasu. III. Jansky, Libor.

HD1691.I54 2008

333.91—dc22

2008003990

International Water Security: Domestic Threats and Opportunities

Edited by Nevelina I. Pachova, Mikiyasu Nakayama, and Libor Jansky

Contributors:

Nevelina I. Pachova
Libor Jansky
Mikiyasu Nakayama
Shuntaro Yamamoto
Naho Mirumachi
Marko Keskinen
Katri Mehtonen
Olli Varis
Virpi Stucki
Madiodio Niasse
Mahmoud El Zain
Bastien Affeltranger
Kayo Onishi
Aysegül Kibaroglu
Anthi D. Brouma
Mete Erdem
Jeroen F. Warner
Richard Meissner

Water is essential for all aspects of life. Managing water is a challenging task, particularly in shared water basins that host more than half of the world's population.

National sovereignty and security considerations have long constrained the reasonable, equitable and sustainable utilization of international water courses. With post-Cold War democratization and globalization on the rise, domestic actors have an increasingly important role to play in national decision-making and traditional foreign policy debates. This change entails new threats but also presents new opportunities for ensuring international water security.

This volume explores both these threats and opportunities through the presentation of case studies that analyze the multi-faceted and dynamic nature of the interplay between domestic and international water security. In so doing, a range of past, on-going and emerging international water disputes from the Middle East, Africa, Asia and Europe are examined. Well-known cases are revisited from new perspectives while new approaches are suggested as analytical frameworks and practical tools for understanding and coping with emerging security threats.

Nevelina I. Pachova is Programme Associate at the United Nations University's Vice-Rectorate in Europe. **Mikiyasu Nakayama** is Professor of the Department of International Studies at the Graduate School of Frontier Science, University of Tokyo. **Libor Jansky** is Senior Academic Programme Officer at the United Nations University's Vice-Rectorate in Europe.

Ordering information

North America, Latin America, Asia & the Pacific:

UNITED NATIONS PUBLICATIONS

2 United Nations Plaza,
Room DC2-853, Dept 174
New York, NY 10017
Tel: 212 963-8302,
800 253-9646 (credit card orders)
Fax: 212 963-3489
E-mail: publications@un.org

Europe, Africa, and the Middle East:

UNITED NATIONS PUBLICATIONS

Sales Office and Bookshop, Bureau E4
CH-1211 Geneva 10, Switzerland
Tel: 41-22/917-2614, 41-22/917-2613
Fax: 41-22/917-0027
E-mail: unpubli@unog.ch

ISBN 978-92-808-1150-6
308pp US\$35.00



United Nations
University Press

53-70, Jingumae 5-chome, Shibuya-ku, Tokyo 150-8925, Japan
Tel +81-3-3499-2811; Fax +81-3-3406-7345
E-mail: sales@hq.unu.edu; <http://www.unu.edu>