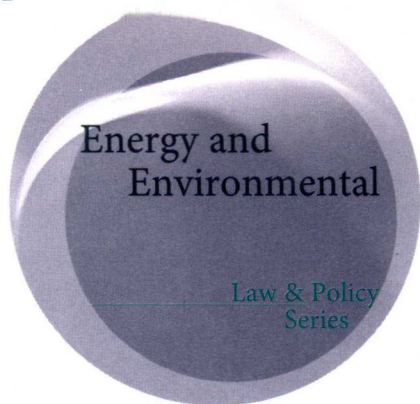


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The Law of Non-Navigational Uses of International Watercourses

Options for Regional Regime-Building in Asia

By Nahid Islam



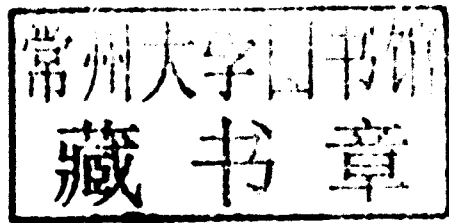
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The Law of Non-Navigational Uses of International Watercourses

**Energy and Environmental Law & Policy Series
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VOLUME 8

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- to increase the access to environmental and energy information for students, academics, non-governmental organizations, government institutions, and business;
- to facilitate cooperation between academic and non-academic communities in the field of energy and environmental law and policy throughout the world.

*To my creator, the most gracious
For giving the opportunity and ability to write this book*

*To my parents
For giving the opportunity to educate myself*

*To my mom
For all her sacrifices*

*To my husband
For all his support and understanding*

And

*To my children
For a better future*

Preface

Scope, Objective and Methodology

This book is about the regime of international watercourses; that is, the principles, norms, rules, and decision-making procedures regarding the access, use, sharing, and management of international watercourses. It focuses primarily on transboundary surface water, keeping in mind the inter-relationship of such water with other components of the hydrological cycle – namely, the watershed, the groundwater, atmospheric water, and the coastal and the marine waters – and the need for an ecosystemic approach in managing such waters to attain sustainable development.

The purpose of writing this book is primarily to broaden the understanding of the social, cultural, economic, and environmental significance of national and international watercourses to the agrarian regions of South and Southeast Asia. A recent surge of infrastructural development activities within these regions has turned the management of transboundary watercourses into a sensitive political issue. Moreover, in recent years, the modern definition of security (from military buildup to national socioeconomic development) has encompassed water resource use in these regions as such a concern. The growing significance of water resources requires greater scholarly consideration to help formulate practical policy guidelines for these states in the sharing and management of their water resources.

Second, although Asia holds one-third of the world's freshwater resources and, despite the tremendous problems faced by these countries in the management of their shared watercourses, very few scholarly works have been undertaken to address the issues involved. Almost all of the works on the subject are related to European and North American watercourses. It is only in recent times that the importance of water-related disputes in the Middle East has engaged Western security concerns, with Western writers becoming interested enough to write about this region's water resources. This concern, however, has not reached other parts of Asia. This lack of attention calls for fresh research on watercourses in Asia.

Preface

Third, almost all works on international watercourses have not only addressed Western watercourses, but also have been written from Western perspectives, which rarely reflect Asian values, realities, and interests. It is for this reason that this book offers an Asian perspective to balance the writing on water resource management practises and to add an 'Asian reality'.

Fourth, to attain sustainability for the protection of our common future, it is very important to know, understand, and appreciate different perspectives of development and resource management and to give them proper weight. The community-based water management practises and perspectives that this book presents will provide a different perspective on resource management. The rich Asian juridico-cultural heritage apparent in the management of water resources can provide valuable experience for other regions. This facilitates greater sensitivity and calls for more inclusive participation in the development of an international law of watercourse management.

Before describing the approach and methodology, it is important to focus on changing my orientation from the Masters research to this Doctoral-level dissertation, which is the basis of this book. In my Masters work,¹ I discussed how the countries in Europe and North America were able to or have tried to resolve watercourse management problems. On that basis, I suggested options for regime-building for the Ganges basin countries.

While working on the Doctoral dissertation,² I questioned my earlier approach. I seriously started to doubt whether the Western approach would solve inter-state water-related problems in the Ganges and other river systems in the agrarian societies of Asia. I know, from personal experience, the failure of the state-centric development approach in South Asia. Recent alternative development thinking in Asia, popularized through the non-governmental organizations (NGOs) and academics, with emphasis on the empowerment of people, has made me realize that instead of looking at international law, one must think about the social contexts that originate and shape law and particular development approaches. Research in that direction reveals that not only is international law Euro-centric, but the development approach that it prescribes is biased in favour of centralization suitable to industrialized societies. Asia, on the other hand, has a different cultural orientation toward law. A decentralized, community-based resource management approach was the norm in South and Southeast Asia before colonization. A comparative look at the philosophies regarding the relationship between humanity and nature and property systems between Asia and the West has helped confirm my belief and inform the conceptualization of my theory. I recognized that to achieve real development in South and Southeast Asia in the management of

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1. Nahid Islam, *The Regime of International Watercourses and Transboundary Management of the Ganges River Basin*, submitted in partial fulfilment of the degree of Master of Laws (LLM), Dalhousie Law School, Dalhousie University, Nova Scotia, Canada, 1993.
 2. Nahid Islam, *Rethinking the Law of Non-Navigational Uses of International Watercourses: Options for Regional Regime-Building in Asia*, submitted for the degree of Doctor in the Science of Laws (JSD), Dalhousie Law School, Dalhousie University, Nova Scotia, Canada, 1998.

regional international watercourses, the entire development approach needs to be reversed from its Western orientation to 'Asianization'.

This book has adopted an interdisciplinary approach to construct that context, although primarily it is a legal work. It attempts to blend various perspectives from other disciplines in the social sciences to help unravel and bring understanding to the sociocultural aspects of the discussion.

The concepts used as analytical tools, for example, Asia, regime, Western, etc., have been defined for the purposes of this book, instead of accepting given definitions. This is to avoid the complication of methodology that arises from using those concepts in the established senses, as well as to narrow or broaden their application to suit the purpose of the book. For example, regime theory accepts states as the pre-eminent actors in international relations; whereas this book includes regional and international organizations, both governmental and non-governmental, as well as communities involved in water resources management in my 'regime'.

The term 'Asia' is also used in different senses, each of which is value laden in different dimensions. For this book, Asia is the political and the geographical area of South and Southeast Asia for the purpose of presenting the sociocultural practises and value systems of Asia. For the purpose of the management of its international watercourses, the definition of South Asia and Southeast Asia refer to the Ganges and Mekong basin countries. The book has used the term 'Western' in the sense of state practises on international watercourses in the countries of Europe and North America that have provided the basis for law-making in this area. The term, 'Europe' is used in the book to identify those European countries, mostly Western, who have experienced an earlier industrial revolution, who have adopted the common or civil law as their legal tradition, who have spread those legal cultures in Asia through colonization, and who have extensive experience with international watercourse use and management. The concept of 'community-based resource management' is taken in the book as the self-reliant autonomous resource management system of a community that functions on a communal basis with a supporting legal and institutional framework within the community. This book argues that the traditional resource management practises in Asia were community-based. In recognition that such autonomous community resource management practise is no longer feasible in its entirety because of changed land and production systems, it advocates co-management between the government and the user communities. The term 'participatory management' is used to mean co-management between the community users and the centralized government, with various supporting intermediary institutions such as the NGOs. This book argues that sustainable development in today's agrarian societies in Asia depends on a participatory approach to decision-making and resource management.

In terms of theoretical orientation, this book accepts the concept of sustainable development as the most relevant for presenting the community users' perspective. It reflects and captures succinctly the central theme of the book, which is the need for incorporation of local practises into the use and management of international watercourses. Related concepts that may be considered relevant are

Preface

governance, alternative development, community-based resource management, and co-management, each of which is discussed in relevant parts of the book.

As for the scholarship, my approach proceeds from 'realism and sensitivity in law-making' while advocating reform for the implementation of such law. What I mean by 'realism' is that law-making must recognize the reality and need of the changing contexts and act accordingly. The reality, in our case, is to attain sustainability in the face of a degrading resource base and an environmental imbalance that threatens the existence of life. Principles and procedures of resource management need to be devised in a way that is sensitive to different contexts and ensures greater equity and broader participation.

Reform for implementation of sustainable development principles requires good governance; thus this book advocates such reform at three levels. At one level, it is the reform of international watercourse law in a way that ensures participation of the local users, both in law-making and in actual management of watercourses. At another level, reforms are suggested for the regional watercourses regime in the Ganges and Mekong basins to transcend the state-ism and the bureaucrat-ism and to reach out and encompass the user communities through decentralization. Reforms are also suggested for devising participatory approaches to resource management at the national level of the Ganges and Mekong basin countries through decentralization of decision-making and administrative structures relating to international watercourses.

The objective of this book in presenting the need for, and the reality of, a participatory approach to resource management for Asia is not to substitute the centralized approach for the latter, but to advocate a complementary addition to the regime of international watercourses so that it can be effective in providing policy guidelines in regional regime-building. By using case studies, I am emphasizing the effectiveness of the participatory approach for attaining sustainable development for Asian societies, and, by extension, for countries in situations similar to those of Asia.

Admittedly, however, central governments and state authorities are still the primary actors behind resource management and development activities in the third world developing countries (which includes agrarian Asian societies). This book calls for a process of inclusive partnership between people and government. However, instead of universalizing European regional practises and perspectives, this book advocates transformation of regional realities into global activities. It is a non-compulsive, all-encompassing, flexible lawmaking and policy-making process through which the one side can learn from the other and exercise choice in pursuing differentiated and context-effective courses of action in attaining common goals such as sustainability.

List of Abbreviation

ADB	Asian Development Bank
AIR	<i>All India Reports</i>
AJIL	<i>American Journal of International Law</i>
APJED	<i>Asia Pacific Journal of Environment and Development</i>
ASdDI	<i>Annuaire Suisse de Droit International</i>
ASEAN	Association of South East Asian Nations
ASIL	American Society of International Law
AUILR	<i>American University International Law Review</i>
AusAid	Australian Government's Overseas Aid Programme
AYIL	<i>Australian Yearbook of International Law</i>
B.E.	Buddhist Era
BAT	Best Available Technology
B.C.C.A.	British Columbia Court of Appeal
BCEALR	<i>Boston College Environmental Affairs Law Review</i>
BDP	Basin Development Plan of Mekong River Commission
BELA	Bangladesh Environmental Lawyers Association
BEP	Best Environmental Practise
BIISS	Bangladesh Institute of International and Strategic Studies, Bangladesh
BOD	Biochemical Oxygen Demand
BWDB	Bangladesh Water Development Board
BWT	Boundary Water Treaty
BYIL	<i>British Yearbook of International Law</i>
BYUJPL	<i>BYU Journal of Public Law</i>
CBR	Canadian Bar Review
CBRM	Community-Based Resource Management

List of Abbreviation

CIDA	Canadian International Development Assistance
CJIELP	<i>Colorado Journal of International Environmental Law and Policy</i>
ck.	Cubic Kilometer
CLR	<i>California Law Review</i>
CSCE	Conference on Security and Cooperation in Europe
CTS	Canadian Treaty Series
Cusec	One Cubic Foot Per Second
CYIL	<i>Canadian Yearbook of International Law</i>
DANIDA	Danish International Development Assistance
DDT	Dichlorodiphenyltrichloroethane
DIL	<i>Digest of International Law</i>
DJILP	<i>Denver Journal of International Law and Policy</i>
DO	Dissolved Oxygen
DoE	Department of Environment, Bangladesh
ECAFE	Economic Commission for Asia and Far East
ECE	Economic Commission for Europe
EEC	European Economic Commission
EGAT	Electricity Generation Authority, Thailand
EIA	Environmental Impact Assessment
EJIL	<i>European Journal of International Law</i>
ELQ	<i>Ecology Law Quarterly</i>
EMP	Environmental Management Plan, India
EPA 1986	Environment (Protection) Act, 1986, India
EPA 1992	Environmental Protection Act, 1992, Bangladesh
EPL	Environmental Policy and Law
EPL 1992	Environmental Protection Law, 1992, Lao PDR
EQA	Enhancement and Conservation of Environmental Quality Act, 1992, Thailand
ESCAP	Economic and Social Commission for Asia and Pacific
EU	European Union
EY	<i>European Yearbook</i>
FAO	Food and Agricultural Organization of the United Nations
FILJ	<i>Fordham International Law Journal</i>
FNWUA	Federation of National Water Users Association, Nepal
FUG	Forest User Group, Nepal
FYP	Five Year Plan
G7	Meeting of the Finance Ministers from a group of seven industrialized countries
GAP	Ganges Action Plan, India
GAREMA	Gram (Village) Resource Management Association
GDA	Ganges Dependent Area
GDP	Gross Domestic Product
GIELR	<i>The Georgetown International Environmental Law Review</i>
GJICL	<i>Georgia Journal of International and Comparative Law</i>

GMB	Greater Mekong Basin
GNP	Gross National Product
GPA	Global Programme of Action for the Protection of Marine Environment from Land-based Activities
GSIM	Geological Society of Indian Members
GWH	Gigawatt Hours
ha.	Hectare
HELR	<i>Harvard Environmental Law Review</i>
HICLR	<i>Hastings International and Comparative Law Review</i>
HMG Nepal	His Majesty's Government of Nepal
IALR	<i>Inter-American Law Review</i>
IBP	Indicative Basin Plan of 1970, Mekong Committee
IBWC	International Boundary Water Commission, United States and Mexico
ICJ	International Court of Justice
ICJ Reports	International Court of Justice, Reports of Judgements, Advisory Opinions and Orders
ICLQ	<i>International and Comparative Law Quarterly</i>
IDI	Institute de Droit International
IER	International Environmental Reporters
IFFCO	Indian Farmers Fertilizer Co-operatives Ltd
IIED	International Institute of Environment and Development, United Kingdom
IIL	<i>Institute of International Law</i>
IJC	International Joint Commission, United States and Canada
IJF	<i>Indian Journal of Fisheries</i>
IJGLS	<i>Indian Journal of Global Legal Studies</i>
IJIL	<i>Indian Journal of International Law</i>
IJMCL	<i>International Journal of Marine and Coastal Law</i>
ILA	<i>International Law Association</i>
ILC	International Law Commission
ILM	International Legal Materials
ILO	International Labour Organization
ILR	<i>International Law Reports</i>
IOCPS	Indian Ocean Centre for Peace Studies
IRN	International River Network
IUCN	International Union for the Conservation of Nature
IWRM	Integrated Water Resources Management
IYIA	<i>Indian Yearbook of International Affairs</i>
JC	Joint Committee of the Mekong River Commission
JCE	Joint Committee of Experts, India and Bangladesh
JEL	<i>Journal of Environmental Law</i>
JIA.	<i>Journal of International Affairs</i>
JRC	Joint River Commission, India and Bangladesh
km.	Kilometre

List of Abbreviation

Lao PDR	Lao People's Democratic Republic
LEP	Law on Environmental Protection, Vietnam
LEPNRM	Law on Environmental Protection and Natural Resources Management, Cambodia
LGERA	Large Group Employee Application
LJIL	<i>Leiden Journal of International Law</i>
LMB	Lower Mekong Basin
LNTS	League of Nations Treaty Series
LR	<i>English Law Reports</i>
LUG	Land User Registration under 2003 Land Act, Vietnam
LWR	Law on Water Resources, 1998, Vietnam
MAF	Million Acre Feet
MAF	Ministry of Agriculture and Forestry, Lao PDR
MAPD	Ministry of Planning and Development, Vietnam
MARD	Ministry of Agriculture and Rural Development, Vietnam
MDRN	Mekong Development Research Network, Bangkok
MIJSDLP	<i>McGill International Journal of Sustainable Development Law and Policy</i>
MJIL	<i>Michigan Journal of International Law</i>
MLD	Million Litres Per Day
MM.	Millimetre
Mmhos/cm	Microhmhos Per Centimetre
MNRE	Ministry of Natural Resources and Environment, Thailand/Vietnam
MoE	Ministry of Environment, Cambodia
MOEF	Ministry of Environment and Forestry, Bangladesh
MOSTE	Ministry of Science, Technology and Environment, Thailand/Vietnam
MOU	Memorandum of Understanding
MPO	Master Plan Organization, Bangladesh
MRC	Mekong River Commission
MW	Megawatt
NAFTA	North American Free Trade Agreement
NEB	National Environment Board, Thailand
NEMAP	National Environmental Management Action Plan, Bangladesh
NGO	Non-governmental Organization
NIC	Newly Industrialized Countries
NIEO	New International Economic Order
NILR	<i>Netherlands International Law Review</i>
NJIL	<i>Nordic Journal of International Law</i>
NMC	National Mekong Committee
NRJ	<i>Natural Resources Journal</i>
NRL	Natural Resources Lawyer
NYIL	<i>Netherlands Yearbook of International Law</i>

NYUELJ	<i>New York University Environmental Law Journal</i>
NYUJILP	<i>New York University Journal of International Law and Policy</i>
ODA	Official Development Assistance, United Kingdom
OECD	Organization for Economic Cooperation and Development
OJ	Official Journal
OJEC	<i>The Official Journal of the European Communities</i>
OMVS	Organization for the Development of the Senegal River
ONREPP	Office of Natural Resources and Environmental Policy and Planning, Thailand
PACE ELR	<i>PACE Environmental Law Review</i>
PAP	Project-Affected People
PARCOM	Paris Commission
PCIJ Ser. A	Permanent Court of International Justice, Collection of Judgements (1992-1930)
PPM	Parts Per Million
PRA	Participatory Rural Appraisal
RECIEL	<i>Review of European Community and International Environmental Law</i>
REFLECT	Regenerated Freirean Literacy through Empowering Community Techniques
RFD	Royal Forest Department, Thailand
RIAA	Reports of International Arbitral Awards
RIBP	Revised Indicative Basin Plan of 1987, Mekong Committee
RID	Royal Irrigation Department, Thailand
RIL	River Inter-Link Project, India
RRA	Rapid Rural Appraisal
SAARC	South Asian Association for Regional Cooperation
S.C.	Supreme Court of India
S.C.C	Supreme Court Cases, India
SCR	Supreme Court Reports, India
SLR	<i>Sydney Law Review</i>
S.N.S.	Statute of Nova Scotia
S.O.	Statute of Ontario
SO ₂	Sulphur dioxide
km. ²	Square Kilometre
SR Vietnam	The Socialist Republic of Vietnam
SS	Suspended solids
STEA	Science, Technology and Environment Agency, Lao PDR
SYIL	<i>Singapore Yearbook of International Law</i>
TDSC	Thai Development Support Committee
TIAS	United States Treaties and Other International Acts Series
U.S.	United States Supreme Courts Reports
UAR	United Arab Republic
UBCLR	<i>University of British Columbia Law Review</i>

List of Abbreviation

UCLAJELP	<i>UCLA Journal of Environmental Law and Policy</i>
UN	United Nations
UN GAOR	United Nations General Assembly Official Record
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNGA	United Nations General Assembly
UNGA Res.	United Nations General Assembly Resolution
UNRIAA	United Nations Reports of International Arbitral Awards
UNTS	United Nations Treaty Series
UNYB	<i>United Nations Yearbook</i>
USAID	United States Agency for International Development
USBR	United States Bureau of Reclamation
USD	United States Dollar
USSR	Union of Soviet Socialist Republic
USTS	United States Treaty Series
UTLJ	<i>University of Toronto Law Journal</i>
VELJ	<i>Virginia Environmental Law Journal</i>
WCD	World Commission on Dams
WCED	World Commission on Environment and Development
World Bank	International Bank for Reconstruction and Development
WRCC	Water Resources Coordination Committee, Lao PDR
WRI	World Resources Institute
WRJ	Water Resources Journal
WRPO	Water Resources Planning Organization, Bangladesh
WTO	World Trade Organization
WUA	Water Users Association
WWF	World Wildlife Fund
WWRL	Water and Water Resources Law, 1996, Lao PDR
YB IEL	<i>Yearbook of International Environmental Law</i>
YB IIL	<i>Yearbook, Institute of International Law</i>
YB ILC	<i>Yearbook of International Law Commission</i>
YJIL	<i>Yale Journal of International Law</i>

Foreword

Much of the world's finite supply of fresh water is shared by two or more countries. The steadily rising global population, coupled with the uncertainties regarding future supplies due to climate change, make it more important than ever before that the use, management and protection of shared freshwater resources be governed by effective normative regimes.

Nations relate to each other primarily through their governments. In arriving at a system for allocating, protecting and managing precious water supplies between the states that share them, the traditions, needs and potential contributions of local user communities can sometimes get lost in the inter-governmental negotiation process. More fundamentally, in a Westphalian system of international law whose principal subjects remain states, participation by individuals and groups continues to be limited, outside the fields of human rights and self-determination. Yet for rational water management to be successful, participation and buy-in by those most directly affected is essential.

In this work, Nahid Islam examines the key role that should be played by those actually using and living with the resource in achieving successful management and protection of international watercourses, especially in agrarian contexts, focusing on the Ganges and Mekong River Basins. The participation of such local communities is supported by the overarching paradigm of sustainable development, for over two decades the international community's guiding principle for the harmonization of efforts to promote economic development and the need to protect the environment. Ms Islam proposes changes in water governance systems on the national, regional and global levels to ensure sustainable management and development of international watercourses. Her proposed policy prescriptions, while sometimes idealistic, constitute a blueprint for future action on all three levels, the common theme of which is the entrenching in the relevant normative orders of