

## **PRAISE FOR *THE ENVIRONMENTAL DIMENSION OF ASIAN SECURITY: CONFLICT AND COOPERATION OVER ENERGY, RESOURCES, AND POLLUTION***

*This volume brings together an impressive array of leading Asian and American scholarly experts on East Asia's environmental challenges. Taken as a whole, this important collection of essays makes a strong case for viewing these challenges as significant threats to human security, peace, and political stability in the region.*

—**Ken Conca**, associate professor of government and politics,  
University of Maryland

*A valuable but somber chronicle by South Korean and American authors of the diverse and severe environmental problems confronting Northeast Asia and the multiple obstacles which stand in the way of effective regional action to address them. Looking at these environmental issues as challenges to both national and human security, the essays present a case for guarded optimism that the level of inter-governmental commitment, public awareness and civil society activism may be the spores of a latent regional environmental regime.*

—**Paul Evans**, professor, Liu Institute for Global Issues, University  
of British Columbia

*The Environmental Dimension of Asian Security is an important book that deserves a wide audience. This book lucidly conceptualizes, succinctly describes, and cogently analyzes the nexus between environmental and natural resources (ENR) problems and security in Northeast Asia. Major ENR challenges in this region, such as acid rain, dust and sandstorms, climate change, oil spills, nuclear waste dumping, dwindling fish stocks, and food shortages, are not merely regional problems, but are problems with global impacts. The war memories and Cold War mentality that still haunt this region constitute an impediment to institutionalized regional cooperation. A clear picture of the nature and scope of ENR problems and their security implications, however, will certainly act as a solid foundation for the development of more extensive regional cooperation in the foreseeable future. This book provides us with such a clear vision.*

—**Hiroshi Ohta**, Aoyama Gakuin University

*This informative and integrated set of essays analyzes a volatile mixture of non-traditional security issues within an increasingly volatile region. Analyzing a number of border-crossing problems in energy and maritime and air pollution, it sheds new light not only on an understudied set of concerns, but also on the tentative multilateral efforts to head them off.*

—**T. J. Pempel**, director, Institute of East Asian Studies, University of California, Berkeley

*Readers with broad regional interests will find much of value in The Environmental Dimension of Asian Security. It has been tempting to overlook the environment in studies of a region that is compelling for its geopolitical and economic stories. Yet the cumulative impact of ten distinct approaches covering the entire sweep of Northeast Asia provides a wakeup call. The introduction and conclusion weave together the connections among the different strands of the volume, assuring the reader that environment and security in this part of the world are increasingly inseparable. While the authors find some signs of hope, they also warn of the mounting tally from delays in regionalism that threaten to hold back the emergence of a regional environmental security complex. As we look ahead, there may be no other region where environmental decisions will have such fateful consequences.*

—**Gilbert Rozman**, Princeton University

*Northeast Asia constitutes a "regional environmental security complex," wherein the actors and societies are enmeshed together in a web of positive and negative externalities with respect to both environmental problems and efforts to solve them. The three sets of environmental issues relevant to the security architecture are damage to and destruction of peaceful relations, declining stability and order of the state-based system of international relations caused by environmental decay and resource scarcity; threats to human security rooted in environmental decay and resource scarcity; and damage to and destruction of environmental integrity caused by instability and conflict. These issues are examined in depth in this collection of essays by specialists from and on the region, particularly with respect to energy, resources, and pollution. The book is a "must-read" for students of environmental affairs and area studies specialists on Northeast Asia.*

—**Ramesh Thakur**, vice rector, Peace and Government Program, United Nations University

# **The Environmental Dimension of Asian Security**



# The Environmental Dimension of Asian Security

*Conflict and Cooperation over Energy,  
Resources, and Pollution*

edited by

IN-TAEK HYUN

MIRANDA A. SCHREURS



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# CONTENTS

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|   |      |
|---|------|
| List of Illustrations and Tables  | vii  |
| Foreword<br><i>Richard H. Solomon</i>   | ix   |
| Acknowledgments   | xiii |
| <b>INTRODUCTION: The Environment-Security Nexus</b><br>in Northeast Asia<br><i>In-Taek Hyun and Sung-han Kim</i>                        | 3    |
| <b>1. A Regional Environmental Security-Complex Approach</b><br>to Environmental Security in Northeast Asia<br><i>Geun Lee</i>          | 23   |
| <b>2. Energy Security and Regional Stability in Northeast Asia</b><br><i>Sangsun Shim and Miranda A. Schreurs</i>                       | 41   |
| <b>3. The Case of Radioactive Waste Management in East Asia</b><br><i>Young-Ja Bae</i>  | 63   |
| <b>4. Security, Energy, and the Environment:</b><br>The Atmospheric Link<br><i>Anna Brettell</i>  | 89   |
| <b>5. Regional Security and Cooperation in the Protection</b><br>of Marine Environments in Northeast Asia<br><i>Miranda A. Schreurs</i> | 115  |
| <b>6. Water Security in Northeast Asia: Coping with</b><br>Global Water Issues<br><i>Mika Merviö</i>                                    | 143  |

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|  |     |
|--|-----|
| 7. Food Security in East Asia and the North Korean Famine<br><i>Shin-wha Lee</i>   | 165 |
| 8. Inter-Korean Environmental Cooperation: Options for<br>Improving Environmental Quality in North Korea<br><i>Kyudok Hong</i>                   | 185 |
| 9. The State and Nongovernmental Organizations<br>in Northeast Asia's Environmental Security<br><i>Esook Yoon, Seunghwan Lee, and Fengshi Wu</i> | 207 |
| 10. A Regional Environmental Security Complex in East Asia:<br>The Reality and the Potential<br><i>Elizabeth Economy</i>                         | 233 |
| CONCLUSION: East Asia's Environmental Challenges and Their<br>Implications for Security and Regional Cooperation<br><i>Miranda A. Schreurs</i>   | 253 |
| Notes  | 275 |
| Selected Bibliography  | 335 |
| Index  | 359 |
| About the Contributors   | 399 |



# **LIST OF ILLUSTRATIONS AND TABLES**

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## **MAP**

|                |     |
|----------------|-----|
| Northeast Asia | xiv |
|----------------|-----|

## **FIGURE**

|   |    |
|---|----|
| 1. Nuclear Power Plants in Northeast Asia | 75 |
|---|----|

## **TABLES**

|  |     |
|--|-----|
| 1. Types of Environmental Security   | 9   |
| 2. Summary of the Regional Environmental Security Complexes                                | 29  |
| 3. Nuclear Power Plants and Annual Electrical Power Production in Northeast Asia (2005–06) | 74  |
| 4. Status of Reprocessing and Radioactive Waste Storage by Country in Northeast Asia       | 76  |
| 5. Responsible Authority for Radioactive Waste in Northeast Asian Countries                | 81  |
| 6. Water Use in East Asia  | 150 |
| 7. Availability of Water Resources   | 150 |
| 8. State of the Undernourished in Developing Countries in East Asia (1990–92, 2000–02)     | 168 |



## FOREWORD

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Northeast Asia is the most rapidly industrializing region on the globe. Economic growth in regional powerhouses South Korea, Taiwan, Japan, and China—the most rapidly industrializing of them all—has accelerated energy demand, which in turn has contributed to environmental crises in the densely populated Northeast Asian region. Rapid economic growth and the spread of its toxic consequences create myriad tensions in an area that also contains three of the world's most troubling security flashpoints: the Taiwan Strait, the Korean Peninsula, and the East China Sea.

In a region encompassing countries with diverse political systems, there are few regional institutions or cooperation agreements to handle disputes over competition for new energy reserves, overexploitation of natural resources, and transborder air and water pollution. *The Environmental Dimension of Asian Security* links these issues of regional ecological degradation within an environmental-security conceptual framework. The analysis highlights which environmental issues can best be addressed by the region's political leaders, which are amenable to institutional collaboration and management, and which are resistant to interstate cooperation.

As with any regional assessment, some states dominate the analysis by dint of their economic and military power. Most of the issues explored in this book affect all states in Northeast Asia, but some of the region's most significant environmental tensions involve two states on opposite ends of the region's power continuum.

Most analysts and observers of the People's Republic of China contend that its rapacious quest for oil and natural gas drives its foreign policy. Such a policy heightens maritime tensions over crowded shipping lanes and disputes over the definition of exclusive economic zones and the ownership of energy resources in the seabeds below. China's foreign policy has also raised concerns in remote regions, as the People's

Republic courts African regimes with odious human rights practices, such as Sudan, in the search for favorable oil concessions or guaranteed access to plentiful reserves. Even China's foreign policy expansion into neighboring countries with plentiful oil and natural gas resources has sounded alarms for its geopolitical ramifications, particularly its arrangement with Russia over the course of a Siberian natural gas pipeline—at Japan's expense.

China's increasing energy imports are fueling an economy whose impressive gains are being redirected, under President Hu Jintao's continuation of a "Go West" development campaign, from the booming coastal regions to the poorer, largely rural western provinces. As more agricultural acreage is earmarked for industry, toxic industrial effluent spreads into the surrounding water table used for irrigating crops.

At the other end of China's socioeconomic spectrum, auto clubs are sprouting up in the coastal regions as demand from China's burgeoning middle class expands the economic market for the country's booming automobile industry—which has just recently surpassed Germany as the world's third largest. A significant and growing portion of the country's population is taking to China's developing highway network and adding to the country's greenhouse gas emissions and to its smog, which regularly blankets Beijing and other major urban centers.

If China's leaders find it difficult to respond to the warnings of the country's environmental scientists and other experts of the parlous state of the country's environment, they are even less prepared to address regional or crossborder pollution and other environmental problems. China relies on coal-fired power plants to a degree much greater than do the advanced industrial nations of the West, and the consequent sulfur dioxide emissions from coal burning have created a serious "acid rain" problem for the Asian region. The rampant desertification of China's Gobi Desert has added to the severity of the region's sand and dust storms, which now bind with China's industrial pollutants as they travel to neighboring countries, particularly to the Korean Peninsula. The jet stream even carries these pollutants to the American West Coast, where thin currents of the dust have been traced in Portland, Oregon, and San Francisco.

In April 2006 the U.S. Environmental Protection Agency announced that it had traced high levels of mercury deposition in the United States to China and India. In 2008 Beijing will host the "Green" Summer Olympics, featuring solar-power grids, water-saving technology, and extensive wastewater treatment systems. It will be interesting to see whether the event comes off as simply a showcase for China's high-tech

prowess or as a sign to the world that China's goals for its long-term economic development are indeed regionally and globally sustainable.

As various contributions in this volume make clear, the People's Republic of China is a major but not the only source of environmental problems in Northeast Asia. The impoverished North Korea presents its own regional environmental-security problems. As several of the chapters in this volume note, the "rogue" status of the North Korean regime and Seoul's goal of reunification inject North Korea's domestic environmental problems directly into the regional context. Persistent food crises that have sparked waves of refugees at China's borders and an apparently successful nuclear development program have propelled Pyongyang to regional—and international—prominence in an environmental-security nexus. These two issue areas highlight the *security* component of that nexus, as well as the divergent approaches the region has adopted in the face of these challenges. On the one hand, the regional response to North Korea's food crises has been largely ad hoc and bilateral. On the other hand, North Korea's nuclear brinkmanship has sparked a more coordinated regional diplomacy, involving innovative multilateral responses such as the Korean Peninsula Energy Development Organization and the ongoing Six-Party Talks.

The book makes a strong case for why the region should establish an effective regime to come up with similarly innovative approaches on the range of environmental problems confronting it. At the same time, the authors detail the considerable obstacles to coordinated management: underfunded national environmental agencies, the weakness of regional nongovernmental organizations, and the lack of multilateral organizations to provide an overarching strategy.

*The Environmental Dimension of Asian Security* is the Institute's first scholarly venture into the contentious discipline of environmental security, even though it has devoted a great deal of programming and analysis to the Asian region. The Institute's Press has published several seminal, award-winning studies on the North Korean famine and conflict management on the Korean Peninsula, including Andrew Natsios's *The Great North Korean Famine* and Hazel Smith's *Hungry for Peace*. Three installments in the Institute's Cross-Cultural Negotiation Project relate to conflict management in the Asian region: Scott Snyder's *Negotiating on the Edge: North Korean Negotiating Behavior*, my *Chinese Negotiating Behavior: Pursuing Interests through "Old Friends," Case Studies in Japanese Negotiating Behavior* by Michael Blaker, Paul Giarra, and Ezra Vogel; and *Reconciliation in the Asia-Pacific*, edited by Yoichi Funabashi. This impressive list is supplemented by the many Special Reports and

Peaceworks monographs published over the years on the role of specific countries in the Asia-Pacific security environment.

This first foray by the U.S. Institute of Peace into Asian regional politics and environmental security is a joint project between the Institute's Jennings Randolph Fellowship Program and the Center for Conflict Prevention and Analysis. And we could not have hosted two more knowledgeable and dedicated senior researchers to bring this project to fruition: In-Taek Hyun, professor of political science and director of Korea University's Il-Min International Relations Research Institute in Seoul, was a guest scholar at the Institute during 2000–01. He has also extensively consulted with the Center for Conflict Prevention and Analysis on reunification issues on the Korean Peninsula. Miranda Schreurs is now a professor of comparative politics and director of the Environmental Policy Research Center at the Free University of Berlin, recently leaving a long stint as professor of politics at the University of Maryland, College Park. She is the author of *Environmental Politics in Japan, Germany, and the United States*.

RICHARD H. SOLOMON, PRESIDENT  
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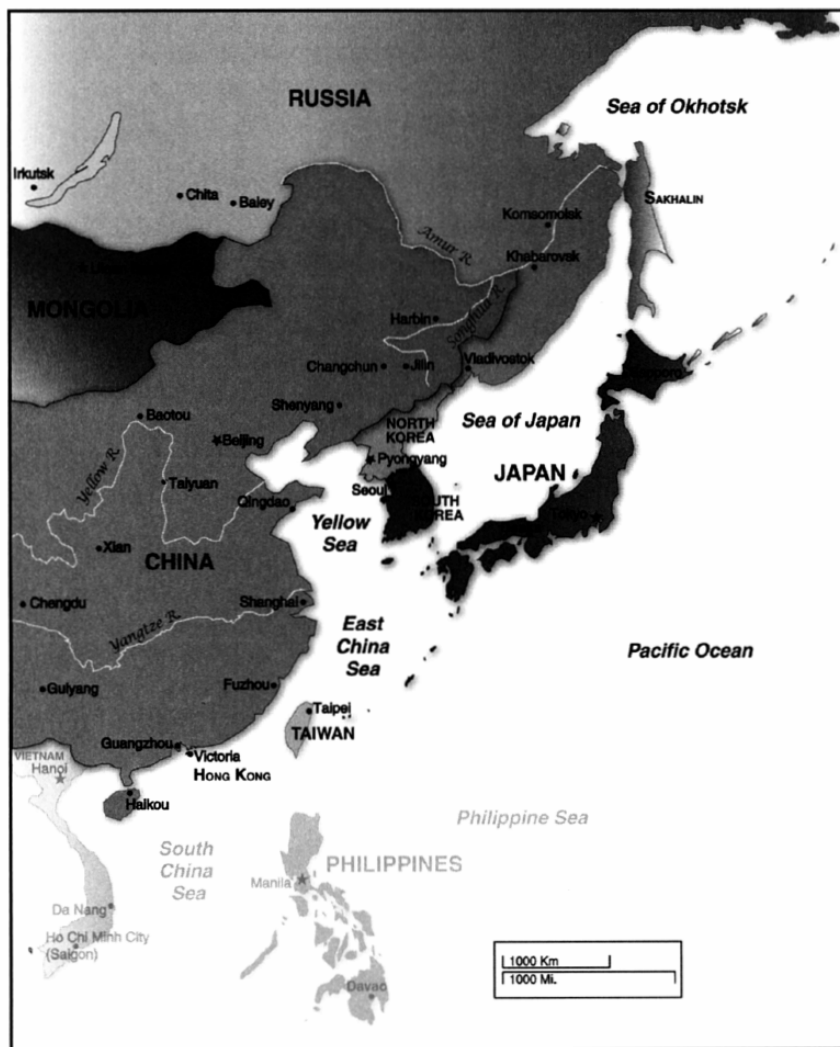
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## Northeast Asia





# **The Environmental Dimension of Asian Security**

