
Institutions and Environmental Change

Principal Findings, Applications, and Research
Frontiers

edited by Oran R. Young, Leslie A. King, and Heike
Schroeder

Institutional Dimensions of Global Environmental Change
A Core Research Project of the International Human Dimensions
Programme on Global Environmental Change (IHDP)

The MIT Press
Cambridge, Massachusetts
London, England

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This book was set in Sabon on 3B2 by Asco Typesetters, Hong Kong.
Printed and bound in the United States of America.

Printed on recycled paper.

Library of Congress Cataloging-in-Publication Data

Institutions and environmental change : principal findings, applications, and research frontiers / edited by Oran R. Young, Leslie A. King, and Heike Schroeder.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-262-24057-4 (hardcover : alk. paper) — ISBN 978-0-262-74033-3

(pbk. : alk. paper) 1. Environmental policy. 2. Environmental protection.

3. International relations—Environmental aspects. 4. Globalization—

Environmental aspects. 5. International cooperation. I. Young, Oran R. II.

King, Leslie A. III. Schroeder, Heike.

HC79.E5I5159 2008

333.7—dc22

2008007304

10 9 8 7 6 5 4 3 2 1

Preface

This book constitutes the culmination of a long and rewarding experience with scientific research involving participants from many disciplines and many countries. The project on the Institutional Dimensions of Global Environmental Change (IDGEC) was one of the four original core projects of the International Human Dimensions Programme on Global Environmental Change (IHDP). Planning for IDGEC actually got under way in 1995 with an invitation to Arild Underdal of the University of Oslo and Oran Young, then of Dartmouth College, from IHDP's predecessor, the Human Dimensions Programme, to prepare a feasibility study identifying opportunities for engaging in cutting-edge research on the roles that institutions play both in causing and in addressing large-scale environmental problems. This was followed by the appointment of a Scientific Planning Committee with a mandate to prepare a Science Plan for the project, a series of workshops organized to develop this plan, a process involving reviews from outside experts together with revisions to address the suggestions of the reviewers, and finally the formal approval of the plan by IHDP's Scientific Committee (SC) in November 1998. IDGEC's own Scientific Steering Committee (SSC) met for the first time in Japan during June 1999 and continued to meet regularly throughout the life cycle of the project, which came to a close formally in March 2007.

The purpose of this volume is to distill the principal findings of IDGEC and to highlight the scientific legacy of the project. Three other volumes dealing with what IDGEC treats as the problems of interplay and scale, as well as with international bodies created to administer environmental regimes, complete this record of IDGEC's accomplishments. Together the four volumes provide a substantial account of the results arising from research carried out under the auspices of IDGEC.

We have learned a lot about the conduct of large-scale scientific research on issues relating to global environmental change in the course of our work with IDGEC. Like other projects dealing with global environmental change, IDGEC has not been blessed with a research fund and the authority to allocate it among individual researchers. Rather, we had a mandate from IHDP to announce the launching of a concerted program of research on institutional issues, to encourage a large number of researchers to join our common journey, to establish infrastructure in the form of an International Project Office (IPO) to develop and service a community of researchers working in this realm, and to create opportunities for interested researchers to interact with one another and to bring their findings to the attention of policy makers and what we have come to call “knowledge brokers.” We discovered early on that this was a tall order. Not being in a position to distribute significant material resources, we learned at once about the need to rely on intellectual leadership or, in other words, on the effort to establish and energize a vibrant community or network of researchers who would be motivated to participate largely because of the intellectual stimulation and feelings of efficacy to be derived from interacting with colleagues who share both interests and values. Needless to say, this process was not always straightforward, but it did give rise to a situation in which we can say with assurance that the whole of the project was substantially greater than the sum of the parts.

Early on, we also realized the importance both of forging a strong link to high-priority concerns in the social sciences and of applying our work to salient issues in the realm of global environmental change (e.g., climate change, losses of biodiversity, the degradation of ocean ecosystems). To this end we deliberately grounded the work of IDGEC in matters of central concern to students of social institutions, while at the same time turning our attention to cutting-edge issues in the realm of environmental governance. Thus, what IDGEC calls research foci—the questions of causality, performance, and design—are generic concerns of interest to scholars interested in institutions. What IDGEC calls analytic themes—the problems of fit, interplay, and scale—are issues that have emerged as high-profile concerns among those interested in human-environment interactions. To strengthen the links between the research foci and the analytic themes, we launched a series of flagship activities: one dealing with atmospheric issues and emphasizing the topic of climate change; a second dealing with marine systems and especially

recent changes in the law of the sea; and a third dealing with terrestrial issues and particularly matters pertaining to the use and conservation of forests. Integrating these individual pieces of our puzzle into a coherent picture turned out to be a challenge requiring focused attention on the part of members of the SSC and the IDGEC executive officer. Meeting this challenge fully and effectively became an exciting and productive effort, giving rise to strong and lasting ties among all the key players in the project.

Along the way we have accumulated many debts of gratitude that we are happy to acknowledge publicly at this time. We are grateful to Eckert Ehlers, the first chair of the IHDP SC, and to Larry Kohler, the first executive director of IHDP, who guided IDGEC through its formative stages. Larry, in particular, turned out to be a demanding taskmaster but one whose high expectations regarding performance played an important role in making IDGEC a success. We are also pleased to acknowledge the support of Hans Opschoor, who acted as liaison during the early years between the IHDP SC and the IDGEC SSC. A number of individual staff members located in the IHDP Secretariat in Bonn played constructive roles over the years as science coordinators responsible for maintaining a connection between IDGEC as an autonomous core project and the central administration of IHDP.

Three outside experts—Abram Chayes, Joke Waller-Hunter, and Narpat Jodha—served as external reviewers of the draft IDGEC Science Plan. Bringing very different perspectives to this task, they provided excellent feedback and recommendations that made it possible to strike a proper balance between analytical and applied concerns and to strengthen the final text of the Science Plan considerably.

Perhaps our largest debt of gratitude goes to all those who have served over the years as members of the Scientific Planning Committee and of the IDGEC SSC. The architects of the IDGEC Science Plan—including Arun Agrawal, Peter Sand, Arild Underdal, and Marilyn Wasson, as well as two of us (King and Young)—produced a road map for the project that has withstood the test of time remarkably well. Some twenty-two individuals, including practitioners as well as scientists, served at one time or another as members of the IDGEC SSC. They played a crucial role in providing guidance for the collective efforts of IDGEC. In this connection we would like especially to recognize Agus Sari, who took over from Oran Young as chair of the IDGEC SSC at the beginning of 2006 and guided the project successfully to its close.

IDGEC would not have been able to function without an effective IPO and especially without the dedicated service of those who occupied the role of executive officer during the period 1999–2007. One of us (Schroeder) held this position from the fall of 2003 through the end of the project in March 2007. Her predecessors included Nicholas Flanders, Virginia Walsh, and Syma Ebbin. Here we want to pay special tribute to Virginia, whose tragic death in 2004 cut short a promising career in the academic world.

The U.S. National Science Foundation (NSF) played an essential role in granting the bulk of the funding needed to operate the IPO throughout the life of the project. We extend our thanks publicly not only to the foundation itself but also to Tom Baerwald, our program officer at NSF, who has held us to high standards and supported our efforts loyally from the outset. IHDP awarded an annual subvention that made it possible to organize regular meetings of the IDGEC SSC in locations in Asia, Europe, and North America. We are grateful also to Dartmouth College, which hosted the IPO and provided contributions in kind from 1999 through 2002, as well as to the Donald Bren School of Environmental Science and Management at the University of California, Santa Barbara, which played the same role from 2003 through the formal close of the project in March 2007. This is also the place to acknowledge with thanks the crucial support provided by Nicki Maynard, our office manager at Dartmouth, and Maria Gordon, our office manager at the Bren School, whose efforts made all the difference on a day-to-day basis.

An IDGEC Synthesis Planning Group guided our efforts throughout the synthesis process. The three of us were joined as members of this committee by Frank Biermann, Song Li, and Agus Sari. We had the good fortune to be able to organize a major IDGEC synthesis conference during December 2006 in Bali, which not only played a central role in helping us to crystallize IDGEC's scientific legacy but also provided an initial opportunity to engage in a consultative process regarding future directions in this field of research. Under the leadership of Frank Biermann, the latter effort has given rise to a planning process that we expect will eventuate in the launching of a new project on Earth system governance. The Bali Conference was made possible by generous support from the following sources: the Asia-Pacific Network for Global Change Research; the Donald Bren School of Environmental Science and Management at the University of California, Santa Barbara; Charles Darwin University; the Clayton H. Riddell Faculty of Environment, Earth, and

Resources at the University of Manitoba; the Global Carbon Project; the Inter-American Institute for Global Change Research; the International Human Dimensions Programme on Global Environmental Change; the Land-Ocean Interactions in the Coastal Zone project; the Research Council of Norway; the System for Analysis, Research, and Training; the United Nations University Institute of Advanced Study; the U.S. National Science Foundation; and Yayasan Pelangi Indonesia.

Finally, we want to acknowledge the help of Maria Gordon, our office manager and in-house editor at the Bren School; Clay Morgan, our editor at MIT Press; and the anonymous reviewers the Press engaged to evaluate our manuscript. One of the reviewers, in particular, provided lengthy and sophisticated comments that have made us think hard and work to clarify the main messages of this book.

IDGEC has been a formative experience for us in human as well as scientific terms. We come away with strong bonds of friendship across many scientific, political, and geographical boundaries that have emerged in conjunction with the work of our project.

Oran R. Young

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