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## **IUFRO World Series Vol. 25**

# FORESTS AND SOCIETY – RESPONDING TO GLOBAL DRIVERS OF CHANGE

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The contents of this book do not necessarily present the views of the organizations supporting this work.

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### **Preface**

This book is the product of World Forests, Society and Environment (WFSE), a Special Project of the International Union of Forest Research Organisation (IUFRO). WFSE is a global, open, non-profit network of scientists and experts steered by ten international research organisations and coordinated by the Finnish Forest Research Institute (METLA). The network focuses on the forest, society, and environment interface. On the basis of existing scientific knowledge, it looks for innovative solutions to support and advance the formulation and implementation of forest-related policies that promote sustainable development and well-being.

This book is the second volume published by WFSE in the IUFRO World Series. The first one, *Forests in the Global Balance: Changing Paradigms*, was launched five years ago (August 2005) in the XXII IUFRO World Congress in Brisbane, Australia.

The present book, *Forests and Society – Responding to Global Drivers of Change*, will be launched in the XXIII IUFRO World Congress in Seoul, Republic of Korea, August 2010.

In addition, the project has published three regional policy briefs in the last four years:

- Making European Forests Work for People and Nature (2007)
- Making Latin American Forests Work for People and Nature (2008)
- ♦ Making Sub-Saharan African Forests Work for People and Nature (2009)

A new policy brief volume will be published in the second half of 2010: *Making Asian Forests Work for People and Nature*.

In 2007, the Steering Committee of WFSE identified globally relevant forestry-related topics to be addressed by the project. The essential idea for this book originated from an acknowledgement of the changing social and natural circumstances, and the related drivers of change affecting forests, forestry, human society, and the environment, globally and locally. We are convinced that forests and forest-related

matters can no longer be addressed in isolation from the surrounding society and natural environment; instead, these need to be seen as an integral part of interrelated social and natural systems.

The Steering Committee of WFSE, also at the 2007 Annual Meeting, nominated the editors and identified recognised scientists who were invited to become Convening Lead Authors (CLAs) of the chapters that addressed the selected themes of the book. They invited Lead and Contributing Authors (LAs and CAs, respectively) in order to form collaborative research teams for conducting critical analyses in each of the themes. The work was based on the cooperation of the author teams for each chapter, as well as between these teams across the whole book. CLAs and LAs were also responsible for composing the manuscript for their chapter and for its timely submission to the editors.

Two editorial workshops were organised for facilitating the discussions of editors and CLAs to collectively debate on the contents of the chapters and on the main focus of the publication. The first workshop was arranged in September 2008 in Helsinki, Finland; the second one was held in Hamburg, Germany, in 2009. In addition, editors had two meetings for polishing the publication: the first one arranged in Buenos Aires in October 2009, and the second one in Rome in January 2010. All chapters were evaluated firstly by the editors – on two occasions – and finally in a peer reviewing process conducted by anonymous external reviewers.

As editors of this book, we would like to express our satisfaction on the successful completion of this exciting experience, which we feel provides a set of interesting research findings on the topics studied. We sincerely hope that this publication will contribute to discussions and further research related to the drivers of change, and the threats and challenges that forests, forestry, and forest-dependent people are facing today and in the future. We also hope that it will foster attention to taking advantage of the possible new opportunities the changes may bring about.

#### **Acknowledgements**

This book is the product of the work of the many scientists and experts who acted as authors in different capacities. Many of them contributed to this book on their own time or in addition to their other duties. We would like to sincerely thank all of them for their commitment and outstanding efforts that made the preparation of this book possible.

We especially want to acknowledge the important input of all the reviewers of the different chapters of this book. We sincerely thank the reviewers for their great contribution in the improvement of the quality of this publication.

We gratefully acknowledge the financial support provided by the Finnish Forest Research Institute (METLA) and the Finnish Ministry for Foreign Affairs, which made possible the development, publication, and distribution of this book. We also sincerely recognise the members of the IUFRO WFSE Steering Committee for providing overall guidance and support. Furthermore, we would like to thank IUFRO for continuous support to our efforts.

Our special thanks go to partner institutions for their support and valuable in-kind contributions: Center for International Forestry Research (CIFOR), Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), European Forest Institute (EFI), Food and Agricultural Organisation of the United Nations (FAO), John Heinrich von Thünen Institut (vTI), Finnish Forest Research Institute (METLA), Natural Resources Canada (NRC), Tropical Agricultural Research and Higher Education Center (CATIE), United Nations University (UNU), and World Agroforestry Centre (ICRAF).

We are particularly grateful to Seppo Oja for designing and preparing the layout of this publication, and to Maggie M. Paquet for language editing. In addition, we want to thank Yijing Zhang and Jakob Mainusch for assisting in the editorial tasks. Finally, we want to express our gratitude to all the other people and organisations who have contributed to this publication in one way or another.

#### **Editors:**

Gerardo Mery, Pia Katila, Glenn Galloway, René I. Alfaro, Markku Kanninen, Maxim Lobovikov, and Jari Varjo

June 2010

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## **Contents**

Preta	ace	3
PAR	TI INTRODUCTION	
I	Forests in a Changing World	13
PAR	T II GLOBAL ENVIRONMENTAL CHANGES	
2	Forests and Adaptation to Climate Change: Challenges and Opportunities Convening lead author: Bruno Locatelli Lead authors: Maria Brockhaus, Alexander Buck and Ian Thompson Contributing authors: Carlos Bahamondez, Trevor Murdock, Geoff Roberts and Jaime Webbe	21
3	Harnessing Forests for Climate Change Mitigation through REDD+ Convening lead author: Markku Kanninen Lead authors: Maria Brockhaus and Daniel Murdiyarso Contributing author: Gert-Jan Nabuurs	43
4	Air Pollution Impacts on Forests in a Changing Climate	55
5	Forest Cover and Global Water Governance	75
6	Forest Biodiversity and Ecosystem Services: Drivers of Change, Responses and Challenges	95
7	Forest Health in a Changing Environment  Convening lead author: René I. Alfaro  Lead authors: Andrea Battisti, Allan Carroll, Richard Fleming and Jarkko Hantula  Contributing authors: Danielle Francis, Paul E. Hennon, Dolly Lanfranco, Arja Lilja,  Michael Müller, Mar Ramos and Alex Woods	113
PAR	T III GLOBAL SOCIO-ECONOMIC CHANGES	
8	Changes in Global Markets for Forest Products and Timberlands	137
9	Implications of Technological Development to Forestry	157
10	Forests and Bioenergy production  Convening lead author: Antti Asikainen  Lead authors: Perttu Anttila, Jussi Heinimö, Tattersall Smith and Inge Stupak  Contributing author: Waldir Ferreira Quirino	183

11	Forestry in Changing Social Landscapes  Convening Lead Author: Heidi Vanhanen  Lead Authors: Jeremy Rayner and Yurdi Yasmi  Contributing authors: Thomas Enters, Miguel Fabra-Crespo, Peter Kanowski,  Heimo Karppinen, Jakob Mainusch and Annukka Valkeapää	201
12	Forests, Human Health and Well-Being in Light of Climate Change and Urbanisation Convening lead author: Caroline M. Hägerhäll Lead authors: Åsa Ode, Mari Sundli Tveit and Maria Dolores Velarde Contributing authors: Carol J. Pierce Colfer and Tytti Sarjala	223
13	Extra-Sectoral Drivers of Forest Change Convening lead authors: Maxim Lobovikov, Laura German and Dirk Jaeger Lead authors: Sebastiao Kengen and Cecil Konijnendijk Contributing authors: Irina Buttoud-Kouplevatskaya, Heru Komarudin, Keith M. McClain, Jose Rente Nascimento, George Schoneveld and J. John Stadt	235
	T IV REGIONAL EXAMPLES OF FOREST RELATED CHALLENGES AND PORTUNITIES	
14	Sustainability of Boreal Forests and Forestry in a Changing Environment Convening lead author: Philip J. Burton Lead authors: Yves Bergeron, Bryan E.C. Bogdanski, Glenn Patrick Juday, Timo Kuuluvainen, Brenda J. McAfee, Aynslie Ogden and Victor K. Teplyakov Contributing authors: René I. Alfaro, Danielle A. Francis, Sylvie Gauthier and Jarkko Hantula	249
15	Amazon Forests at the Crossroads: Pressures, Responses, and Challenges Convening lead author: Wil de Jong Lead authors: Jan Borner, Pablo Pacheco, Benno Pokorny and César Sabogal Contributing authors: Charlotte Benneker, Walter Cano, Carlos Cornejo, Kristen Evans, Sergio Ruiz and Mario Zenteno	283
16	Opportunities and Challenges for Community forestry: Lessons from Tropical America Convening lead author:Wil de Jong Lead authors: Carlos Cornejo, Pablo Pacheco, Benno Pokorny and Dietmar Stoian Contributing authors: César Sabogal and Bastiaan Louman	299
17	Emerging Local Economic and Social Dynamics Shaping East African Forest Landscapes	315
18	Secondary Forests in West Africa: a Challenge and Opportunity for Management Convening lead author: Jobst-Michael Schroeder Lead authors: David O. Oke, Jonathan C. Onyekwelu and Eshetu Yirdaw	335
19	Promoting Sustainable Forest Management through Community Forestry in the Philippines Convening lead author: Lucrecio L. Rebugio Lead authors: Antonio P. Carandang, Josefina T. Dizon and Juan M. Pulhin Contributing authors: Leni D. Camacho, Don Koo Lee and Eleno O. Peralta	355
20	Genetic Resources and Conservation of Mahogany in Mesoamerica  Convening lead author: Carlos Navarro  Lead authors: David Boshier, Stephen Cavers and Andrew Lowe	369
21	Sustainability of Wood Supply: Risk Analysis for a Pulp Mill in Guangxi, China Convening lead author: Martti Varmola Lead author: Markku Kanninen Contributing authors: Ning Li and Dabing Xu	385

## PART V MANAGEMENT OPTIONS, POLICIES AND INSTITUTIONAL ARRANGEMENTS TO ADDRESS NEW CHALLENGES

22	Managing Forested Landscapes for Socio-Ecological Resilience	401	
23	23 Ability of Institutions to Address New Challenges  Convening lead authors: Benjamin Cashore and Glenn Galloway  Lead authors: Frederick Cubbage, David Humphreys, Pia Katila, Kelly Levin, Ahmad Maryudi,  Constance McDermott and Kathleen McGinley  Contributing authors: Sebastião Kengen, Moacir José Sales Medrado, María Cristina Puente,  August B Temu and Ederson Augusto Zanetti		
PAR	RTVI THEWAY FORWARD		
24	The Need for New Strategies and Approaches	489	
Aut	hors	501	

## **List of Boxes**

Box 2.1	Adaptation and vulnerability: Definitions	22
Box 2.2	Using future tree suitability projections for adaptation	28
Box 2.3	Vulnerability assessment of Chilean forests and landowners	29
Box 2.4	Adaptation for forests in the NCs and NAPAs	33
Box 2.5	Forests for adaptation in the NAPAs	37
Box 3.1	Forest-related issues in the Copenhagen Accord	44
Box 3.2	Role of northern forests	48
Box 3.3	FCPF and UN-REDD	49
Box 4.1	Ozone impact and risk assessment	60
Box 5.1	Water challenges in the Sahel – human or natural. An example of complexity Jonas Ardö	78
Box 5.2	Controversy: Do forests act like sponges to conserve water?	80
Box 5.3	China: Optimising land use is first priority	85
Box 5.4	South Africa: Empty rivers downstream of forest plantations  David Scott	85
Box 5.5	Different development and needs drives forms of governance	86
Box 7.1	Lessons from a <i>Dothistroma</i> needle blight epidemic in northwestern  British Columbia, Canada	118
Box 7.2	Climate change effects on the decline of yellow-cedar	120
Box 7.3	Forest management, climate change, and feedbacks: the mountain pine beetle in western North America	122
Box 7.4	New forest epidemics in northern Europe	124
Box 7.5	Biological control of the invasive pine shoot moth, Rhyaciona buoliana, in changing Chilean environments	126
Box 8.1	Non-wood forest product and trade: Lin'an, China	140
Box 8.2	Market perspective of bioeconomy from forestry: the case of Ontario, Canada  Indrajit Majumdar	142
Box 8.3	The growing importance of corporate responsibility in the forest-based industry Ning Li and Anne Toppinen	146
Box 8.4	Forestry investments in China	153
Box 9.1	Forest biorefinery: an example of policy driven technology	160
Box 9.2	Endophytic bacteria to improve fitness of woody plants	169
Box 9.3	Laser Measurement-Based Precision Forestry	172

Box 10.1	From deforestation to sustainable fuelwood production	190
Box II.I	Australians' attitudes to forests	208
	Do attitudes about forests differ between ordinary citizens and forest owners? Heimo Karppinen and Annukka Valkeapää	212
Box 11.3	Comparing citizens' perceptions of forests in the Spanish regions of Valencia and Cantabria	214
Box 11.4	Potential future areas of conflict	217
Box 11.5	Attitudes to forestry and conservation in Indonesia	218
Box 12. I	Climate change and vector-borne diseases	225
Box 12.2	Forest and human health in tropical areas	226
Box 12.3	Forests as a source of health-promoting and bioactive compounds	227
Box 13.1	Forests and infrastructure: Managing cumulative effects in a boreal landscape of Alberta, Canada	238
Box 13.2	Forests and urbanisation: The Sihlwald in Zurich, Switzerland	240
Box 14.1	Old growth in the Canadian boreal forest	256
Box 14.2	IUCN red-listed species in the boreal forest	258
Box 14.3	Recent efforts to promote wood processing in Russia	261
Box 14.4	More insect damage to come: the spruce budworm in Canada's boreal forest  René I.Alfaro	264
Box 14.5	Heterobasidion parviporum in Finland: expectations for climatic change Jarkko Hantula	266
Box 14.6	A Case study of sustainable forest management in a changing climate:  Champagne-Aishihik Traditional Territory, South-west Yukon, Canada	274
Box 17.1	Causes of encroachment in East African forest landscapes	326
Box 17.2	FACE-UWA Carbon Sequestration Project	328
Box 18.1	Geographical determination of West Africa	337
Box 19.1	Ngan, Palansalan, Pagsabangan Forest Resource Development Cooperative's (NPPFRDC's) experience with cancellation of Resource Use Permit due to the absence of a legislated law that supports CBFM	364
Box 22.1	Enabling condition and power balance: Case studies from El Petén, Guatemala; Hojancha, Costa Rica; and Yuscarán, Honduras	422
Box 22.2	Public participation: Status and challenges in Quebec, Canada	426
Box 23.1	Policy Intersection: the Case of European Union (EU)-Indonesian Forest Law Enforcement, Governance, and Trade (FLEG-T)	474

# **Abbreviations and Acronyms**

ASEAN	Association of Southeast Asian	ITTO	International Tropical Timber Organi-
BRIC	Nations	IUCN	zation International Union for Conservation
CATIE	Brazil, Russia, India, China Tropical Agricultural Research and	IOCN	of Nature
CALL	Education Centre	IUFRO	International Union of Forest
CBD	Convention on Biological Diversity	iorno	Research Organizations
CBFM	Community-Based Forest Manage-	MAI	Mean Annual Increment
<b>C</b> 2	ment	MCPFE	Ministerial Conference on the Pro-
CDM	Clean Development Mechanism		tection of Forests in Europe
CF	Community Forest	MDGs	Millennium Development Goals
CIFOR	Center for International Forestry	MEA	Millennium Ecosystem Assessment
	Research	METLA	Finnish Forest Research Institute
CIRAD	Centre de Coopération Inter-	NGO	Non-Governmental Organization
	nationale en Recherche Agronomique	NRC	Natural Resources Canada
	pour le Développement	NTFP	Non-Timber Forest Product
COP	Conference of Parties	NWFP	Non-Wood Forest Product
CR	Corporate Responsibility	PEFC	Programme for the Endorsement of
CSR	Corporate Social Responsibility		Forest Certification
DBH	Diameter at Breast Height	PES	Payment for Environmental Services
DSS	Decision Support Systems	R&D	Research and Development
EBM	Ecosystem-Based Management	REDD	Reducing Emissions from Deforesta-
EFI	European Forest Institute		tion and Forest Degradation
ENGO	Environmental Non-Governmental	SF	Sustainable Forest
	Organization	SFM	Sustainable Forest Management
EU	European Union	SME	Small and Medium Sized Enterprise
EUR	Euro	UN	United Nations
FAO	Food and Agricultural Organization	UNCED	United Nations Conference on
FLECT	of the United Nations	LINIDD	Environment and Development
FLEGT	Forest Law Enforcement, Governance and Trade	UNDP	United Nations Development
FSC	Forest Stewardship Council	UNECE	Programme United Nations Economic Commis-
GCM	General Circulation Model	ONECE	sion for Europe
GDP	Gross Domestic Production	LINESCO	United Nations Educational,
GEF	Global Environment Facility	ONLIGO	Scientific, and Cultural Organization
GHG	Greenhouse Gas	UNFCCC	United Nations Framework
GIS	Geographic Information System	0.11.000	Convention on Climate Change
GMO	Genetically Modified Organism	UNFF	United Nations Forum on Forests
ICRAF	World Agroforestry Centre	UNU	United Nations University
ICT	Information and Communication	US	United States
	Technologies	USA	United States of America
IMF	International Monetary Fund	USD	United States Dollar
INIFAP	National Institute for Agricultural,	vTI	John Heinrich von Thünen Institut
	Livestock and Forestry Research of	WFSE	World Forests, Society and Environ-
	Mexico		ment
IPCC	Intergovernmental Panel on Climate	WTO	World Trade Organization
	Change	WWF	World Wildlife Fund