### TRANSFORMING BIODIVERSITY GOVERNANCE

Over fifty years of global conservation has failed to bend the curve of biodiversity loss, so we need to transform the ways we govern biodiversity. The UN Convention on Biological Diversity aims to develop and implement a transformative framework for the coming decades. However, the question of what transformative biodiversity governance entails and how it can be implemented is complex. This book argues that transformative biodiversity governance means prioritizing ecocentric, compassionate and just sustainable development. This involves implementing five governance approaches – integrative, inclusive, adaptive, transdisciplinary and anticipatory governance – in conjunction and focused on the underlying causes of biodiversity loss and unsustainability. *Transforming Biodiversity Governance* is an invaluable source for academics, policy makers and practitioners working in biodiversity and sustainability governance. This is one of a series of publications associated with the Earth System Governance Project. For more publications, see www.cambridge.org/earth-system-governance. This title is also available as Open Access on Cambridge Core.

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The **Earth System Governance Project** was established in 2009 as a core project of the International Human Dimensions Programme on Global Environmental Change. Since then, the Project has evolved into the largest social science research network in the area of sustainability and governance. The Earth System Governance Project explores political solutions and novel, more effective governance mechanisms to cope with the current transitions in the socioecological systems of our planet. The normative context of this research is sustainable development; earth system governance is not only a question of institutional effectiveness, but also of political legitimacy and social justice.

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# TRANSFORMING BIODIVERSITY GOVERNANCE

Edited by INGRID J. VISSEREN-HAMAKERS Radboud University, Netherlands

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### Preface

The idea for this book was conceived in December 2016 during the 13th Conference of the Parties to the Convention on Biological Diversity (CBD COP13) in Cancun, Mexico. Several members of the Rethinking Biodiversity Governance (RBG) network, a network of social scientists and policy practitioners working on biodiversity governance, were chatting during a coffee break in the hallway in front of the meeting rooms.

Discussions on global biodiversity governance after the 2020 deadline for the Aichi targets were starting, and the development of the Global Assessment of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was underway – the time seemed right for a book on transforming biodiversity governance. It was clear from the start that we wanted the book to become part of the tradition of the Earth System Governance (ESG) book series, since many of us have been active members of the ESG community for years, and earlier volumes in the community's series have inspired and shaped our own work in countless ways.

The book evolved through presentations of draft chapters at ESG conferences, numerous discussions at workshops, CBD sessions and meetings of the RBG network. The book reflects the diversity of views, disciplines, philosophical perspectives, motivations and areas of expertise of the RBG network. It's only through this sense of community that we were able to together contribute to the discussion on an issue as complex as transforming biodiversity governance.

The book reflects and contributes to current thinking on sustainable development. It is increasingly recognized among policy practitioners and scholars that fundamental societal change is needed to achieve the sustainability goals established by the international community, including those on addressing biodiversity loss. A rich debate on such transformations, transformative change and transitions is ongoing. How and the extent to which these much-needed fundamental changes can be governed is an outstanding question. The book has set out to contribute to this

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#### Preface

question – hence its title *Transforming Biodiversity Governance*: Sustainability transformations also require transformations in and of governance.

On the cover you see an image of a beaver, a transformative animal in its own right through its role as ecosystem engineer in shaping its environment and thereby the landscape. Please bear with us as we take a Dutch perspective in explaining the cover image. Beavers became extinct in the Netherlands in 1826 due to hunting. They were reintroduced in the late twentieth century, and also found their way into the Netherlands themselves from Belgium and Germany. Once in the Netherlands, they benefited from rewilding efforts and the climate adaptation policy of creating "room for the river," and the number of beavers increased across the country. The population grew to the extent that now in some parts of the country beavers are starting to be seen as a problem. Special management plans are being put in place to resist the transformative powers of the beaver; hunting is unfortunately again taking place. This short, Dutch history of the beaver illustrates how we as humans have to rethink how we relate to nature and animals, and thereby also need to rethink biodiversity governance. Instead of trying to manage nature for humans, we can learn to live with, and as part of, nature.

The aim of this book was to inform the development and implementation of the CBD Post-2020 Global Biodiversity Framework (GBF). These negotiations, as well as the writing of this book, were severely challenged by the COVID-19 pandemic. The pandemic made us all more aware in so many ways of the inextricable link between nature, biodiversity conservation, increasing risks of pandemics and human wellbeing. At the time of writing, we expect the book to be published around the finalization of the negotiations of the CBD Post-2020 GBF. We hope that the analyses in this book may inform and inspire its further implementation, and support the efforts of actors around the world to enable the transformative change that is so urgently needed for the conservation, and sustainable and equitable use, of biodiversity.

### Acknowledgments

This book truly represents a community effort. So many people contributed in so many different ways. We are grateful to all of you.

First of all, a huge thanks to all the authors of the book for the wonderful cooperation, sharing of ideas and excellent chapters you have written. Discussing these chapters at various moments in time has been one of the most rewarding aspects of our joint efforts. We would especially also like to note the role of the first authors of the chapters in extending the author teams to include diverse geographical and disciplinary perspectives.

Thanks also to Frank Biermann, editor of this series, who supported the idea for this book from the start.

We would like to genuinely thank the chapter reviewers for taking the time to go through the chapters critically. All chapters were peer reviewed by an author from a different chapter in the book and an anonymous reviewer. These reviews helped tremendously in improving the chapters and strengthening the line of argumentation of the book.

Sincere thanks also to Caro Dijkman of Caro Grafico, who designed the figures in Chapters 1 and 4.

We are deeply indebted to Cebuan Bliss. On top of her role as coauthor in several chapters, Cebby took on numerous coordinating roles in the development of the book, including copy-editing all draft chapter texts, organizing the peer review process, and overseeing administration and communication. This book would not have been published without you, Cebby!

We are grateful to the Nijmegen School of Management of Radboud University and the PBL Netherlands Environmental Assessment Agency for covering the open access fees for the book.

Last but not least we would like to thank our respective families for their patience during this book project, which ended up lasting for about five years.

## Abbreviations

ABMTs	- area-based management tools
ABNJ	<ul> <li>areas beyond national jurisdiction</li> </ul>
ABS	- access and benefit-sharing
ACP	- African, Caribbean and Pacific
AHTEG	- ad hoc technical expert group
ART	<ul> <li>architecture for REDD+ transactions</li> </ul>
ATS	– Antarctic Treaty System
BBNJ	- Marine Biodiversity Beyond the Limits of National
	Jurisdiction
BCC	- Benguela Current Convention
BECCS	- bioenergy with carbon capture and sequestration
BIC	<ul> <li>biodiversity impact chain</li> </ul>
BIOFIN	<ul> <li>Biodiversity Finance Initiative</li> </ul>
BIOPAMA	- Biodiversity and Protected Areas Management Program
BPI	<ul> <li>biodiversity policy integration</li> </ul>
C40	<ul> <li>C40 Climate Leadership Group</li> </ul>
CAP	- Common Agricultural Policy
CBD	<ul> <li>Convention on Biological Diversity</li> </ul>
CBFP	<ul> <li>Congo Basin Forest Partnership</li> </ul>
CCA	<ul> <li>community conserved area</li> </ul>
CDR	<ul> <li>– carbon dioxide removal</li> </ul>
CHM	<ul> <li>common heritage of mankind</li> </ul>
CITES	- Convention on International Trade in Endangered Species of
	Wild
	Fauna and Flora
$CO_2$	– carbon dioxide
COBA	<ul> <li>community based group</li> </ul>
COP	- Conference of the Parties

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CMS	<ul> <li>Convention on the Conservation of Migratory Species of Wild Animals</li> </ul>
COST	– European Cooperation on Science and Technology
CRA	– environmental reserve quota ( <i>Cota de Reserva Ambiental</i> )
CSCP	- Collaborating Centre on Sustainable Consumption and
eser	Production
DAC	– direct air capture
DSI	– digital sequence information
EC	– European Commission
EBSAs	– ecologically or biologically significant marine areas
EID	– emerging infectious disease
ES	– ecosystem services
ESG	– environmental, social and governance
EU	– European Union
FAO	– Food and Agriculture Organization
FAWC	– Farm Animal Welfare Council
FPIC	- free, prior and informed consent
GBF	– Global Biodiversity Framework
GCA	– Global Commission on Adaptation
GEF	– Global Environment Facility
GELOSE	– Gestion Locale Sécurisée (secured local managed forests law)
GM	– genetically modified
IAS	– invasive alien species
ICC	– International Chamber of Commerce
ICCAs	– Indigenous and community conserved areas
ICDP	<ul> <li>integrated conservation and development project</li> </ul>
ICLEI	– International Council for Local Environmental Initiatives (now
10221	Local Governments for Sustainability)
IG	- integrative governance
IMET	– Integrated Management Effectiveness Tool
IPBES	- Intergovernmental Science-Policy Platform on Biodiversity
	and
	Ecosystem Services
IPCC	– Intergovernmental Panel on Climate Change
IPLC	– Indigenous peoples and local communities
IPRs	– intellectual property rights (including patents)
ITPGRFA	– International Treaty on Plant Genetic Resources for Food and
	Agriculture
IUCN	– International Union for the Conservation of Nature

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IUU	- illegal, unreported and unregulated
KBA	– key biodiversity area
KIFCA	– Kyeintali Inshore Fisheries Co-Management Association
LBSAPs	<ul> <li>local biodiversity strategies and action plans</li> </ul>
LED-R	– low emissions rural development
LME	– large marine ecosystem
LMMA	– locally managed marine areas
LMOs	<ul> <li>living modified organisms</li> </ul>
MA	– Millennium Ecosystem Assessment
MARISMA	– Marine Spatial Management and Governance Project
MAT	– mutually agreed terms
METT	– Management Effectiveness Tracking Tool
MGR	– marine genetic resources
MPA	– marine protected area
MSP	– marine spatial planning
NAMA	- nationally appropriate mitigation action
NBSAPs	- national biodiversity strategies and action plans
NCP	<ul> <li>nature's contributions to people</li> </ul>
NEOH	– Network for EcoHealth and One Health
NGFS	- Network for Greening the Financial System
NGO	- nongovernmental organization
ODA	<ul> <li>– official development assistance</li> </ul>
OECD	- Organisation for Economic Co-operation and Development
OECMs	- other effective area-based conservation measures
OIE	- [Office International des Epizooties] World Organisation for
	Animal Health
PA	– protected area
PAME	<ul> <li>Protected Area Management Effectiveness</li> </ul>
PES	- payments for ecosystems services
PIC	<ul> <li>prior informed consent</li> </ul>
	<ul> <li>Pandemic Influenza Preparedness Framework</li> </ul>
PPP	<ul> <li>public-private partnerships</li> </ul>
RAN	<ul> <li>Rainforest Action Network</li> </ul>
REDD+	- Reducing Emissions from Deforestation and Forest Degradation
RFMOs	<ul> <li>regional fisheries management organizations</li> </ul>
RoN	– Rights of Nature
RTQMM	<ul> <li>Rio Tinto QIT Madagascar Mineral</li> </ul>
SBSTTA	- Subsidiary Body on Scientific, Technical and Technological
	Advice

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SDGs	– sustainable development goals
SOI	– Sustainable Ocean Initiative
SRM	- solar radiation modification
TBG	- transformative biodiversity governance
TEEB	- the economics of ecosystems and biodiversity
TRIPS	- trade-related aspects of intellectual property rights
UFF	– Unlocking Forest Finance
UN	– United Nations
UNCLOS	- United Nations Convention on the Law of the Sea
UNDP	- United Nations Development Programme
UNDRIP	- United Nations Declaration on the Rights of Indigenous
	Peoples
UNEP	- United Nations Environment Programme
UNESCO	- United Nations Educational, Scientific and Cultural
	Organization
UNFCCC	- United Nations Framework Convention on Climate Change
UNFSA	<ul> <li>United Nations Fish Stocks Agreement</li> </ul>
UNGA	- United Nations General Assembly
WCPA	- World Commission on Protected Areas
WCS	- Wildlife Conservation Society
WEF	– World Economic Forum
WHO	- World Health Organization
WIPO	- World Intellectual Property Organization
WRI	- World Resources Institute
WTO	– World Trade Organization