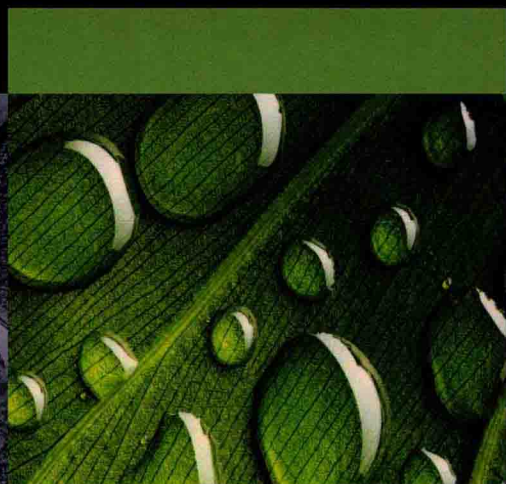


ELGAR ENCYCLOPEDIA
OF ENVIRONMENTAL LAW

General Editor: Michael Faure



BIODIVERSITY AND NATURE PROTECTION LAW



Edited by
Elisa Morgera
Jona Razzaque

VOLUME III

Biodiversity and Nature Protection Law

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BIODIVERSITY AND NATURE PROTECTION LAW

ELGAR ENCYCLOPEDIA OF ENVIRONMENTAL LAW

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The *Elgar Encyclopedia of Environmental Law* is a landmark reference work, providing definitive and comprehensive coverage of this dynamic field. The *Encyclopedia* is organized into 12 volumes around top-level subjects – such as water, energy and climate change – that reflect some of the most pressing issues facing us today. Each volume probes the key elements of law, the essential concepts, and the latest research through concise, structured entries written by international experts. Each entry includes an extensive bibliography as a starting point for further reading. The mix of authoritative commentary and insightful discussion will make this an essential tool for research and teaching, as well as a valuable resource for professionals and policymakers.

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Foreword to the Encyclopedia

It is our privilege, on behalf of the IUCN Academy of Environmental Law, to introduce this set of volumes comprising the *Elgar Encyclopedia of Environmental Law* and to thank General Editor Michael Faure and the outstanding group of volume editors for their invaluable contribution and commitment to the project.

The decision to initiate development of this multi-volume Encyclopedia was taken by the Governing Board of the IUCN Academy of Environmental Law in 2011 in response to a proposal from Ben Booth of Edward Elgar Publishing. It has been a pleasure for the Academy Secretariat to work with EEP and Professor Faure throughout the implementation process over the past several years. We must specifically acknowledge Ben Booth and Laura Mann of EEP for their diligent and systematic guidance at every stage.

The *Elgar Encyclopedia of Environmental Law*, a challenging and ambitious undertaking, has represented an important opportunity for the IUCN Academy in collaboration with a wider range of distinguished scholars and researchers to pursue its mission: environmental law is essential for the achievement of a sustainable world that values and conserves nature under the rule of law and justice.

Based on the quality and experience of the specialists whose commentaries and discussion are included in the set, we are confident that the *Elgar Encyclopedia of Environmental Law* will serve as a valuable and respected source of reference for students, scholars, professionals, policy makers and other interested readers who will have occasion to consult its content.

Jamie Benidickson and Yves Le Bouthillier
Executive Directors
IUCN Academy of Environmental Law
Faculty of Law
University of Ottawa

Foreword to Volume III

This a fascinating book about one of the great challenges in environmental law at the domestic and international levels: how can law and legal instruments contribute to the protection of natural resources and more particularly biodiversity? As Elisa Morgera rightly sketches in the Introduction, an alarming state of affairs besets biodiversity, which is in many areas declining at a high speed. The question of how law can help to turn the tide is therefore both highly important and urgent. This wide-ranging book addresses the challenge from several perspectives.

This book brings together the work of numerous specialists, who comprehensively address many different issues with respect to biodiversity and nature protection law. Without becoming lost in the details of law in national legal systems, crucial issues are discussed from a high-level perspective. Considerable attention is paid to one of the central instruments in international environmental law, the Convention on Biological Diversity, but several aspects of biodiversity, varying from species conservation to island biodiversity, forest biodiversity and inland waters are also discussed, again at an accessible level of generality. Other relevant issues such as biofuels, ecotourism and the role of REDD+ in biodiversity are also included. A lot of attention is equally paid to the legal and policy instruments needed to implement the protection of biodiversity, such as liability rules and public participation as well as monitoring and compliance instruments.

The Introduction rightly stresses that the protection of biodiversity has strong links with the protection of human rights, for example, as reduced biodiversity may endanger rights of indigenous peoples and local communities.

These issues and many other fascinating aspects are addressed in this volume. It is probably the first book that brings together substantive expert commentary on so many diverse aspects of biodiversity and nature protection law at this high level of generality. I wholeheartedly congratulate the editors and the authors for this great achievement and I am convinced that many interested in the question of how the law can contribute to biodiversity will read the contributions to this book with great interest and admiration.

Michael Faure
General Editor
Encyclopedia of Environmental Law

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Elisa Morgera wishes to express her gratitude to colleagues at the University of Edinburgh School of Law, where she was based during the preparation of this volume, to Mika Schroder for her precious research assistance and to Maëva Cabanel for translating a chapter in this volume from French to English. In addition, she wishes to thank the members of the *Earth Negotiations Bulletin* team covering the negotiations under the Convention on Biological Diversity (CBD) and colleagues at the CBD Secretariat for stimulating exchanges of ideas on international biodiversity law. Jona Razzaque would like to thank the Faculty of Business and Law and the Department of Law of the University of the West of England for providing research time to edit the manuscript.

The law and policy developments throughout this book are reflected as they were on 20 July 2016.

Elisa Morgera
Jona Razzaque

Abbreviations

AAU	Assigned amount unit
AB	Appellate Body
ABNJ	Areas beyond national jurisdiction
ABS	Access and benefit-sharing
ASEAN	Association of southeast Asian Nations
ASR	Articles on State Responsibility
BBNJ	Biodiversity beyond national jurisdiction
BCH	Biosafety Clearinghouse
BECCS	Bioenergy with carbon capture and sequestration
BIT	Bilateral investment treaty
BOD	Biochemical oxygen demand
BTU	British Thermal Unit
CAC	Command-and-control
CAFÉ	Corporate average fuel economy
CBD	Convention on Biological Diversity
CBDR	Common but differentiated responsibility
CBDRRC	Common but differentiated responsibilities and respective capabilities
CC	Climate change
CCA	Climate change adaptation
CCAC	Climate and Clean Air Coalition
CCAMLR	Commission on the Conservation of Antarctic Marine Living Resources
CCP	Cities for Climate Protection
CCS	Carbon capture and storage
CDM	Clean development mechanism
CDR	Carbon dioxide removal
CEQ	Council on Environmental Quality
CER	Certified Emission Reductions
CFL	Compact fluorescent lamp
CGIAR	Consultative Group on International Agricultural Research
CHP	Combined heat and power
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CJEU	Court of Justice of the European Union
CMS	Convention on Migratory Species
COP	Conference of the Parties
CSR	Corporate social responsibility
DDA	Doha Development Agenda
DICE	Dynamic Integrated Climate Economy
DOE	Designated Operational Entity
DRR	Disaster risk reduction

DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
EA	Environmental Assessment
EAG	Environment Advisory Group
EBSA	Ecologically or biologically significant marine area
EC	European Commission
ECtHR	European Court of Human Rights
EEA	European Economic Area
EEDI	Energy Efficiency Design Index
EEZ	Exclusive economic zone
EIA	Environmental impact assessment
EIS	Environmental impact statement
EPA	Environmental Protection Agency
ETS	Emissions Trading Scheme
EU	European Union
FAO	Food and Agriculture Organization
FET	Fair and equitable treatment
FIP	Feed-in premium
FIT	Feed-in-tariff
FLEG	Forest Law Enforcement and Governance
FVA	Framework for Various Approaches
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GBP	Global Bioenergy Partnership
GCF	Green Climate Fund
GEF	Global Environment Facility
GGGI	Global Green Growth Institute
GHG	Greenhouse gas
GIACC	Group on International Aviation and Climate Change
GLISPA	Global Island Partnership
GMO	Genetically modified organism
HAP	Hazardous air pollutant
IACHR	Inter-American Commission on Human Rights
IAM	Integrated assessment model
ICAO	International Civil Aviation Organization
ICCAs	Indigenous peoples' and community conserved territories and areas
ICCPR	International Covenant on Civil and Political Rights
ICJ	International Court of Justice
ICLEI	International Council for Local Environmental Initiatives
ICSID	International Centre for Settlement of Investment Disputes
IDP	Internally displaced person
IEA	International Energy Agency
IET	International emissions trading
IFC	International Finance Corporation
IIA	International investment agreement
ILC	International Law Commission

ILS	Insurance-linked security
IMF	International Monetary Fund
IMO	International Maritime Organization
INDC	Intended Nationally Determined Contribution
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPSO	International Programme on the State of the Ocean
IRENA	International Renewable Energy Agency
ISA	International Seabed Authority
ITLOS	International Tribunal for the Law of the Sea
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
IUCN	International Union for the Conservation of Nature and Natural Resource
JI	Joint Implementation
KP	Kyoto Protocol
LDC	Least-developed country
LED	Light-emitting diode
LEV	Low Emissions Vehicle
LID	Low impact development
LMMC	Like Minded Megadiverse Countries
LMO	Living modified organism
LRTAP	Long-Range Transboundary Air Pollution
LULUCF	Land Use, Land-Use Change and Forestry
MBI	Market-based instrument
MBM	Market-based mechanism
MEA	Multilateral environmental agreement
MEPC	Marine Environment Protection Committee
MFN	Most favoured nation
MOU	Memorandum of Understanding
MPA	Marine protected area
MPR	Minimum Program Requirement
MRV	Monitoring, Reporting and Verification
NAFO	Northwest Atlantic Fisheries Organization
NAFTA	North American Free Trade Agreement
NAP	National Allocation Plan
NEPAD	New Partnership for Africa's Development
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMM	New market mechanism
NSRL	No Significant Risk Level
NT	National treatment
OAU	Organization of African Unity
ODS	Ozone-depleting substance
OECD	Organization for Economic Co-operation and Development

OEHHA	Office of Environmental Health Hazard Assessment
OHCHR	Office of the High Commissioner for Human Rights
OPEC	Organization of Petroleum Exporting Countries
OPIC	Overseas Private Investment Corporation
OSHA	Occupational Safety and Health Administration
OSHRC	Occupational Safety and Health Review Commission
PAGE	Policy Analysis of the Greenhouse Effect
PAT	Perform Achieve Trade
PES	Payments for environmental services
PET	Punctuated equilibrium theory
PM	Particulate matter
PoWPA	Programme of Work on Protected Areas
PPM	Processes and production method
PTC	Production tax credit
PWIB	Programme of Work on Island Biodiversity
REC	Renewable energy credit
REDD	Reducing Emissions from Deforestation and Forest Degradation
RES	Renewable Electricity Standard
RFMOs	Regional fisheries management organizations
RGGI	Regional Greenhouse Gas Initiative
RIEL	Research Institute of Environmental Law
RIN	Renewable Identification Number
RPS	Renewable portfolio standard
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SCM	Subsidies and Countervailing Measure
SDGs	Sustainable Development Goals
SEA	Strategic environmental assessment
SEEMP	Ship Energy Efficiency Management Plan
SIDS	Small Islands Developing States
SLCP	Short-lived climate pollutant
SLR	Sea level rise
SPS	Sanitary and phytosanitary
SRM	Solar radiation management
SST	Surface sea temperature
TBPAs	Transboundary protected areas
TBT	Technical barriers to trade
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UCLG	United Cities and Local Governments
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
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

UNFF	United Nations Forum on Forests
UNGA	United Nations General Assembly
UNHRC	United Nations Human Rights Council
UNWTO	UN World Tourism Organization
USGBC	United States Green Building Council
VCLT	Vienna Convention on the Law of Treaties
VER	Voluntary Emissions Reduction
VMEs	Vulnerable marine ecosystems
VOC	Volatile organic compound
WHC	World Heritage Convention
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization

Contents

<i>List of editors and contributors</i>	viii
Foreword to the Encyclopedia <i>Jamie Benidickson and Yves Le Bouthillier</i>	xi
Foreword to Volume III <i>Michael Faure</i>	xii
<i>Acknowledgments</i>	xiii
<i>List of abbreviations</i>	xiv
Introduction to Volume III: The research challenges of international biodiversity law <i>Elisa Morgera</i>	1
PART 1 HISTORICAL AND CONCEPTUAL BACKGROUND	
III.1 Historical perspectives on the challenge of biodiversity conservation <i>Braulio Ferreira de Souza Dias and Kathryn Garforth</i>	13
III.2 Sovereignty, conservation and sustainable use <i>Christine Willmore</i>	31
III.3 The historical roots of the North-South dynamic in biodiversity conservation and its imprint on the Convention on Biological Diversity <i>Andreas Kotsakis</i>	44
PART 2 PRINCIPLES AND APPROACHES	
III.4 Sustainable development and equity in biodiversity conservation <i>Virginie Barral</i>	59
III.5 The ecosystem approach and the precautionary principle <i>Elisa Morgera</i>	70
III.6 Nature capital: valuation and payments for ecosystem services <i>Alexandra Langlais</i>	81
PART 3 KEY THEMES	
III.7 Species-based conservation <i>Erika J Techera</i>	97
III.8 Terrestrial areas protection <i>An Cliquet and Hendrik Schoukens</i>	110