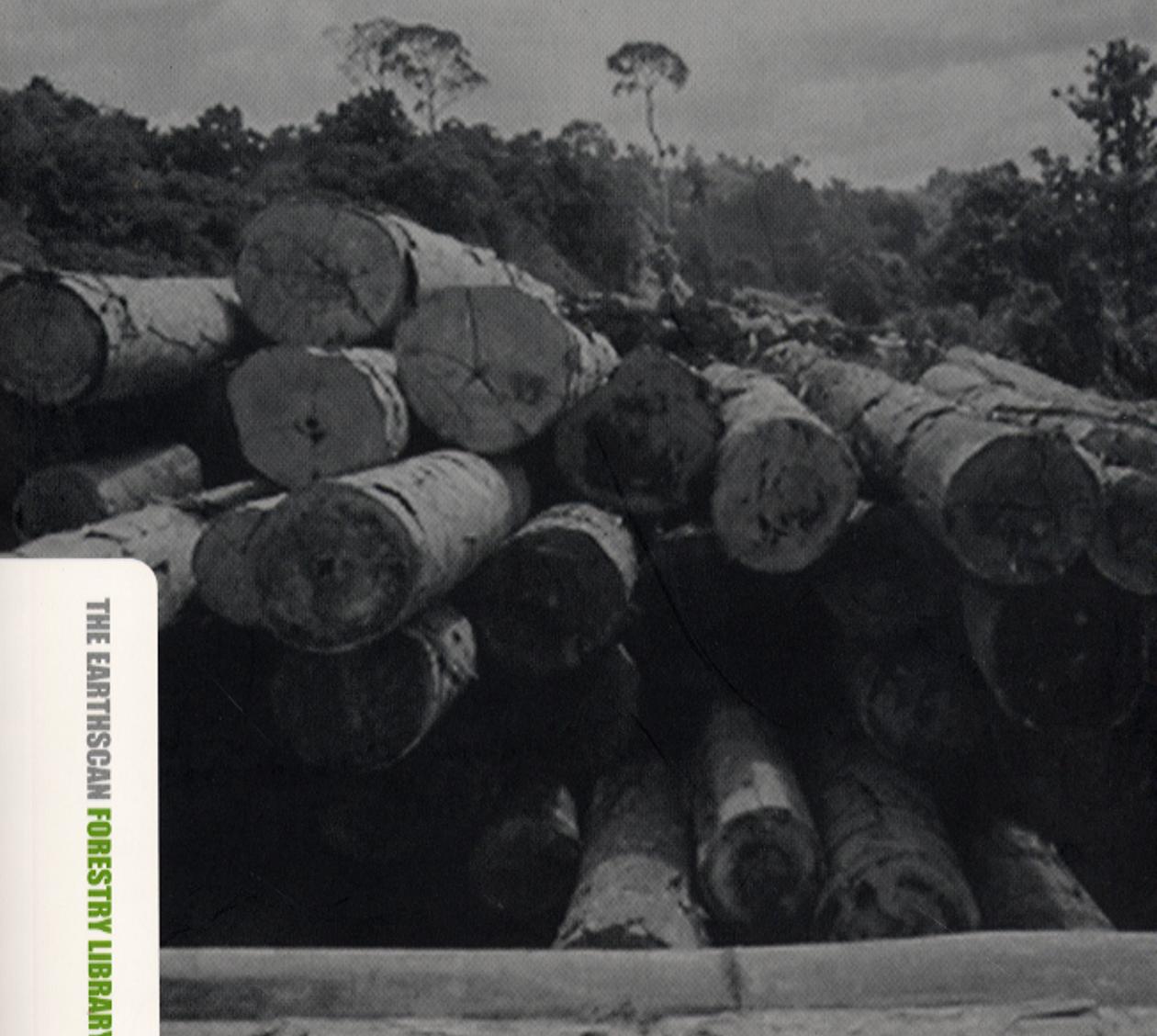


forests in landscapes

ECOSYSTEM APPROACHES TO SUSTAINABILITY



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JEFFREY A. SAYER & STEWART MAGINNIS

Forests in Landscapes

Ecosystem approaches to sustainability

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Forests in Landscapes

Ecosystem approaches to sustainability

*Jeffrey Sayer and Stewart Maginnis
assisted by Michelle Laurie*

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Foreword

To many people the apparent lack of progress with conserving and managing the world's forests embodies all that has gone wrong with respect to the modern world's stewardship of its natural resources. There are still too many places where deforestation and degradation continue unabated, forest-dependent people slip further into poverty, governments and other forest owners lose large sums of potential revenue to illegal logging, and climate change now threatens the remaining forests. World leaders make commitments but appear to be unable to find workable solutions. This catalogue of woes makes for depressing reading. However, the reality on the ground is that when the right incentives exist and when forest governance is fair and predictable, progress can be achieved. When these conditions are right, solutions will emerge, tailored to local circumstances and taking into account both short-term development needs and long-term sustainability.

Sayer and Maginnis have drawn together in this volume a series of case studies that show that local reality is often well ahead of international rhetoric with respect to the conservation and sustainable use of forests. In many parts of the world people are organizing to manage forests better. Faced with scarcity of the goods and services that they need from forests, people are cooperating to produce locally workable solutions to forest problems.

In order to allow this trend to continue, we need to resist the temptation of shoe-horning the science and the art of sustainable forest management into a one-size-fits-all straitjacket of standards and norms. The international processes dealing with forests have often been referred to disparagingly as international talk-shops. They may have focused too much on top-down definitions of "principles" or "criteria and indicators" or other approaches to sustainable forest management. But they have also provided inspiration for many of the positive things that are happening. Local success has not just suddenly emerged from a vacuum; it has been nourished and shaped by the debates that have been occurring at the meetings of the Convention on Biological Diversity and the United Nations Forum on Forests. Recent thinking emerging from these two bodies is leading to a new and exciting understanding of how forests can be managed as "ecosystems" and to new concepts and tools for Sustainable Forest Management.

The idea for this book came from the ongoing discussion at both the Convention on Biological Diversity (CBD) and the United Nations Forum on Forests (UNFF) on the relationship between the Ecosystem Approach and Sustainable Forest Management. This book demonstrates that these are neither alternative methods of forest management nor are they simply complicated ways of saying the same thing. They are both emerging concepts for more integrated and holistic ways of managing forests within larger landscapes in ways that optimize benefits to all stakeholders. The best bet for the sustainable and equitable management of the world's forests will be locally adapted solutions that are inspired by the latest thinking on both the Ecosystem Approach and Sustainable Forest Management. Ultimately, every forest situation is different and we need a plurality of solutions, each grounded in local realities. International processes do seem to be contributing to a more enabling environment in which successful local solutions can emerge.

So the conclusion is that not all the news on forests is bad. Over the past couple of decades, a quiet revolution in forest management has been gathering momentum. This revolution has been initiated not in boardrooms or national assemblies but through the practice of communities, individuals, foresters and conservationists, often setting aside their differences and starting to act together.

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Preface

This book was stimulated by discussions held at the third meeting of the United Nations Forum on Forests (UNFF) on the relationship, as applied to forests, between sustainable forest management (SFM) and the Ecosystem Approach Principles developed under the Convention on Biological Diversity (CBD). It also responds to a decision at the 6th Conference of the Parties of the CBD seeking clarification of the relations between the two concepts.

The book grew out of a workshop held in May 2004 in Begnins, Switzerland. This meeting brought together a group of 20 people representing forest managers, academics, specialists in integrated approaches to natural resources management and forest conservation practitioners from about 15 countries. The group shared experiences on recent trends in sustainable forest management concepts and in the use of various forms of ecosystem approaches to forest conservation and management problems.

The case studies in this book were, with the exception of the Australia chapter, written by persons attending the Begnins workshop. But the workshop also triggered an intense set of interactions amongst both the participants and people from the wider IUCN network on issues related to ecosystem approaches and sustainable forest management. We have drawn heavily on this network of experts and on the rich recent literature on SFM and ecosystem approaches in editing this volume.

It was apparent from the beginning that there had been numerous attempts to manage forests at the scale of “ecosystems” during recent decades. The terms “Ecosystem Management” and the concept of managing and conserving “forest ecosystems” had been around for a long time before the CBD Principles were developed. Much of this practical experience anticipated, and undoubtedly contributed to, the Ecosystem Approach concepts articulated by the CBD. Almost all of the case material in this book relates to practical experiences that were already initiated long before the publication of the CBD Principles. We were not able to identify and so have not drawn upon any examples of forest management initiatives that had been undertaken as a direct response to the CBD Principles. The use of the term “ecosystem approaches” in this book therefore refers to forest management experiences that are consistent with, but were not a response to, the CBD Principles. We have used the lower case, ecosystem approach, when we are referring to general approaches to managing forests at a large spatial scale for multiple environmental and social objectives in ways that are consistent with the CBD Principles. We have used the upper case and definite article – The Ecosystem Approach – when we are referring specifically to the CBD Principles.

This book is written largely from the perspective of the forester. Foresters have been widely criticised for taking a narrow commodity focus to forest resource management. They have been primarily interested in timber and are perceived as treating everything else as secondary to timber production. We believe that this book shows that this stereotype is no longer valid and has not been for at least a couple of decades. Foresters and forest departments have in many cases been at the cutting edge of the development of more integrative approaches to resource management. In many cases this has been because they were subject to strong pressure from civil society to give more prominence to the broad social and environmental values of forests – but the fact remains that the past two decades have seen a remarkable evolution of the profession of forestry. We would argue that foresters may have moved further and quicker in the direction of ecosystem approaches to management than other resource managers – and certainly further than they have widely been credited.

FORESTS IN LANDSCAPES: ECOSYSTEM APPROACHES TO SUSTAINABILITY

A major conclusion of our work is that ecosystem approaches manifest themselves in very different ways in different situations. The term "ecosystem approach" is understood in different ways by people depending on the situations in which they have worked. In Western Europe the issues that have driven the need for ecosystem approaches have been biodiversity conservation and amenity. In India and Central America it has been poverty alleviation and local people's rights to forest resources. In North America and Australia it has been an environmental lobby for the preservation of old-growth forests. In Russia it has been the protection of employment and rural economies in the face of destructive and illegal logging. When asked to write about experiences with ecosystem approaches people from these different geographic origins focussed on the issues that had been the drivers of change in their own forests.

This leads us to the overall conclusion that it is unhelpful to focus too much on any one formula for forest management. The future of forestry should lie in pluralism. Every forest system is different in its biophysical, economic, social and political attributes. Every situation needs a response tailored to its present needs and these needs will inevitably change over time. The skill of the forest manager is to be able to draw upon the rich literature on the ecology, economics and social values of forests and work with all stakeholders to develop the best management regime for the location at that point in time. The forester then has to stay engaged and be alert to the need to change management when the time comes to do so. We do not believe in management by formula or by any single "cookie-cutter" approach, guideline or criteria and indicator set. However we do conclude that the CBD Ecosystem Approach Principles and their supporting documentation are an excellent resource for forest managers and should be widely consulted and the Principles should be respected. We also conclude that the recent literature on sustainable forest management and the numerous sets of criteria and indicators that have been developed to monitor and evaluate its performance also represent valuable sources of guidance and accumulated knowledge and make valuable contributions to addressing the challenge of better management of forests worldwide.

*Jeffrey A. Sayer and Stewart Maginnis
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Acronyms and Abbreviations

ACICAFOC	Asociación Coordinadora Indígena y Campesina de Agroforestería Comunitaria Centroamericana (Central American Coordinating Association for small-scale Agroforestry)
ACOFOP	Asociación de Comunidades Forestales de El Petén (Petén Association of Forest Communities)
AFLEG	African Forest Law Enforcement and Governance
AMAs	Adaptive Management Areas
AMI	Áreas de Manejo Integral (Integrated Management Areas)
APEC	Asia-Pacific Economic Community
AREAS	Asian Rhino and Elephant Action Strategy
BOSCOSA	Cooperación en los Sectores Forestal y Maderero (Forest and Wood Sector Cooperation)
CACH	Centro Agrícola Cantonal de Hojanca (Hojanca Cantonal Agricultural Centre)
CALM	Department of Conservation and Land Management-Western Australia
CAR	Central African Republic
CATIE	Tropical Agricultural Research and Higher Education Center
CBD	Convention on Biological Diversity
CBFP	Congo Basin Forest Partnership
CCAD	Comisión Centroamericana de Ambiente y Desarrollo (Central American Commission for Environment and Development)
CEFDHAC	Conference on Central African Moist Forest Ecosystems
CFM	Community Forest Management
CGIAR	Consultative Group on International Agricultural Research
CIB	Société Congolaise Industrielle des Bois (Congolese Forest Industry)
CIFOR	Center for International Forestry Research
CIRAD	The International Centre for Agronomic Research for Development
CITES	Convention on International Trade in Endangered Species
COMIFAC	Comité des Ministres des Forêts d'Afrique Centrale (Committee of Forest Ministers of Central Africa)
CONAP	Consejo Nacional de Áreas Protegidas (National Council for Protected Areas)
CRZ	Coastal Regulation Zone
CT	Commercial Thinning
CTFT	Le Centre Technique Forestier Tropical (Technical Centre for Tropical Forestry – France)
C&I	Criteria and Indicators
DRC	Democratic Republic of the Congo
ECOFAC	Ecosystèmes Forestiers en Afrique Centrale – An EU sponsored programme

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EDC	Ecodevelopment Committee
EIA	Environmental Impact Assessment
EsA	Ecosystem Approach
ESA	Endangered Species Act
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FD	Forest Department
FEMAT	Forest Ecosystem Management Assessment Team
FMU	Forest Management Unit
FONAFIFO	The Fondo Nacional de Financiamiento Forestal (National Fund for Forest Finance)
FREEP	Forestry Research Education and Extension Project
FSC	Forest Stewardship Council
FSI	Forest Survey of India
FUNDECOR	Fundación para el Desarrollo de la Cordillera Volcánica Central (Foundation for the Development of the Central Volcanic Range)
GEF	Global Environment Facility
GIS	Geographic Information System
GMO	Genetically Modified Organism
GNP	Gross National Product
Gol	Government of India
HCVs	High Conservation Values
ICBEMP	Interior Columbia Basin Ecosystem Management Project
ICDP	Integrated conservation and development project
IEDP	India Ecodevelopment Project
IFF	Intergovernmental Forum on Forests
IIFM	Indian Institute of Forest Management
INBio	Instituto Nacional de Biodiversidad de Costa Rica (National Biodiversity Institute, Costa Rica)
IPF	Intergovernmental Panel on Forests
ITTO	International Tropical Timber Organization
IUCN	The World Conservation Union
JFM	Joint Forest Management
MAB	Man and Biosphere Programme
MASS	Montane Alternative Silvicultural Systems
MCPFE	Ministerial Conference for the Protection of Forests in Europe
MoEF	Ministry of Environment and Forests
MoU	Memorandum of Understanding
MUSY	Multiple Use–Sustained Yield
NBSAP	National Biodiversity Strategy and Action Plan
NEPA	National Environmental Policy Act

NESDB	National Economic and Social Development Board
NFMA	National Forest Management Act
NFP	National Forest Programme
NGO	Non-governmental organization
NIMBY	Not In My Back Yard
NIPF	Non-industrial Private Forest
NRSA	National Remote Sensing Agency
NTFP	Non-Timber Forest Product
NWFP	Northwest Forest Plan
PA	Protected Area
PDBL	Desarrollo del Bosque Latifoliado (Development of Broad-Leaved Forests)
PES	Payment for Environmental Services
PNW	Pacific Northwest
PNWW	Pacific Northwest-Westside
PCT	Pre-commercial Thinning
PYME	Pequeñas y Medianas Empresas (Small and Medium Enterprises)
PPA	People's Protected Area
RCA	République Centrafricaine
RDC	République Démocratique du Congo
RFD	Royal Forestry Department – Thailand
RPA	Renewable Resources Planning Act
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SFM	Sustainable Forest Management
SMEs	Small- and Medium-Scale Enterprises
TFAP	Tropical Forestry Action Plan
TNS	Tri-National de la Sangha
TOF	Trees outside Forests
UNCED	United Nations Conference on Environment and Development
UNFF	United Nations Forum on Forests
UNDP	United Nations Development Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
UPA	United Progressive Alliance
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USFS	United States Forest Service
WCS	Wildlife Conservation Society
WSCG	Women's Savings and Credit Group
WTI	Wildlife Trust of India
WWF	WorldWide Fund for Nature (World Wildlife Fund in North America)