

Beyond Tropical Deforestation

From Tropical Deforestation
to Forest Cover Dynamics and
Forest Development

Edited by Didier Babin



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Preface

UNESCO's activities on forest ecosystems date back to the early days of the Organization. For a ten-year period starting in the mid-1950s, the Humid Tropics Research Programme provided the main focus for UNESCO's scientific work on humid tropical systems, including studies and projects on humid tropics vegetation, the preparation of regional floras and regional vegetation maps, assessments of tropical herbaria and zoological collections, and international symposia aimed at bringing together information in such fields as termite ecology, tropical deltas and the forest/savannah boundary.

Over the last three decades, the Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves has provided the principal framework for UNESCO work on tropical forest ecosystems, with additional activities from initiatives such as the International Hydrological Programme (IHP) and the Convention Concerning the Protection of the World Cultural and Natural Heritage.

The MAB Programme was launched by UNESCO in 1971, with the aim of improving the scientific basis for managing the natural resources of the biosphere. Innovative approaches to land use problems and environmental issues were addressed through a series of international projects, one of which (MAB Project 1) was specifically concerned with 'Ecological effects of increasing human activities on tropical and subtropical forest ecosystems'. Contributing field projects addressed such topics as interactions between people and forests in East Kalimantan (Indonesia), effects of forest incursion on ecosystem dynamics at Tai (Côte d'Ivoire), and mechanisms of nutrient conservation in forests on sandy soils at San Carlos de Rio Negro in Venezuela.

More recently, biosphere reserves have become the heart of the MAB Programme. Biosphere reserves embody a practical approach to achieving a sustainable balance between the conflicting goals of conserving biological diversity, promoting human development while maintaining associated cultural values. Biosphere reserves are sites where this objective is tested, refined, demonstrated and implemented.

As the core of MAB, biosphere reserves are infused with its basic philosophy. The emphasis is on humans as an integral and fundamental part of the biosphere; on integrated approaches to the study; assessment and management of large-scale ecological systems subject to human impact; and on development of a continuum of scientific and educational activity to underpin sustainable resource management.

And in support of activities at the field level, UNESCO has continued to be involved in the cumulation, synthesis and diffusion of technical information on humid tropical ecosystems. Examples in the 1970s to early 1980s included a wide-ranging review of the natural resources of humid tropical Asia and a state-of-knowledge report on tropical forest ecosystems. Since then, a diversity of more finely focused topics have been taken up, such as reproductive ecology of tropical forest plants, traditional crop improvement techniques, domestication of tropical trees for timber and non-timber products, long-term monitoring of biological diversity in tropical forest plots, food and nutrition in the tropical forest. As an ensemble, these topics have been addressed through joint activities involving a wide-range of collaborating institutions at regional, national and international levels.

It is with this as background and context from UNESCO that the present publication has been planned and published, as a joint activity of UNESCO-MAB and CIRAD-Forêts, the Forestry Department of the French Agricultural Research Centre for International Development.

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The present volume is the result of field and theoretical work from researchers and scientists the world over. At the heart of their work are such fundamental questions as what is deforestation? How do we measure it? How easy is deforestation to define and measure? The chapters in this volume show that deforestation represents changes in use. It is not something whose consequences and effects are always negative, as often perceived. Examples from Latin America, Asia and Africa illustrate the different dimensions and perceptions of deforestation and underlines the importance of opening the mind to such complex issues.

Mireille Jardin
Director a.i.
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