Rehabilitation of Degraded Tropical Forest Ecosystems

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The Center for International Forestry Research (CIFOR) was established in 1993, at a time when there was a resurgence of interest in the sustainable management of the world’s tropical rainforests. It was felt that to establish such an international center would have a number of major advantages, such as (a) being able to fully harness the knowledge and experience of advanced specialists, (b) delivering information in a politically neutral manner, and (c) fully utilizing the global knowledge base. Since CIFOR’s establishment Japan has been its main donor contributor. That generous support from Japan has helped CIFOR to maintain its global presence, and made a substantial qualitative and quantitative contribution to all of CIFOR’s work in developing regions and, in particular, to building close links with partner institutions.

The project “Rehabilitation of Degraded Tropical Forest Ecosystem” aims to develop techniques to reduce forest degradation and to rehabilitate degraded forest ecosystems. The project was launched in response to rapid loss of tropical forests. At present, such forests are decreasing at the rate of some 17 million hectares per year, due mainly to clearing for agriculture. Tropical forests are also being degraded at an alarming rate. Timber harvesting alone accounts for more than 5 million hectares of tropical forests being converted into poorly managed secondary forests every year. The loss and degradation of tropical forests reduce future timber production potential and threaten the global environment. Some natural disasters such as flooding, erosion, landslides and desertification have been attributed in part to degradation and loss of tropical forests. Loss of forests also releases greenhouse carbon gases and reduces the forests available to capture more carbon.

The Japanese Government and CIFOR have implemented the project jointly. Japan has supported the project by out-posting Japanese researchers to CIFOR to work on a problem that is important in many developing countries. The research has been conducted in collaboration with scientists in selected Asian and South American developing countries.

It is great pleasure for me to contribute the foreword for this book, which contains information on the rehabilitation of tropical degraded forest ecosystems based on the activities of partner institutions that CIFOR has facilitated. The data and information presented here provide an invaluable source of reference material, especially for university graduate and postgraduate researchers, and scientists in national and international organizations interested in forest rehabilitation in the tropics. It will particularly benefit those planning rehabilitation of degraded forest ecosystems in the tropics. The book should also be useful to forest managers in both public and private sectors who must make decisions based on the data they have available and who have neither the time nor the resources to delve into the highly dispersed literature on forest rehabilitation in the tropics. Since forest rehabilitation is a long process, this book does not represent the final product of our
rehabilitation research, but only an initial milestone along the way. We need to continue our efforts to solve the problem and to develop a sound system of sustainable forest management.

CIFOR is very grateful to many people for their assistance with this book. We would particularly like to thank the Government of Japan for its' continuous support, as well as the contributing authors and their institutions for their commitment and their patience in dealing with the demands the editors have made on them. We also will to thank the reviews and editors who provided critical appraisals of the papers and made valuable inputs. Warm regards go also Shigeo Kobayashi for his leadership on the project, Christian Cossalter for his supervision to the project, John and Jennifer Turnbull who brought contributing together and completed endless checking and crosschecking of the information, Rosita Go for secretarial assistance, Gideon Suharyanto for layout, and all the others who contributed in so many ways.

Dr. David Kaimowitz,
Director General of CIFOR
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