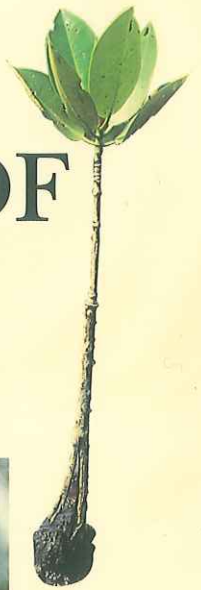


# RESTORATION OF MANGROVE ECOSYSTEMS



THE INTERNATIONAL TROPICAL TIMBER ORGANIZATION  
*and*  
THE INTERNATIONAL SOCIETY FOR MANGROVE ECOSYSTEMS

## *Restoration on Mangrove Ecosystems*

Mangroves grow between the sea and the land and mangrove wetlands are mainly found on sheltered coastlines, deltas, estuaries and lagoons in tropical countries. These wetlands can be remarkably diverse and productive. In recent times vast areas of mangrove land have been destroyed or seriously degraded by agriculture and urban development, by pollution and by catastrophic climatic events. Such damage is found world-wide and is not limited to developing countries. Poor management practices that do not recognise the inherent value of mangrove ecosystems frequently cause the damage.

The thoughtless widespread destruction of mangrove wetlands removes a valuable biological and economic resource and this has prompted a surge of interest in trying to restore impaired mangrove ecosystems. *Restoration of Mangrove Ecosystems* is concerned with the rationales and detailed techniques for restoring disturbed mangrove ecosystems. There is no single rationale or unique approach for restoring mangrove ecosystems and each case is heavily influenced by the local conditions. However, there is now a significant body of knowledge on the restoration of mangrove ecosystems and, for the first time, case-studies from thirteen countries, written by international experts with first hand experience, have been brought together to illustrate the variety of problems and solutions. This book is essentially a practical account of the steps necessary to ensure successful mangrove restoration but it also briefly discusses the philosophy of restoration and summarises the extent of current knowledge concerning the planting of mangroves.

*Restoration of Mangrove Ecosystems* contains detailed information that will be of value to a range of people from coastal villagers who want to preserve their local mangrove environment to government and international agencies that have responsibility for national coastlines. It can be used as a manual for mangrove planting or as a guide to mangrove ecosystem restoration.

*Restoration of Mangrove Ecosystems* is part of a trilogy being produced by the International Society for Mangrove Ecosystems and the International Tropical Timber Organization to promote awareness of the importance of mangroves. The other two parts of the trilogy are: *Journey Amongst Mangroves* and *A World Mangrove Atlas*.

*Front cover:*

*Photographs by H.T. Tan and Chan Hung Tuck*

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Daintree mangroves, Queensland, Australia.  
Photograph Barry Clough

# RESTORATION OF MANGROVE ECOSYSTEMS



COLIN FIELD  
Editor

THE INTERNATIONAL TROPICAL TIMBER ORGANIZATION  
*and*  
THE INTERNATIONAL SOCIETY FOR MANGROVE ECOSYSTEMS

*It is science alone that can solve the problems of hunger and poverty, sanitation and illiteracy, of superstition and deadening custom and tradition, of vast resources running to waste, of a rich country inhabited by starving people... Who indeed could afford to ignore science today? At every turn we have to seek its aid... The future belongs to science and those who make friends with science.*

Jawaharlal Nehru 1889-1964

Proceedings of the National Institute of Sciences of India 1961

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