Regional Coordination Workshop

Rehabilitation of Tsunami-Affected Forest Ecosystems:

Strategies and New Directions

Bangkok, Thailand
07 – 08 March 2005

SUMMARY REPORT

March 2005
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>1. Background</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Overview of workshop proceedings</td>
<td>1</td>
</tr>
<tr>
<td>3. Critical issues raised at the workshop</td>
<td>2</td>
</tr>
<tr>
<td>4. Vision and guiding principles</td>
<td>4</td>
</tr>
<tr>
<td>5. Recommendations.</td>
<td>5</td>
</tr>
<tr>
<td>Annex 1. List of participants</td>
<td>6</td>
</tr>
</tbody>
</table>
1. 1. BACKGROUND

The Regional Coordination Workshop on Rehabilitation of tsunami-affected forest ecosystems: strategies and new directions was organized by the Food and Agriculture Organization of the United Nations (FAO) and held from 07 to 08 March 2005 in Bangkok, Thailand. In convening the workshop, FAO responded to a need for exchange of information on existing and planned impact and damage assessments, rehabilitation and reconstruction activities related to forests and trees and for strengthening coordination and collaboration of national, regional and international agencies involved in forest rehabilitation and management of tsunami-affected areas.

The workshop brought together 15 government representatives from seven countries1 (Indonesia, India, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand) affected by the 26 December 2004 tsunami in Asia. They were joined by about 30 representatives of international, regional and sub-regional organizations, including non-governmental organizations. The workshop provided participants the opportunity to share information, collectively assess initial findings related to rehabilitation needs and opportunities, share plans and proposals for future rehabilitation work, and develop mechanisms for collaboration and joint activities.

The overall goal of the workshop was to strengthen and enhance rehabilitation efforts in the tsunami-affected areas to provide for a better future for people living in coastal areas.

The objectives of the workshop were to:

- exchange information and knowledge related to the impacts on forest ecosystems and the effective rehabilitation of forest ecosystems in tsunami-affected areas;
- strengthen coordination and collaboration of national, regional and international agencies involved in forest rehabilitation and management of tsunami-affected areas; and
- develop a mechanism for coordination and action to be taken at the regional level to support the rehabilitation of tsunami-affected forest ecosystems and to address other forest-related issues in the rehabilitation and reconstruction phase.

2. OVERVIEW OF WORKSHOP PROCEEDINGS

After a warm welcome by Mr. He Changchui, FAO’s Assistant Director-General and Regional Representative for Asia and the Pacific, and an introduction to the workshop by Mr. Patrick Durst, FAO Senior Forestry Officer (Asia and the Pacific), four invited speakers set the scene. The topics of their presentations included: the role of mangroves and other vegetation in protecting against tsunamis and tidal surges; the role of trees and forests in integrated coastal zone management; the latest assessment of the impacts of the tsunami on coastal vegetation; and the assessment of wood use and needs in the region for reconstruction.

During an open forum, participants from the seven of the affected countries described rehabilitation and reconstruction activities related to trees and forests. In particular, they highlighted overall rehabilitation approaches taken in their respective countries and the role of forests and trees in the overall plans, ongoing and planned activities, key challenges to be addressed, and the potential role of, and expectations from strengthened regional coordination from a national perspective.

Many international, regional and sub-regional organizations responded to relief and rehabilitation needs within days of the disaster. Representatives of each organization had the

1 The participant of Bangladesh was unable to attend.
opportunity to outline ongoing and planned activities. In addition, several speakers presented ideas for better coordination at national and regional levels.

Based on the presentations, discussions and ideas expressed, participants were divided into three topical working groups to draw joint conclusions, elaborate a common vision and principles that should guide forest-related rehabilitation and reconstruction efforts in the region and formulate recommendations for strengthening coordination efforts in the region (elaborated further below).

3. CRITICAL ISSUES RAISED AT THE WORKSHOP

Recognizing that situation varies country by country, participants raised the following issues:

1) The protective role of mangroves and other coastal forests (natural and planted) against tsunamis, typhoons, and other natural disasters depends on various factors, including: the type and characteristics of the event itself; species characteristics, stand density, height and width; and the characteristics of the adjacent sea bottom. There is a need to further assess the effectiveness of mangroves and other coastal vegetation in protecting coastal areas from major natural disasters.

2) There is a lack of clear, accurate and comprehensive information about the impact of the tsunami on coastal areas, including forests and trees. Where coastal vegetation was severely affected, more precise impact assessments are needed, which also consider the characteristics of the sea bottom close to the coastline.

3) Although the tsunami caused significant damage to coastal vegetation in some countries, many organizations are planning to restore and rehabilitate coastal forests as a protective measure against future tsunamis, tidal surges, typhoons and cyclones. A rigorous analysis of the factors influencing the protective function of coastal forests is needed and guidelines developed to assist countries that plan to establish greenbelts and other forests for (mainly) protective purposes.

4) Rehabilitation/reforestation efforts must be carefully planned and implemented and the forests subsequently managed properly. Full stakeholder (from different levels and sectors) involvement is necessary in this process to ensure success. In particular, local communities need to be fully involved in the decision making.

5) Problems preventing cost-effective methods of rehabilitation of coastal forests include insufficient technical knowledge, limited human resources and capacities for implementing rehabilitation activities, and ambiguous land tenure and clear demarcation of land.

6) Initiatives aimed at rehabilitation and management of coastal forests for protection purposes must be linked to socio-cultural and economic needs and aspirations of local people. Protection forests also require management and many production forests, if properly managed, can also fulfill protection functions.

7) There is a critical need for sound technical information on workable practices for rehabilitating coastal forests, suitable sites for planting, and proven approaches for involving local people in decision making, planning and implementation. Similarly, policy makers and the donor community require solid advice to avoid quick fixes, with potential negative consequences, and to ensure that their decisions and assistance enhance sustainable development.

8) Integrated coastal area management is particularly challenging because of the tremendous diversity of livelihoods that depend on fisheries, aquaculture, tourism, forestry and agriculture. Long-term rehabilitation should focus on creating sustainable
livelihoods and restoring productive use of coastal resources. Integrated approaches to coastal zone management need to balance ecological, social, cultural, economic considerations and the importance of community participation and adequate governance. Inter-sectoral cooperation and coordination are needed as well as appropriate policy formulation and strategic planning mechanisms to balance trade-offs among different, and often conflicting, interests.

9) Detailed calculations of the wood needs for reconstructing infrastructure have yet to be carried out in most places. In some countries, wood demand may be met from domestic sources. There is a risk of over-exploitation of local forests (some of them protected areas) to meet the wood demand for reconstruction. In some cases, large quantities of wood will have to be imported.

10) Some donor countries are offering to export wood to affected countries. Care must be taken to ensure that wood used for reconstruction has the necessary characteristics to meet specific needs and is adequately treated to ensure durability. Some species may also not be acceptable for socio-cultural reasons. The potential of using salvage wood and alternative construction materials, such as bamboos, needs to be further explored.

11) Conflicting demands for use of the affected lands (green belts, aquaculture, agriculture, tourism, residential and industrial sites) are causing controversies and tensions in a number of locations, especially where land titles and tenure arrangements are ambiguous. In some cases, “land grabbing” has particularly affected poorer sections of society.

12) Although several countries have passed zoning laws, prohibiting development of coastal areas within a certain distance of high-water marks and beachfronts, in general law enforcement requires strengthening.

13) The international community has helped countries with emergency relief and early response assistance, impact assessments, development of rehabilitation plans, and wood needs assessments. NGOs have raised substantial funds to assist in tsunami rehabilitation efforts and are moving quickly with delivering assistance. There are tremendous needs and opportunities to improve effectiveness of efforts through improved coordination and the provision of relevant information in a timely manner.

The following issues and topics could be addressed through regional collaboration:
- Natural disaster management strategies, including exchange of information on vulnerability and risk analysis and rapid damage assessments.
- Exchange of technical information on rehabilitation, establishment and management of coastal forests (natural and planted).
- Sharing among countries and organizations of experiences and lessons learned related to restoration and rehabilitation of coastal areas and integrated coastal zone (area) management.
- Practical application of the livelihoods approach and means to strengthen inter-sectoral collaboration.
- Governance issues, including coordination between national and local level planning, approaches for strengthened stakeholder participation, and development of institutional frameworks and legislation to support integrated coastal area management and coastal forest rehabilitation.
- Scientific analyses of factors influencing the degree of protection provided by coastal forests and guidelines for the establishment and management of protection forests and shelterbelts in order to make them more effective.
- Assistance in organizing joint research activities and exchange of research results.
4. VISION AND GUIDING PRINCIPLES

The participants of the workshop identified a common vision and underlying principles to guide forest-related rehabilitation efforts in the affected areas of the region. These would provide a basis for country, regional and international-level action.

The participants agreed on the following vision of the outcome of forest-related initiatives in rehabilitation and reconstruction efforts in tsunami-affected area:

**Vision**: a better future than existed before the tsunami, which is based on forests’ and trees’ contributions to poverty alleviation, food security, human capacity building, environmental sustainability and reduced vulnerability to natural disasters in the short and long-term.

**Guiding principles** for rehabilitation efforts in the forest sector:

1) Rehabilitation and reconstruction efforts should recognize the sovereign rights of each affected country and the cultural and economic contexts of the affected coastal communities, and respect traditional uses, access and rights to resources.

2) Interventions should be based upon a livelihoods approach that addresses poverty alleviation, food security, human capacity building, and environmental sustainability and minimizes vulnerability and risks from future natural disasters.

3) Action should be based on participatory principles involving all stakeholders, but in particular affected populations, in policy formulation, planning and decision-making.

4) Forestry interventions should be compatible with sustainable forest management practices, and carried out within the context of integrated coastal area management and spatial planning that recognizes the multiple uses of the natural resource base.

5) Planning of rehabilitation activities should take into consideration the anticipated impacts of climate changes on coastal areas as well as national strategies for climate change adaptation as appropriate.

6) Flexible and adaptive methods should be adopted to respond to the complexity of the situation and particular conditions in the affected areas.

7) Emphasis is needed on strengthening institutional capacity at all levels and of various actors (government and non-governmental), ensuring good governance and law compliance, and securing equitable distribution of costs and benefit.

8) Rehabilitation processes should be carefully planned, implemented and evaluated, including the following elements:
   - detailed impact and damage assessments and needs analyses as the basis of all rehabilitation activities;
   - assessments of the institutional capacity of different organizations at all levels and all economic sectors in order to ensure efficient delivery of suitable technical and material inputs and effective use thereof;
   - application of scientifically-based, proven technologies that are environmentally sustainable, socially acceptable and economically sound;
   - action taken with clear indication of measurable outcomes;
   - emphasis on accountability and transparency; and
   - effective communication and coordinated partnership between government, NGOs, international agencies and bilateral donors.
5. RECOMMENDATIONS

The participants recommended that a regional partnership to foster collaboration and coordination of forest-related initiatives in rehabilitation efforts in the tsunami affected countries should be established. The participants recognized that such regional partnerships for information sharing, technical support and capacity building are consistent with existing FAO-supported networks and other partnership mechanisms in which its member countries are actively participating. The proposed partnership would address the current needs and challenges presented by the tsunami disaster.

The partnership would include affected countries, international and regional organizations, NGOs, research organizations, and other stakeholders as well as donors supporting the partnership. The objective would be to support a forestry response to the tsunami that is cost effective, comprehensive, technically sound and developed within the context of integrated coastal area management and sustainable livelihoods.

The immediate benefits of the activities of the partnership would be targeted at the tsunami-affected areas in Asia, but would also be relevant to other affected areas and to mitigation and rehabilitation efforts in future coastal disasters.

The functions of the partnership would be the following:
- provide access to information;
- furnish technical knowledge, expertise, guidelines and tools;
- support capacity building; and
- strengthen partnerships, coordination arrangement and access to financial resources.

The structure would consist of the following: affected countries, a wide network of partners, a support group (steering committee/coordination committee) made up of the countries and a small, representative group of partners, and a secretariat at FAO. An emphasis would be put on making it flexible, streamlined and able to evolve to accommodate emerging needs.

It further recommended that FAO, in collaboration with other potential partners, continue to work to develop and establish the partnership and, as an interim measure, formulate a programme of action related to the critical issues identified in this document.

FAO and other UN organizations together with affected countries and other partners should quickly work together to make specific requests for support through the Mid-term Review of the Flash Appeal, and other sources, for regional cooperation and other priority issues related to forests and tsunami.

The participants proposed that the summary report be made available at the Ministerial Meeting on Forests and the Committee on Forestry to be held at FAO, Rome on 14 and 15-19 March, respectively.
ANNEX 1

LIST OF PARTICIPANTS

REPRESENTATIVES OF TSUNAMI-AFFECTED COUNTRIES

INDIA

J.C. Kala
Forest Department, Tamil Nadu

Promode Kant
Additional Principal Chief Conservator of Forest
Indian Forest Service, Tamil Nadu

INDONESIA

Iman Santoso
Director
Centre of Forestry Planning Coordination for Sumatra Region
Ministry of Forestry

Harry Santoso
Director
Watershed Management and Land Rehabilitation
Ministry of Forestry

Ir. Edi Effendi Tedjakusuma
Director
Forestry and Water Resources Conservation
National Development Planning Agency (Bappenas)

Mustafa Hasybullah
Head
Aceh Forestry Service

Husaini Syamaun
Assistant Manager
Aceh Forestry Service

MALAYSIA

Mohd Yunus bin Zakaria
State Forestry Director of Pulau Pinang
Forest Department Peninsular Malaysia

Suhaili bin Hj. Rosli
Assistant Director of Silviculture and Forest Protection
Forest Department Peninsular Malaysia

MALDIVES

Ibrahim Shareef
Project Manager
Ministry of Fisheries Agriculture and Marine Resources

MYANMAR

U Aye Maung
Director of Taninthayi Division
Forest Department

SRI LANKA

Jayalath Edmond Munasinghe
Deputy Conservator of Forests
Forest Department

THAILAND

Rungnapar Pattanavibool
Forest Biologist
Forest and Conservation Research Office
National Park, Wildlife and Plant Conservation Department

Suchat Kalyawongsas
Forest Technical Officer
Forest Management and Forest Products Research Office
Royal Forest Department

Sonjai Havanond
Coastal and Mangrove Resources Management Expert
Department of Marine and Coastal Resources
REPRESENTATIVES OF INTERNATIONAL AND REGIONAL ORGANIZATIONS

Kartik Shanker
Ashoka Trust for Research in Ecology and the Environment (ATREE)
India

Yong-Kwon Lee
ASEAN-Korea Environmental Cooperation Unit
Republic of Korea

Faizal Parish
Director
Global Environment Centre
Malaysia

Nazamuddin Said Basyah
Senior Advisor
Greenomics Indonesia
Indonesia

Walter Kollert
Chief Technical Advisor
GTZ Malaysian-German Forestry Education Project (MGFEP)
Malaysia

Per G. Rudebjer
Capacity Building Specialist
World Agroforestry Center (ICRAF)
Thailand

Hiras Paimatua Sidabutar
Projects Manager
International Tropical Timber Organization (ITTO)
Japan

Charas Mayura
Finance/Administrative Officer
International Tropical Timber Organization (ITTO)
Japan

Tejpal Singh
Programme Coordinator
Ecosystem and Livelihoods Group
The World Conservation Union (IUCN)
Thailand

Suree Bhumibhaman
Faculty of Forestry
Kasetsart University (KUFF)
Thailand

Benjamin Brown
Indonesia Program Coordinator
Mangrove Action Project
Indonesia

James Enright
Southeast Asian Coordinator
Mangrove Action Project
Thailand

T. Ravishankar
Associate Director and Principal Scientist
M. S. Swaminathan Research Foundation
India

Aisa Mihara
Secretary-General
Organization for Industrial, Spiritual and Cultural Advancement (OISCA) Thailand
Thailand

Tomoyuki Tanoi
OISCA Volunteer
OISCA Thailand
Thailand

Krit Chin
OISCA Volunteer
OISCA Thailand
Thailand

Reiko Nakamura
Secretary General
Ramsar Center Japan
Japan

Guy Boggs
Lecturer
Tropical Spatial Science Group
Charles Darwin University
Australia
Joana Merlin-Scholtes  
UN Resident Coordinator and UNDP Resident Representative in Thailand  
Office of the UN Resident Coordinator and UNDP Resident Representative Thailand

Ferdinand Strobel  
UNDP  
Thailand

Phansiri Winichagon  
Manager, Environment Unit  
UNDP  
Thailand

Norzilla Mohamed  
Programme Associate  
UNDP Malaysia  
Malaysia

Tunnie Srisakulchairak  
Programme Officer  
UNEP Regional Resource Centre for Asia and the Pacific (RRC.AP)  
Thailand

Han Qunli  
Senior Programme Specialist for Environmental Sciences, Regional Science Bureau for Asia and the Pacific, UNESCO Office Jakarta  
Indonesia

Hans Dencker Thulstrup  
Science Programme Specialist  
UNESCO Office of the Pacific States  
Samoa

Berhaman Ahmad  
School of International Tropical Forestry  
University of Malaysia Sabah  
Malaysia

Aminuddin Mohamad  
Professor  
University of Malaysia Sabah, Malaysia

Ong Jin Eong  
Malaysia

Ian Renshaw  
Wetlands International, Thailand  
Thailand

Sundari Ramakrishna  
Head of office  
Wetlands International, Malaysia  
Malaysia

Nat Pinnoi  
Environmental Economics  
Environment and Social Development Unit  
World Bank  
Thailand

Robert Mather  
WWF Thailand  
Thailand

Chavalit Vidthayanon  
Head  
Freshwater and Marine Unit  
WWF Thailand  
Thailand

John Parr  
Director of Conservation  
WWF Thailand  
Thailand
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONAL (FAO)

He Changchui  
FAO’s Assistant Director-General and  
Regional Representative for Asia and the Pacific  
Thailand

Miyuki Ishikawa  
APO (Forest Economics and Policy)  
FAO Regional Office for Asia and the Pacific  
Thailand

Susan Braatz  
Senior Forestry Officer (Sector Analysis)  
Forestry Department  
Italy

Zishan Karim  
Implementation Coordinator  
FAO Regional Office for Asia and the Pacific  
Thailand

Patrick B. Durst  
Senior Forestry Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Revathi Balakrishnan  
Senior Officer (Gender and Development)  
FAO Regional Office for Asia and the Pacific  
Thailand

Masakazu Kashio  
Regional Forest Resources Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Wim Polman  
Rural Development Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Simmathiri Appanah  
National Forest Programme Advisor  
FAO Regional Office for Asia and the Pacific  
Thailand

Malcolm Hazelman  
Senior Extension, Education and Communications Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Thomas Enters  
National Forest Programme Facilitator  
FAO Regional Office for Asia and the Pacific  
Thailand

Gamini Keerthisinghe  
Senior Plant Production Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Simon Funge-Smith  
Aquaculture and Inland Fisheries  
FAO Regional Office for Asia and the Pacific  
Thailand

Diderik de Vleschauwer  
Regional Information Officer  
FAO Regional Office for Asia and the Pacific  
Thailand

Philip McKenzie  
APO (Forest Policy)  
FAO Regional Office for Asia and the Pacific  
Thailand