Post-tsunami: coastal forests can act as bioshields
Other forms of protection are also needed

Bangkok, 04 September 2006 – A gathering of world experts confirmed that forests and trees can act as bioshields for protection of people and other assets against tsunamis and other coastal hazards, resolving an ongoing debate in scientific circles about the role of coastal forests against natural disasters, FAO said today.

Convened by FAO in Khao Lak, Thailand from 28 to 31 August, the workshop called for urgent action to be taken to protect existing coastal forests, rehabilitate degraded ones and plant new forests and trees in sites where they are suitable and have the potential to provide protection.

The experts concluded that bioshields, if well designed and managed, are able to provide protection against most coastal hazards. However, care must be taken to avoid generalizations and to create a false sense of protection as coastal forests are not able to provide effective protection against all hazards.

Physical and biological factors need to be taken into account in addition to economic, social and cultural ones. Scientific knowledge should be translated into policy-relevant information for decision makers and into technical guidelines and information for coastal resource managers.

“FAO cautions against indiscriminate planting of trees in the name of coastal protection. The degree of protection offered by coastal bioshields depends on many factors related to the characteristics of the hazard, the site and the forest,” noted Susan Braatz, FAO’s programme coordinator for early forestry rehabilitation in tsunami affected countries. “These factors must be well understood if efforts to improve coastal protection through forest management are to be successful,” Ms Braatz added.

In cases where bioshields are not a feasible option or sufficiently effective, provisions must be made for other forms of protection, including hard engineering solutions and a hybrid of “hard” and “soft” solutions, and – in extreme events – evacuation must be relied upon.

Coastal forests should be valued for the full scope of their functions and benefits, not just their potential protective function, FAO stressed.
“Continued clearing and degradation of coastal forests represents a loss of important goods and environmental services,” alerted He Changchui, head of FAO in Asia and the Pacific.

The benefits of mangroves and other coastal forests have been undervalued by many, contributing to the neglect of these resources. Worldwide the area of mangroves decreased by 20 percent over the past two decades. The value and management of other types of coastal forests and trees have been overlooked even more.

The workshop was held under the auspices of the FAO Forestry programme for early rehabilitation in Asian tsunami affected countries, funded by Finland.

The gathering of 65 coastal engineers and oceanographers, forest ecologists and managers, disaster management specialists and coastal planners provided a rare opportunity to examine the role of coastal forests against tsunamis, cyclones, coastal erosion and wind and salt spray in a multi-disciplinary manner.

“There have been many meetings on tsunamis in the past two years, but this is the first one that has assembled physical and natural scientists and coastal resource managers to look at this important issue together,” said Gegar Prasetya, Indonesian coastal engineer and tsunami expert.

FAO is providing emergency relief and early rehabilitation in the agriculture, fisheries and forestry sectors for improved livelihoods of tsunami affected communities through 75 projects with a combined worth of $65 million. It will continue to support long-term rehabilitation in the affected countries.

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See also www.fao.org/forestry/tsunami/coastalprotection