# PLAN OF OPERATIONS

# MALDIVES COMPONENT

OF

# FORESTRY PROGRAMME FOR EARLY REHABILITATION IN ASIAN TSUNAMI AFFECTED COUNTRIES

# OSRO/GLO/502/FIN

01 March 2006

## I. INTRODUCTION AND BACKGROUND

The Maldives is a chain of islands spread over a distance of 900 kilometers in the Indian Ocean. It is located between  $7^0$  N and  $0^042$ ' S and between  $72^0$  and  $74^0$  E. The land area covers about 26 geographic atolls grouped into 20 administrative atolls. The population of the Maldives is about 330,000 people. The main economic sectors of the country are tourism (accounting for 33% of the GDP of the country) and fisheries, including fish processing (15% of GDP). Agriculture accounts for less than 3% of GDP, but the Government of the Maldives is actively encouraging the further development of the sector. The traditional form of agriculture is dominated by home gardening, although in recent years some large commercial crop cultivation schemes have been developed on uninhabited "agricultural islands" leased from the Government for this purpose. The Maldives is highly dependent on imports of food, raw materials and manufactured goods.

The country faces two main geographic challenges: (a) a highly dispersed landmass of very small size, and (b) the low elevation of most of the islands. The area of the country is about 30,000 hectares, spread over 1,190 islands, of which 197 are inhabited. More than 70% of inhabited islands have fewer than 1,000 people. This extremely low population density makes the Maldives unique, even among small island archipelagic States. It raises the cost of delivering social services and of public administration, as there is hardly any scope to generate economies of scale. The average elevation of the islands in the Maldives is only 1.5 meters above sea level. This poses challenges related to water supply and agricultural potential, as well as makes the islands highly vulnerable to storms, coastal erosion and sea level rise.

#### **Tsunami impact and response**

The Indian Ocean tsunami of 26 December 2004 traveled at over 700 kilometers per hour and reached Maldives at 9:20 AM. The tsunami was the worst disaster ever to hit the Maldives. Waves of 1 to 4 meters wiped out several islands and destroyed both housing and livelihoods, leaving behind 83 people dead and 5% of the population homeless. The Maldives is among the countries worst affected by the tsunami. Thirty-nine islands were significantly damaged and nearly a third of the Maldives' people were severely affected. The Government declared a state of emergency and appealed for international assistance, including through the UN Flash Appeal. The GOM tsunami reconstruction policies and strategies are elaborated in the National Reconstruction and Recovery Plan (NRRP). The agriculture section of the plan calls for the improvement of soil, forestry and water resources as well as the rehabilitation of home gardens (including fruit and other trees), rapid re-establishment of sustainable income-generating activities of farming communities whose livelihood was destroyed by the tsunami, and enabling the poor and vulnerable agricultural communities to re-establish their income earning opportunities and respond to needs required to achieve food security. The Plan's environment section calls for the development of management and recovery plans for immediate impacts on local biodiversity.

In some islands, *Pandanus spp.* and *Suriana maritima* (tassel plant) were severely affected due to salt-water intrusion caused by tsunami. In some places *Calophyllum inophyllum* (funa) located close to the beach died. Observations also indicated that some areas of mangrove forests are showing signs of degradation due to the tsunami's deposition of sediments at their outlets to the sea, which has impeded the flow of water out and into the mangrove needed to keep the ecosystem healthy. Trees in home gardens and avenue trees were widely affected by the inundation of seawater carried inland by the tsunami and subsequent stagnation caused degradation. An estimate indicates that about 700,000 fruit trees and 840,000 timber trees were damaged in the inhabited islands. These losses affected about 11,500 households.

The Government of Finland is financing the regional project, "Forestry Programme for Early Rehabilitation in Asian Tsunami Affected Countries" (OSRO/GLO/502/FIN) to support rehabilitation in the three most affected countries – Indonesia, the Maldives and Sri Lanka, and to strengthen capacity and facilitate coordination among the Asian affected counties. The duration of the project is from May 2005 until December 2006. In August and September 2005, FAO fielded a consultant financed by the project who, working together with the Ministry of Fisheries, Agriculture and Marine Resources (MoFAMR), carried out an assessment of forest-related damage and rehabilitation needs in selected atolls and islands. On the basis of the assessment, a preliminary plan of operations was developed. The following plan of operations builds upon the preliminary plan.

#### Forest sector in the Maldives

The main types of forests in the Maldives are littoral forests and mangroves and some inland forests (locally referred to as "jungle") with larger trees. The littoral forests are dominated by species in the *Scaveola* and *Suriana* group, which are saline tolerant. Mangroves occur only in some of the islands and are dominated by species in the Rhizophoraceae family. The area of forests in the country has been estimated to be 3 per cent of the total geographical area (or about 1000 ha), but a national forest inventory has never been carried out and it is suspected that this figure under-estimates the amount of forest, particularly on uninhabited islands.

The littoral forests and mangroves are used by local communities to supply wood for boat building and other needs. There is considerable demand for wood for boat building, particularly in the northern islands. Species used in boat building include: *Hibiscus tiliaceous* (sea hibiscus, known as "dhigga" in Dhivehi, the local language), *Ochrasia barbonica* (cork wood; dhunburi) *Calophyllum inophyllum* (Alexander laurel; funa), and *Diospyros ebenum* (ebony; kalhuvakaru) and *Tectona grandis* (teak; haivakaru). Some of the wood is available from local forests in the north, but this is supplemented by wood imported from outside the Maldives. In the southern islands there is less demand for boat building wood, as the islanders prefer fiber reinforced plastic (FRP) boats. Some wood is used even for building the FRP boats, some of which is sourced locally. Demand for firewood is comparatively low, since coconut refuses is widely used for fuel, and kerosene and cooking gas are easily available in many places. The country is heavily dependent on imports to meet most of its timber needs for construction, furniture and other uses.

Degradation of the Maldives' forests has been going on for a long time, mainly due to lack of management, over cutting and clearing for urban expansion. The tsunami caused additional damage in some places.

The potential value of forest and tree resources to the Maldives is currently not fully realized. This is due to the lack of a holistic approach to the management, conservation and use of the country's forest and tree resources and of an adequate institutional and policy framework. Once self-sufficient in timber, most of the timber is now imported and trees valued for boat building, tools, traditional handicrafts are increasingly scarce. The country has limited nursery production capacity, with the result that many seedlings are imported from abroad. This is not only extremely costly, but it poses the risk of introducing pests and diseases and the genetic stock of the imports may be less well adapted to local conditions than that of local plants. The regulations governing forest and tree use in some cases act as a disincentive to forest management and reforestation.

Despite these constraints, the Government has recently made efforts to increase forest cover in the country. Concerned over the decreasing forest and tree cover, in the 1990s the GOM launched the "Million Trees Programme". The island authorities support planting of avenue and shade trees. In addition, for every tree cut on an island, there is now a requirement that two more should be planted to replace it. There are also some traditional practices in forest planting and management in the Maldives, including transplanting wildlings or planting cuttings in the forest

for propagation of valued timber species. Most families have home gardens, but as the land areas tend to be small, they devote the space mainly to edible crops, fruit trees and some ornamental shrubs and trees. In the past, many villages planted trees and shrubs on the beaches for erosion control, but this tradition apparently is less common today.

The MoFAMR recognizes the need for a more comprehensive approach to the forest sector. It is interested in developing a sector strategy and plan; strengthening its institutional capacity in forestry, which now is extremely limited; and revising the laws and regulations that act as a disincentive for people to plant and manage trees. Jurisdiction for various aspects of forestry falls under various administrative bodies (MoFAMR; Ministry of Environment, Energy and Water (MoEEW); Island Chiefs under the Ministry of Atolls, etc.), which also underlines the need to ensure strong coordination among these and with other Ministries whose activities affect forests and trees.

# National Reconstruction and Recovery Plan and Seventh National Development Plan

The policies and strategies in the NRRP are encompassed in the Seventh National Development Plan (7NDP) for 2006-2011, which is currently being drafted with release planned for mid-2006. The 7NDP indicates that priority public financing will be channeled to the tsunami reconstruction and recovery-related policies and strategies. The project has an opportunity to provide information related to the Maldives' forest sector that would be beneficial for the implementation of the 7NDP.

## **II. PROJECT OBJECTIVES**

The overall objective of the regional programme (OSRO/GLO/502/FIN) of which the Maldives is a component is to help restore the livelihoods of the people in the tsunami-affected areas and to contribute to their improved and more secure futures through forest rehabilitation and reforestation. The specific objectives of the overall programme are:

- To provide forest and tree-derived benefits and improved household income to the affected populations to address their immediate livelihood needs
- To establish a sound foundation for medium and long-term forest rehabilitation and reforestation for coastal protection and forest management
- To improve institutional and coordination capacity of the Governments to ensure sustainable practices for timber and non-wood forest product supplies and environmental services from forests.

Within these overall objectives, the specific objectives of the Maldives component are:

- To improve the livelihoods of tsunami-affected people in the Maldives at present and in the future through improved home gardens, greener villages, greater availability of wood and other forest products for local use, and increased coastal protection
- To enhance the capacity of the local community, government institutions, and community-based institutions for rehabilitating, managing and sustainably using the Maldives' forest and tree resources
- To contribute to a more holistic and enabling policy and institutional framework for longterm development of the forest sector in the Maldives.

# **III. PROJECT APPROACHES**

The project has a two-pronged strategy: 1) to implement field activities on a pilot scale to develop and demonstrate successful approaches for forest and tree management and use in the

Maldives, 2) to contribute an enabling environment that would facilitate the scaling up of these activities and the longer-term development of the Maldives' forest sector. The relatively undeveloped nature of the forest sector necessitates that greater emphasis be put on institution strengthening and capacity building than would normally be expected in an emergency rehabilitation project. Without such emphasis, the sustainability of project activities would be jeopardized and the ability to scale up the pilot level activities would be limited.

Given the short time period of the project and the challenges posed by the geographic characteristics of the country, the project will concentrate its field activities on a limited number of islands in one cluster. This will limit the costs of travel and logistic difficulties. The project can have a greater impact and a more effective demonstration effect by supporting various types of activities in a smaller geographic area, than by diluting its efforts over a larger number of atolls and islands. The limited duration of the project also underlines the necessity of linking to and building upon existing initiatives and institutional mechanisms at community, atoll and national level.

Regardless of whether a project is for emergency rehabilitation and reconstruction or is focused on long-term development, investing in communities to help themselves provides the best approach by which long-term sustainability can be achieved. This project will work through existing effective community-based organizations (CBOs), including Island Development Committees, Island Women's Committees, and Youth Groups, and will promote participatory, self-help development. CBOs in the Maldives have a long experience in carrying out communitysupported activities. Community cohesion and cooperation is very strong in many islands.

The project is designed to ensure equitable sharing of benefits (commensurate with costs) among the project beneficiaries. All tree seedlings will be provided for free. The planting and post planting care (i.e., protection, watering) of seedlings planted in home gardens and in spaces attached to institutions (e.g. island health clinic, mosque, schools) will be the responsibility of the individual families and institutions, respectively. In the case of planting in public spaces (e.g. avenue trees, shade trees in parks or areas where people gather, community forest lands) in which no group of islanders benefits selectively, the project will provide a cash incentive to the CBO responsible for the activity for the planting and post-planting care. The CBO responsible for enrichment planting of timber trees on forestlands will receive payment for the provision of planting materials (e.g. cuttings or seeds for direct seeding). The payment (number of rufiyas per tree planted and cared for or for the planting materials) will be consistent from island to island. It is up to the responsible CBO to decide how the cash benefits will be divided within the CBO (e.g. kept by the individual workers, deposited into the CBO's common fund, or some combination of the two).

The project seeks to link forestry to the major economic sectors -- tourism and fisheries, as well as with the agriculture sector. Intersectoral linkages will help ensure that initiatives and activities of the principal sectors complement, rather than conflict with one another and increase the value of the sector to the national economy and local livelihoods. For example, managing forests to increase the availability of timber from species favoured for boat construction will increase the economic value of the country's forests. Successfully tapping into the robust and growing tourist industry – such as by developing mangrove sites for tourist visits and managing forests to provide raw materials for traditional handicrafts of interest to tourists, provides greater potential for economic sustainability of the forestry activities. Working on "agricultural islands", where the GOM is promoting agriculture, offers potential opportunities for development of integrated production systems, including agroforestry.

The project is using the distribution of fruit tree seedlings (in almost universal demand) as an entry point for the forest-related activities, which do not have a strong tradition on the islands. Offering fruit trees can help open the door for discussion and identification of forestry-related needs on the islands.

A degree of flexibility will be maintained during project implementation in order to be able to respond to new developments and emerging opportunities in the rapidly changing emergency rehabilitation environment.

# **IV. SITE SELECTION AND LOCATION**

The field activities of the project will be carried out on 6 islands located close to one another in Ha Alifu and Ha Dhallu atolls in northern Maldives. These are Kelaa, Filladhoo, Baarah and Utheemu in Haa Alifu Atoll, and Naivaadhoo and Nellaidhoo in Haa Dhaalu Atoll.

The MoFAMR identified these islands, and a final decision was made after a field reconnaissance was made by MoFAMR and FAO project staff in late January 2006, based on the following criteria:

- Affected by tsunami (extent of damage ranges from very high to limited)
- Has not received significant quantities of relief and rehabilitation assistance
- Accessibility with regard to transportation costs
- Potential for demonstration or educational purposes
- Multiple needs from forests identified by the island community
- Potential for various types of forestry interventions and / or home garden improvement
- Active CBOs are in place and have strong interest in carrying out community-based forestry activities and participating in the project
- Potential links to the tourism, fisheries and/or agricultural sectors.

The specific activities and location of sites for project-supported work on each island were identified by the islanders themselves in consultation with the Island Chief and MoFAMR and FAO project staff.

### **V. PROJECT BENEFICIARIES**

The primary beneficiaries of the project's field activities will be fishing and farming communities on the six islands. They include 7066 people, or 2059 families living on six islands.

The beneficiaries will include 1710 families on the four islands that will receive fruit trees seedlings from the project for planting in their home gardens. (Two islands - Baarah and Filladhoo - will not receive fruit trees because they have already received seedlings through GOM distribution programmes and FAO-supported projects.) The decision was made that all families on the four islands will be eligible to receive fruit tree seedlings, irrespective of their economic status, in order to avoid conflicts on the islands and because the income levels among the households are not so different as to justify the time and effort needed to distinguish between them. In addition, the GOM and various international donors have already set a precedent of distributing fruit trees for home gardens to all families on recipient islands.

The beneficiaries include :

- all inhabitants of the six islands who will benefit from avenue trees and shade trees
  planted in public spaces and on the grounds of island health clinics, schools, and
  mosques;
- islanders of Utheemu and Nellaidhoo who will benefit from the protection from salt spray afforded by coastal windbreaks established with the help of the project;
- those of Kelaa and Naivaadhoo who will benefit from the enrichment plantings in their forests of timber species use for boat building;

- the villagers of Filladhoo who will benefit from the rehabilitation of a mangrove forest and the associated income that is expected to be generated from visits of tourists from nearby resort islands;
- and the villagers of Utheemu who will benefit from the community nursery established there.

The CBOs and their respective members that are implementing partners for the project activities will benefit economically and through strengthened capacity by their involvement in the project activities. These include, for example, the Island Women's Committee managing the nursery on Utheemu, and Island Development Committees involved in enrichment planting in the inland forest areas.

As for the selection of beneficiaries, all families on the four islands that have not yet received fruit tree seedlings through another tsunami rehabilitation effort are eligible for seedlings from the project (see above). Utheemu was selected as the site for establishment of a community nursery because it is well placed to have demonstration impact (as an historically important island, it has been developed as a site for tourism for Maldivians and clients of nearby resort islands) and is centrally located between three resort islands, which can provide a potential market for nursery plants. The selection of beneficiaries for activities carried out by CBOs (shade and avenue tree planting, enrichment planting of timber species) will be chosen by the CBO itself to avoid disrupting traditional community structures and practices, which appear to be well developed and equitable.

Other key beneficiaries include Government officials in MoFAMR, MoEEW and other Ministries that will benefit from the institution strengthening activities supported by the project.

The MoFAMR and the people of the Maldives will benefit from the project's support to the development of a national forestry strategy and plan and related policy and legislative reforms.

# VI. PROJECT RESULTS AND ACTIVITIES

**RESULT 1**. Livelihoods of tsunami-affected communities improved through fruit trees planted in home gardens, shade trees and avenue trees planted in public spaces, greater availability of timber species through enrichment planting in the island forests, and improved protection provided by the establishment of coastal shelterbelts.

## Activities

1.1 Prepare the list of fruit tree seedlings to be distributed to Kelaa, Utheemu, Naivaadhoo and Nellaidhoo and issue a contract for the production of the seedlings.

The Island Development Committee and/or Island Women's Committee on each island will prepare and, through the Island Chief, provide a list of families and the number and species of fruit trees for distribution (a maximum of four fruit trees per family) to the project. The project will contract the production of the fruit tree seedlings to a commercial producer, who in turn sub-contracts the seedling production to individual islanders.

1.2 Develop a plan for project-supported activities for each of the six islands

The activities will include, depending on the island, fruit tree distribution for home gardens; planting and maintenance of avenue and shade trees; shelterbelt planting for protection against winds and salt spray; enrichment planting of timber species in community forest areas; mangrove rehabilitation and nursery establishment.

The project staff will work closely with each of the islands to assist them in preparing a detailed plan for the activities to be carried out with project assistance. The plans will include the details of the activities (types and location); the name of the CBO or other entity responsible for each activity and name of the focal point for the activity who will communicate with the project; arrangements for the planting and post-planting care (including details on the payments – amount and payment schedule -- for trees planted in public spaces and in community forest lands; timetable of the activities; indicators of project progress and impact and the monitoring mechanism.

1.3 Procure and distribute seedlings and procure other planting material

Seedlings of fruit and shade trees will be procured from two sources: i) a local commercial supplier for seedlings for Kelaa, Filladhoo, Naivaadhoo, Nellaidhoo and Nellaidhoo; and ii) the nursery in Utheemu for distribution on that island. Seedling distribution will be supervised by a MoFAMR officer posted at the Agricultural Centre in Hanimaadhoo. Planting material (seedlings, seeds, cuttings) for the enrichment planting of forest trees will be procured from individual villagers, as arranged by the entity responsible for that activity (e.g. Island Development Committee).

1.4 Provide training in tree planting and post-planting care

Hands-on training and orientation will be given to the community groups involved in planting on site preparation, planting and post care operations by staff of the project with support of a staff member of the Agricultural Centre in Hanimaadhoo.

1.5 Provide post planting care

Day to day maintenance of the seedlings after planting (watering, weeding and protection) will be carried out by the members of the group responsible for that activity (e.g. school, health care centre, Island Development Committee, Island Women's Committee, etc).

1.6 Monitor progress and results of the island activities of the project

Monitoring of the project activities on the six islands will be carried out continually by the community group responsible for each of the activities and once a month by a staff member of the Agricultural Centre in Hanimaadhoo, who will be joined by Male'-based project staff every other month. Information on the indicators of progress and impact identified by the CBOs in consultation with project staff, and indicated in the individual island plans, will be collected.

**<u>RESULT 2</u>** A community nursery established in Utheemu and developed as a self-sustaining enterprise managed by the Island Women's Committee (IWC).

# **Activities**

- 2.1 Assist the Island Women's Committee secure land from the Island Chief for the nursery
- 2.2 Carry out market assessments of the demand for fruit and shade trees and ornamental plants by the three nearby tourist resorts.
- 2.3 Assist the IWC to design and construct the nursery.

This will be carried out under the guidance of a staff member of the Agricultural Centre in Hanimaadhoo.

2.4 Assist the IWC to develop a plan for the production of timber seedlings, fruit tree seedlings and ornamental plants based on the needs of the project activities and, at a pilot scale, the plants targetted to the resort islands.

This will be carried out under the guidance of a staff member of the Agricultural Centre in Hanimaadhoo and project staff.

- 2.5 Provide initial training and then continual technical support and training in seedling production and nursery management over the course of the project duration to the members of the Committee identified to manage the nursery.
- 2.6 Provide training in business management to the women responsible for the nursery. This will be carried out under the guidance of a staff member of the Agricultural Centre in Hanimaadhoo
- 2.7 Assist the IWC to market their plants to the resort islands.
- 2.8 Assist the IWC to develop a plan for nursery production and management for 2007, including a business plan and plans for procurement of needed inputs.

**<u>RESULT 3</u>** An area of mangrove forest rehabilitated on Filladhoo and developed as a site for visits by islanders and tourists on nearby islands

## **Activities**

- 3.1 Obtain permission from the MOEEW, Ministry of Atolls and other relevant ministries for the proposed mangrove rehabilitation and related activities.
- 3.2 Open the channel to the sea that was filled with sand by the tsunami to allow free flow of seawater into and out of the mangrove forest and small lagoon.
- 3.3 Construct a small wooden jetty on the small beach at the edge of the lagoon for tourists to get into and out of bokuras that would take them around the mangrove.
- 3.4 Clean and extend the existing trail around the mangrove forest, including through the adjacent pandanus forest, as a nature trail.
- 3.5 Produce and erect signs at the edge of the mangrove and along the nature trail about the mangrove ecosystem, local tree species, the islanders' traditional uses of tree products, etc.

**<u>RESULT 4</u>** A foundation provided for the development of a comprehensive forest sector strategy in the Maldives.

### **Activities**

- 4.1 Compile available information from all relevant sources on the status of forests, trees and related vegetation, and their management and use in the Maldives; driving forces of changes in forest and tree cover; policies governing forest and tree management and use; and the institutional and legal framework governing the management and use of forest and tree resources. Organize this material and provide a set to the MoFAMR.
- 4.2 Prepare a policy report based upon the above information and that analyzes the incentives and disincentives that current policies and regulations (in forestry and other sectors) pose for the achievement of sustainable forest management in the Maldives; identifies areas for possible revision of policies and legislation governing forest conservation, management and use; and

proposes a process whereby the GOM can develop a forest sector strategy and plan. The report will include an analysis of the laws and regulations regarding tree cutting in the Maldives (including "chit" system) and possible reforms that could be introduced to provide greater incentives for sustainable management and use of the country's timber resources.

- 4.3 Present the findings of the policy report to a meeting convened by the MoFAMR and attended by all other relevant Ministries.
- 4.4 Assist the GOM to outline the steps leading to the development of forest sector strategy and plan and revised forest laws and regulations.

**<u>RESULT 5.</u>** Capacity of the Government of the Maldives and island communities to plan and support forest rehabilitation and management strengthened and awareness of the value of the forests to the country increased.

# **Activities**

- 5.1 Organize a one-week training course on the Maldives' forests and their conservation, management and use, on related policy and legislation, and on the Maldives' international commitments regarding forestry and related issues (e.g. biodiversity). The training will be held for mid-level staff of GOM, including officers of MoFAMR (including the Marine Research Centre, and the Agricultural Centres in Hanimaadhoo in Ha Dhaalu Atoll and Mendhoo in Laamu Atoll); MoEEW (including the Environment Research Centre); and other Ministries. It will include presentations made by various Government officers and international consultants to the project, as well as a site visit.
- 5.2 Provide a second in-country training course for mid-level officers, NGOs and Presidents of Environment Clubs in schools, either on participatory approaches or on technical aspects of forest management in the Maldives.
- 5.3 Under the budget of the regional component of the project, send one to two GOM officers to the regional workshop on the protective functions of coastal forests planned for June 2006, and to one other workshop/training organized under the regional component.
- 5.4 Prepare a "Guide on the Trees and Shrubs of the Maldives", drawing on and updating information in the "Catalogue of Plants" and other materials available in the country.
- 5.5 On the six project islands, provide hands-on training to women, men and youth in coastal forest rehabilitation and management (including mangroves); avenue and shade tree planting and care; and nursery management as needed in the course of implementing the related project activities.
- 5.6 Develop extension materials, including leaflets in local language and in English, for example on the trees of the Maldives, propagation techniques, coastal forest rehabilitation, nursery establishment and management, timber species and enrichment planting in forests, and shade tree planting techniques and post planting care.
- 5.7 Make presentations to the islands' schools about the project and forests/trees and organize field visits for school children and villagers from nearby islands to the mangrove area on Filladhoo Island, the nursery on Utheemu and other areas of project activities for educational purposes.

#### VII. PROJECT MANAGEMENT

#### **Timeline and log frame**

The timeline and log frame for the project activities in the Maldives are provided in Sections X and XI, respectively.

#### Implementing agents and partners, including for technical support

The Officer-in-Charge, FAO Maldives will assume overall responsibility for the implementation of project activities. He will be supported by the FAO's Emergency Operations and Rehabilitation Division (TCE) in FAO HQ in Rome, and locally by TCE staff and consultants in FAO's Office for Emergency and Rehabilitation operations in Male', the capitol of the Maldives. Technical responsibility for the project is under the FAO Forestry Department, through the Regional Coordinator, Forestry Programme for Early Rehabilitation in Asian Tsunami Affected Countries, in conjunction with forestry officers in HQs and the Regional Office for Asia and the Pacific in Bangkok (RAP). Field implementation will be coordinated by the Forestry Specialist and Community Mobilization Expert (FSCME), an international expert fielded by FAO.

The project will be implemented in close collaboration with the counterpart institution, the Ministry of Fisheries, Agriculture and Marine Resources. A National Project Director (NPD) will be nominated by MoFAMR to work in close collaboration with the FSCME to ensure liaison with the Ministry and other government agencies, facilitate access to information, and provide technical input and local knowledge.

The project will hire National Project Assistant (NPA) to assist the FSCME and NPD with project management tasks, organization and monitoring of field activities, and carrying out the other duties associated with project implementation. Involvement of the NPA in the project will strengthen his/her capacity in the forest sector. It is envisaged that the present project will pave the way for long term initiatives in the forestry sector in Maldives. The experience gained by the NPA through the project would be of use in future projects. In this connection, the MoFAMR will consider hiring his/her expertise, thus the capacity gained will remain as an asset in the Ministry and will contribute to the future forestry programme.

Staff of the MoFAMR's Agriculture Centre in Hanimaadhoo in Haa Dhaalu Atoll will provide technical support to the project and assist with monitoring of progress. Among other things, it will help with the establishment of the community nursery on Utheemu and subsequent training of the nursery workers. It will also assist in the distribution of fruit tree seedlings on the six islands and will provide associated training in planting and post-planting care. One staff member of the Agricultural Centre in Hanimaadhoo will be designated as the focal point to carry out and coordinate the input to the project from the Centre.

The project will investigate the possibility of recruiting a United Nations Volunteer to provide additional support to the project's activities.

At the island level, the implementing partners will be local CBOs, including Island Development Committees, Island Women's Committees, Youth Groups, and staff of health clinics, schools, mosques and other places where shade trees will be planted. These groups will be responsible for coordinating and carrying out project activities.

FAO will provide technical support services through its Forest Department staff from the Regional Office for Asia and the Pacific in Bangkok and FAO Headquarters in Rome. These services include reviewing and commenting on project reports and technical materials and technical backstopping missions of one to two weeks on a specific area of project implementation needing technical assistance.

## **Collaboration and Coordination**

Coordination between this project and other FAO projects in agriculture and fisheries will be facilitated through FAO's in-country coordination mechanisms as well as through the Tsunami Task Force and tsunami Technical Coordination Unit in RAP. Synergies and coordination will be sought with other FAO emergency tsunami interventions in the Maldives, including the projects following projects: "Immediate provision of agricultural inputs to worst affected fisher and farmer groups in the Maldives" (OSRO/MDV/501/BEL); "Emergency assistance to support affected coastal communities in Maldives" (OSRO/MDV/503/JPN); "Rehabilitation of marine fisheries sector and agricultural infrastructure" (OCHA/MDV/504/CHA), "Replacement of farming inputs to farmers and home gardeners" (MDV/05/001/01/99), and other new projects that become operational during the life span of this project. Opportunities for coordination and collaboration are greatest with OSRO/MDV/501/BEL, OCHA/MDV/504/CHA and MDV/05/001/01/99, which are providing assistance to island communities through the distribution of fruit tree seedlings for home garden rehabilitation and improvement.

The project will liaise closely with other UN agencies (in particular UNDP and UNEP), international and national NGOs (e.g. British Red Cross and Care Society, a Maldivian NGO) and multilateral financial institutions (e.g. the World Bank and the Asian Development Bank). During the preparation of the Plan of Operations, the relevant ministries, international organizations and NGOs were approached and consulted to exchange information and identify possibilities for collaboration and ways to minimize duplication of effort. At the outset of project implementation, the MoFAMR will convene a meeting of all organizations involved in home garden improvement and forest related activities to share information, facilitate coordination, and explore opportunities for collaboration.

A Project Steering Committee will be established to facilitate information sharing on project activities and progress and to allow for input from the relevant Government agencies. Members will include the MoFAMR (as Chair); MoEEW; Ministry of Atolls, the Ministry of Planning and National Development, among others. The Steering Committee will meet quarterly over the course of the project.

At the island level, an Island Steering Committee (ISC) will be formed for the project. The ISC will meet monthly to review project implementation. The meeting will be attended by the NPA, the focal point for the project of the Agriculture Centre, the Island Chief, the focal points for each activity supported by the project, and, every other month, the FSCME and NPD.

To facilitate coordination of the overall programme under OSRO/GLO/502/FIN, the CTA and the national counterpart will participate in quarterly meetings with the CTAs their counterparts for Sri Lanka and the Maldives and the Regional Coordinator to discuss overall project implementation. One meeting will be held in Bangkok, Indonesia, Sri Lanka and the Maldives.

# Reporting

An inception report will be provided by the Forestry Specialist and Community Mobilization Expert in March 2006. It will provide information against which an initial assessment of the programme profile and progress to date can be made. The report will provide the activity plans for the six islands, indicate progress made and constraints encountered to date on all project activities, steps that will be taken to overcome those constraints, and identify indicators to monitor progress against the results and activities. Progress reports will be prepared at quarterly intervals thereafter (June, September and November 2006) for submission to the Regional Coordinator and for presentation at the quarterly regional meetings. The terminal report of the programme will be prepared by the end of November 2006.

#### **Monitoring and Evaluation**

Monitoring and evaluation of project outcomes and impacts related to each result will be measured on the basis of criteria given in the log frame (annex XI). For community activities implemented under result 1, island level criteria will be developed through the participatory planning process with the islands. These criteria will feed into the overall project indicators given in the log frame.

Frequent technical support and monitoring of project activities will be provided by the project, particularly on the three islands where a concentration of activities will be carried out (Kelaa, Filladhoo and Utheemu). This will be carried out through the visits by a staff member of the Agricultural Centre in Hanimaadhoo and the NPA each month and including the FSCME and NPD every other month.

Standard FAO monitoring and evaluation guidelines will be followed, including those related to measurable indicators, reviews and evaluation reports of the project impact. The FSCME and NPD, in close collaboration with the focal point of the Agricultural Centre in Hanimaadhoo, will be responsible for coordination of the monitoring of project activities. Technical Divisions of FAO will provide technical guidance for the monitoring and assessment of the project.

At the end of the project, an evaluation mission will be undertaken to assess achievement of activities and impact and make recommendations for follow up action by GOM or potential donors.

#### **Project Visibility**

During the early stages of the project, a flyer (providing information on the project's objectives and activities) and a poster will be produced and widely distributed to publicize the project, including the contributions of Finland and FAO. Project signboards will be erected in the mangrove rehabilitation area on Filladhoo and the island nursery on Utheemu. The project will arrange for national radio and television spots to report on project activities (in particular the mangrove rehabilitation effort on Filladhoo). Visibility of the project will also be increased by technical materials developed and widely distributed by the project and MoFAMR. FAO will also enhance visibility of the project through its own website and publications (e.g. Tiger Paper; UNASYLVA).

Project work will be publicized during the second half of the project implementation period through arranging visits for GOM officials and representatives, international and bilateral organizations, national and international NGOs, and school groups interested in learning of project activities.

#### Procurement

Procurement will be implemented by FAO in accordance with FAO Procurement rules and regulations.

## Provisions for follow-up support to project activities

The project staff will assist the MoFAMR and other relevant government agencies to develop project profiles for donor consideration to support follow up activities and expansion of the project to new areas.

In discussions with the recipient islands in the project inception period, commitment was given by the islanders to provide for the care and protection of trees planted and the other interventions supported by the project. If additional support is needed to ensure sustainability of the project interventions, an exit strategy will be developed to allow project closure with minimum disruption to the island activities in the eventuality that further funding is not forthcoming or is delayed. These measures will be outlined in the terminal report for the Maldives component of the project.

# VIII. TIMELINE

	Description	Jan 06	1 -	Feb- 06		Mar 06		Apr 06		May -06	/	Jun - 06		ul - 6	A 06	ug -	Sep 06	) -	Oct 06	-	Nov - 06		Dec - 06
		1	2								2			2				2	1	2			1 2
Result 1	Livelihoods of tsunami-affected communities improved through fruit trees planted in home gardens, shade trees and avenue trees planted in public spaces, greater availability of timber species through enrichment planting in the island forests, and improved protection provided by the establishment of coastal shelterbelts.																						
Activity 1.1.	Prepare the list of fruit tree seedlings to be distributed to Kelaa, Utheemu, Naivaadhoo and Nellaidhoo and issue a contract for the production of the seedlings.																						
Activity 1.2.	Develop a plan for project-supported activities for each of the six islands			—	J.																		
Activity 1.3.	Procure and distribute seedlings and procure other planting material Fruit trees																						
	Shade trees Timber trees										_			-		+			_		_	+	+
Activity 1.4.	Provide training in tree planting and post-planting care								-						-	-							
Activity 1.5.	Provide post planting care																						
Activity 1.6.	Monitor progress and results of the island activities of the project																						
Result 2.	A community nursery established in Utheemu and developed as a self-sustaining enterprise	man	aged	by th	ie Isl	land	Won	nen'	s Coi	mmi	ittee	IWC	.).										
Activity 2.1.	Assist the Island Women's Committee secure land from the Island Chief for the nursery																						
Activity 2.2.	Carry out market assessments of the demand for fruit and shade trees and ornamental plants by the three nearby tourist resorts.				J																		
Activity 2.3.	Assist the IWC to design and construct the nursery.																						
Activity 2.4.	Assist the IWC to develop a plan for the production of timber seedlings, fruit tree seedlings and ornamental plants based on the needs of the project activities and, at a pilot scale, the plants targeted to the resort islands.																						
Activity 2.5.	Provide initial training and then continual technical support and training in seedling production and nursery management over the course of the project duration to the members of the Committee identified to manage the nursery.																						
Activity 2.6.	Provide training in business management to the women responsible for the nursery.																						Τ
Activity 2.7.	Assist the IWC to market their plants to the resort islands.																						
Activity 2.8.	Assist the IWC to develop a plan for nursery production and management for 2007, including a business plan and plans for procurement of needed inputs																						
Result 3	An area of mangrove forest rehabilitated on Filladhoo and developed as a site for visits by i	sland	ers a	nd to	ourist	s on	near	by is	sland	ls				_				_					
Activity 3.1.	Obtain permission from the MOEEW, Ministry of Atolls and other relevant ministries for the proposed mangrove rehabilitation and related activities																						
Activity 3.2.	Open the channel to the sea that was filled with sand by the tsunami to allow free flow of seawater into and out of the mangrove forest and small lagoon																						

Activity	Construct a small wooden jetty on the small beach at the edge of the lagoon for tourists to get										1										
3.3.	into and out of bokuras that would take them around the mangrove																				
Activity	Clean and extend the existing trail around the mangrove forest, including through the adjacent																				
3.4.	pandanus forest, as a nature trail.																				
Activity	Produce and erect signs at the edge of the mangrove and along the nature trail about the																				
3.5.	mangrove ecosystem, local tree species, the islanders' traditional uses of tree products, etc																				
Result 4.	A foundation provided for the development of a comprehensive forest sector strategy in the	Maldi	ives.																		
Activity	Compile available information from all relevant sources on the status of forests, trees and																				
4.1.	related vegetation, and their management and use in the Maldives																				
Activity	Prepare a policy report based upon the above information and that analyzes the incentives and																				
4.2.	disincentives that current policies and regulations (in forestry and other sectors) pose for the																				
	achievement of sustainable forest management in the Maldives								_												_
Activity	Present the findings of the policy report to a meeting convened by the MoFAMR and attended																				
4.3.	by all other relevant Ministries.			_											_	_					—
Activity	Assist the GOM to outline the steps leading to the development of forest sector strategy and																				
4.4.	plan and revised forest laws and regulations				Ļ					Ļ					<u> </u>			Ļ			<u> </u>
Result 5.	Capacity of the Government of the Maldives and island communities to plan and support for increased.	rest re	ehabil	itatio	n and	man	agem	ent sti	rengti	iened	and	awar	eness	of th	ie vali	ue of	the fo	rests	to the	coui	itry
Activity	Organize a one-week training course on the Maldives' forests and their conservation,																				
5.1.	management and use, on related policy and legislation, and on the Maldives' international																				
	commitments regarding forestry and related issues (e.g. biodiversity).								_												_
Activity	Provide a second in-country training course for mid-level officers, NGOs and Presidents of																				
5.2.	Environment Clubs in schools, either on participatory approaches or on technical aspects of																				
A	forest management in the Maldives. Under the budget of the regional component of the project, send one to two GOM officers to			_											_					_	—
Activity 5.3.	the regional workshop on the protective functions of coastal forests planned for June 2006, and																				
5.5.	to one other workshop/training organized under the regional component																				
Activity	Prepare a "Guide on the Trees and Shrubs of the Maldives", drawing on and updating																				
5.4.	information in the "Catalogue of Plants" and other materials available in the country																				
Activity	On the six project islands, provide hands-on training to women, men and youth																1				
5.5.																					
Activity	Develop extension materials, including leaflets in local language and in English,																1				
5.6.																					
Activity	Make presentations to the islands' schools about the project and forests/trees and organize field																				
5.7.	visits for school children and villagers from nearby islands to the mangrove area on Filladhoo																				
	Island, the nursery on Utheemu and other areas of project activities for educational purposes.																				
Project	Reporting – Quarterly and Final																				
Manageme																	1				
nt				_			_	_	_			_		_	_	_					_
	Monitoring																				
	Project visibility	On-going activity On-going activity																			
<i>a b i</i>	Development of project profiles								·		<u> </u>		-								
Consultant s	International consultant (Forestry)								Jan	uary	/ to	Decer	nber	16							
	International consultant (Policy framework)								_												
	National Project Assistant								Т	hroug	thout	the pr	oject								

# IX. LOGFRAME

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Risks and Assumptions
Principal Objective	To help restore the livelihoods of the people in the tsunami affected areas and to contribute to their improved and more secure futures through forest rehabilitation and reforestation			
Specific Objectives	<ul> <li>To improve the livelihoods of tsunami affected people in the Maldives at present and in the future through improved home gardens, greener villages, greater availability of wood and other forest products for local use, and increased coastal protection</li> </ul>	• Fruit trees and shade/avenue trees planted, coastal shelterbelts established, enrichment planting in inland forests carried out per community-developed plans on six islands	Physical verification; group interviews of beneficiaries and other community members; project technical reports; monitoring reports will provide information regarding the achievement and outcome of the project's field activities	Favorable weather conditions and policy environment.
	• To enhance the capacity of the local community, government institutions and community based institutions for rehabilitating, managing and sustainably using the Maldives's forest and tree resources	<ul> <li>People trained in technical aspects of forestry and participatory approaches, extension materials developed, and awareness raising and educational activities carried out.</li> </ul>	<ul> <li>Project technical reports and monitoring reports</li> </ul>	
	• To contribute to a more holistic and enabling policy and institutional framework for long term development of the forest sector in the Maldives	• Forest sector study carried out and presented and the steps for the development of a forestry strategy and plan for the Maldives discussed by all relevant Ministries	<ul> <li>Project technical reports and monitoring reports</li> </ul>	
Results	• Result 1 Livelihoods of tsunami-affected communities improved through fruit trees planted in home gardens, shade trees and avenue trees planted in public spaces, greater availability of timber species through enrichment planting in the island forests, and improved protection provided by the establishment of coastal shelterbelts.	<ol> <li>Number of families receiving fruit tree seedlings for planting in home gardens on Kelaa, Utheemu, Naivaadhoo and Nellaidhoo</li> <li>Number of shade and avenue tree seedlings distributed on the six islands</li> <li>Number and area of trees planted for coastal shelterbelts on Utheemu and Nallaidhoo</li> <li>Number of forest trees planted in inland forests as enrichment planting on Kelaa and Naivaadhoo</li> <li>Survival rates of seedlings distributed</li> <li>Number villagers (women and men) benefiting from employment in project activities</li> </ol>	<ul> <li>Physical verification</li> <li>Group interviews of beneficiaries and other community members</li> <li>Project technical reports.</li> <li>Monitoring reports.</li> </ul>	Favorable weather conditions Favorable and essential support from the host government, community and civil society organizations No devastating natural or man made disaster occurs during project implementation

	• Result 2	2.1. Nursery established and tree seedlings		
	A community nursery established in	produced and sold to the project		
	Utheemu and developed as a self-sustaining	2.2. Number of villagers benefiting from		
	enterprise managed by the Island Women's	employment in the nursery		
	Committee (IWC).	2.3. Number of people trained in nursery		
		management		
		2.4. Plan for nursery production and management		
		in 2007 developed Number of people (from		
		Government and island communities) trained		
		in nursery development and management,		
		plantation techniques and post planting tree		
		care		
	Result 3			
	An area of mangrove forest rehabilitated on	3.1. Mangrove area on Filladhoo rehabilitated and		
	Filladhoo and developed as a site for visits	developed for educational and tourism uses		
	by islanders and tourists on nearby islands	3.2. Number of people visiting the Filladhoo		
		mangrove site		
		_		
	Result 4			
	A foundation provided for the development	4.1. Forest sector study complete		
	of a comprehensive forest sector strategy in	4.2. Plan available for developing a national		
	the Maldives.	forest sector strategy and plan		
	<ul> <li>Result 5</li> </ul>	5.1. Number of GOM officers attending training		
	Capacity of the Government of the Maldives	courses		
	and island communities to plan and support	5.2. Number of islanders receiving training		
	forest rehabilitation and management	5.3. Extension materials developed		
	strengthened and awareness of the value of	5.4. Awareness generation and extension		
	the forests to the country increased.	materials developed		
		5.5. Book on "Trees and Shrubs of the Maldives"		
		published		
	Activities per result:			
Antivition	Result 1	Мантая	Canta	
Activities	1.1. Prepare the list of fruit tree seedlings to	Means	Costs	
	be distributed to Kelaa, Utheemu,			
	Naivaadhoo and Nellaidhoo and issue a			
	contract for the production of the			
	seedlings.			
	1.2. Develop a plan for project-supported			
	activities for each of the six islands			
	1.3. Procure and distribute seedlings and			
	procure other planting material			
	1.4. Provide training in tree planting and			
	post-planting care			
	1			1

1.5. Provide post planting care		
1.6 Monitor progress and results of the		
island activities of the project		
Decult 2		
Result 2		
2.1. Assist the Island Women's Committee		
secure land from the Island Chief for		
the nursery.		
2.2. Carry out market assessments of the		
demand for fruit and shade trees and		
ornamental plants by the three nearby		
tourist resorts.		
2.3. Assist the IWC to design and construct		
the nursery.		
2.4. Assist the IWC to develop a plan for		
2.4. Assist the two to develop a plan for		
the production of timber seedlings,		
fruit tree seedlings and ornamental		
plants based on the needs of the project		
activities and, at a pilot scale, the		
plants targetted to the resort islands.		
2.5. Provide initial training and then		
continual technical support and training		
in seedling production and nursery		
management over the course of the		
project duration to the members of the		
Committee identified to manage the		
nursery.		
2.6. Provide training in business		
management to the women responsible		
for the nursery.		
2.7. Assist the IWC to market their plants		
to the resort islands.		
2.8. Assist the IWC to develop a plan for		
nursery production and management		
for 2007, including a business plan and		
plans for procurement of needed		
inputs.		
Result 3		
3.1. Obtain permission from the MOEEW,		
Ministry of Atolls and other relevant		
ministries for the proposed mangrove		
rehabilitation and related activities.		
3.2. Open the channel to the sea that was		
J.2. Open the channel to the sea that was		

filled with sand by the tsunami to allow free flow of seawater into and out of	
free flow of segwater into and out of	
nee now of seawater fillo and out of	
the mangrove forest and small lagoon.	
3.3. Construct a small wooden jetty on the	
small beach at the edge of the lagoon	
for tourists to get into and out of	
bokuras that would take them around	
the mangrove.	
3.4. Clean and extend the existing trail	
around the mangrove forest, including	
through the adjacent pandanus forest,	
as a nature trail.	
3.5. Produce and erect signs at the edge of	
the mangrove and along the nature trail	
about the mangrove ecosystem, local	
tree species, the islanders' traditional	
uses of tree products, etc.	
Result 4	
4.1. Compile available information from all	
relevant sources on the status of	
forests, trees and related vegetation,	
and their management and use in the	
Maldives; driving forces of changes in	
forest and tree cover; policies	
governing forest and tree management	
and use; and the institutional and legal	
framework governing the management	
and use of forest and tree resources.	
Organize this material and provide a	
set to the MoFAMR.	
4.2. Prepare a policy report based upon the	
above information and that analyzes	
the incentives and disincentives that	
current policies and regulations (in	
forestry and other sectors) pose for the	
achievement of sustainable forest	
management in the Maldives; identifies	
areas for possible revision of policies	
and legislation governing forest	
conservation, management and use;	
and memory autori, intalligenicity and use,	
and proposes a process whereby the	
GOM can develop a forest sector	
strategy and plan. The report will	
include an analysis of the laws and	

regulations regarding tree cutting in the		
Maldives (including "chit" system) and		
possible reforms that could be		
introduced to provide greater		
incentives for sustainable management		
and use of the country's timber		
resources.		
4.3. Present the findings of the policy report		
to a meeting convened by the		
MoFAMR and attended by all other		
relevant Ministries.		
4.4. Assist the GOM to outline the steps		
4.4. Assist the GOW to outline the steps		
leading to the development of forest		
sector strategy and plan and revised		
forest laws and regulations.		
Result 5		
Kesuli 5		
5.1. Organize a one-week training course		
on the Maldives' forests and their		
conservation, management and use, on		
related policy and legislation, and on		
the Maldives' international		
commitments regarding forestry and		
related issues (e.g. biodiversity). The		
training will be held for mid-level staff		
of GOM, including officers of		
MoFAMR (including the Marine		
Research Centre, and the Agricultural		
Centres in Hanimaadhoo in Ha Dhaalu		
Atoll and Mendhoo in Laamu Atoll);		
MoEEW (including the Environment		
Research Centre); and other Ministries.		
It will include presentations made by		
various Government officers and		
international consultants to the project,		
as well as a site visit.		
5.2. Provide a second in-country training		
course for mid-level officers, NGOs		
and Presidents of Environment Clubs		
in schools, either on participatory		
approaches or on technical aspects of		
forest management in the Maldives.		
5.3. Under the budget of the regional		
component of the project, send one to		
two GOM officers to the regional		
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workshop on the protective functions	1
of coastal forests planned for June	1
2006, and to one other	1
workshop/training organized under the	1
regional component.	1
5.4. Prepare a "Guide on the Trees and	1
Shrubs of the Maldives", drawing on	
and updating information in the	1
"Catalogue of Plants" and other	1
materials available in the country.	
5.5. On the six project islands, provide	
hands-on training to women, men and	
youth in coastal forest rehabilitation	
and management (including	
mangroves); avenue and shade tree	
planting and care; and nursery	
management as needed in the course of	
implementing the related project	
activities.	
5.6. Develop extension materials, including	
leaflets in local language and in	
English, for example on the trees of the	
Maldives, propagation techniques,	
coastal forest rehabilitation, nursery	
establishment and management, timber	
species and enrichment planting in	
forests, and shade tree planting	
techniques and post planting care.	
5.7. Make presentations to the islands'	
schools about the project and	
forests/trees and organize field visits	
for school children and villagers from	
nearby islands to the mangrove area on	
Filladhoo Island, the nursery on	
Utheemu and other areas of project	
activities for educational purposes.	
	Due conditions

# **Pre-conditions**

Stable security situation and accessibility of the project area.

# **Pre-conditions**

Stable security situation and accessibility of the project area.

# X. GOVERNMENT CONTRIBUTION AND SUPPORTING ARRANGEMENTS

The Ministry of Fisheries, Agriculture and Marine Resources will be the Government counterpart agency responsible for the project.

The Government of Maldives will:

- nominate a National Project Director to liaise with the international and national consultants on all aspects of project implementation;
- make available the services of qualified staff for the duration of the project as necessary, including staff in the Ministry in Male and in the Agricultural Research Centre in Hanimaadhoo as detailed in the preceding text;
- provide office space for the Forestry Specialist and Community Mobilization Expert and the National Project Assistant in the MoFAMR;
- provide all necessary facilities for the efficient operation of the project including access to information, data, and storage space as required;
- provide administrative and technical support that may be required for the successful completion of the project;
- allow the FAO Representative accredited to the country, or any other FAO official designated by him/her or representative of the Donor to visit the project sites for purposes related to project implementation and evaluation.

### Annex 1

## **TERMS OF REFERENCE**

# Forestry Specialist and Community Mobilization Expert/Chief Technical Adviser

## Tasks to be undertaken

Under the general guidance of the Chief TCEO, the technical guidance of the Regional Coordinator, Forestry Programme for Early Rehabilitation in Asian Tsunami Affected Countries, operational guidance of TCE, and under the direct supervision of the FAO Representative (FAOR) for Sri Lanka and the Maldives and in close cooperation with the FAO Emergency Coordinator for the Maldives, government counterpart officials, national and provincial authorities and in coordination with other international and national actors, the Forestry Specialist and Community Mobilization Expert shall:

- Within one month of arrival, and in conjunction with national, atoll and island counterparts and communities, develop a detailed plan for the project activities in the Maldives (including results, activities, timetable, responsible organization, geographic location, human resources and other inputs, and budget) in line with the project document for OSRO/GLO/502/FIN and the preliminary plan of operation for the Maldives. This should include:
- criteria for beneficiary selection
- information on the location, area extent of the littoral and mangrove forests, needing protection and rehabilitation and areas for potential reforestation in the atolls chosen for project implementation
- list of communities in which the project will work to support forest rehabilitation, home garden rehabilitation and agroforestry, etc.
- list of Local Area Initiatives that the project could assist
- list of implementing partners that will support the community-level forestry activities
- a training plan for the project
- Establish an operational structure to plan, monitor and provide management support and technical backstopping for the project
- Coordinate and supervise the implementation of project activities
- Liaise closely with the Regional Coordinator on all technical aspects of project activities and assist in the organization and implementation of regional activities (workshops, training courses, studies, etc.) in order to facilitate coordination and a programme approach across the programme's components.
- Work in close collaboration with FAO's agriculture and fisheries staff working on tsunami rehabilitation in Sri Lanka to ensure close coordination and integration of forestry, fisheries and agriculture activities, particularly as regards support to integrated coastal area management.
- Liaise with and seek the co-operation of other UN organizations, regional organizations, donors, NGOs and civil society organizations involved in rehabilitation of forests and home gardens in the tsunami-affected areas;
- Provide technical assistance, as required, to concerned government bodies, FAO implementing partners and to operational units providing assistance for rehabilitation of forests and home gardens.

- Review available information and brief the FAO Office and UN Country Team on ongoing and planned activities and assessments related to forest sector.
- Prepare a strategy for coastal forest rehabilitation and management in the Maldives and outline a process by which a corresponding plan could be developed, building on the project experience but expanding to national level
- Prepare project profiles and project documents for submission to donors for forest rehabilitation and forest and livelihoods initiatives.
- Perform other related duties, as assigned.

**<u>Reporting</u>**: Submit monthly progress reports and an end-of-mission report detailing activities undertaken, results achieved and recommendations for follow-up action

**Qualifications:** Masters degree in forestry or a related discipline, experience in coastal forest management and community forestry, project management experience in developing countries, and a minimum of ten years work experience in forest rehabilitation and reforestation.

# **Duration of the assignment:** 11 months

**Duty Station**: Male, with in-country travel as required

Annex 2

# **TERMS OF REFERENCE**

## International Consultant, Forestry Assessment and Programme Planning

### Tasks to be undertaken by the Consultant

This consultancy will be carried out under the operational leadership of FAO's Emergency Operations and Rehabilitation Division (TCE). TCE's mandate is "to enhance rural people's resilience and ability to recover from human and natural disasters". Within the context of the Asian Tsunami emergency response, TCE is working closely with the Governments of affected countries and with partner agencies to provide emergency assistance and rehabilitation of the agriculture, forestry and fisheries sectors. This includes extensive needs assessment, recovery planning, provision of substantial material inputs, and mobilization of communities to support recovery processes. Due to the rapidly evolving nature of the response, there is a requirement for flexibility in addressing these needs, and the Consultant may be called upon to support assessments, planning, project design and management of actual delivery of assistance as required by the circumstances

Under the general guidance of the Chief TCEO, the technical guidance of the Tsunami Technical Focal Point for Forestry and responsible forestry officer in the Regional Office for Asia and the Pacific; under the overall supervision of the FAO Emergency and Rehabilitation Coordinator/Representative in the Maldives; in close cooperation with Government of the Maldives (GOM) officials at various levels; and in coordination with representatives of other international organizations, donor countries and NGOs involved in the forestry sector, the main tasks of the consultant are as follows:

- Assess the areas of mangroves and other coastal forests destroyed or damaged by the tsunami;
- Meet with forestry and other relevant officials in the Ministries of Fisheries, Agriculture and Marine Resources to gather information on: the status of tsunami impact and needs assessments; opportunities for forest sector interventions that would enhance rehabilitation and reconstruction efforts; related activities of the GOM, IOs, NGOs, bilateral organizations, etc; and capacity building needs of the GOM related to forests;
- Identify key players and contacts in rehabilitation, reconstruction and restoration activities related to forestry, environment, livelihoods and integrated coastal area management and meet with them to gather information on their respective activities;
- Assess the status of information and knowledge in the country on the role of mangroves and other coastal vegetation (including coastal scrub and trees) in mitigating the impacts of tsunami, tidal surges and storms;
- Determine the areas potentially suitable and available for rehabilitation or replanting of coastal vegetation and mangroves for coastal protection and environmental benefits, within the context of integrated coastal area management;
- Identify opportunities for community plantings, home gardens, agroforestry, fruit trees, and trees for amenity and/or shade to restore and improve livelihoods;
- Identify the physical and technical inputs required to support the proposed forest rehabilitation and reforestation activities, including needs for forest nurseries and seedling distribution systems;
- Identify opportunities for small scale forest-based enterprises and the actions needed to develop them;
- Through contacts with relevant GOM officials and organizations involved in reconstruction of housing, other infrastructure and fishing boats, assess whether there are any issues or difficulties to be overcome related to provisioning of wood for these purposes;

- Determine the education, training and extension support necessary to strengthen the Government and community capacity to implement the rehabilitation of mangrove forests, coastal trees, nursery management and mobilization of communities and farmers to participate in integrated coastal area management.
- Prepare a draft programme proposal and work plan for FAO's forestry-related programme to assist in the tsunami rehabilitation effort in the Maldives, outlining the various actions, requirements and terms of reference for technical inputs, financial inputs, institutional arrangements and potential partners.

The consultant is to:

- Use existing FAO representation, networks and on the ground expertise in forestry, fisheries, agriculture and sustainable development, as appropriate;
- Work in collaboration with national and local Government authorities, agencies, NGOs, donors and other stakeholders;
- Link, wherever possible to information gathered by other organizations, government initiatives, research studies, and information in the public domain;
- Liaise regularly with the Coordinator of the Forestry Tsunami Response Task Group

**Duration of the assignment**: 15 August - 19 September 2005

Location: Malé, Maldives with frequent trips to the affected areas.

# **TERMS OF REFERENCE**

## Forest Sector Policy and Planning Consultant, Maldives

## Tasks to be undertaken by the consultant

Under the general operational guidance of the Chief TCEO; under the general supervision of the FAO Representative (FAOR) for Sri Lanka and the Maldives and the direct supervision of the OiC FAO Maldives and the FAO Emergency and Rehabilitation Coordinator for the Maldives; under the direct technical supervision of the Forestry Specialist and Community Mobilization Expert (Chief Technical Adviser); and in close collaboration with government counterpart officials, national and atoll and island authorities and in consultation with other international and national actors, the Forest Sector Policy and Planning Consultant shall:

- Meet with all relevant government officials (including, but not limited to, the Ministry of Fisheries, Agriculture and Marine Resources; Ministry of Environment, Energy and Water Resources; Ministry of Planning; Ministry of Atolls; Ministry of Urban Development; Ministry of Tourism) to brief them on the objectives of the consultancy and to discuss their relative jurisdictions over forest and tree resources, the extent to which their sectors rely on forest and tree resources; their current and planned activities that would impact the extent, management or use of forest and tree resources; and national policies and plans related to forest and other resources; international commitments related to forest resources (e.g., Multilateral Environmental Agreements like Convention on Biological Diversity).
- 2. Meet with other international organizations assisting the Government of the Maldives and national and international NGOs to collect information on recent, on-going and planned projects related to management and use of forest resources or that would have a significant impact on these resources.
- 3. Collect all relevant available information in the country from diverse sources on:
  - the status of forests, trees and related vegetation resources (types, location, extent, use) in the Maldives;
  - goods and services from forests and trees and their contributions to the livelihoods of Maldivians, to environmental sustainability and to the national economy
  - trends in forest and tree cover over time;
  - causes of forest degradation and clearance;
  - status of forest management (through informal mechanisms and formal plans)
  - current and planned developments in agriculture, urban development and other land use changes that are likely to affect forest resources;
  - forest land and forest/tree resource tenure;
  - links between the tourism, fishery and agricultural sectors;
  - policies governing forest and tree management and use;
  - policies in related sectors (e.g., environment, biological diversity) and in sectors that are likely to affect forest/tree cover and use (urban development, tourism, fisheries, agriculture, etc.)
  - laws and regulations governing the management and use of forest and tree resources;
  - institutional framework for forest resource management (including jurisdictions; intersectoral coordination mechanisms)

and compile the information then provide a set to the MoFAMR.

4. Visit the atolls and islands to meet with Atoll and Island Chiefs, Island Development Committees and community groups to collect additional information on forest/tree resources, trends in land use changes, local practices concerning forest/tree management and use, and local regulations and controls over forest/tree use.

5. Prepare a report that:

- indicates the status of knowledge and information on forests, trees and related vegetation resources in the Maldives;
- summarizes the information collected in task (2);
- analyzes the incentives and disincentives that current policies and regulations (in forestry and other sectors) pose for the achievement of sustainable forest management in the Maldives;
- proposes areas where policies and legislation governing forest conservation, management and use need revision;
- makes recommendations aimed at strengthening inter-sectoral coordination and coordination mechanisms;
- proposes a process whereby the GOM can develop a forest sector strategy and plan
- indicates the financial and human resources needed to develop a forest sector strategy and plan and possible sources of external financing
- suggests an organizational structure for forest resources management at island, atoll and national level

6. Present the finding of the report to a meeting convened by the MoFAMR and attended by representatives of other ministries

7. Assist the MoFAMR to outline the steps leading to the development of a forest sector strategy and plan.

**<u>Reporting</u>**: Submit the report referred to in task 5 above as well as an end-of-mission report detailing activities undertaken, people met, results achieved and recommendations for follow-up action

**Qualifications:** Masters degree in forestry or a related discipline, a minimum of ten years work experience with emphasis on forest policy and planning and/or development of national forest programmes, work experience in Small Island States is of particular relevance.

**Duration of the assignment:** 2 months

**Duty Station**: Male, with in-country travel as required

# **TERMS OF REFERENCE**

## National Project Assistant

### Tasks to be undertaken by the consultant

Under the general operational guidance of the Chief TCEO; under the general supervision of the FAO Representative (FAOR) for Sri Lanka and the Maldives and the direct supervision of the OiC FAO Maldives and the FAO Emergency and Rehabilitation Coordinator for the Maldives; under the direct technical supervision of the Forestry Specialist and Community Mobilization Expert (Chief Technical Adviser); and in close collaboration with government counterpart officials (in particular of the Ministry of Fisheries, Agriculture and Marine Resources) and island authorities, the National Project Assistant shall assist the Forestry Specialist and Community Mobilization Expert in the following:

- Arrange procurement of seedlings from contractor
- Organize distribution of fruit and shade tree seedlings
- Help establish community nursery
- Organize community in rehabilitation of mangroves in Filladhoo
- Undertake monthly monitoring jointly with Agriculture Research Centre, Hanimadhoo
- Organize trainings for community members, officials of the MoFAMR
- Develop extension material jointly with extension wing of the MoFAMR
- Carry out day-to-day administrative assistant tasks
- Assist organize steering committee meetings
- Liaise closely with the personnel in MoFAMR and the island authorities and the partners of the project and community in the islands
- Monitor the field activities in the home garden, shade trees, and other restoration activities of the project and every month and submit monitoring report as per the timeline

**<u>Reporting</u>**: Submit field mission reports and by mid-December 2006 an end-of-assignment report detailing activities undertaken and results achieved.

**<u>Oualifications:</u>** Above C in SSC examination. Three O level passes or has done A level examination. Knowledge in computer applications. Willingness to travel to islands and work with the community.

**Duration of the assignment:** 10 months or up to end of December 2006 whichever is earlier

**Duty Station**: Male, with in-country travel as required