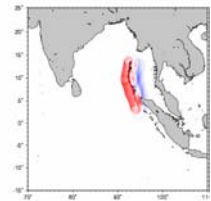
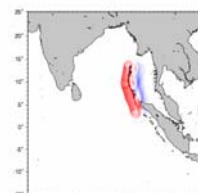




Project Brief Tsunami Recovery & Rehabilitation Thailand



Project Title:	In-Depth Assessment of Mangroves and Other Coastal Forests Affected by Tsunami	
Sector:	Environmental Recovery	
Fund Manager:	UNDP	
Executing Agency:	FAO	
Implementing Partners:	Ministry of Natural Resources and Environment	
Project Period:	April - October 2005	
Focal Point:	hiroyubi.konuma@fao.org (FAO), ferdinand.strobel@undp.org (UNDP)	
Status:	Awaiting Approval	
Target Communities:	Under review	
Number of Beneficiaries:	of Under review	
Context:	<ul style="list-style-type: none"> • Mangrove and other coastal forests seem to have played an essential role in protecting the communities behind them from the surge of tsunamis. There is need to investigate the “why”. • However, other types of forests, especially sandy beach forests and peat swamp forests were more severely affected. Serious sand erosion caused many trees to be uprooted. In addition, some freshwater plant species appeared to be killed by exposure to salt water. Various kinds of animal species appeared to have been affected in their habitat by the tsunami. • As negative impacts to the environment have not been assessed yet, it is urgently required to conduct a series of scientific studies to enhance the ecosystem rehabilitation efforts. 	
Summary:	<ul style="list-style-type: none"> ▪ The project will conduct in-depth studies on damage to mangroves, beach forests, peat swamp forests and other coastal plantations affected by the tsunami. ▪ The subjects covered will include: 1) physical damage to those forests by forest type, species composition, location, shape and size of a stand, tree height and density, etc. 2) ecological damage and sensitivity (by forest type, species, etc.) and long-term effects on biodiversity. 3) socio-economic damage to farming, such as coconut, rubber, cashew nut, etc. 4) the effectiveness of coastal woody vegetation to mitigate damage to local communities. 	
Objectives:	<ul style="list-style-type: none"> ▪ To provide in-depth assessment of mangroves and other coastal forests affected by the tsunami to provincial government authorities, local communities, schools and universities. ▪ To provide technical advice, guidance, training and supervision in order to improve forests, in close collaboration with concerned government agencies and local authorities. ▪ Findings will be used for better planning of rehabilitation strategies, ecosystem management, and disaster prevention for the local communities. 	
Expected Outcomes/ Achievements	<ul style="list-style-type: none"> ▪ Improvement to public awareness on the functions and services of mangroves and other coastal forests to mitigate damage by tsunamis and typhoon waves ▪ Improvement of forest management systems for sustainable utilization and conservation. ▪ Enhancement of government technical capacities on the application of land use planning, forest ecosystem management and environmental education programmes. ▪ Indirect improvement of local community livelihood security systems. ▪ Indirect promotion of eco-tourism. 	
Indicative Budget		US\$
Personnel		80,000
Travel		20,000
Equipment and supplies including GIS		70,000
Training		30,000
General Operating costs		20,000

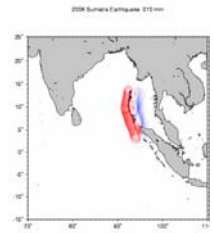


Total

US 220,000

Project Brief Tsunami Recovery & Rehabilitation Thailand

Project Title:	Coral Reef Clean-Up, Rehabilitation and Protection
Sector:	Environmental Recovery
Fund Manager:	UNDP
Executing Agency:	UNOPS
Implementing Partners:	Department of Marine and Coastal Resources (DMCR)
Project Period:	March - December 2005
Project Area:	Phi Phi Islands, Similan Island, Phuket and other affected sites.
Focal Point:	phansiri.winichagoon@undp.org
Status:	Ongoing
Context:	<ul style="list-style-type: none"> ▪ The tsunami damaged important coral reef ecosystems along the Andaman Coast of Thailand. Physical damage was particularly significant in areas where the wave backwash brought debris from tourist resorts or coastal dwellings out onto the reef beds. Initial impact assessments indicate that objects as large as television sets, kitchen sinks and deck chairs were swept onto reef beds. Unless urgently removed, the corals will suffer long-term damage. Even greater damage could occur if the debris contains pollutants or toxins such as cleaning agents, solvents or other chemicals, which could potentially poison large tracts of corals as well as other marine biodiversity.
Summary:	<ul style="list-style-type: none"> ▪ This project will support the official clean-up operations in heavily affected areas by providing urgently needed equipment, supplies as well as training for volunteer divers to identify and remove debris from coral reef beds in a safe and effective manner. ▪ The project will also provide boats and hydraulic equipment to assist in the removal of heavy objects (particularly objects that pose pollution risks). Very large items, which do not pose immediate threats, will be identified and marked using flags or GPS coordinates for later removal. ▪ Training will be made available for divers to identify corals and repair where necessary ▪ Monitoring of transplanted corals and recovery process for lessons learned.
Objectives:	<ul style="list-style-type: none"> ▪ To ensure the conservation of coral reef resources important to the local tourism and fisheries sector, by minimizing long-term damage from debris and solid waste pollution caused by the Tsunami. ▪ To gain understanding of how to repair Thailand's reefs in the event of similar disturbances.
Expected Outcomes / Achievements:	<ul style="list-style-type: none"> • Harmful debris removed from coral reef areas and broken corals repaired where possible. • Hazardous materials and potential contaminants (e.g. electrical or mechanical equipment containing chemicals, solvents, etc.) identified for priority removal using hydraulic equipment. • Non-hazardous heavy items located and marked for future removal. • Reef protection practices realised and shared with partners. • Reef rehabilitation practices realised and shared with partners.
Indicative Budget	US\$
Cleanup of Coral Reefs	159,000
Rehabilitation of Coral Reefs	62,000
Protection of Coral Reefs	153,000



Facilities and Administration

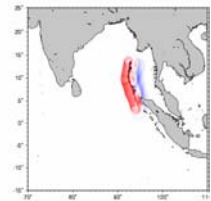
26,000

Total:

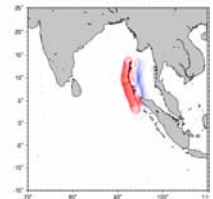
US \$ 400,000



Project Brief Tsunami Recovery & Rehabilitation Thailand



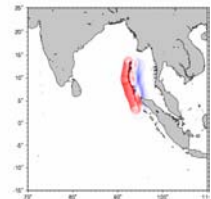
Project Title:	Strategic Planning of the Andaman Sea Coastline	
Sector:	Environmental Recovery	
Fund Manager:	UNDP	
Implementing Partner:	UNDP	
Project Period:	February - December 2005	
Focal Point:	phansiri.winichagoon@undp.org	
Status:	Under formulation	
Context:	<ul style="list-style-type: none"> ▪ Hundreds of thousands of people have been affected by the recent tsunami that hit Southern Thailand on 26 December 2004. Nearly 500 fishing villages along the Andaman coast were seriously affected, about 30,000 households dependant on fisheries have lost their means of livelihood, over 4,500 fishing boats have been destroyed or damaged, and over 90,000 people have lost their jobs in the tourism sector. ▪ At the same time, the tsunami had a very serious impact on the natural environment, with several marine and coastal national parks severely damaged, coral reefs destroyed by debris, and agricultural land affected by salt water intrusion. These environmental impacts will in turn have serious consequences for the tourism industry and people's livelihoods. 	
Objective:	<ul style="list-style-type: none"> ▪ To develop a strategic plan to guide the Royal Thailand Government policy formulation and sustainable development of the Andaman Sea coastline, adopting a holistic, multi-departmental, and inclusive partnership approach. 	
Activities:	<ul style="list-style-type: none"> ▪ Assemble a strategic planning team from the Thai Government ministries and local governments and external partners to design and manage the project; ▪ Update existing maps in GIS format of the Andaman Sea coastline to include the current status of natural resources, including levels of destruction and damage to coastal infrastructure; ▪ Include on the maps areas of pre-tsunami activities e.g. fishing, tourism, industrial development, urban development, national parks, undeveloped and uninhabited areas; ▪ Also include an assessment of existing jurisdiction, legislation and management. ▪ Implement a consultative process for the future use of the Andaman Sea coastline; ▪ Prepare a large-scale, long-term strategic plan for the sustainable development of the Andaman Sea Coastal Zone to ensure equitable sharing of benefits and conservation of resources and biodiversity. ▪ Form a single management authority representing all government, community and private sectors that reports to the highest level of government. 	
Expected Outcomes/Achievements:	<ul style="list-style-type: none"> • Updated GIS maps and plans of the Andaman Sea coastline; • Clarification of responsibilities and roles of different management authorities and levels of government; • A strategic plan for holistic management of the Andaman Sea coastline with the involvement of all sectors; • A network of MPAs in line with the WSSD objectives and CBD recommendations; • Potential long-term option is marine managed area status of the Andaman Sea coastline to include specific zones promoting sustainable development of tourism, forestry and fishing sectors and areas designed for biodiversity conservation 	
Indicative Budget		US\$
Intl. expertise in strategic planning of natural resources		100,000
National expertise in strategic planning of natural resources		100,000
Equipment and supplies		20,000
Workshops		50,000



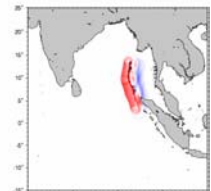
Training (on-the-job training, short courses, and study tours)	90,000
General Operating Costs (including travel)	50,000
Total	US \$ 410,000



Project Brief Tsunami Recovery & Rehabilitation Thailand



Project Title:	Sustainable Eco-Tourism Development in the Affected Southern Provinces of Thailand
Sector:	Environmental Recovery
Duration:	March 2005 - December 2006
Fund Manager:	UNDP
Executing Agency:	UNDP
Implementing Partner:	Ministry of Tourism and Sports in partnership with MONRE, IUCN, private sector
Focal Point:	
Status:	sirisupa.kulthanan@undp.org Under Formulation
Target communities:	6 affected provinces in Southern Thailand: Ranong, Phang-nga, Phuket, Krabi, Trang and Satun. Direct target beneficiaries are small tourism businesses, tour operators and local communities in these provinces.
Context:	<ul style="list-style-type: none"> ▪ Tourism industry accounts for around 5.1 % of Thailand's GDP. The tsunami struck southern Thailand's west coast along the Andaman Sea, especially in Ranong, Phang-nga, Phuket, Krabi, Trang and Satun. Three major impacts for the tourism industry are a loss of human resources (including one-third manpower of tourism industry), a loss of natural and environmental resources and the damage to tourism industry especially in Phuket, Phang-nga and Krabi. Structural damage to tourism is estimated at US\$ 1billion, while it is estimated that around 30 Billion Baht lost in tourism businesses, 43 Billion Baht lost in revenue from tourism, and 40% decrease in number of tourists since the disaster. ▪ Eco-tourism has been growing in Thailand, which highly depends on natural terrestrial and marine environments and quality services. However, a large proportion of eco-tourism is still unsustainable resulting in further environmental degradation and potential losses of biodiversity.
Summary:	<ul style="list-style-type: none"> ▪ The project will strengthen partnerships to assess current and future capacity in the tourism sector in the Andaman Sea, determining sustainable limits and ensure that new infrastructure and operations are compatible with sustainable use of the natural resources. ▪ The project will provide expert(s) and training to small tourism-related businesses on alternatives and sustainable management of eco-tourism, and on environmental protection. This may include study visit(s) to other countries, which have keen experiences on eco-tourism i.e. Costa Rica. ▪ The project will provide communications/media expert(s) to government agencies concerned and small tourism businesses on media and awareness campaign on eco-tourism. Capacity building will also be provided to local communities to increase their awareness and knowledge in planning process for eco-tourism in their respective areas.
Objectives:	<ul style="list-style-type: none"> ▪ To develop a stronger, sustainable and more profitable tourism sector, especially on eco-tourism, as part of the rehabilitation of the Andaman Sea coastal zone.
Expected Outcomes / Achievements:	<ul style="list-style-type: none"> ▪ Improved management of coastal resources and reduction of damaging practices in Andaman sea ▪ Sustainable tourism promoted through improved coordination of Thailand's policies and management of eco-tourism. ▪ Capacity of key government agencies, small tourism business and communities strengthened on sustainable tourism management and environmental protection.
Indicative Budget	US\$
Experts/consultants	150,000



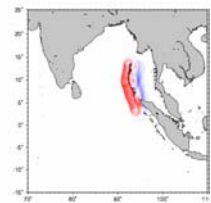
Workshops / training / study visits	350,000
Media campaign and materials	100,000
General management	50,000

Total		US\$ 250,000
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Project Brief Tsunami Recovery & Rehabilitation Thailand

Project Title:	Responsive Assistance to the Rehabilitation of Natural Resources and Environmental Damages in the Affected Areas of Thailand
Sector:	Environmental Recovery
Duration:	June 2005 - December 2005
Fund Manager:	UNDP
Executing Agency:	UNDP, UNEP
Implementing Partners:	MONRE, DMCR, WWF, AIT, IUCN
Focal Point:	phansiri.winichagoon@undp.org
Status:	Approval
Target communities:	Mangrove regions of six affected provinces: Ranong, Phang-nga, Phuket, Krabi, Trang and Satun. Sirinath National Park.
Context:	<ul style="list-style-type: none"> ▪ Following the December tsunami a number of government agencies embarked on immediate rapid damage assessments on beach and reef areas in tsunami-affected areas. Initial assessments concluded that 13% of sampled coral reefs were damaged, sea grass beds saw 3.5% damaged and 1.5% destroyed and mangrove forests less than 0.2% damaged. ▪ While immediate environmental concerns have been mapped out and emergency measures taken, medium- to long-term rehabilitation will require more detailed impact assessments, which need to be guided by systematic analysis and monitoring.
Summary:	<ul style="list-style-type: none"> ▪ The project will undertake an economic assessment of the natural damages caused by the tsunami. ▪ Mapping of mangrove forests in affected provinces to formulate a base-line database for relief plans, rehabilitation and sustainability for the long term. ▪ Building of a Geographical Information System which will consolidate for easy access all information on marine and coastal resources. ▪ A pilot project in Sirinath Marine National Park to raise awareness of eco-tourism and environmental issues among local communities and private sector in Phuket and the region. ▪ Sub-regional dialogue between DMCR and local stakeholders on the management of coastal and marine resources, national agendas and offers of assistance for rehabilitation and conservation.
Objectives:	<ul style="list-style-type: none"> ▪ Assist the Royal Thai Government in its tsunami rehabilitation and recovery efforts through a number of specific interventions.
Expected Outcomes / Achievements:	<ul style="list-style-type: none"> ▪ Economic assessment of tsunami damages to Thailand's natural resources. ▪ Mapping of all mangrove areas for Andaman coastal region. ▪ Awareness raised among policy-makers, planners and practitioners on the need for natural resource rehabilitation and conservation. ▪ Strengthening of management for Sirinath Nat. Park as well as positioning the park as a national example of sound ecotourism practices and environmental conservation. ▪ Unified GIS database for key components of marine and coastal resources in Thailand. ▪ Provincial and local action plans for marine and coastal resource management.
Indicative Budget	US\$



Economic evaluation	40,000
Mapping mangrove forests along the six affected provinces	45,000
Strengthening management of Sirinath Nat. Park	60,000
Development of marine and coastal resources database	60,000
Strengthen DMCR coordination capacity of post-tsunami rehabilitation	30,000
Coordination and support	35,000
Total	US\$ 270,000