

REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

Submission Date: 11 June 2007 **Re-submission Date:** 14 November 2007

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 2753 GEF AGENCY PROJECT ID: n/a

COUNTRY: Sri Lanka

PROJECT TITLE: Participatory Coastal Zone Restoration and

Sustainable Management in the Eastern Province of post-tsunami Sri

Lanka

GEF AGENCY: IFAD

OTHER EXECUTING PARTNERS: Ministry of Fisheries and Aquatic

Resources, Coast Conservation Department (Sri Lanka)

GEF FOCAL AREA(S): Land Degradation, SPA

GEF-4 STRATEGIC PROGRAM(S): SP-1, SPA (GEF-3) NAME OF PARENT PROGRAM/UMBRELLA PROJECT: n/a

Expected Calendar				
Milestones	Dates			
Work Program (for FSP)	August 2006			
GEF Agency Approval	February 2008			
Implementation Start	July 2009			
Mid-term Review	Dec. 2012			
Implementation Completion	June 2016			

GEF FEES (9% OF TOTAL GRANT)				
IFAD	100%	654,292		

A. PROJECT FRAMEWORK

Project Objective: Restoration and management conservation of globally important ecosystems affected by the tsunami mainstreamed into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change along the East Coast of Sri Lanka

Project	Invstm't		GEF Financing* Co-financing*		GEF Financing* Co-financing*		5 7 . 1 (4)	
Components	, TA, or STA**	Expected Outcomes	Expected Outputs	(\$)	%	(\$)	%	Total (\$)
1. Development and application of best practices for sustainable management of key coastal ecosystems with integration of adaptation to climate change vulnerabilities	TA	Best practices for effective restoration and sustainable management of key coastal ecosystems with integration of adaptation to climate change vulnerabilities developed and demonstrated	1.1. Best practices developed and demonstrated for community-led restoration of globally important ecosystems; 1.2. Best practices and policy guidelines published on practical restoration and conservation management of globally important ecosystem; 1.3. Central information base established at CCD as repository for all work on ecosystem restoration and coastal adaptation to climate change	1,903,200	66.34	965,475	33.66	2,868,675
2. Mainstreaming of effective ecosystem restoration and sustainable management with integrated options for climate change vulnerabilities	Investme nt, TA	2. Effective ecosystem restoration and sustainable management with integrated options for climate change vulnerabilities are mainstreamed into post-tsunami reconstruction planning and implementation by relevant authorities and donors	2.1. Policy framework reviewed and restructured to support the restoration and sustainable use of coastal natural resources and adaptation to climate change; 2.2. Requirements to incorporate restoration of coastal ecosystems and adaptation measures for climate change vulnerabilities introduced into the central national planning system for all tsunamireconstruction projects; 2.3. Restoration of coastal ecosystems incorporated into the Eastern Province planning system; 2.4. Ecosystem Restoration and Adaptation Unit (ERAU) created within the Coast Conservation Department to provide facilitation and supervision services to tsunamireconstruction projects; 2.5. Demonstration of replication of ecosystem restoration and community based co-management of coastal ecosystems and adaptation to climate change promoted by Eastern Provincial Council	1,008,900	41.68	1,411,525	58.32	2,420,425

3.	Investme	3. Coastal	3.1. Enabling environment for	2,345,765	40.57	3,436,100	59.43	5,781,865
Empowerment	nt	communities	community co-management of					
of coastal		empowered to	natural resources and adaptation to					
communities		manage local	climate change vulnerability					
empowered to		natural resources	established; 3.2. Co-management of					
manage local		to enhance	mangroves and coastal lagoon					
natural		sustainable	promoted at Vakarai to improve					
resources		livelihoods and	local livelihoods, foster sustainable					
		adaptation to	land management and to minimise					
		climate change	climate change impacts; 3.3. Co-					
		vulnerabilities	management of sand resources					
			promoted at Panama\Pottuvil to					
			improve local livelihoods, foster					
			sustainable land management and to					
			minimise climate change impacts;					
			3.4. Co-management of coral					
4 7 '	TD 4	4 7 '	resources promoted at Pigeon Island	911,100	53.91	778,969	46.09	1,690,069
4. Learning,	TA	4. Learning,	4.1. Monitoring, evaluation,	911,100	55.91	//8,969	46.09	1,090,009
monitoring and evaluation		evaluation and	reporting and dissemination systems					
evaluation		adaptive	established and operational					
		management increased						
5. Project manager	nent	mereaseu		750,950	43.45	977,381	56.55	1,728,331
Total Project Cos				6,919,915	.55	7,569,450	2 3.23	14,489,365

B. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

Financing source	Project Preparation ^a	Project	Agency Fee	Total at CEO Endorsement	For the record: Total at PIF
GEF	350,000	6,919,915	654,292	7,924,207	7,000,000
Co-financing	190,000	7,569,450		7,759,450	35,800,000
Total	540,000	14,489,365	654,292	15,873,657	42,800,000

^a PDF-B funded under GEF-3

C. SOURCES OF CONFIRMED CO-FINANCING, including co-financing for project preparation for both the PDFs and PPG

Name of co-financier (source)	Classification	Туре	Amount (\$)	% ^b
IFAD	Exec. Agency	Soft Loan	7,183,650	92.58
Government of Sri Lanka	Nat'l Gov't	In-kind	480,300	6.19
IUCN	NGO	In-kind	95,500	1.23
Total Co-financing			7,759,450	100.00

^b Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY(IES) OR COUNTRY(IES)

GEF Agency Focal Area		Country Name/		(in S	\$)	
Agency Focul Area	Global	Project Prep.	Project	Agency Fee	Total	
IFAD	Land Degradation	Sri Lanka	350,000	5,000,000	472,760	5,882,760
IFAD	SPA	Sri Lanka		1,919,915	181,532	2,101,447
Total GEF	Resources		350,000	6,919,915	654,292	7,924,207

^{*} No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

E. PROJECT MANAGEMENT BUDGET/COST

Cost item	Total Est'd person wks	GEF (\$)	Other sources (\$)	Project total (\$)
Local consultants ^c	4,004	245,700	427,700	673,400
International consultants ^c	0	0	0	0
Office facilities, equipment, vehicles and communications ^d		230,720	300,100	530,820
Travel d		91,130	64,581	155,711
Miscellanea d		183,400	185,000	368,400
Total		750,950	977,381	1,728,331

^c Please see detailed information regarding the consultants in Annex C ^d Provide detailed information and justification for these line items:

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS

Component ^e	Estimated person weeks	GEF(\$)	Other sources (\$)	Project total (\$)
Local consultants	6,916	500,500	882,700	1,383,200
International consultants	84	168,000	0	168,000
Total	7,000	668,500	882,700	1,551,200

e Please see detailed information regarding the consultants in Annex C

G. DESCRIBE THE BUDGETED M&E PLAN:

The Monitoring and Evaluation (M&E) system is the set of planning, information gathering, and synthesis, reflection and reporting processes along with the necessary supporting conditions and capacities required for the outputs of M&E to make a valuable contribution to decision making and learning. Past experience in Sri Lanka has shown that M&E is the least important for the project stakeholders until they realize that the intended objectives were not achieved at the end. Very often it has been seen that the M&E functions were confined to tracking the activities, tracking financial progress and reporting to the donor. But it is essential that all elements of M&E are attended from the very inception of the project.

The M&E system of the proposed GEF operation will have the following approach and activities:

1. Establishment of baseline information

Taking into consideration the gaps in the information base, it is essential that the baseline information is updated at the time of the commencement of project proper. Possibly data analyzed in the form of digitalized maps can be prepared and will be used for comparisons at the time of project impact evaluations. Collection of baseline information and data will be completed at least within 6 months of the projects commencement.

2. Creation of a Management Information System (MIS) for impact monitoring

This will constitute a multi-disciplinary team working further to fine tune the following documents:

- Project Technical Monitoring Plan
- Project Impact Monitoring Plan, which will include a Participatory Monitoring and Evaluation Plan based on the logical framework matrix.

3. Project inception phase

There will be at least three months as project inception period in order to fully understand the project and to install the necessary project management structure on ground.

4. Project Progress Monitoring

This will encompass the setting up of the National Steering Committee (NSC), periodic monitoring (Project Progress Review Meetings, Project Tripartite Reviews (PTRs), Preparation of the annual work plan and Periodic Thematic and Technical Reports

5. Project Impact Evaluation

This component will include the completion of the mid-term evaluation and the final evaluation.

6. Sharing best practices

Technical reports will be generated from the feed-back received from the progress reports and other reviews and evaluations, and will be published as lessons learned.

7. Capacity development of the M&E Staff

This is significantly important in view of limited expertise available especially in the eastern province for project monitoring and evaluation. The need for this is further emphasized due to the technical nature of the project and that the project staff need biodiversity monitoring skills based on the indicators developed in the log frame.

8. Audit

The Project Implementing Agency will provide IFAD and GEF with certified periodic financial statements. An annual audit of the financial statements relating to the status of IFAD, including GEF funds, will be carried out, according to the established procedures set out in the Programming and Finance manuals, and in accordance with the Project Cooperation Agreement.

The main activities planned for the M&E are shown in the table below:

Table 1. Monitoring and Evaluation Work Plan and Budget

Type of M&E activity	Responsible Parties	Budget (\$)	Time frame
1. Establish baseline	Consultants (Multi disciplinary team)	75,000	Within six months of project start up
2. Design technical (scientific) monitoring plan	External consultant	90,000	Within six months of project start
3. Design participatory monitoring plan	Consultant	50,000	Within six months of project start
4. Management Information System	External Consultant	80,000	Within six months of project start
5. Inception Workshop	Project Team/IFAD	30,000	Within first three months of project start up
6. Inception Report	Project TeamPPRR	None	Within one month following Inception Workshop
7. National Steering Committee Meetings	Project Coordinator	None	Following Project IW and subsequently at least three times a year
8. Project progress review meetings	Project Team	80,000	Quarterly
9. Project Tripartite Review	■ IFAD/GEF/GOSL	90,000	Each year of the project
10. Annual work planning	Project Staff	38,000	Annually
11. Thematic papers/technical papers	 Project Technical Team/External Technical evaluators 	30,000	
12. Mid-term Evaluation	 Project team, IFAD/GEF Regional Coordinating Unit External Consultants (i.e. evaluation team) 	60,000	After three years of project implementation
13. Final Evaluation	 Project team, IFAD/GEF Regional Coordinating Unit External Consultants (i.e. evaluation team) 	60,000	Towards the end of the project implementation
14. Capacity development on M&E	ConsultantProject team	30,000	Before the end of first year
15. Audit	IFAD -CO Project team	50,000	Yearly
TOTAL INDICATIVE C Excluding project team sta	COST (7 YEARS) ff time and travel expenses	763,000	

PART II: PROJECT JUSTIFICATION

A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE GLOBAL ENVIRONMENTAL BENEFITS: A.1. Project rationale

The Eastern Province of Sri Lanka borne the brunt of the damage caused when the Indian Ocean Tsunami struck the island in the morning of 26th December 2004. As well as causing the deaths of 14,345 people (46% of the national death toll), displacing over 220,000 people, and destroying most of the fishing industry, it also caused extensive damage to coastal ecosystems – with respect to area of occurrence 100% of coastal lagoons, 43% of mangroves, and 38% of sand dunes were either partially damaged or completely destroyed. The value of these ecosystems in providing protection was apparent to all in that lives were saved and property protected where these ecosystems had not been degraded by poor management. However, in the immediate aftermath of the tsunami, humanitarian considerations were given the highest priority to provide rescue, relief, and emergency support to the survivors. The reconstruction programme that followed provided a rare opportunity for a truly holistic approach to policy formulation and implementation, but due to lack of capacity, technical knowledge, and inadequate institutional coordination, the national reconstruction response was made in isolation of ecosystem restoration, adaptation to climate change vulnerabilities and broad conservation objectives, which were given low priority leading to responses that are inappropriate to, incompatible with, or unsupportive of, the sound utilization of natural resources which most of the local communities of the East Coast are ultimately dependent upon to sustain their livelihoods.

The project design is founded on overcoming three key barriers to the restoration of coastal ecosystems – that technical knowledge for low-cost restoration methods is not present on the island; that environmental issues have been given low priority during the tsunami relief and reconstruction programme; and that those processes leading to land degradation prior to the tsunami must be changed if the rehabilitated ecosystems are to provide the functions and services envisaged on a sustainable long-term basis. While the initial emphasis of this seven-year project will be on developing a scientifically-based, low-cost, community-based approach to rehabilitating three key coastal ecosystems - mangroves, coastal lagoons, and sand dunes - at specific sites, facilitating replication of these techniques all along the East Coast (and in due course other tsunami-affected coasts) is at its heart. In seeking to achieve this, it will implement a two-prong strategy to a) demonstrate that replication is technically feasible at other sites, and b) mainstream ecosystem restoration into the reconstruction process by making it a requirement of Government policy and building the capacity of a specialist Government unit to facilitate and support the process. Improved management of these restored and other coastal resources will be promoted to raise incomes, develop sustainable livelihoods, and improve sustainable land management, by facilitating the empowerment of the local communities to enter co-management agreements of the coastal areas with Government, and by providing best practice guidance and other tools and opportunities for them to improve their incomes. Support will be targeted at the rural poor and particularly women to improve their level of participation in social and economic activities improve incomes and reduce poverty.

A.2. Goal, objective and project components

The long-term goal of the project is to rehabilitate tsunami-affected ecosystems in Sri Lanka to provide full ecosystem services including adaptation against extreme climatic events. The project development objective is to mainstream restoration and management conservation of globally important ecosystems affected by the tsunami into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change along the East Coast of Sri Lanka. The project design is founded on overcoming three key barriers to the restoration of coastal ecosystems - that technical knowledge for low-cost restoration methods is not present on the island; that environmental issues have been given low priority during the tsunami relief and reconstruction programme; and that those processes leading to ecosystem and land degradation prior to the tsunami must be changed if the rehabilitated ecosystems are to provide the functions and services envisaged on a sustainable long-term basis. While the initial emphasis of this seven-year project will be on developing a scientifically-based, low-cost, community-based approach to rehabilitating three key coastal ecosystems - mangroves, coastal lagoons, and sand dunes – at specific sites, facilitating replication of these techniques all along the East Coast and in the areas where IFAD Post-tsunami livelihoods support project to be implemented (and in due course other tsunami-affected coasts) is at its heart. In seeking to achieve this, it will implement a two-pronged strategy to demonstrate that replication is technically feasible at other sites, and to mainstream ecosystem restoration into the reconstruction process by making it a requirement of Government policy and building the capacity of a specialist Government unit to facilitate and support the process.

The project is planning to undertake all its SPA related activities in line with the recommendations of the 1st National Communication to the UNFCCC and they will be concentrated in the areas of three pilot sites and the six replication sites of the IFAD/GEF project. The main objective of these activities is to reduce the vulnerability of coastal areas by increasing the resilience of restored coastal ecosystems affected by the tsunami. The proposed SPA activities are intended to foster the following aspects: (i) increase the capacity of the country to formulate and implement effective vulnerability assessments to climate change; (ii) incorporate greater consideration of climate change impacts into national policies and test planning methods for adaptation; (iii) identify critical coastal areas and ensure that sensitive ecosystems (mangroves, lagoon, sand dunes and coral reefs), oncerehabilitated, will be more resilient to climate change then they were before the tsunami; and (iv) improve the understanding of climate change impacts and build capacity at local level on adaptation to climate change.

The project interventions have been designed to contribute to four interrelated outcomes:

Outcome 1, Best practices for effective restoration and sustainable management of key coastal ecosystems developed and demonstrated; Outcome 2, Effective ecosystem restoration and sustainable management are mainstreamed into post-tsunami reconstruction planning and implementation by relevant authorities and donors; Outcome 3, Coastal communities empowered to manage local natural resources to enhance sustainable livelihoods, and Outcome 4, Learning, evaluation and adaptive management increased.

A.3. Global Environmental Benefits expected

The key global environmental benefits will arise from restoration and sustainable land management of those ecosystems significantly degraded by the tsunami, initially at the demonstrations sites and then through replication along the coast of the Eastern Province, and perhaps subsequently further afield. These ecosystems, when in good condition, have been shown to have provided extremely effective protection against an extreme marine surge and saved lives and prevented damage to property as a result, as such their restoration will provide the same protective function in the face of rising sea levels and the increased frequency of extreme weather events (e.g. cyclones) resulting from global climate change. In addition, restoring large areas of mangrove, and to a lesser extent the scrub vegetation associated with sand dunes, will increase levels of carbon sequestration to some extent thereby contributing towards actions to counter global warming. The project will also illustrate the importance of implementing a bottom-up resource use planning approach, strengthening the capacity of local government to coordinate restorative measures, removing policy barriers by creating the appropriate regulatory and enabling policy environment, and mainstreaming sustainable land management processes into priority rural development strategies leading to secondary global benefits of poverty reduction and food security. Furthermore, it will illustrate the importance of engaging and mobilizing local communities in the management of coastal resources, and in the control of land degradation over-exploitation of resources. Through these initiatives, rural populations most affected by the tsunami will be mobilized as important partners to effect on-the-ground conservation and management. The project will illustrate how to develop such a practical and cost-effective approach and how to replicate this in other countries bordering the Indian Ocean and badly affected by the tsunami.

The project will also bring global biodiversity benefits. Restoration and sustainable management of these globally important coastal habitats, previously capable of supporting a wide range of coastal wetland species including at least 23 globally threatened ones, will enable them to return to the same condition long-term that will support these species again. The East Coast of Sri Lanka is well known internationally, generates large amounts of foreign exchange whenever the security situation allows through tourism, and rehabilitating the coastal habitats and improving the conservation management of the its flora and fauna will maintain and enhance this global value. A concerted and systematic control and eradication programme of alien invasive species spread by the tsunami will result in this threat to coastal habitats being largely eliminated, in line with the aims of GEF's Operational Programmes. Rehabilitating the damaged ecosystems, conserving their globally important biodiversity and taking action to control IAS will all contribute towards the fulfillment of Sri Lanka's obligations under the CBD and UNCCD.

At the national level, the project will illustrate the importance of linking poverty reduction with conservation of coastal ecosystems, and the role to be played through value-added production and the promotion of rural non-farm or fishing activities as a means to increase local investment opportunities, particularly for households headed by widows. The focus on community-based, participatory planning and management coupled with supportive institutional structures will be a model for ecosystem recovery and poverty reduction that could be replicated elsewhere in the country, and not just in tsunami-affected areas. These systems are also fundamental to reviving a decimated coastal fishing industry and promotion of natural resources planning and sustainable land management

techniques, supported by economic initiatives undertaken by IFAD's "Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme" aimed at diversifying people's income-generating activities, will revive coastal agriculture and reduce pressure from inland ecosystems (particularly bushlands and forests) and protected areas. Systematic control of alien invasive plants spread by the tsunami is more likely to lead to their eradication than the current ad hoc approach.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

Sri Lanka places great importance on meeting its obligations as a signatory to a number of environmental conventions. The proposed project will provide a concrete contribution to the implementation of the National Action Plan to Combat Desertification (NAP) of the UNCCD which was adopted in 2002 and support the UNFCCC National Communications of Sri Lanka adopted in 2000, with its Mitigation option and Adaptation responses. In addition the project will support current Government priorities and actions towards conserving its flora and fauna under the Convention on Biodiversity. The proposed project is fully consistent with the national vision and coherent with national priorities, policies and strategies to counter land degradation and promote sustainable land management, reduce coastal vulnerability to climate change, and protect biodiversity and coastal ecosystems. In particular, the GEF project responds to the major activities of the second revision of the Coastal Zone Management Plan (CZMP) at a critical time by: (i) promoting sustainable development through environmentally-sensitive restoration; (ii) demonstrating participatory models for green restoration; (iii) building capacity to strengthen and improve mechanisms for inter-agency coordination; (iv) promoting and strengthening mechanisms for community-based natural resources management; and (v) building the people's confidence in restoration measures. It also fulfils the requirements of several statements in the Government's National Environmental Policy "Caring for the Environment 2003-2007: Path to Sustainable Development", including restoration of damaged communities; the recognition of the economic value of environmental services to assure their sustainability to benefit people; strengthening the institutional capacity to ensure sound management and coordination, and the encouragement of socially responsible behaviors through awareness-raising, incentives, and enforcement. The Biodiversity Action Plan draws particular attention to promoting the conservation of mangroves, lagoons and coral reefs and the CZMP includes an objective to conserving these and sand dunes, and the project is consistent with these and also complements several large projects already being implemented in the North-East Province as well as IFAD's "Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme" due for implantation shortly.

The project is strongly supported by the Government and the relevant agencies, particularly the Coast Conservation Department (CCD). In addition, the Province and Districts have also demonstrated a great deal of support for this initiative during its design phase, recognizing the importance of the multiple functions played by coastal ecosystems as storm barriers, providers of natural resources to sustain the livelihoods of rural communities, and in maintaining biodiversity. Consultations with the "Liberation Tigers of Tamil Eelam" (LTTE) officers at Vakarai also indicate significant support for this project. The policies and projects cited above, and the massive mobilization of foreign and domestic relief aid being channeled through government agencies, demonstrate the active engagement of the GoSL in its desire to reconstruct the infrastructure and livelihoods of coastal communities while restoring coastal ecosystems to provide for a sustainable future.

Please see the full project document for more details (Project Brief, sections 1.A.5 and 2.5).

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

The project's objectives are fully consistent with the newly approved GEF Focal Area Strategies, and more specifically with its provisions for Sustainable Land Management and Adaptation to Climate Change. GEF defines land degradation as "... any form of deterioration of the natural potential of land that affects ecosystem integrity either in terms of reducing its sustainable ecological productivity or in terms of its native biological richness and maintenance of resilience". The purpose of the new Land Degradation Focal Area (LD FA) is to "foster system-wide change to control the increasing severity and extent of land degradation in order to derive global environmental benefits", proposing Sustainable Land Management (SLM) as main tool. In Sri Lanka, the tsunami has caused massive land degradation, directly and indirectly reducing the land's sustainable ecological productivity and its native biological richness. The project will restore and manage sustainably the ecosystems affected, reducing and arresting land degradation, as proposed by the LD FA priority. The project will also support Strategic Objectives 1 ("An enabling environment will place SLM in the main stream of development policy and practice at regional, national and local levels") and 2 ("Mutual benefits for the global environment and local livelihoods through catalyzing SLM investments for large-scale impact"). The proposed project is also compatible with GEF's willingness to finance the incremental cost of developing sustainable land management

practices, which would provide communities with new and alternative livelihoods and support the preservation of ecosystem stability, functions and services.

The activities proposed under this project conform closely with the LD FA strategic priorities under its Strategic Program 1, "Supporting Sustainable Agriculture and Rangeland Management". The project stresses an integrated approach to land restoration, strengthening cross-sectoral mechanisms, and involving local community participation in restoration, and sustainable land management and protection, thereby facilitating the improvement of people's livelihoods and economic well-being. It will fund the incremental costs of complementing other actions by the GoSL and international agencies to restore, and thereafter conserve, the structure and functional integrity of coastal ecosystems, benefiting not only the local people, but the rich biodiversity associated with Sri Lanka's eastern coast. Emphasis will be laid on the use of indigenous species for facilitating regeneration activities, and the project will demonstrate best practice for green restoration of the coast belt for replication along the remainder of the East Coast and the South Coast. It will mainstream SLM strategies into national and local coastal development priorities, as well as building the capacity at national and community level to ensure participatory involvement in continuing integrated land use planning and management.

With regards to adaptation, the GEF was asked, during UNFCCC COP7, to establish pilot or demonstration projects to show how adaptation planning and assessment can be practically translated into projects that will provide real benefits, and may be integrated into national policy and sustainable development planning. At the GEF Council Meeting of November 2003 and the COP9 in Milan in December 2003, a business plan was adopted that for the first time recognized the funding needs for adaptation activities under a pilot window designed to identify policy options and measures that could demonstrate how adaptation to climate change can be implemented. The GEF Council issued Document (GEF/C.273/Inf.10, 8/Rev 1) dated 14 October May 2005, containing the Operational Guidelines for the Strategic Priority "Piloting and Operational Approach to Adaptation" (SPA). These Guidelines, inter alia, indicate that the objective is "to reduce vulnerability and to increase adaptive capacity to the adverse effects of climate change in the focal areas in which the GEF works".

In the Biodiversity Focal Area, global environmental benefits include "reduced risks of global biodiversity loss and enhanced protection of ecosystems and the species they contain". In the Land Degradation focal area, incremental global benefits are expected from "sustainable land management to preserve, conserve and restore the structure and functional integrity of ecosystems". The current project contributes to the achievement of these global environmental benefits.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

D.1. Linkages with IFAD strategy and activities in the country

The present project proposal will, therefore, draw from IFAD's country's experience and also from other donors' programmes, particularly the integrated and participatory rural development ones targeted at disadvantaged areas, conservation of the natural resource base, and expansion of basic rural infrastructure. The IFAD-GEF project is in harmony with the development goals and objectives of most of the other donors. The intervention will also provide an enabling environment for the efficient utilization of the investments made by such donors. GEF interventions will cut across the major sectors and will serve as a conduit to provide the sustainable ecological base on which the desired goals and targets of these projects could be achieved.

The GEF Project will link closely with the "Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme", signed and approved in late 2005, and that will be funded under an IFAD negotiated loan as well as from other sources, through shared baseline studies, integrated implementation arrangements, and convergent approaches to community participation. These links will be developed further during implementation of the project, but specifically, the GEF assistance will focus on the incremental costs of country-driven initiatives for green restoration and subsequent conservation measures to rehabilitate the devastated areas of the coastal ecosystems, mitigate against further land degradation to reduce potential damage arising from future natural and man-induced events (e.g. tsunamis and cyclones), and eradicate invasive alien species which have been spread by the tsunami.

D.2. Coordination with other related initiatives

Projects in Sri Lanka relevant to the current proposed intervention involving the GEF include:

- (i) "Conservation of Biodiversity through Integrated Collaborative Management in the Rekawa, Ussangoda and Kalametiya (RUK) Coastal Ecosystems" (UNDP-GEF). This project builds upon initiatives such as the Special Area Management (SAM) Plan for Rekawa and the Wetland Site Report for Kalametiya, to prepare an overall plan for the Rekawa, Ussangoda and Kalametiya area in collaboration with local communities, CBOs, and NGOs. Emphasis is being given to the establishment of a collaborative management framework for the conservation programmes for marine turtles and mangroves. It is managed by the Coast Conservation Department with operational and technical assistance form IUCN-SL.
- (ii) "Bay of Bengal Large Marine Ecosystem" (GEF-World Bank). This project was approved recently by the GEF Council. The project will develop an agreed strategic action programme for the sustainable management of the Bay of Bengal Large Marine Ecosystem (LME), executed through FAO working with the eight governments (Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand) to address trans-boundary marine resources issues along the coast of this LME. Other issues may include land-based sources of marine pollution, artisanal fisheries versus commercial fisheries, habitat conservation and restoration, and potentially Integrated Coastal Management (ICM) strategies for adapting to extreme climatic events that devastate coastal communities. Coordination and cooperation is already existent between the implementing agency, National Aquatic Resources Research and Development Agency (NARA) and the CCD, and will be strengthened once that the execution starts.
- (iii) "Strengthening Partnerships for Effective Control of Invasive Alien Species in Sri Lanka" (SPECIeS) (GEF-UNDP). This medium-sized project, being developed jointly under the Coastal, Marine and Freshwater Ecosystems and Forest Ecosystems Programmes, is at the final stages of its PDF-A review. It seeks to reduce the rate of entry of new IAS into Sri Lanka, and eradicate or bring existing IAS under effective control within Sri Lanka's most important protected areas and other sites of biodiversity/ecological value, both coastal and inland. This project will be highly complementary to the current proposal, through its strengthening of the policy, legal and regulatory frameworks to deal with IAS; its moves to enhance the key institutions in developing measures to detect and respond to IAS; and its awareness-raising and education component to build understanding of the gravity of the issues posed by IAS.

Two other major projects are currently being implemented in the North-eastern Province which have close affinity with the proposed project – the "North-East Coastal Community Development Project" (NECCDP) and the "North-East Community Restoration and Development Project" (NECORD). In addition, sustainable environmental protection of coastal areas and ecosystems to raise standards of living and reduce vulnerability against natural disasters are being identified in the recently developed "Strategy and Programme for Reconstruction and Development of the Marine Fisheries Sector" prepared by the Ministry of Fisheries and Aquatic Resources with the assistance of FAO. Therefore the project is addressing part of medium term focus (2005-2009) of the resent reconstruction and development strategy for the marine fisheries sector.

Liaison and coordination and close technical linkages will be established with these GEF projects, in particular with the RUK project where the successful SAM co-management plan will be used as a model for those on the East Coast, and with the Bay of Bengal Large Marine Ecosystem project to complement activities, assimilate lessons learned, and share data and experiences.

Please see the full project document for more details (Project Brief, sections 2.6 and 2.7).

E. DESCRIBE THE INCREMENTAL REASONING OF THE PROJECT:

E.1. Baseline

Within the context of the national policy goals and development plans specified above, the government of Sri Lanka has earmarked significant baseline funding for coastal conservation and post-tsunami reconstruction in Eastern Province over the coming years.

Yet, despite a recognized need and stated intention to do so, there has to date been only minor progress in ensuring that ecosystems are successfully rehabilitated as part of the post-tsunami reconstruction process, reversing ongoing trends of ecosystem degradation in coastal areas, or ensuring that the necessary steps are taken to ensure that coastal ecosystems are managed sustainably in the future.

Under the baseline it is likely that there will be continuing, and intensifying, threats to coastal ecosystems, which will impact negatively both on the post-tsunami reconstruction process and on future coastal zone development

and sustainable livelihoods. Continuing pressures on coastal ecosystems will also lead to the loss of biodiversity of global significance. In particular the following threats and impacts of the baseline course of action should be noted: (i) Decline in species' populations, habitat degradation and fragmentation of coastal ecosystems along the East Coast of Sri Lanka; (ii) Destabilization of key ecosystem functions in coastal lagoons and estuaries; (iii) Increase in area affected by invasive alien species; (iv) Increased human pressure on natural resources of globally important coastal ecosystems and (v) Coastal ecosystem degradation and species loss due to human mismanagement.

E.2. GEF Alternative (incremental reasoning)

In the light of this baseline, three possible courses of action were identified:

- (a) The first option is to continue, without taking any additional action, existing baseline activities. Although implying no additional financial cost, this option is not considered sufficient to address current threats to globally important biodiversity that have arisen as a result of the tsunami and associated reconstruction processes, or are likely to occur in the context of future human pressures, unsustainable development patterns and expected climate change impacts.
- (b) A second option is to enforce strict preservation and policing regimes on coastal ecosystems so as to disallow any human use of, or threats to, biodiversity. Although, if successful, this alternative strategy could secure significant global biodiversity benefits, it is not considered a desirable course of action. As well as being costly and difficult to implement, it is unlikely to be sustainable after the project period given existing financial, human resource and institutional capacity, or in socio-economic terms. It also has the potential to conflict with national economic development and social equity goals, particularly those relating to poverty reduction, and is therefore unacceptable. The high opportunity costs associated with the strict protection of biodiversity, including high budgetary costs, losses to local livelihoods and to national economic development, are untenable in practice.
- (c) The third strategy, outlined in the proposed operation, is to complement baseline activities by building capacity and awareness of ecosystem concerns, and integrating them into the post-tsunami reconstruction process, in a way which is supportive both of conservation goals and of socio-economic development needs. This alternative is considered to be the most desirable and effective option, in social, economic, financial, development and conservation terms. As well as securing global environmental benefits it can simultaneously meet baseline development goals in Sri Lanka. The global benefits to be achieved from this strategy are, first, coastal zone management and ecosystem conservation strengthened as part of the post-tsunami reconstruction activities, in order to secure global biodiversity benefits, and second, coastal biodiversity and ecosystems more equitably and sustainably managed, yielding benefits to tsunami-affected communities and to the country as a whole.

Due to limited existing financial and human resources and capacity, and because the maintenance of global benefits is not a priority goal at the national level, it is unlikely that this course of action would be followed without GEF funding through the proposed project. It is however important to emphasize that the project will complement, or add to, existing attempts to achieve sustainable and equitable post-tsunami reconstruction in Sri Lanka. It does not aim to replace baseline activities or to diminish any existing economic benefits, but rather to strengthen coastal zone management and ecosystem conservation, in order to secure global biodiversity benefits.

Further information is offered in the project documents (Project Executive Summary, Annex A).

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

F.1. Political, socio-economical and institutional risks

- (i) Political risks. Despite peace talks that have been going on since February 2002, they have been interrupted by periods of stalemate and intermittent upsurges in violence. There remains a small risk of a return to serious military confrontation. Since 2002, intermittent violence has tended to be isolated and short-lived. It is clear that both sides want peace, the problem is how to achieve it. As a result, the periodic violence appears to be born more from frustration than from a desire to force a conclusion. The risk is deemed to be low, but an alternative location has been identified if the proposed site at Vakarai (within LTTE military control) becomes unsafe.
- (ii) Legal and institutional risks. Sri Lanka's incompletely devolved government means that there is significant difficulty in coordinating the different forms of government national vs. provincial and inter-agency

cooperation. This inability to provide a coordinated response was evident during the tsunami and remains. It poses, if not a risk, at least a significant hurdle to be overcome. The project has looked to the two large projects already being implemented in the North-Eastern Province (NECCDP and NECORD) to see what lessons can be learned. Improved coordination at the national level has been facilitated by using the same National Steering Committee as formed for the IFAD Loan, while NECCDP have offered full use of the Inter-agency Committee they have already established as well as their Provincial and District coordination mechanisms to facilitate the implementation of project activities.

F.2. Methodological and operation challenges

- (iii) The methodologies for ecosystem restoration prove not to be obtainable or fail to be achieved successfully in the local context because the damage caused by the tsunami was just too great. Studies undertaken from around the world during the PDF-B have indicated that coastal systems such as mangroves and sand dunes can be restored successfully using low-cost techniques. The project has specifically provided a three-year phase at the beginning to provide enough time to allow various methods to be pilot tested and to be adapted to local conditions. Only the clearance of debris from the lagoons remains untried. Nonetheless, studies from other localities indicate that ecosystems can be re-established in areas from which they have been completely eradicated.
- (iv) The design and implementation of community co-management plans pose a number of problems, not least in maintaining the motivation of the communities. This may be particularly the case when restoring ecosystems, which by their very nature require a lot of time before the benefits become apparent. The project will take cognizance of the successes and the means used to achieve them obtained by the UNDP-GEF RUK Project (see section D above) in developing a model for coastal community co-management that involves some habitat restoration. In addition, actions for restoration will be linked to incentives to demonstrate the validity of operations both for the individual and to the community.
- (v) Operational expenses for the proposed Ecosystem Restoration and Adaptation Unit (ERAU) of the CCD will not be met if mainstreaming of the ecosystem restoration into tsunami reconstruction projects is not adopted by the Government. The proposed ERAU would be made smaller and be sustained by funding from the Government and Province. The CCD staff will be seconded for the work to be implemented by the Unit.

F.3. Risks associated to climate change

Sri Lanka has been experiencing frequent extreme events such as heavy rains followed by floods and landslides, droughts and cyclonic storms over the past years. With the anticipated rise in the surface temperature, it is expected that these events will occur more frequently and with greater intensity, causing much damage to life and property. The rise in the mean temperature and sea level will have an adverse impact in almost all socio-economic sectors of Sri Lanka, including coastal zones, wetlands, fisheries, agriculture, forestry, water resources, health, and energy. Most crops have an optimum temperature for maximum yield which is around mid-twenties; hence any increase in the ambient temperature would mean a reduction in the yield of low elevation crops. The associated increase in evapo-transpiration and soil salinity would exacerbate the loss of yield. Changes in the pattern of rainfall and elevated temperatures would also affect directly inland water resources and hydropower supplies. All these would mean economic losses to the country and probably an increase in levels of poverty in the poor rural areas.

The project is planning to integrate climate change vulnerability assessments for the eastern province and identify adaptation measures for climate change in accordance with the national policies. Identified adaptation measures will be mainstreamed into the project interventions to reduce the vulnerability to climate change impacts. All the efforts will be taken in partnership with the Climate Change Secretariat of the Ministry of Environment in coordinating and integrating the experiences of the project with existing policies of socioeconomic development and environmental conservation to facilitate sustainable development with climate change scenario. The main policy direction for climate change adaptation is the 1st National Communication under the UNFCCC.

More details in the full project documents (Project Brief, sections 1.A.2 and 2.3; Attachment 3, Logical Framework, and Attachment 4, Adaptation Activities financed under the SPA).

G. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

The cost-effectiveness of this project resides in the emphasis placed on improving local enabling environments and setting the stage for the nationwide upscaling of the techniques and experiences via the sustained cross-sectoral approaches. The operation's cost-effectiveness will be also enhanced by the use of proven mechanisms for community participation, government's involvement and technology transfer.

The GEF proposal will be closely associated to the "Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme", financed by IFAD, sharing with it resources and structures. Apart from the initial cost of setting up the Ecosystem Restoration and Adaptation Unit within CCD, no new structures or institutions are proposed. It will share the same National Steering Committees, and rather than establishing its own coordinating mechanisms, the GEF operation will make full use of those at Provincial and District level, plus the Inter-Agency Committee, already established by the NECCDP. This partnership will undoubtedly boost the cost-effectiveness of both interventions. Some of the benefits expected are the improvement of coordination and communication, the application of common procurement and supervision procedures, and the implementation of complementary project interventions in the project area.

The project approach, with its emphasis in participatory approaches for sustainable use, will generate targeted investments through participatory mapping and prioritization of activities. This will lead to better allocation of GEF and non-GEF resources and more focused interventions and investments.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. PROJECT IMPLEMENTATION ARRANGEMENT:

The project will be implemented over a period of seven years and will be executed by the Ministry of Fisheries and Aquatic Resources under the Coast Conservation Department with the support of the International Fund for Agricultural Development (IFAD) as a GEF Executing Agency. Policy guidance will be obtained through the National Steering Committee set up under the chairmanship of the Secretary of the Ministry of Fisheries and Aquatic Resources. This project, being part of the IFAD Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme, will be jointly implemented and will share the same Steering Committee at national level (NSC). Implementation arrangements of the project will be vested with the Coast Conservation Department. A Project Directorate Unit will be established in Colombo under the responsibility of the Director of the Coast Conservation Department who will become the National Project Director and will take charge of co-ordination aspects of the project at the national level. The main Project Management Unit (PMU) will be set up in Trincomalee, from where local level implementation will be managed. The Project Manager will head this Unit, and responsible for the three Field Project Offices supported by Technical Experts and working in close collaboration with the National Project Director at the CCD. The PMU will: (i) have the role of administration, technical coordination and politico-institutional liaison, and of monitoring and supervising the project; (ii) be a structure with administrative and financial autonomy to manage the project. Three Field Project Offices headed by Field Coordinators will be established in Trincomalee, Batticaloa and Ampara districts with the responsibility of managing field implementation activities and reporting to the Project Manager. These Offices will be collocated in the same premises of the IFAD program. The implementation will be done in close coordination with the Project Director and Project Manager of the IFAD Post Tsunami Coastal Restoration and Coastal Communities Resource Management Programme to ensure full complementarity between the activities of both initiatives. At the Provincial level coordination of activities with the other projects will be ensured through Provincial Coordination Committee Chaired by the Chief Secretary of the North-east Provincial Planning Secretariat. District Secretaries will be chairing the District Coordinating Committees ensuring the coordination of activities at the district level. Project will also represented at the Inter-Agency Planning Committee to facilitate smooth project implementation and coordination with the other agencies on the ground. The World Conservation Union (IUCN), Sri Lanka Office will provide operational support inclusive of technical assistance to the project. As the project expands to include more replication sites, these arrangements may be adapted to the eventual establishment of new offices. .

The Ecosystem Restoration and Adaptation Unit (ERAU) to be set up at CCD in partnership with the Ministry of Environment under the IFAD/GEF initiative will have the responsibility of integrating ecosystems restoration and adaptation to climate change in coastal sector development at national, provincial and local levels.

Pilot activities identified for the Pigeon Island will be undertaken in close partnership with the Department of Wildlife Conservation.

The project management will also build on the strong links developed with, and support by, the NECCDP during the PDF-B. The two projects are highly complementary working in part working in similar fields and in similar areas, although the ADB-funded project has a greater focus on infrastructure. Overlap and duplication has been minimized by ensuring that site-based restoration and community development work will take place in different geographic areas. Furthermore, the proposed project can make several technical contributions to NECCDP, e.g. incorporating ecosystem restoration into the CZMAP for the North-east and providing best practice guidance for the mangrove restoration proposed by NECCDP. The proposed GEF initiative will make full use of the Interagency Committee already established by NECCDP as well as the Provincial and District coordination mechanisms set up by NECCDP to facilitate the implementation of project activities. The implementation and management structure of the project is illustrated fully in the organizational diagram (see Figure 1 below), and the roles and responsibilities of implementation partners are detailed in Attachment 10 of the full project document.

In order to assure the smooth implementation of the project, ground situation will be analyzed on signing of the Grant Agreement between IFAD/GEF and the GoSL before implementing the project. Based on the situation analysis, the necessary adaptive management measures will be taken with the guidance of the National Steering Committee for effective implementation of the project. This will be done during the Project Inception Phase followed by an Inception Workshop.

The National Steering Committee (NSC) will be the same established for the IFAD loan, in order to avoid duplications and ensure good coordination, but will be expanded to include line agencies covering issues related only to the IFAD/GEF initiative. The Director of the CCD, who chaired the NSC during the PDF-B phase, will be superseded by the Secretary of the Ministry of Fisheries and Aquatic Resources (MFAR) during the implementation phase in order that close co-ordination will be ensured with implementation the IFAD loan being undertaken by the same Ministry. The primary task of the NSC will be to provide institutional, political, and operational policy advice and guidance to the IFAD/GEF initiative.

Please see Attachment 10 (Stakeholder Involvement Plan) to the project document for additional details.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

The project formulation was oriented by, and basically aligned to, the original project concept (PDF-B) approved in 2005, developing the ideas outlined in its rationale and strategy. The objectives proposed, the contribution to the global environmental benefits and the incremental reasoning followed the logical lines established in the PDF-B document. However, the final project design that is being submitted has some differences with the concept note, due mainly to the reorientation from BD to SPA made between pipeline and work program inclusion, and the shift of priorities in GEF 4. The changes were introduced to fine-tune the document to the SPA, and to bring the document into line with the new objectives, focal areas strategies, procedures and templates of GEF 4. Other modifications are related to the final amounts being committed by the co-financiers. All those changes can be considered as minor.

See below the summary of modifications.

1. New GEF focal areas and strategic programs

The project design has been updated to include the new GEF Focal Areas Strategies and Strategic Programs. The new GEF focal area is Land Degradation (instead of Biodiversity and Land Degradation), while the Strategic Program is LD SP 1 (instead of OPs 2, 3 and 15). The project is also aligned to the SPA Strategy Priority.

2. Reorientation from BD to SPA

The project was reoriented from the BD focal area to "Piloting an Operational Approach to Adaptation" (SPA) between pipeline and work program, following the GEF suggestions. The project design had therefore to be fine-tuned and modified to incorporate specific adaptation measures into the project components.

3. Financing plan

The original financing plan estimated a GEF grant of US\$ 6,920,000, and a total contribution from the executing agencies (IFAD, GoSL and beneficiaries) of US\$ 35,800,000. This amount was later revised after the negotiations held between IFAD and the GoSL in the framework of the post-tsunami assistance offered to this country. The financing plan finally confirmed was US\$ 6.92 m. from the GEF and US\$ 7.57 m. from the co-financiers, bringing the total project cost to US\$ 14.49 m.

PART V: AGENCY CERTIFICATION

This request has been prepared in accordance with Gl for project identification and preparation.	EF policies and procedures and meets the GEF	criteria
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Please do not forget to copy IFAD/GEF Registry	on official communications: gefregistry@ifad.org	

ANNEX A: PROJECT RESULTS FRAMEWORK

Goal: To rehabilitate tsunami-affected ecosystems in Sri Lanka to provide full ecosystem services including adaptation against extreme climatic events GEF Project Objective: To mainstream restoration and management conservation of globally important ecosystems affected by the tsunami into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change along the East Coast of Sri Lanka Number of tsunami-reconstruction projects, and public and private sector developments running contrary to response to the project since the numbers are changing To rehabilitate tsunami-affected ecosystems in Sri Lanka to provide full ecosystem services including adaptation against extreme climatic events Ecosystem restoration is currently low priority with no such activities active, and no requirement for its integration into other projects under the aegis of the Reconstruction and Development Authority (RADA) To be determined at the start of implementation of the project since the numbers are changing	Project strategy	Objectively verifiable indicators					
GEF Project Objective: To mainstream restoration and management conservation of globally important ecosystems affected by the tsunami into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change along the East Coast of Sri Lanka Number of tsunami-reconstruction projects, and public and private sector developments running contrary to Special Area Management (SAM) plans Ecosystem restoration is currently low priority with no such activities active, and no requirement for its integration into other projects To be determined at the start of implementation of the project since the numbers are changing rapidly Co management efforts have been tested in the south but not yet in the east	TROSECT STRATEGY	Indicators	Baseline	Target	Means of Verification	Risks/Assumptions	
To mainstream restoration and management conservation of globally important ecosystems affected by the tsunami into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change along the East Coast of Sri Lanka Number of tsunami-reconstruction projects, and public and private sector developments running contrary to Special Area Management (SAM) plans Government requirement to incorporate ecosystem restoration is currently low priority with no such activities active, and no requirement for its integration into other projects and adaptation to climate change along the East Coast of Sri Lanka Government requirement to incorporate ecosystem restoration and adaptation to climate change into all post-tsunami reconstruction and coastal zone management projects under the aegis of the Reconstruction and Development Authority (RADA) Number of tsunami-reconstruction and coastal zone management project sides (CZMP) To be determined at the start of implementation of the project since the numbers are changing rapidly Co management efforts have been tested in the south but not yet in the east	Goal:	To rehabilitate tsunami-affected eco	systems in Sri Lanka to provide full e	ecosystem services including adaptation	on against extreme climatic events		
Number of community comanagement agreements including ecosystem restoration Number of community comanagement agreements including ecosystem restoration Two community comanagement agreements schemes are under preparation at agreements have been signed By end of Year 7, at least nine new community comanagement agreements have been signed Signed agreements Project reports Assumes community community commanagement agreements have been signed	GEF Project Objective: To mainstream restoration and management conservation of globally important ecosystems affected by the tsunami into the reconstruction process to support sustainable livelihoods and reduce vulnerability to climate change	1. Institutional Government requirement to incorporate ecosystem restoration and adaptation to climate change into all post-tsunami reconstruction and coastal zone management projects Number of tsunami-reconstruction projects, and public and private sector developments running contrary to Special Area Management (SAM) plans Number of community co-management agreements including ecosystem restoration negotiated by Coast Conservation Department (CCD) and other	Ecosystem restoration is currently low priority with no such activities active, and no requirement for its integration into other projects To be determined at the start of implementation of the project since the numbers are changing rapidly Co management efforts have been tested in the south but not yet in the east Two community co-management schemes are under preparation at present under North East Coastal Community Development Project	By the end of the Year 2, a Cabinet Decision passed requiring ecosystem restoration to be integrated into all reconstruction and coastal zone management projects under the aegis of the Reconstruction and Development Authority (RADA) No further contradictory developments by end of Year 3	Cabinet Decision Post-tsunami reconstruction project proposals (Government and donors) Field visits to project sites CZMP	constrained by war or war related security activities Assumes Government's commitment to environmental restoration to provide a basis for protection of communities and the development of sustainable livelihoods in coastal areas remains strong Assumes community comanagement efforts are a successful vehicle for ecosystem	

PROJECT STRATEGY	Objectively verifiable indicators					
I ROJECI SIRAIEGI	Indicators	Baseline	Target	Means of Verification	Risks/Assumptions	
	GEF SPA					
	Government requirement to incorporate adaptation to climate change into all coastal zone management projects and to the development programmes in the coastal areas	Adaptation to climate change vulnerability in coastal areas is currently a low priority	By the end of Year 2, adaptation to the climate change in coastal areas is integrated into the next revision of the Coastal Zone Management Plan (CZMP) By the end of the project, adaptation climate change activities are separately shown in all the development programmes/projects on the coastal areas	Updated CZMP with adaptation mechanisms Reports of Development programmes/projects and National planning documents	Assumes government attention on adaptation to climate change is significant	

2. Land Management and Biodiversity Area of globally significant natural coastal ecosystems restored and rehabilitated along the eastern coast of Sri Lanka – coastal lagoons and sand dunes	Area of pre-tsunami coastal lagoons and sand dunes along the east coast estimated to cover 33,600ha and 350ha respectively Area of coastal lagoons and sand dunes damaged by tsunami along the east coast estimated to be 9,000ha and 50ha respectively	1,000 ha of coastal lagoons and 75 ha of and sand dunes rehabilitated by end of Year 7	Field verifications Field surveys in areas where post-tsunami reconstruction is taking place Periodic monitoring reports of the IFAD/GEF Project Implementing Agency	Assumes commitment of all parties including Central, Provincial and Local Government partners and local communities for project approach and concepts Risk: tsunami reactive and responsive development priorities may lead to unsustainable coastal planning and restoration.
Area of nationally important natural coastal ecosystems along the eastern coast of Sri Lanka - mangroves	Area of pre-tsunami mangroves along the east coast estimated to cover 3,200ha Area of mangrove damaged by tsunami along the east coast estimated to be 1300 ha	250 ha of mangroves rehabilitated by end of Year 7	Field verifications Field surveys in areas where post-tsunami reconstruction is taking place Periodic monitoring reports of the IFAD/GEF Project Implementing Agency	
Number of globally threatened species present along the east coast	Prior to the tsunami, 23 globally threatened species and seven near-threatened species were present	By end of project, no net loss of globally threatened species attributable to impact of tsunami on coastal ecosystems and its recovery process or other anthropogenic impacts	Field surveys and monitoring	Assumes that habitat restoration can provide high quality habitat again within the project timeframe
Number of endemic species along the east coast	Three plants and six marine species were present prior top the tsunami	Pre-tsunami conditions of endemism in the eastern coast is maintained or enhanced by end of project	Field surveys IUCN Sri Lanka Red List	Marine species are assumed not to have been affected by the tsunami – focus will be on plants

	GEF SPA				
	A number of natural coastal ecosystems – lagoons, estuaries and mangrove forests, agricultural lands and human settlements which are vulnerable to the impacts of climate change along the Eastern Coast protected	The ecosystems, agricultural lands and human settlements in low lying areas are vulnerable to climate change impacts	At least 3 estuaries, 3 lagoons and 6 mangrove forest areas will be protected and prepared to face the impacts. At least 500 ha of agricultural lands and 1500 households will be made safe to climate change impacts	Field surveys and observations	Assumes the vegetation belts are damaged from another tsunami People understand the importance of these vegetation belts and do not damage them
Outcome 1 Best practices for effective restoration and sustainable management of key coastal ecosystems with integration of adaptation to climate change vulnerabilities developed and demonstrated	Community led, cost-effective and practical pilot testing of key ecosystem restoration methodologies integrating adaptation to climate change Availability of best practice guidelines for restoration of tsunami affected coastal ecosystems Area of globally important ecosystems along the east coast rehabilitated through community-based actions	No pilot tests underway No best practice guidelines for ecosystem restoration in coastal areas are available currently None at the start of the project	By middle of Year 3, pilot tests for restoration of mangroves, sand dunes and coastal lagoons complete By end of Year 3 best practice guidelines for ecosystem restoration in coastal areas developed for mangroves, sand dunes, and coral reefs By end of Year 7 the following tsunami-affected, globally important ecosystems are under full restoration using best practice guidelines: • at least 75ha of sand dunes in the East Coast including Panama/Pottuvil	Technical reports field and trip reports Participatory monitoring reports Progress reports Best practice guidelines for three ecosystem types Fixed transects Best practice guidelines for three ecosystem types Physical verification Biological indicators for ecological health are recruited into the restored ecosystems	Assumes that pilot tests provide adequate basis for developing replicable models
			 at least 250 ha of mangroves in the East Coast including Vakarai; and at least 1,000ha of coastal lagoons the East Coast including Vakarai 	% income increase from sustainable use of resources from restored ecosystems	

GEF SPA				
Community led, cost-effective and practical pilot testing of improvement and protection methodologies of key coastal ecosystems as an adaptation mechanism to climate change	No pilot tests underway	By middle of Year 3, pilot tests of improvement and protection methodologies of key coastal ecosystems mangroves, estuaries and coastal lagoons complete	Mainly the Technical reports of each pilot testing activity Participatory monitoring reports Progress reports	Assumes that pilot tests provide adequate basis for developing replicable models
Availability of best practice guidelines for promoting better adaptation mechanisms protect coastal ecosystems from climate change impacts	Best practice guidelines for adaptation to climate change have not been identified	By end of Year 3 best practice guidelines for adaptation to climate change in coastal areas introduced for the protection of mangroves, sand dunes, agricultural lands and human settlements	A set of best practice guidelines for different ecosystems and vulnerable areas	Assumes government regulations and political environment will support to implement the guidelines

Output 1.1: Best practices developed and demonstrated for community-led restoration of globally important ecosystems Activities: 1.1.1 Establish baseline inventories of flora and fauna in the key ecosystems and compare to pre-tsunami status 1.1.2 Establish socio-economic baseline data for communities involved with restoration demonstration sites 1.1.3 Pilot test methods identified in the PDF-B study using participatory planning and community-led implementation to ascertain most effective means of restoration of key ecosystems 1.1.4 Undertake community-led restoration of mangroves and coastal lagoon at Vakarai 1.1.5 Undertake community-led restoration of sand dunes at Panama/Pottuvil **GEF SPA Activities** 1.1.6 Undertake vulnerability mapping of East Coast to prioritise areas for adaptation 1.1.7 Promote participatory planning and community-led implementation of activities aiming at minimizing climate change impacts through the improvement of the quality of the ecosystems by piloting test methods identified in the PDF-B study **Output 1.2:** Best practices and policy guidelines published on practical restoration and conservation management of globally important ecosystems Activities: 1.2.1 Prepare and disseminate best practice guidelines in three languages on the restoration of mangroves, lagoons, and sand dunes 1.2.2 Prepare and disseminate management guidelines on community natural resource management systems, buffer zone greening, solid waste management, sustainable tourism, land use planning, and harvesting of ornamental fish 1.2.3: Prepare and disseminate policy guidelines for the efficient restoration of key ecosystems and on the effective involvement of communities in the process to ensure that lessons learned are incorporated into post-tsunami reconstruction projects Output 1.3: Central information base established at CCD as repository for all work on ecosystem restoration and coastal adaptation to climate change Activities: 1.3.1 Collate and document in appropriate formats, all data on ecosystem restoration arising from baseline studies, pilot study trials, scaling-up processes, monitoring and evaluation 1.3.2 Through newly formed Ecosystem Restoration and Adaptation Unit within the CCD, maintain information base and make available to the Disaster Management Centre, other Ministries and agencies, and civil society, and link it with other relevant databases, e.g. at NARA **GEF SPA Activities**

1.3.3 In collaboration with MOE and the UNFCCC focal point, collate and document all information relating to coastal adaptive measures and vulnerability to climate change
 1.3.4 Maintain information base on climate change vulnerability and coastal adaptive measures through the newly formed Ecosystem Restoration and Adaptation Unit within the CCD

	N. d. 1				
Outcome 2 Effective ecosystem restoration and sustainable management with integrated options for climate change vulnerabilities are mainstreamed into post-tsunami reconstruction planning and implementation by relevant	National Government requirement to incorporate ecosystem restoration into all post-tsunami reconstruction and coastal zone management projects – see Development Objective.				
authorities and donors	<u>Provincial</u>				
	Coastal Zone Management Action Plan (CZMAP) for the Eastern Province includes restoration of tsunami-affected ecosystems as a priority	CZMAP for the Eastern Province initiated recently by NECCDP, but technical expertise to incorporate ecosystem restoration and adaptation to climate change in coastal areas into the CZMP is inadequate	By end of Year 1, CZMAP is completed for the Eastern Province and includes ecosystem restoration and adaptation to climate change as an integral part of the plan	Coastal Zone Management Action Plan for the Eastern Province	Timetable assumes scheduled progress by NECCDP in other areas of the plan is achieved
	Environmental coordination amongst Government agencies; amongst international and local humanitarian agencies and donors; and between Government and non-government tsunami- related agencies	Government: Until January 2006, no environmental coordination meetings occurred. In January 2006, Tsunami Environment Response Platform initiated to resolve environmental problems. Humanitarian agencies: No coordination to date. Meetings of the Consortium of Humanitarian Agencies (CHA) are held weekly, but only for information sharing; not empowered to make decisions Govt/NGOs: Occasional presentations by Government agencies requested at CHA meetings. Nominal environmental coordination for housing projects ¹	By middle of Year 2, monthly environmental coordination meetings held between relevant Government agencies and international and local humanitarian agencies and donors to facilitate effective ecosystem restoration as an integral part of post-tsunami reconstruction.	Minutes of meetings Number of coordination meetings held	Assumes meetings improve coordination on the ground

¹ Prior to the tsunami, according to the National Environmental Act 56/1988 and amendments, housing projects over a certain size had to be referred to the Central Environmental Authority for environmental clearance. Immediately after the tsunami, this requirement was not observed in the light of the emergency. However, in 2005 the Tsunami Housing Reconstruction Unit was formed to coordinate the housing reconstruction programme, and in August 2005 an Environmental Director was recruited to THRU to facilitate the legal environmental approvals of housing projects on green sites.

Proportion of tsunami-related and coastal zone management projects including ecosystem restoration Bye-laws supporting requirement	In 2005, no tsunami-related project included an ecosystem restoration component No bye-laws active at start of	By end of Year 3, 50% of projects included an ecosystem restoration component. By end of Year 4, 100% of projects included an ecosystem restoration component. Bye-laws passed by end of Year 3	Bye-laws.	
for ecosystem restoration on coastal projects	project			
District Environmental Law Enforcement Committee (DELEC)	DELECs were established as part of national policy in 1995 but operate with varying degrees of success (becoming inactive in Batticoloa in the late 1990s) according to the priority and capacity accorded to environmental issues	DELEC re-activated and capacity built in Batticoloa District by end of Year 1 DELECs strengthened in Trincomalee and Ampara Districts by end of Year 3 Effective enforcement of environmental regulation in the three districts by Year 2	Minutes of DELEC meetings Capacity assessment score reports before and after capacity building Number of cases brought to the courts	Assumes law enforcement with regard to biodiversity conservation is adequately delegated to the committee
Specialist Ecosystem Restoration and Adaptation Unit within CCD	No Unit in existence at start of project	Specialist Ecosystem Restoration and Adaptation Unit fully trained and operational by end of Year 3 Capacity building of local implementing agencies and participating CBOs in ecosystem restoration, adaptation and monitoring undertaken from Year 3 onwards	Management records, accounts, plans, reports, training records. Capacity assessments and evaluation scores, training records, reports	Assumes Treasury and Public Administration Departments provide funds and the necessary positions approved to establish the Unit
Best practice at the demonstration sites replicated at other sites along the East Coast.	None at the beginning of the project	Restoration of the three ecosystems underway at six or more sites by end of Year 5 – sites to include at least one of each ecosystem and at least one site in each of the three Districts	Field verifications Periodic monitoring reports of the Project Management Unit and IFAD/GEF Project Implementing Agency	

GEF SPA				
Coastal Zone Management Action Plan (CZMAP) for the Eastern Province includes plans for adaptation to climate change as a priority	Technical expertise on adaptation to climate change incorporated into the CZMP is inadequate	By end of Year 1, CZMAP is completed for the Eastern Province with adaptation to climate change as an integral part of the plan	Coastal Zone Management Action Plan for the Eastern Province	Assumes scheduled progress by NECCDP in other areas of the plan is achieved
Proposition of coastal zone management projects integrated with components relating to adaptation to climate change	In 2005, no coastal zone management project targeted climate change adaptation components	By end of Year 4, 100% of projects includes at least one component on climate change adaptation	Provincial development plans Coastal zone management plans/progress reports	Assume political support will be given
Specialist Ecosystem Restoration and Adaptation Unit within CCD	No Unit in existence at start of project	Capacity building of the adaptation sector of the unit is undertaken within the first two years of the project.	Management records, accounts, plans, reports, training records.	
		Capacity building of local implementing agencies and participating CBOs in adaptation and monitoring undertaken from Year 3 onwards	Capacity assessments and evaluation scores, training records, reports	

Output 2.1: Policy framework reviewed and restructured to support the restoration, sustainable use of coastal natural resources and adaptation to climate change

Activities:

- 2.1.1 Undertake review of relevant policy, legislation, and investment guidelines to identify gaps, requirements, and perverse incentives
- 2.1.2 Develop a pro-poor enabling policy environment for natural resource planning, sustainable land management, and adaptation to climate change within which local interventions are recognized and rewarded

GEF SPA Activities

2.1.3 Develop appropriate guidelines on adaptation to climate change for inclusion into pro-poor policy environment

Output 2.2	2:	Requirements to incorporate restoration of coastal ecosystems and adaptation measures for climate change vulnerabilities introduced into the central national planning system for all tsunami-reconstruction projects
Activities:		
	2.2.1	Facilitate a process to establish national policy that requires ecosystem restoration to be incorporated into all post-tsunami reconstruction projects
	2.2.2	Provide assistance to RADA to strengthen environmental coordination between RADA, the CCD/MOE/CEA, other Ministries, and other agencies through regular meetings to support ecosystem restoration
	2.2.3	Hold half-yearly briefings on key environmental issues and techniques for policy-makers, planners and managers of the different sectors and agencies involved in post-tsunami reconstruction, at national and local levels
Output 2.3	3:	Restoration of coastal ecosystems incorporated into the Eastern Province planning system
Activities:		
	2.3.1	Promote and support the inclusion of community-based ecosystem restoration in the CZM Action Plan for the Eastern Province
	2.3.2	Support the NEPC to update the CZMAP for the Eastern Province to incorporate lessons learned from ecosystem restoration, community co-management, and coastal vulnerability and adaptation to climate change
	2.3.3	Support District Secretaries to strengthen District-level environmental coordinating mechanisms
		GEF SPA Activities
	2.3.4.	Mainstream climate change adaptability into the CZMAP for the Eastern Province
Output 2.4	4:	Specialized Ecosystem Restoration and Adaptation Unit (ERAU) created within the Coast Conservation Department to provide facilitation and supervision services to tsunamireconstruction projects
Activities:		
	2.4.1	Establish scope of operations and undertake capacity needs assessment of Ecosystem Restoration and Adaptation Unit
	2.4.2	Recruit staff and build institutional and technical capacity of the Unit and facilitate working with project team at demonstration sites
	2.4.3	Build capacity of the Unit to train other implementing agencies and participating CBOs in ecosystem restoration and monitoring, and coastal vulnerability
		GEF – SPA Activities
	2.4.4	Build capacity of the Ecosystem restoration and Adaptation Unit to train other implementing agencies and participating CBOs on coastal vulnerability due to climate change and adaptation measures
Output 2.5	5:	Demonstration of replication of ecosystem restoration, sustainable use through community-based co-management of coastal ecosystems and adaptation to climate change promoted by the Eastern Provincial Council
Activities:		
	2.5.1	Undertake ecosystem and socio-economic status surveys of tsunami-affected areas to prioritise potential sites for replication of ecosystem restoration
	2.5.2	Undertake consultations with local communities and other stakeholders to identify and agree participatory implementation mechanisms
	2.5.3	Initiate ecosystem restoration and monitoring using best practice guidelines, knowledge transfer from visits to demonstration sites, and training from Cod's Ecosystem Restoration and Adaptation Unit.
		GEF – SPA Activities
	2.5.4	Undertake ecosystems and socio-economic status surveys of surrounding areas of the ecosystems which are vulnerable to climate change impacts

			T		<u> </u>
Outcome 3 Coastal communities empowered to manage local natural resources to enhance sustainable livelihoods and adaptation to climate change	Framework for enabling legal designation of community comanagement areas	CCD's legal framework not comprehensive to cover areas beyond the coastal zone leading to unregulated use of resources by communities	Amendment to Coastal Conservation Act enabling co- management agreements to be made with CCD passed by end of Year 2	Amendment to Coast Conservation Act.	Assumes that process already initiated by CCD does not meet hurdles from other government agencies
vulnerabilities	Percentage of community members participating in the designing and implementation of co-management of selected	No co-management plans at present	30% of the communities mobilized are participating in comanagement by the end of 2 nd Year	Participation records of the CBOs and community mobilisation reports	
	ecosystems for sustainable land use		60% of the communities mobilized are participating in comanagement by the end of 4 th Year		
	An information base on functions of, and services provided by, different coastal ecosystems of the east coast and their economic values	Ad hoc and scattered information is available for some ecosystems but not related to their economic values	Comprehensive information base available to stakeholders on functions and economic values of key coastal ecosystems of the eastern coast of Sri Lanka by end of the Year 1	Information base	
			30% of the targeted communities are aware of the economic value of the coastal ecosystems and contribute towards its conservation and sustainable use by end of the year 2	Guides in Sinhala and Tamil languages	
			60% of the targeted communities are aware of the economic value of the coastal ecosystems and contribute towards its conservation and sustainable use by end of the Year 4		
	Provide market-based incentives for ecosystems and sustainable land management targeting the local communities	Insufficient incentives available at the start of project	30% of the targeted communities income is increased and dependence on un sustainable natural resources use is decreased the end of Year 2		
			60% of the targeted communities income is increased and dependence on un sustainable natural resources use is decreased the end of Year 4		

Percentage cover of live hard coral at Pigeon Island reef**	Currently healthy reef with over 70% live hard coral cover	Maintain or increase present level by end of project High percentage or healthy live coral cover indicating the reefs ability to recover from a bleaching event due to climate change and preventing coastal erosion	Field surveys	Assumes El Nino effect or climate change does not lead to coral bleaching or mortality Assumes: live coral cover helps in adaptation to climate change and supports in coastal protection function and preventing coastal erosion
Number of Butterfly fish (best fish group for indicating reef health and ornamental fishing pressure)	Currently 10* adult individuals per transect	Current numbers increased or maintained by end of project	Field Surveys	Variations in natural recruitment may result in short-term population fluctuations
Management plan for Pigeon Island and its vicinity	No Management plan is available for the Pigeon Island and its vicinity	Management plan is completed by the end of Year 2	Detailed management plan for the Pigeon Island and its vicinity	
Creation of a Sanctuary for Pigeon Island Reef to ensure its conservation and sustainable use	Currently no marine areas under Protected Area Status nor community co-management A 1km area around Pigeon Island is currently a buffer zone to the National Park	Sanctuary/conservation area created to include X ha of marine coral reef by end of Year 2 Marine area under community comanagement is X ha by end of Year 3	Gazettal of new Sanctuary boundaries Community co-management agreements signed by CCD and DWC	Assumes the process does not meet hurdles from the government agencies
Fishing pressure	Indiscriminate collection of ornamental species and destructive fishing using explosives ²	Sustainable collection of ornamental fishing according to the Co-management plan by year 3 Cessation of blast fishing in the sanctuary by Year 2	Physical verification of number of dives for ornamental fish collection Reported number of explosions	
Number of boats and visitors to Pigeon Island National Park and Sanctuary holding access permits	No regulation of visitors or boats and no access permits are issued at start of project ²	Regulatory mechanisms in place and at least 50% of visitors hold access permits by end of Year 3 and 80% by Year 6	Physical verification by on site DWC/CCD officers	Assumes willingness of DWC to implement a user fee system to the Marine National Park

² Number of Crown of Thorns Starfish, destructive fishing practices, and visitors will be determined by appropriate surveys to be undertaken as part of the PDF-B in the calm season March-August 2006. Since the period of the PDF-B has been reduced in order to speed initiation of a response to the tsunami, and because it commenced in August 2005, such surveys have not yet been possible.

Area of co-managed mangrove, coastal lagoons, and sand dunes along the east coast of Sri Lanka	None at the beginning of the project	Three community comanagement areas underway at the end of the Year 3 Six additional community comanagement areas (at least one of each ecosystem) initiated by the end of the Year 5	Community co-management agreements signed by CCD and DWC for the east coast of Sri Lanka	
	About 9,000 ha of coastal lagoons are directly affected by tsunami	500 ha of coastal lagoon restored by the end of Year 4 1,000 ha of coastal lagoon restored by end of Year 7	Progress reports and monitoring of the impact of the co-management	Assume the community and local stakeholders and authorities ownership of the co- management agreements
	About 350 ha of coastal sand dunes affected by tsunami	20 ha sand dune restored by end of Year 4		
		50 ha sand dune restored by end of Year 7		
	About 1,300 ha of mangroves affected by tsunami	150 ha mangrove restored by end of Year 4		
		250 ha mangrove restored by end of Year 7		
Lagoon fish catch per unit effort (daily catch/traditional non-mechanized craft)	Fish catch is in a declining trend due to deposition of tsunami debris in lagoons, and present average is about 5-6kg/boat/day	Sustainable fish catch shows gradual increase and average catch increases by at least 1kg/boat/day within 3 years of implementation of comanagement	Catch data from the lagoon fishers of Vakarai	
Natural colonization of <i>Spinifex littoreus</i> on the rehabilitated sand dunes	None at start of project since no attempt made to rehabilitate sand dunes along the East Coast	At least 10% of the rehabilitated sand dunes are coverage with <i>Spinifex littoreus</i> by the end of the Year 4	Field observations Project progress reports	
Presence of invasive alien species within co-management areas	Presence and abundance of IAS in co-management areas is currently unknown. It will be established in baseline surveys undertaken in year 1 since IAS spread extremely quickly	IAS eradicated from co- management areas of original demonstration sites by end of Year 5 and from replicated co- management sites by end of Year 7	Field surveys	Assumes that IAS are present in comanagement areas having being spread by tsunami

Household incomes in comanagement areas: a) average incomes b) percentage of income derived from co-managed area	Baseline to be established at commencement of comanagement of ecosystems	25% increase in average household income within 3 years of commencement of implementation of comanagement 20% increase in income derived from co-managed area within 3 years of commencement of implementation of comanagement	Field surveys Project progress reports	
GEF SPA				
Number of awareness programmes on climate change related coastal vulnerabilities and suitable adaptation measures to the communities along the coastal belt	Local communities are not familiar with climate change impacts	An awareness programme for each GN division in the coastal belt of the project area	Participation records of the awareness programmes Community mobilisation reports	Assume security situation will be favourable for communities participate in the programmes
Extent of the mangroves and the vegetation belt grown to protect lagoons, estuaries, cultivation lands and human settlements along the east coast of Sri Lanka	Not enough mangroves and vegetation as a barrier to storms and other climate change impacts	Adaptation to climate change vulnerability is increased as a result of ecosystem restoration by the co-management of coastal ecosystems by Year 6	Progress reports Field surveys	Droughts/cyclones may damage seedlings or small plants
Number of dikes and sea walls established to protect lagoons, estuaries, cultivation lands and human settlements		Pressure on coastal ecosystems will be less as lands are available for cultivation Reservations of the ecosystems will not be encroached as human settlements are safe		
Number of government officers of the Department of irrigation, agriculture, fisheries, lands and coastal conservation trained on climate change impacts, importance of introducing adaptation measures and related policies	Capacity of Government officers on climate change impacts and adaptation measures is low	Capacity of government agencies in climate change adaptation will increase	Completion Reports of training programmes	Assume trained officers remained in the relevant posts for a considerable time

			Availability of preparedness plans to cope with emergencies and disasters generated by climate change Availability of social infrastructure like safe places to be used in the events of floods and cyclones to minimise losses	No safe places available to reach in a disaster in vulnerable areas	Preparedness plans for vulnerable areas for climate change Three safe places in the most vulnerable areas for climate change	Preparedness plans Project progress reports Observations	Assume these structures are not encroached			
Output 3.1	1:	Enabling environment for community co-management of natural resources and adaptation to climate change vulnerability established								
Activities:										
	3.1.1	Expedite the Amendment to the Coast Conservation Act to provide a legal framework for CCD to establish co-management agreements within SAM sites								
	3.1.2	Assist the Tsunami Environment Response Platform to conduct strategic environmental assessment (SEA) of the existing and proposed reconstruction programmes								
	3.1.3	Design and implement an awareness/education campaign on restoration, sustainable use of coastal natural resources, and coastal vulnerability and adaptation, targeted at local communities								
	3.1.4.	Build capacity of CCD to introduce participatory natural resource management approaches among the relevant local communities and other stakeholders								
	3.1.5.	·								
	3.1.6.	Identify potential market-based incentive mechanisms for ecosystem management, and produce clear and practical "How to adopt these" guides for local stakeholders GEF SPA Activities								
	3.1.7.	Design and implement an awareness/education campaign on coastal vulnerabilities due to climate change and adaptation measures, in particular sustainable use of coastal natural resources								
Output 3.2: Co-management of mangroves and coastal lagoon promoted at Vakarai to improve local livelihoods, foster sustainable land management and to minimise climate change							e change impacts			
Activities:										
		Identify the boundaries of the co-management area in consultation with local communities including displaced farmers and other key stakeholders								
	3.2.2	Develop community co-management plan and institutional mechanism for conservation management of mangroves and coastal lagoon in Vakarai in conjunction with demonstration of ecosystem restoration and control of invasive alien species								
	3.2.3	Incorporate replanting of species such as Palmyra palms, Pandanus, and other species as appropriate into co-management plan to provide resources to communities and promote sustainable land management								
	3.2.4	Facilitate effective implementation of community co-management plan to improve incomes with emphasis on pro-poor activities and support to households headed by women								
	3.2.5	5 Undertake periodic monitoring and evaluation to assess the effectiveness of the management plan and to make changes where necessary								
		GEF _ SPA Activities								
	3.2.6	Protect lagoons and low lying areas from impacts of climate change through the establishment of vegetation belts of mangroves and other species, as well as dikes and sea walls where necessary along the coast in Vakarai								
	3.2.7	Strengthen capacity of the government officers of the Department of irrigation, agriculture, fisheries, lands and coastal conservation on climate change impacts and the importance of using vegetation belts and mangroves management as adaptation measures								
Output 3.3	3:	Co-management of	of sand resources promoted at Panama	a\Pottuvil to improve local livelihood	ds, foster sustainable land manageme	nt and to minimise climate char	ige impacts			
Activities:										

- 3.3.2 Develop community co-management plan and institutional mechanism for conservation management of coastal sand dunes at Panama/Pottuvil in conjunction with demonstration of ecosystem restoration and control of invasive alien species
- 3.3.3 Incorporate replanting of species such as Casuarina and other species as appropriate into co-management plan to provide resources to communities and promote sustainable land management
- 3.3.4 Facilitate effective implementation of community co-management plan to improve incomes with emphasis on pro-poor activities and support to households headed by women
- 3.3.5 Undertake periodic monitoring and evaluation to assess the effectiveness of the management plan and to make changes where necessary

GEF – SPA Activities

- 3.3.6 Establishment of a vegetation belt of Casuarina and other suitable species to protect the ecosystem and identification, in association with the Department of agriculture, of drought resistant and salinity tolerant varieties of agricultural crops both to promote sustainable land management and to protect dry lands from the impacts of climate change
- 3.3.7 Strengthen capacity of the government officers of the Department of irrigation, Agriculture, fisheries, lands and coastal conservation on climate change impacts and the importance of sand dunes and sand use management as adaptation measures
- 3.3.8 Preparing plans to cope with emergencies and disasters, and to create social infrastructure like safe places to be used in the events of floods and cyclones to minimise losses

Output 3.4:

Co-management of coral resources promoted at Pigeon Island

Activities:

- 3.4.1 Identify the boundaries of the co-management area adjacent to the National Park, in consultation with key stakeholders
- 3.4.2 Develop and facilitate effective implementation of community co-management plan and institutional mechanism for conservation management of Pigeon Island Coral Reef promoting sustainable livelihoods for local communities and user groups dependant on the natural resources of the reef to improve incomes with emphasis on pro-poor activities and support to households headed by women
- 3.4.3 Strengthen the capacity of the Department of Fisheries and Aquatic Resources to work with the community to implement fisheries regulations effectively
- 3.4.4 Strengthen the capacity of the Department of Wildlife Conservation (DWC) to manage Pigeon Island National Park effectively including establishment of a park office at Nilaveli and provision of a patrol boat
- 3.4.5 Support DWC to develop a management plan for Pigeon Island and its vicinity, that meshes with the community co-management plan with the aim of establishing a Sanctuary to act as a strict conservation area for the core reef and limited resource extraction beyond
- 3.4.6 Support the extension of existing biophysical monitoring conducted by the National Aquatic Resources Research and Development Agency to monitor reef health, and assess effectiveness of the project and make changes as appropriate
- 3.4.7 Facilitate decision amongst enforcement agencies to identify and agree one agency to take the lead for the conservation and management of coral reefs outside of Protected Areas

Outcome 4 Learning, evaluation and adaptive management increased in both tsunami restoration and climate change adaptation activities	Cognizance taken of lessons learned from demonstration activities and applied to other sites and planning systems	0 demonstration sites at start of Year 1	Lessons learned applied to at least six other sites along East Coast by end of Year 5	Project progress reports References to project activities in planning documents, project reports, press releases	Assumes qualified, experienced and affordable project and technical staff are available Risk: Capacity of national institutions, already stretched by the post-tsunami reconstruction, are able to deliver on project activities
	Positive monitoring and evaluation reports, both internal and external	First evaluation report	IFAD - GEF Mid-term and Terminal Evaluation reports show impact of project activities	Project progress reports Monitoring and Evaluation reports by IFAD-GEF Minutes of PSC, and other advisory meetings	

Output 4.1: Monitoring, evaluation, reporting and dissemination systems established and operational

4.1.1. Establishment of appropriate monitoring schemes at selected sites to assess progress and impact of restoration interventions and policy and planning changes and replication of best practices outside of the province

PROJECT MANAGEMENT: Project Management structures and mechanisms are established and maintained for effective project management over the project period

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

ANNEX B.1. RESPONSES TO REVIEW BY THE COUNCIL

1. Technical Comments from Germany and Response by the Project Team

Comments from Germany

The development objective of the GEF Project is to 1) demonstrate that ecosystems can be restored and to 2) mainstream participatory conservation management into the reconstruction process (after 3 years all GOSL and Donor reconstruction projects include an ecosystem component) after the Tsunami. Three "key barriers" are seen as the main reasons for the degradation of most eco-systems: insufficient technical know-how to rehabilitate ecosystems, insufficient priority accorded to ecosystem degradation, and economic dependency of coastal population on the natural resources. Ecosystem damages derive from human activities or in-activities rather the impact of the Tsunami.

The four objectives of the project are:

- To develop and demonstrate replicable low-cost best practices for effective restoration and sustainable management (US\$2.8 million);
- To mainstream effective ecosystem restoration into post Tsunami reconstruction and rehabilitation projects implemented by authorities and donors (US\$2.4 million;
- To develop a scientifically-based, low-cost, community-based approach to rehabilitate 3 key coastal ecosystems (mangroves, coastal lagoons, sand dunes) at specific pilot sites (US\$6.1 million);
- To provide project management including monitoring and evaluation (US\$1.8 million).

The executing agencies are the Ministry of Fisheries and Aquatic Resources (MFAR) and IFAD for GEF. The implementing agency is the newly formed Ecosystem Restoration and Adaptation Unit (ERAU) in the Coast Conservation Department of the Ministry of Environment (MOE). IUCN will provide operational support and technical assistance.

Aside from the above mentioned agencies the North Eastern Provincial Council, the Provincial Planning Secretariat with its Centre for Information Resources Management, the Reconstruction and Development Authority (RADA) of the Centre for National Operations (Tsunami) under the Presidential Secretariat, the District Secretariats and others are important stakeholders either in project planning, coordination and implementation.

The project area is along the eastern coast of Sri Lanka. The process of establishing peace in the area seems to be suffering new setbacks as tension has risen again and violence is on the increase³.

The project approach is still rather technical (restoration practices). Aside from the indicators (25% increase in household income within 3 years of commencement of co-management; 20% increase in income derived from co-managed area within 3 years of commencement) the project document is not clear on how to achieve this. What are the incentives for the coastal population to participate in co-management? What kind of alternative sources of income can be promoted and supported? Multi-agency approaches are required because of the possible demand for a diversity of different skills, knowledge and experience. Income generating activities and the envisaged micro-enterprises centred on the local population require targeted support to access potential markets. Vocational and other training as well as business development services might be needed to support at least some IGAs.

³ IMM LTD; Development Update, Local Partnership for Aid Effectiveness, Number 1, July 2006

A vast amount of funding and manpower is allocated towards the implementation of isolated (?) pilot measures (objective 3). If the aim of the project is to foster replicable low-cost systems and technologies why then is it so expensive to develop and to test those? The publication of best practices even in 3 languages is not sufficient to sensitise the communities and development agents. There is a need for a "marketing and support strategy" to bring the messages across and to initiate replication of proposed best practices.

More emphasis should be targeted towards mainstreaming rather implementing pilot measures. "Getting policies right and implementing regular impact assessments is crucial to creating and maintaining an environment that enables livelihood change strategies"⁴. Why not provide support directly to the reconstruction projects by including an environmental component to those?

The implication of co-management approaches on legislation as well as policy formulation and adaptation for the different stakeholders involved is not fully described. Clear jurisdiction (user and management rights) over the natural resources (mangroves, fish etc.) need to be established. There should be exit strategies developed if the political process comes to halt. The MFAR has not supported community based fisheries co-management in the past. The Fisheries Management Authorities if they exist are dominated by civil servants and politicians rather community members (12:3).

The lack of coordination of development efforts is one of the problems addressed in the project documentation. However, capacity building is limited to the ERAU of the CCD. A project dealing with mainstreaming environmental aspects should have a much wider scope on organisational development, capacity building and change projects within the major agencies involved.

The project objectives meet the GEF Strategic Priorities.

References above are based on the Project Executive Summary (PES) - covering 18 pages with a very small font.

Responses to the comments from the Project Team

Comment/Question (C/Q): The project is rather technical (restoration) project document is not clear how to achieve this.

Answer (A): We agree that the ecosystem restoration can be considered as a technical task. However in this project we are planning to test cost effective participatory techniques of restoration on ground. This is possible as there are many small short term initiatives which can be replicated and have been already tested on ground post the tsunami including the partner agencies like IUCN - implementing projects such as *Green Coast for nature and people*. The IFAD GEF initiative is building on experiences and lessons learned from those and attempting to work with communities on a longer term basis (7 years) with sufficient technical and financial resources. Initially they will be implemented in three locations for three types of ecosystems and subsequently replicated in other areas. It is expected that this would be achieved through the Ecosystem Restoration and Adaptation Unit (ERAU), team of project Community Mobilizers and the local stakeholders, the project Team and government's commitment and ownership.

C/Q: What are the incentives for the coastal population to participate in co-management?

A: Main benefit of the co-management of coastal ecosystems to the communities would be the establishment of resource user rights. Presently they have open access type of property rights and as such they do not have any incentive for restoration. With establishment of user rights they will actively participate in restoration and sustainable use as they are going to get benefited from the project intervention. As these will not be realized in the short term, special attention will be paid to develop

⁴ IMM: lessons learned from Cambodia

incentive mechanisms for the communities to participate in the co-management. Vocational training and other skill enhancement programmes will be developed to benefit the target communities. We have now further clarified this in the proposal (page 9 of the Project Executive Summary).

C/Q: What kind of alternative sources of income can be promoted and supported?

A: Special attention will be provided to train youth to divert them from un-sustainable fishing to other alternate income sources related to fishery. Economic cost of un-sustainable practices will be assessed using environmental economics tools and techniques and findings will be communicated to convince communities engage in such activities. Further more, an economic assessment will be undertaken to determine which are the best income generating alternatives for the communities. Some potential alternative income generation activities have already been suggested by communities such as sea weed culture, crab farming, ecotourism and value addition to fishery through micro financing schemes will be developed and supported from the project to provide short to medium term benefits to the participating communities. Market accessibility, to new produce and improved marketing channels to existing coastal produce will also be part of the targeted support scheme to these beneficiary communities. We have now further clarified this in the proposal (page 9 of the PES).

C/Q: Multi-agency approaches are required because of the possible demand for a diversity of different skills, knowledge and experience.

A: The project is designed to benefit and strengthen multi-agency coordination. Coast Conservation Department, Ministry of Fisheries, National Aquatic Resources Research and Development Agency, Forest Department, Department of Wildlife Conservation, District and Divisional Secretariats and many other agencies are directly involving in the project and additionally there is a National Steering Committee consisting of about 20 agencies.

C/Q: Income generating activities and the envisaged micro-enterprises centred on the local population require targeted support to access potential markets.

A: As mentioned above income generating activities will be developed and supported from the project to provide short to medium term benefits to participating communities. Market accessibility, to new produce and improved marketing channels to existing coastal produce will also be part of the targeted support scheme to these beneficiary communities

C/Q: Vocational and other training as well as business development services might be needed to support at least some IGAs.

A: Agreed and included in the proposal on (page 8 and 9 of the PES).

C/Q: A vast amount of funding and manpower is allocated towards the implementation of isolated (?) pilot measures (objective 3). If the aim of the project is to foster replicable low-cost systems and technologies why then is it so expensive to develop and to test those?

A: The project is a broader one trying to restore affected ecosystem with community participation while addressing adaptation to climate change vulnerability and mainstreaming these concerns into coastal zone development. In doing so, initially three selected ecosystems will be restored with community participation, and then they will be replicated in many other sites in the eastern coast. In the process capacity of the Ministry of Environment and Coast Conservation Department will be developed on participatory ecosystem restoration and adaptation to climate change. Subsequently participatory ecosystem restoration and adaptation to climate change will be mainstreamed into national and provincial planning systems.

C/Q: The publication of best practices even in 3 languages is not sufficient to sensitise the communities and development agents. There is a need for a "marketing and support strategy" to bring the messages across and to initiate replication of proposed best practices.

A: Apart from publication of best practices the project was designed to facilitate its implementation as well as provide Incentive mechanisms and mainstreaming it to national and provincial government planning.

C/Q: More emphasis should be targeted towards mainstreaming rather implementing pilot measures. "Getting policies right and implementing regular impact assessments is crucial to creating and maintaining an environment that enables livelihood change strategies". Why not provide support directly to the reconstruction projects by including an environmental component to those?

A: The project approach is to involve communities for ecosystem restoration and adaptation and consequently providing support through reconstruction projects. We believe that participatory restoration and co-management with established resource user rights for those communities would create a culture of conservation in the coastal areas. This would enable getting the policies right for restoration and effective mainstreaming both at national and provincial level.

C/Q: The implication of co-management approaches on legislation as well as policy formulation and adaptation for the different stakeholders involved is not fully described. Clear jurisdiction (user and management rights) over the natural resources (mangroves, fish etc.) need to be established. There should be exit strategies developed if the political process comes to halt. The MFAR has not supported community based fisheries co-management in the past. The Fisheries Management Authorities if they exist are dominated by civil servants and politicians rather community members (12:3).

A: Coast Conservation Department is in the process of revising the legal provisions to accommodate comanagement options in the coastal zone. By which both the user and management rights are expected to be shared with people on identified resources. The project is expected to expedite the process of obtaining the amendments to the Coast Conservation Act enabling CCD to engage in co-management.

If the political process comes to a halt, shifting of projects sites will be considered under the approval of the National Steering Committee of the project Chaired by the Secretary Ministry of Fisheries. To accommodate this inception phase is built in to the project where the exact situation is assessed prior to the ground implementation of the project and necessary modifications will be adopted with the directions of the project National Steering Committee.

C/Q: The lack of coordination of development efforts is one of the problems addressed in the project documentation. However, capacity building is limited to the ERAU of the CCD. A project dealing with mainstreaming environmental aspects should have a much wider scope on organisational development, capacity building and change projects within the major agencies involved.

A: Under the project, Reconstruction and Development Agency (RADA) will be supported for improved environmental coordination. We have now incorporated the Ministry of Environment as one of the key agencies for capacity strengthening especially in the area of ecosystem restoration and adaptation to climate change. In addition capacities of the all relevant agencies will be enhanced through training and study visits to project sites in the area of participatory ecosystem restoration and adaptation to climate change.

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⁵ IMM: lessons learned from Cambodia

2. Response from the Project Team to Technical Comments from US

Response to the query raised by Ms. Helen Walsh, of the U.S. Treasury Council.

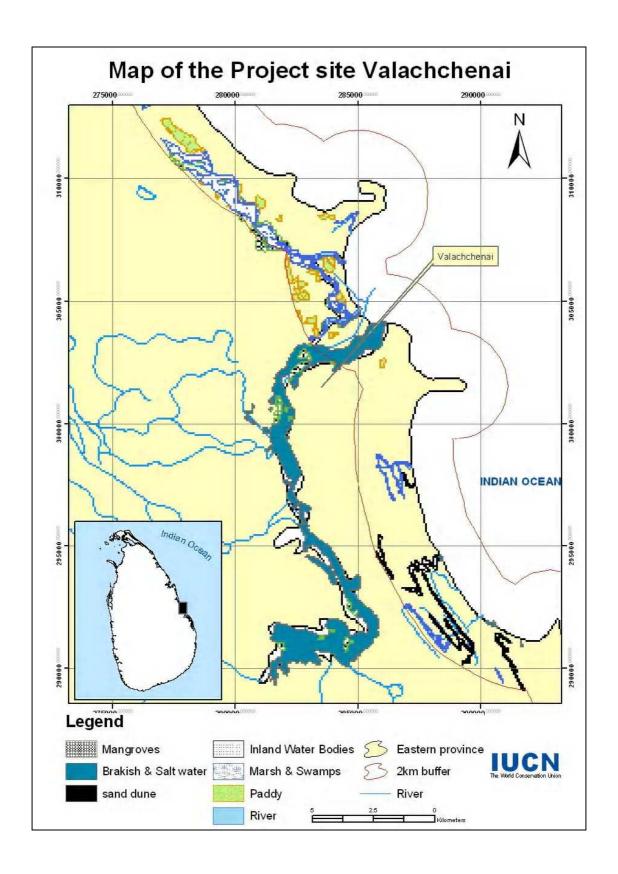
Among other components, the proposed project is expected to pilot test and demonstrate co-management of affected coastal ecosystems for livelihoods enhancement and sustainable land management at three sites. These sites have been selected from the three districts of the eastern province, representing three tsunami-affected ecosystems. They are Pigeon Island coral reefs in the Trincomalee district, Vakarai lagoon and associated mangroves in the Batticaloa district and the Panama/Pottuvil sand dunes in the Ampara district. Lessons learned from the pilot sites will be replicated within and outside of the province in at least 6 additional sites. The locations of the replication sites will be identified as the project progresses.

The project has been designed in close consultation with the Provincial, District and Local agencies. In doing so, have been able to design the project taking the ground realities into planning. One proposed pilot site, the Vakarai lagoon, falls within the LTTE controlled area of the Batticaloa district. As this has been identified in the project designing process as one of the potentially difficult areas to work as it is under intense conflict conditions, an alternate site has been identified. The alternate site so identified is the Valachchenai lagoon (map attached) in the Battocaloa district. This alternate site has been presented to the National Steering Committee and consent obtained.

All the other pilot sites, fall within Government controlled areas and thus will not pose serious implementation problems. However, as the Pigeon Island reef is located a few kilometers out at sea and there could be potential risk if the conflict situation worsens, Pasi Kuda and Kal Kuda reefs in the Batticoloa district have been identified as alternative sites. If the need arises these sites could be considered with the consent of the National Steering Committee. No problem in implementation at the third identified site in the Ampara district is foreseen, as it is located further south.

The eastern province of Sri Lanka has been subjected to ongoing conflict for the past two and a half decades. However, projects have been implemented in the province irrespective of the changing magnitude of the conflict. One such example is the ongoing North East Coastal Community Development project being implemented successfully, through the North-Eastern Provincial Planning Secretariat. It is intended that the proposed project too will be implemented through a Project Management Unit based in the North-Eastern Provincial Planning Secretariat located in Trincomalee. This will facilitate successful project implementation, without incurring heavy administrative/ security expenses.

As most of the project activities are community based participatory activities we believe it will be sufficiently safe for project activities to be implemented as planned. On top of everything the present government has proved that it is highly committed to a negotiated settlement.



ANNEX B.2. REVIEW BY EXPERT FROM STAP ROSTER

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The Project Team appreciates the STAP Reviewer's constructive comments which have improved the proposal, and they have reviewed these carefully and responded to each. Answers/clarifications are provided in a box in italic text just below the STAP comment. Corresponding changes are made to the text of the Executive Summary, Project Brief and Annexes as appropriate.

A. KEY ISSUES

1. Assessment of scientific and technical soundness of the project.

a) General assessment: i) The Project should have a clear focus on the GEF Land Degradation focal area, and the proponent needs to either weed out the existing emphasis (still evident here and there in the document) on significance to global biodiversity, or make a convincing case for the latter. ii) The Project is too focused on ecosystem restoration, and should be much more on sustainable management of these natural resources, as that is where the threats lie, and long-term emphasis should be. Restoration is also too much a technical solution, the need for which is questioned by the Reviewer, certainly in the case of mangroves (see points i) & o), below). iii) There should be letters of agreement or support for the Project innovations mentioned under 12) (see below), as without these there are significant risks. iv) The Project document is very lengthy: currently 87 pages, small font. Project documents by World Bank, UNDP, UNEP and Asian Development Bank are generally about half this size or less; the average of a dozen PDs is 26700 words, while the present one is >50,000.

Response by the Project Team:

Points i) and ii) are addressed and now reflected in the revised Project Brief mainly in following places: Project title; cover page line 3 of the of para 2 of the Brief Description; sub title of the 1A.2 in page 2, added para 10 on the page 3; last section of the para 11, removal of paras 11 and 12 of the previous version on biodiversity; line 1 of para 12; last line of para 61; sub heading of the para 69; 1st three and 8th lines of the para 82; title of outcomes 1 and 2 in each and every place they appear; and last sentence of para 86 of page 29. In addition minor changes were made in many other places.

- iii) Two letters of commitment have been received from the Coast Conservation Department and the and Ministry of Environment on these project innovations the letters are annexed to the Project Brief as Annex 12 and 13.
- iv) The length of the document has been reduced substantially by removal of several paragraphs on biodiversity and by placing the Incremental Cost Analysis and the Project Logical Framework in annexes.
- b) PD cover page, brief summary. This states that "100% of coastal lagoons, 43% of mangroves, and 38% of sand dunes were damaged or destroyed". PD p. 4, para. 13 also states that most of these habitats have been 'severely impacted'. PD p. 17, para 62 refers to significant physical damage to these habitats, as does p. 18, para. 63. However, these statements require explanation and should be supported by concrete data. What does "43% of mangroves damaged or destroyed" mean, for example? In para. 63 (p.19) it is stated that 1376 ha out of 3200 ha of mangrove was damaged or destroyed. Does this really mean that 43% of all mangroves (say, 1500 ha out of 3500 ha) were either badly damaged or destroyed, or does it mean that at X out of Y mangrove locations (which add up to 43% of the mangrove area), there was extensive damage or destruction? This is not simply a matter of semantics. In rapid surveys carried out along Sri Lanka's east coast between Kalmunai and Panama

early in March 2005 <unrelated to the present Project>, I noticed that the effect of the tsunami on many mangroves was limited to immediate wave impact zones, usually not wider than about 50 metres, and that by-and-large most mangroves were relatively unaffected. All mangrove sites showed damage, but the relative amount of mangrove lost per site amounted only to a few per cent. In order to support claims about extensive damage (which may well be possible, as I visited only a limited number of sites) the proposal should back this up with reference to (detailed) environmental assessments and hard data. Similarly, while *Palmyra* palms (*Borassus flabellifer*) were largely killed (by salt, not mechanical damage), most coastal 'vegetation' (coconut, fruit trees) in seaside villages, for example, escaped significant damage, even in areas where all buildings had been destroyed by the waves. The proposal seems to have missed some of the most important post-tsunami environmental assessments carried out in affected coastal areas, including:

- Green-REA: Rapid Assessment of Damage to Natural Ecosystems in the Coastal, Marine and Associated Terrestrial Environments. The Green Rapid Environmental Assessment (Green-REA) was initiated by the Ministry of Environment and Natural Resources on the 16th of January 2005, with several field teams carrying out detailed assessments along the coast in February-April 2005. Green-REA was headed by Dr. J. Samarakoon.
- UNDAC's Draft Field Report: Rapid Environmental Assessment Sri Lanka Tsunami, dated 22 February 2005.
- Rapid Environmental Assessment on Post-Tsunami Brown Environment, by the University of Moratuwa. <a draft outline was prepared in February 2005, and the "Brown-REA" report was due in April 2005>

In fact, the references listed in Annex 9 of the proposal do not include any post-tsunami environmental assessments, which is surprising. P. 13, para 43 does refer to the two REAs, but only in terms of relevance to post-tsunami reconstruction planning, and does not refer to environmental damage.

Response by the Project Team:

The GIS studies undertaken during the PDF-B have taken account of the three studies cited by the STAP Reviewer, but it is agreed that this was not made clear. The three studies, together with the Brown Assessment Report, have been included in the Bibliography (annex 9). In addition, changes have been made in the following places to make it clear that the figures appearing with regard to mangrove degradation refer to the extent (area / ha) of pre- and post-Tsunami mangrove vegetation cover, not to the number of locations of mangrove vegetation in the Eastern Province – Cover page, 1st para of "Brief Description"; para 12; and paras 61 and 62.

c) PD p.1, para.1: "Sri Lanka has the highest biodiversity per unit area of land among all Asian countries...". While true, this does not say much, as this figure is primarily an artefact of country size, and not by inherent biological diversity. The anomaly of such an approach becomes apparent when one realises that along the same lines, relative to size, biologically impoverished Bangladesh is one of the most diverse countries in Asia, as is the Netherlands in Europe. Doubling the size of an area under scrutiny normally does not double its biodiversity (it is usually much less); what is valid at survey plot level also holds for larger tracts of land, including countries. Nevertheless, Sri Lanka *does* have a rich biodiversity and *does* have a lot of unique, endemic species.

Response by the Project Team:

The team thanks the Reviewer and makes note of his points re Bangladesh and the Netherlands, and agrees, but makes no changes – the information comes from the WWF Ecoregions Project and draws attention to the fact that there is very rich biodiversity in a very small island in Sri Lanka. The Reviewer's last sentence is the pertinent one – Bangladesh and the Netherlands do not have such rich biodiversity.

d) PD p.2, para. 8. an average temperature increase in Sri Lanka from 1961-1990 of 0.16°C per decade, being 25% more than the global trend of 0.12°C: how significant is this? Why is the analysis not carried out up to 2000 (or 2005)? Note that if the 1.6°C per decade were to continue over the coming century, the result is still at the low end of the IPCC prediction of 1.5-5.8°C increase in global temperature up to 2100.

Response by the Project Team:

The reason for using 1961-1990 for the analysis is that this is the standard used all over the world to establish the baseline. Even though the baseline trend suggests that the expected temperature rise during the century is within the lower end of the global prediction, resulting sea level rise impacts would be substantial due to the fact that Sri Lanka is an island nation. The Meteorological Department of Sri Lanka has done another analysis for the period of 1931-2000 which has shown an average temperature rise as 0.17°C per decade.

e) PD p. 3-4 Global Significance of Biodiversity. While a lot of globally significant species are listed as occurring in the coastal and terrestrial ecosystems of Sri Lanka's Eastern Province, it is not clear how important the coastal area is from the point of global biodiversity? Which globally significant species are supported in an important way by the coastal systems (e.g. significant populations, breeding areas)? Also, while three endemic plants occur in the coastal ecosystems, it is not clear from the text if these are exclusive to coastal ecosystems. Which of the coastal ecosystems listed are of global significance, and why? Related to this: para. 87-88 refers to 'globally important ecosystems' – a strong case need to be made for this, otherwise it would be better to use the term already used in Outcome 1: 'key coastal ecosystems'.

Response by the Project Team:

The project team agree with Reviewer and have used "key coastal ecosystems" in place of "globally important ecosystems" related to paras 85 and 86.

f) PD. P.9, para 24: "... none of the NGOs currently working in the Eastern Region has shown any special interest in environmental and biodiversity issues." This sweeping statement is not entirely true, as CARE International organised the collecting and disposing of debris in (at least some) coastal towns. A careful assessment would probably identify other initiatives.

Response by the Project Team:

We are aware of the initiatives by CARE, Oxfam and other International and local NGOs on debris clearance but these were undertaken without any special interest on biodiversity issues. The text has been changed to reflect that – para 23.

g) PD p.13, para. 45: green belt initiative by CCD. Green belts to ensure scenic value of the coast and protect the shoreline from erosion are a good idea, but can never be a blanket solution along Sri Lanka's east coast. The main reason is that much of the coast is characterised by high energy coastlines: beaches are fairly steep, soon merging into a low dune (which is where many coastal communities reside, close to their boats, and surrounded by coconut and fruit gardens), which then gives way to a lagoon (which is where mangroves are usually found). Where would one envisage a green belt? In the low dunes where many people live? Where would they move to? As most of the mangroves form a fringe along lagoons, they offer little direct protection to coastal communities against storms and waves, although people swept into the lagoons by the tsunami were able to cling to mangrove trees and avoided being dragged out to sea. Villages protected by mangroves were usually located further away from the sea.

Response by the Project Team:

There were numerous agencies which started planting mangroves and other plants in tsunami-affected coastal areas without sufficient technical background to select species and locations. Therefore this initiative was taken by CCD to provide appropriate guidelines. While agreeing with the views of the Reviewer, no changes will be made to the text since it refers only to an initiative by the CCD.

h) PD p. 18, figure 1 Threats analysis: from the threats analysis the Project seems to be a biodiversity (focal area) project, as the overall threat is to 'globally significant biodiversity'. This is also reflected in the Project Rationale (p. 27, para. 80), which begins with "Sri Lanka has demonstrated an increasing commitment to biodiversity conservation...". If the Project is to be submitted under OP 15 Sustainable Land Management under the Land Degradation focal area, such sections should be rewritten to reflect this. Of course, there will be overlap with, and support to other focal areas, and these should be mentioned, but not as the main goal or rationale.

Response by the Project Team:

Reviewer's comments are highly appreciated and the necessary changes were made to the threats analysis and rest of the text to reflect the OP 15 focal area of the proposal.

i) PD p.18, figure 1. Threats analysis lists 'insufficient technical know-how to rehabilitate ecosystems' as a barrier. Other than removal of debris from lagoons, what kind of technical solutions are required? Mangroves should recover fairly rapidly, provided that nearby stands of healthy mangrove exist as a source of propagules, and normally do not require active replanting (see point o), below). Seagrass beds and coral reefs have not been subjected to much smothering, and although it would be technically feasible to replenish depleted dunes, it would be very expensive, and where would one obtain material for replenishment? Replanting of dunes for stabilisation might be an option.

Response by the Project Team:

The team agrees with the STAP Reviewer, but the Project is trying to find low-cost means of speeding up the natural recovery process to ensure that further pressure does not accrue on undamaged or partially-damaged ecosystems from people who had previously obtained a living from the damaged areas. Non availability of restoration methods to the communities concerned is considered to be a barrier, and the Project is attempting to determine those technical options which are best suited for ecosystem restoration and sustainable management with the participation of communities.

j) PD p.18, figure 1. Threats analysis lists 'current projects to assist with remediation of salinised soils have not yet produced tangible results'. The general consensus among agronomists following the tsunami was that while standing crops were severely affected by salt, these generally sandy coastal soils would be naturally cleansed of excess salt after several wet seasons. The main problem facing farmers would be what to do in the intermediate period – they could speed up the desalination process by restoring irrigation and drainage systems, using irrigation water to flush out salts.

Response by the Project Team:

The Project team agrees – a couple of wet seasons would solve the problem. Again, the key here is to speed up the system since until such time as the soils recover, the farming communities would engage in unsustainable practices exacerbating the problem of land degradation (see para 68). There were some inappropriate attempts made by agencies including international NGOs to correct the problem of salinity, e.g. over pumping of water to remediate the saline affected wells in Batticaloa. Unfortunately there is no major irrigation systems providing irrigation water to the coastal areas to flush out excess salt.

k) PD p. 19 Post-tsunami response (para. 65-69): Many coastal bridges were damaged, and as a result new roads were hastily constructed around lagoons, often through environmentally sensitive areas (e.g. through forests at Pottuvil). Such roads provide new and easy access to timber, sand and other resources, with 'entrepreneurs' exploiting the lack of control following the tsunami.

Response by the Project Team:

This is something the Team missed completely in compiling the brief and thank the Reviewer for drawing attention to. It is now incorporated under the post-tsunami response related threats in the Project brief – para 65.

l) PD p.22, para. 73: "45-55% of the coastline is eroding, and any acceleration .. will increase the rate of loss of land." Erosion is a common, natural feature along most coastlines in the world, and under normal circumstances, sites of erosion are interspersed with sites where accretion is occurring, and in many cases there will be a balance. Increase in sea dynamics (e.g. more storms), tectonics, or changes in sea level may alter this balance, tipping it more in the direction of erosion and resulting in a net loss of land. The occurrence of many lagoons around the Sri Lankan coast is an indication that sea level has been rising around the island for some time, probably due to tectonic movement.

Response by the Project Team:

Agreed on the comment made by the reviewer.

m) PD. P26 pt. 1B.3 Stakeholder analysis. Para. 76 and 77 are not part of a stakeholder analysis (only 78 and 79), but are part of the strategy for stakeholder involvement.

Response by the Project Team:

Agreed with the Reviewer and necessary amendments made – sub title 1B.3

n) PD p.27, para 82. The tsunami may have vastly increased awareness of the importance of coastal ecosystems for protection against storms, but this awareness unfortunately has not (always) translated into actions. For example, the high dunes at Pottuvil protected most of the town from destruction, but in the aftermath of the tsunami, the dunes were being mined for sand for reconstruction of affected areas!

Response by the Project Team:

The Project Team agrees with the comment that the awareness raised among coastal communities has not translated into action. The existing situation is that these resources are considered as open access resources so that the individuals do not see any incentives for their sustainable management. Instead individuals try to maximise their benefits by exploiting the resource – the Tragedy of the Commons. The project will try to pilot test and demonstrate the co-management of selected coastal resources giving local people some kind of ownership to the resource by inculcating long-term sustainability concepts.

o) PD p.28, para. 87-89, Outcome 1, restoration of coastal ecosystems. The proponent should make a case that restoration is: a) necessary, and b) feasible. As stated above under point i), mangroves usually recover naturally and do not require technical solutions. Restoration or rehabilitation of mangroves is often recommended when the ecosystem has been altered to such as extent that it cannot regenerate naturally. Often, those managing mangrove restoration emphasize planting of mangroves as the primary tool in restoration. Mangrove habitat can regenerate naturally in 15-30 years if: i) the normal tidal hydrology is not disrupted, and ii) the availability of waterborne seeds or seedlings (propagules) of mangroves from adjacent stands is not disrupted or blocked. If hydrology is still near normal, but influx of seeds or seedlings is disrupted, then mangroves may be successfully established by planting. All important is that one removes what lead to mangrove destruction in the first place: in SL this means establishing a clear jurisdiction over who manages the resource, increasing awareness, and providing alternatives (e.g. for fuel & construction). For dunes, replenishment seems out of the question, although replanting may be useful. However, as with mangroves, removal of barriers seems more important, including increasing awareness, enforcement of regulations banning construction in dunes, and curbing sand mining.

Response by the Project Team:

Again, the emphasis of the Project is on speeding up the natural recovery time. If the affected ecosystems such as mangroves could be left for 15-30 years as suggested by the Reviewer, the Team agrees that they will recover. However the reality is that the affected communities will keep on using these already degraded ecosystems making it impossible for natural recovery to occur. Therefore, the project is designed to assist the natural recovery process. Improved ownership to these resources through comanagement initiatives the local communities will get a sense of ownership and benefits of sustainable use. Hence, illegal activities would gradually be reduced. Awareness raising is a key component of the project – no changes are made to the text.

p) PD p.28 Outcome 1 restoration of ecosystems. This should not only focus on restoration, but also include "best practice for sustainable management of key coastal ecosystems" developed and demonstrated. Sustainable management of these resources is the key, not restoration. Adding sustainable management would also bring outcome 1 more in line with outcome 2. Note that OP15 guidelines list as various forms of sustainable management as eligible activities, along with capacity building and targeted research, while restoration activities get only a minor mention. The title of the Project should perhaps also be changed to participatory coastal zone sustainable management and restoration, rather than just restoration.

Response by the Project Team:

The Team agrees and the document has been adjusted accordingly- para 82 and elsewhere throughout the log frame and ICA.

q) PD p. 31-32, para. 90-94, Outcome 2: ecosystem restoration & conservation mainstreamed in planning and implementation. Shouldn't the focus be on establishing institutional clarity on who manages which resource? The threats analysis lists confusion over jurisdiction over mangroves and coral reefs as being some of the main problems. Outcome 2 heavily emphasizes "restoration", while promotion of sustainable use is certainly of equal importance, as unsustainable practices are what lead to much of the destruction in the first place.

Response by the Project Team:

The team agrees and the document has been adjusted accordingly – para 90 et seq. and elsewhere throughout the log frame and ICA.

r) PD. P.32, para 95: while it is important to support legislative changes and the CCD, the Project can not guarantee that the changes will happen, and should have an alternative handy in case the process remains stalled. Note that co-management at Vakarai (para. 96) and Panama/Pottuvil (para. 97) also hinges on passage of the amendment.

Response by the Project Team:

This is a very good point and the Team recognizes that they had not drawn out the implications thoroughly. Changes have been made to the text and risk assessment to stress that if there is an undue delay in passage of amendments to the Coast Conservation Act, existing provisions in the Forest Ordinance and the Fisheries and Aquatic Resources Act will be explored for co-management – see para 93.

PD p. 34-35, Outcome 4. This is currently titled "Learning, evaluation and adaptive management increased", but this is misleading, as it simply means project management and M&E, and is not related to capacity building as the title suggests. Also, the total budget of US\$ 3 million of GEF funds for project management appears hefty. This is certainly the case if one sees that this does not include US\$ 1.3 million of GEF funds for project admin and support (p.49). As admin and support are also part of project management, this means that more than 60% of GEF funds are going towards project management. This is much more than is usual on GEF projects, and should be (significantly) decreased.

Response by the Project Team:

Agree with the Reviewer and now the Outcome 4 title is Project Management, Monitoring and Evaluation. Costs have also been substantially reduced to \$2.7 million – \$1.4 million under Outcome 4, and further 1.3 million for project Admin and Support (see also response to "ee" below).

t) PD p.35 Project indicators, risks & assumptions. Add the risk that supportive legislative changes are not made during the life of the Project (see above, point r). An alternative approach should be given under mitigation proposed. Similarly, if the requirement for mainstreaming ecosystem restoration requirements into reconstruction projects is not adopted (see Outcome 2.2), then the financing of the Ecosystem Restoration and Adaptation Unit (ERAU) within the Coast Conservation Department (CCD) becomes an issue. This (L) risk needs to be listed and a mitigation measure proposed.

Response by the Project Team:

This is a very important point not drawn out properly by the Project Team. It is now addressed in the Project Brief in relevant places e.g. para 93, and included in the risks and assumptions matrix. The alternative to this is the use of existing provisions of the Forest Ordinance and Fisheries and Aquatic Resources Act. In addition a commitment letter is obtained from the Department of Coast Conservation on following up with the proposed amendments to support co-management of coastal resources.

u) PD p.36, para. 101: expected global benefits. Increased carbon sequestration can be seen as a modest secondary benefit, and not as a main one, as coastal scrub, dune vegetation and lagoons do not have a high sequestration rates per unit area. There will be benefits to global biodiversity, but the level of which needs to be elaborated, as the mere (e.g. one off) occurrence of globally significant species does not automatically make protection of an area of global significance. Also, restoration to 'once again support these species' (para. 102) will not appeal to the GEF, except as a secondary benefit.

Response by the Project Team:

The point is taken and the document has been adjusted accordingly – para 99.

v) PD p. 48, organigramme of Project Management structure: the Ecosystem Restoration and Adaptation Unit (ERAU) is erroneously called Ecosystem Rehabilitation Unit of CCD. In this organigramme it is not clear where the ERAU will be based – is this to be within CCD Colombo, or in the region?

Response by the Project Team:

Necessary changes are made to the organisation diagram, the ERAU is going to housed in CCD Colombo Office

w) PD p. 49 Project budget. As stated under point s), too much of the GEF funding is targeted towards project management, admin and support. Also, the budget suggests that GEF is to fund 91% of costs associated with project management, admin and support of the full project. This seems an unfair distribution of the burden, maximising the effect of the IFAD loan, by minimising management costs.

Response by the Project Team:

Project Management, Monitoring and Evaluation and Project Admin and Support cost is now reduced to a total of \$ 2.7 million which is around 37% of the total investment

x) PD p.52, para 158: ".. and in some cases important habitats would not be restored." It is important to note that many habitats, if left alone, would regenerate by themselves and not require active human intervention in the form of restoration.

Response by the Project Team:

Coastal Sri Lanka is highly populated and they may make increased threats to remaining pockets of habitats /ecosystems. Therefore things need to be speed up before it is too late. Relevant para is now in the ICA annex.

y) PD, p. 54, para. 175: "The global environmental objective of the Project is that Tsunami affected habitats in Sri Lanka are rehabilitated to provide full ecosystem services, including adaptation against extreme climatic events." To this should be added: preserve globally significant biodiversity. Also, "rehabilitated" should be replaced with "restored or allowed to regenerate".

Response by the Project Team:

Necessary changes are made to the text - para 31 of the page 4 of the Incremental Cost Analysis - Annex 4

z) PD p. 56, ICA matrix, Activity 1.1.3 Vulnerability mapping. This is now regarded as being entirely incremental, but shouldn't part of this be baseline funded? Haven't activities already been initiated by GoSL to identify vulnerable sections of coastline and vulnerable human populations?

Response by the Project Team:

This has been identified as a priority by the government but is yet to be implemented, hence no baseline cost.

aa) PD p.72, Logframe. Targets for restoration of sand dunes and mangroves (5 and 10 ha, respectively) are very modest given the funds allocated (US\$ 0.75 million). This should be much more significant in terms of area. Mangrove restoration of areas not requiring hydrological restoration is usually in the order of US \$100-200 per ha, but it is recognised that methods, cooperation with local communities, and so on will have to be developed first. What is a restored mangrove or dune? Replanting of an area of mangrove may result in 80% mortality of seedlings by year 3, for instance. You may replant 1000 ha, but find that by the end of the project you have actually only restored 100 ha. Is this specified in the best practice guidelines?

Response by the Project Team:

This is a mistake left over from an earlier draft. It is now corrected as 75 ha of sand dunes and 250 ha of mangroves to be rehabilitated and sustainably managed. Thank you.

bb) PD p. 72 Logframe, target for restoration of coastal lagoon = 25 ha. This seems a bit strange, as either you restore an entire lagoon and regard it as 'restored', or it remains unrestored. You cannot restore 25 ha of a lagoon, but can restore an entire, small lagoon, in the range of, say, 25-100 ha.

Response by the Project Team:

Again, this is a mistake left over from an earlier draft. It is now corrected as about 1,000 ha of coastal lagoons to be rehabilitated and sustainably managed.

cc) Annex 2 site descriptions. The description of the Panama and Pottuvil dunes lists an incredible and highly unlikely biodiversity (including elephant, sloth bear, langurs) – which may hold for areas nearby such as Yala, but surely not for this dune area.

Response by the Project Team:

Elephants and sloth bear can be found in the adjoining forest patches connecting with sand dunes even out side of Yala National Park. During PDF B preparation, the Project Team received the first hand evidence of roaming elephants in the Pottuvil sand dunes.

dd) Annex 4 – Incremental cost analysis – why is this included twice (in main text and in annex4), albeit in different formats? Note that ERU is referred to instead of ERAU.

Response by the Project Team:

This was following a model from another proposal that had been successfully funded. The summary ICA was included in the Brief and a full version added as an Annex. Given the Reviewer's comment and those made about the length of the brief, the ICA has been given as a full version only and placed in an Annex.. The typographical error has bee corrected.

ee) Annex 8, Monitoring and Evaluation Plan. The plan itself seems fine, but the budget total of US\$ 763,000 seems way too much for project M&E. I have checked with half a dozen UNDP and WB projects, the average is just under US\$ 200,000. <four of these projects were smaller in terms of overall GEF funding, but they are of similar duration and geographic coverage>.

Response by the Project Team:

This is around 10% of the total budget (7 million), since the project is being implemented in an area of conflict where monitoring costs substantially increase,

ff) Minor points:

- PD p.1, para. 1&3. Rainfall ranges from 1200-1800mm in para. 1, but from 1000-1500mm in para. 3.
- PD p.2, para 5. 'casurina' is not the correct name: common English names include Horsetail, Coast She-oak, Australian oak and Whistling pine. The scientific name of the species common along the Sri Lanka coast is Casuarina equisetifolia.
- PD. P.3 para. 12 Lagoons/estuaries extend over 40,000 ha in EP. Note that this figure includes Trincomalee Bay, without which the area would be about 10,000 ha lower.
- PD.p.3, para. 12. "with 17 true mangrove species... 40-60% of the world's specialised mangrove species". Saenger et al. (1983) record a world wide total of 60 plant species exclusive to the mangrove habitat. <Saenger, P., E.J. Hegerl & J.D.S. Davie (1983) Global status of mangrove ecosystems. IUCN Commission on Ecology Papers No. 3, 88 pp.> The 17 true mangrove species therefore represent about 28% of the world's total.
- PD.p.3 para. 12. The mangrove area appears inflated. A study by AsDB in 2001-2002 concluded that "The figure for the total area of mangrove in the three Project districts varies from 3274-3446 hectares. However, this data is anywhere between 15-20 years old, and during the past decade there have been significant decreases, reducing the total to less than 3000 hectares."
- *PD.p.16*, para 55 what is the national Gini coefficient?
- *PD p.23*, para 74, bullet on tourist industry: the policy of "rereat" should read "retreat".
- PD p.28, para 83, 'two prong strategy' should read 'two pronged strategy'.
- PD p. 53, para 174: "In line with the GEF's Operational Programmes on Climate Change and Land Degradation...". These OPs do not exist; the GEF has a Climate Change focal area, and a Sustainable Land Management OP.
- *PD p.* 60, ERU(2x) this abbreviation should be ERAU.

Response by the Project Team:

All minor comments under ff) have been addressed in the relevant places of the Project Brief.

2. Evaluation of the identification of global environmental benefits and/or drawbacks and risks of the project.

The Project is envisaged to have significant environmental benefits for Sri Lanka in general, and the coastal region of the eastern districts in particular. As mentioned in the PD: "Global benefits resulting from the proposed project's implementation include the maintenance of protected area biodiversity of global significance, including the share of functional benefits that accrue to global communities. By conserving natural species and areas, the Project will preserve the flow of global benefits accruing from their consumptive and non-consumptive utilisation, such as those generated through international trade and tourism. It will also maintain ecosystem integrity, yielding global services such as the regulation of climate. By averting the risk of extinction of globally threatened, endangered and endemic species and habitats, and maintaining a diverse pool of genes and resources, the Project will make a significant contribution to the global option values associated with the possible future use and development of protected area biodiversity." Drawbacks or risks to the global environment are not envisaged.

3. Evaluation of the project's compliance or fulfillment of the goals of GEF

Sri Lanka ratified the United Nations Convention to Combat Desertification (UNCCD) on 9 March 1999, the Convention on Biological Diversity (CBD) on 23 March 1994, the United Nations Framework Convention on Climate Change (UNFCCC) on 23 November 1993, and acceded to the Kyoto Protocol in September 2002 as a non-Annex I party. <As such, Sri Lanka is not bound by any legal requirements in the implementation of the FCCC, and is not required to control its emissions, but only to take climate change concerns into account in formulating socio-economic policies.> Sri Lanka is fully eligible to receive technical assistance from IFAD.

The Project is consistent with Operational Program 15 – Sustainable Land Management (revised 18 December 2003), as it focuses on effective ecosystem restoration and sustainable management, and achieving sustainable livelihoods. The Project complies with the Operational Guidelines for the Strategic Priority on "Piloting an Operational Approach to Adaptation" (SPA), as on the one hand it aims at increasing adaptive capacity to climate change and reducing vulnerability to adverse effects, while on the other hand it also delivers global benefits by promoting conservation and sustainable use of biodiversity, and reduction of land degradation through sustainable land management.

The Project is also compliant with two GEF Biodiversity strategic priorities: BD2 Mainstreaming Biodiversity in Production Landscapes and Sectors and BD4, Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues, and two GEF Sustainable Land Management strategic priorities: SLM1, Targeted Capacity Building, and SLM2, Implementation of Innovative and Indigenous Sustainable Land Management Practices.

4. Assessment of how the project fits within its regional context

The Project focuses its activities on the coastal region of eastern Sri Lanka, targeting key areas, but with the ultimate objective of benefiting all affected areas along the east coast. Within a larger regional context, the Project will benefit the region by restoring ecosystems important to migratory and far ranging species such as waterfowl, dugong, smaller cetaceans and marine turtles that use the near coastal area as a habitat and/or breeding area, at least on a seasonal basis. Because of this, links should be established with Ramsar and Bonn conventions and with the Asia-Pacific Migratory Waterbird Conservation Strategy (see 8, below). <There is no mention of cooperation with counterparts in India, but this may be a politically sensitive issue given the relationship between the two countries, although this has improved in the aftermath of the tsunami, with the Indian Army contributing to reconstruction activities in Sri Lanka, such as the bridge at Pottuvil, for example. Best practice guidelines could be distributed to counterpart agencies of the CCD in India, and to Indian NGOs involved in coastal zone restoration and management.>

5. Evaluation of the replicability of the project

Replicability has been well incorporated into the Project design. While the Project initially aims at restoration of ecosystems at a few pilot sites, the Project Objectives is to restore coastal ecosystems all along Sri Lanka's east coast. One the one hand, the Project will provide technical tools and examples of how to proceed with restoration. The key, however, will be mainstreaming ecosystem restoration into the policy governing post-tsunami reconstruction. This is also the Project's Achilles heel, because if this policy is not adopted by GoSL, funding of replication becomes doubtful.

In order to facilitate replication, the Project will test best-practice guidelines from other regions, and lessons learned will be evaluated. The approach will involve a review of methods, pilot-testing, and scaling up of trials to larger areas. At the same time, the Project will equip and train the Ecosystem Restoration and Adaptation Unit (ERAU) (within the Coast Conservation Dept. CCD), increase coordination among agencies, and help create a policy and planning framework in support of ecosystem restoration. Lastly, the Project will produce and disseminate best practice guidance material, targeting local villagers. This seems a sound enough approach, which hinges upon the establishment and funding of the ERAU.

6. Evaluation of the sustainability of the project

The PD lists three main aspects of the Project that combine to ensure sustainability, namely institutional, financial and economic aspects:

- Institutional aspects. The Project will establish linkages, collective actions and partnerships with, and build on the dynamics of, other projects to enhance sustainability. It will also strengthen the Coast Conservation Department (CCD) by providing it with a new specialist unit (ERAU), and by mainstreaming habitat restoration requirements into reconstruction programmes.
- Financial aspects. According to the PD, capital costs of replicating restoration will be a) low because of the low-cost community-led activities, and b) met through the policy (to be introduced under Outcome 2.2) requiring all post-tsunami reconstruction projects to include ecosystem restoration. The recurring costs of staffing the ERAU will be met be from budgetary allocations to the CCD, the cost of which can be offset against the savings made by employing low-cost methods and from the economic gains that will ensue from rehabilitating a sustainable natural resource base.
- Economic aspects. According to the PD, the introduction of co-management agreements should encourage the careful husbandry of resources to provide long-term economic benefits from the ecosystem restoration activities.

The reviewer wonders about the sustainability of the ERAU, as this will need to be funded, and if the policy recommended under Outcome 2.2 is not adopted, the ERAU concept unravels. Also, what will happen with ERAU funding once post-tsunami reconstruction projects are completed and donors have moved on? Economic gains from a rehabilitated natural resource base accrue to local resource users, not to the central coffers of GoSL, who will have to fund the ERAU. Also, it is bit presumptuous to assume that co-management will automatically lead to 'careful husbandry' of natural resources. Firstly, co-management will need to be supported by legislative changes. Secondly, co-managers will need to be fully aware of the effects of their actions on environment, resource base, and their own pockets, and this requires a significant amount of awareness raising and changing of attitudes.

B. SECONDARY ISSUES

7. Evaluation of linkages to other focal areas (international waters, climate change, etc...)

The following links exist with the other GEF focal areas.

- There is a strong link with the biodiversity focal area, as the Project will restore and protect key ecosystems (dunes, reefs, lagoons, mangroves) that are of importance for globally significant biodiversity.
- There is a link with the climate change focal area, as the Project will strive to restore affected ecosystems such as dune scrub and mangroves, and sustainably manage these area, all of which will have beneficial, albeit modest, effects in this focal area.
- There is a weak link with the international waters focal area via conservation of migratory species (esp. migratory and far ranging species such as certain waterfowl, marine turtles, cetaceans and dugong). Although this link is fairly weak it should be mentioned in the proposal.
- No direct links with the other GEF focal areas Persistent Organic Pesticides (POPs) and ozone layer depletion – are expected.

8. Evaluation of linkages to other programs and action plans at the regional and sub-regional level

The proposal indicates linkages with the following projects (some of which have already been finalised), some of which are national, others which are regional:

- Conservation of Biodiversity through Integrated Collaborative Management in the Rekawa, Ussangoda and Kalametiya (RUK) Coastal Ecosystems (UNDP-GEF) 2002-2005
- Bay of Bengal Large Marine Ecosystem (GEF-World Bank) 2006-2012
- Strengthening Partnerships for Effective Control of Invasive Alien Species in Sri Lanka (SPECIeS) (UNDP-GEF)
- National Capacity Needs Self-Assessment (NCSA) for Global Environmental Management (UNDP-GEF) 2004-2005
- Protected Areas and Wildlife Conservation Project (GEF-WB/ADB) 2001-2006
- Conservation and Sustainable-use of Sri Lanka's Medicinal Plants (GEF-World Bank) 1999-2005
- In-situ Conservation of Crop Wild Relatives through Enhanced Information Management and Field Application (UNEP-GEF) 2004-2009
- Conservation of Threatened Species in the Rainforests of Southwest Sri Lanka (UNDP-GEF) 2001-2005
- Sri Lanka GEF Small Grants Programme (GEF) 2005-2008
- GEF Climate Change Enabling Activity (Phase II)

The Project is also linked with, and builds upon two main regional development projects, namely the North-East Coastal Community Development Project and the North-East Community Restoration and Development Project. Both of these are large, multi-year projects funded by the Asian Development Bank and have a focus on sustainable development of Sri Lanka's east coast.

The Project therefore appears to be well-embedded in programmes and activities that are co-financed by GEF, and financed by other donors.

Links should be established with Ramsar and Bonn conventions, and with the Asia-Pacific Migratory Waterbird Conservation Strategy, because of the regional importance of the coastal habitats for migratory and far ranging species (see 4).

9. Assessment of other beneficial or damaging environmental effects

The Project will have significant environmental benefits, especially for the coastal region of Sri Lanka's Eastern Province, but also for biodiversity in Sri Lanka in general if the replication process via ERAU/CCD extends to other regions in the country. Its may also benefit biodiversity in the greater region, as it may have beneficial effects on populations on migratory and far ranging species. Damaging environmental effects due to the implementation of the Project are not anticipated.

10. Evaluation of the degree of involvement of stakeholders in the project

During Project preparation (the PDF-B phase), the Project design team consulted extensively with the two main projects already operating in the Province – North-East Coastal Community Development Project and North-East Community Restoration and Development Project. The proposal does not mention the degree of involvement of the other stakeholders during the Project design phase, and this needs to be added.

Stakeholder involvement during Project implementation has been well taken care of in the Project design, as it is well outlined in a stakeholder involvement plan included in Annex 5 of the Project Document. This recognises that the main stakeholders on the Project are the fishers and farmers of the rural communities along the East Coast. The fishers and displaced farmers will receive support and training on procedures and techniques of community level resource-use; decision-making; creating, negotiating, and implementing community development plans; resolving resource-use conflicts; and providing leadership in ecosystem restoration and conservation. Other stakeholders include government agencies, such as the local authorities and Coast Conservation Department, who will receive support and capacity building on principles and practices of natural resource planning and sustainable land management; technical issues related to ecosystem restoration, vulnerability assessments and adaptation measures; and resolution of resource-use conflicts. It is also envisaged that NGOs and Civil Society Organizations will play a crucial role in community mobilization and awareness-raising. The Reviewer considers these stakeholder involvement activities to be ample to ensure ownership and facilitate cooperation.

11. Assessment of the capacity building aspects

Capacity building is rightfully a central tenet of the Project, and forms a key part of each of the three main Project outcomes (1-3; outcome 4 is basically project management).

Outcome 1: Best practices for effective restoration < and sustainable management> of key coastal ecosystems developed and demonstrated, aims at providing information and examples of best practices for restoration < and management>, and ensuring that this is disseminated among a wide group of stakeholders. To ensure that all key stakeholders are targeted, all publications will be in three languages (Singhalese, Tamil and English) and the Project will work through national and international NGOs. The reviewer advises the Project to also work with Tamil and Muslim NGOs (which are unlikely to be national NGOs, but more likely regional), as coastal populations are wary of national NGOs (that are usually dominated by Singhalese).

Outcome 2: Effective ecosystem restoration and conservation management are mainstreamed into post-tsunami reconstruction planning and implementation. This outcome focuses on i) creating a binding policy (which also creates funding) for incorporating ecosystem restoration into tsunami reconstruction efforts; ii) creating capacity within the CCD to manage this; and iii) providing tangible examples by executing pilot projects in three districts, while at the same time developing practical capacities.

Outcome 3: Coastal communities empowered to manage local nature resources to enhance sustainable livelihoods. Outcome 3 aims at i) enhancing the legal and regulatory processes in support of coastal ecosystem protection, and ii) establish co-management regimes with local communities at the three pilot Project sites (Pigeon Island, Vakarai and Panama/Pottuvil). While the first is primarily the creation of an enabling environment, the latter will largely consist of local capacity building.

The Project is therefore consistent with: i) OP15, which sees capacity building as one of the main tools in achieving sustainable land management; ii) Biodiversity strategic priority BD4, Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues; and iii) Sustainable Land Management strategic priority SLM1, Targeted Capacity Building.

12. Innovativeness of the project

While ecosystem restoration itself is not innovative – also in Sri Lanka – the Project's main innovation is to integrate this into the post-tsunami reconstruction efforts to ensure that environment concerns are met, and not trampled by well-intended but hastily designed projects. The creation of a body within the CCD to manage restoration (ERAU), funded out of reconstruction funds is also innovative and appears sound, as does linking restoration with co-management of restored ecosystems with local communities, facilitated by changes in the Coast Conservation Act.

These innovations are good, and would provide an excellent opportunity for sustainable management of coastal resources. At the same time, they are also the chinks in the armour of the Project: what if the policy for mainstreaming ecosystem restoration into post-tsunami reconstruction efforts is not adopted, or significantly delayed? What if CCD does not support the establishment of the ERAU, because of other commitments or new concerns? What if the Coast Conservation Act is not amended, so there is no legal basis for co-management? These are real risks and causes for concern regarding Project design. The Proponent should therefore aim to minimise these risks, by obtaining letters of commitment, agreement or support from key agencies for these three main thrusts of the Project.

Response by the Project Team:

Two letters of commitment have been received from the Coast Conservation Department and the and Ministry of Environment – they are annexed to the Project Brief as Annex 12 and 13

Concluding remarks

While the Project is generally well-founded and well-designed, there are a number of issues that need to be addressed. Firstly, there should be letters of agreement or support for the innovations mentioned under 12), as without these there are significant risks. Secondly, the focus on ecosystem restoration should be broadened to include sustainable ecosystem management, as this should be (a major part of) the long-term goal. Provided that these are taken care of, there should not be any major impediment to successful Project implementation. Other issues mentioned are minor, and can readily be addressed by making small changes.

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT

Position Titles	\$/ person week	Estimated person weeks	Tasks to be performed		
For Project Management	1 4				
Local 1. National Project Director (NPD)	400	364	The NPD will be the Government representative at project level, assuming the overall responsibility for the successful execution and implementation of the project, and accountability to GoSL and co-financiers for the proper and effective use of project resources.		
2. Project Manager (PM)	275	364	The PM is the principal representative of the implementing agency at the project level. The primary function of the PM is to oversee the implementation of the project, in consultation with the NPD under the overall policy direction of the National Steering Committee.		
3. Administrative Assistant (AA) (2 positions)	150	728	The Administrative Assistants will work under the direct supervision of the NPD and PM, and will be responsible for providing administrative support to staff within the Project Management Unit (PMU).		
4. Clerical staff (2 positions)	125	728	General administrative support.		
5. Drivers (5 positions)	125	1,820	Maintenance of vehicles, driving.		
For Technical Assistance		Γ			
Local 1. Ecosystem Planning and Management Specialist (EPMS)	275	364	The EPMS will be responsible for the implementation of all activities envisaged in the planning and knowledge generation for ecosystem restoration and conservation activities of the project. The position will involve working closely with members of the communities with key staff from line agencies and with project counterparts.		
2. Natural Resources Economist (NRE)	275	364	The NRE will be responsible for identifying market-based incentives to be disseminated among local stakeholders as an incentive for their effective participation in ecosystem restoration and adaptation to climate change, developing an information base on ecosystem functions and economic values which can be disseminated to interested parties.		
3. Monitoring and Evaluation Specialist (MES)	275	364	The MES will work under the supervision of and report directly to the PM and, whenever requested, to the NPD. S/he will be responsible for developing and implementing the project's monitoring and evaluation (M&E) system and overseeing all components and activities of the project.		
4. Information Dissemination and Communication Specialist (CS)	275	364	The CS will work under the supervision of and report to the PM. S/he will be responsible for the implementation of all activities envisaged in the Information Dissemination of the Project, and for the delivery of all outputs, including the development and implementation of the project's public information dissemination and stakeholder networking activities.		
5. Finance Specialist (FS)	275	364	The FS will report directly to the PM and will be responsible for providing administrative support to the Project, through the coordination of all administrative and financial activities.		
6. ERAU Officer (5 positions)	200	1,820	The ERAU Officers will provide assistance to the NPD for setting up an Ecosystem Restoration and		

7. Field Coordinator (FC) (3	175	1,092	Adaptation Unit at the Coast Conservation Department and provide facilitation and supervision services to tsunami-reconstruction projects. The three FCs will oversee activities in the 3
positions)	173	1,072	project areas of Trincomalee, Batticaloa and Ampara working under the supervision and guidance of the PM. They will be responsible for overall support to project implementation at the District and community levels.
8. Community Mobilizers (CM) (3 positions)	150	1,092	The 3 CMs will be based in the 3 Field Offices and will work closely with the FCs to provide crucial input to the project's effort to build effective local capacity to adequately manage natural resources at the local level, helping to train local stakeholders, and mobilizing communities.
9. Field Administrative Assistant (AA) (3 positions)	150	1,092	The Project Field AA will work under the direct supervision of the NPD, PM and Field Coordinators and will be responsible for providing administrative support to staff within the PMU.
International			
10. Expert, Integrated Coastal Management	2,000	28	Technical assistance and advice to PMU on maintenance of the integrity of ecosystems and protection of biodiversity in these ecosystems. Assessment of challenges (biological, physical and socio-economic pressures) and practical recommendations
11. Expert, Rehabilitation of Coastal Zones	2,000	28	Technical assistance and advice to PMU on rehabilitation and regeneration of coastal ecosystems and species, and integrated conservation. Guidance on proper methodologies and evaluation of activities.
12. Expert, Adaptation to Climate Change	2,000	28	General support to PMU, ERAU and CCD on issues related to adaptation to climate change variability in coastal zones. Technical expertise and analytical activities.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN:

The objective proposed (development of the full project proposal), including the preparatory activities, has been fully achieved thorugh the PDF-B activities carried out.

B. DESCRIBE IF ANY FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION:

There were no specific findings affecting the project design. Similarly, there are no concerns on the project implementation.

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

		GEF Amount (\$)				Co-
Project Preparation Activities Approved	Implementation Status	Amount Approved	Amount Spent To- date	Amount Committed	Uncommitted Amount*	financing (\$)
1. Identification of demonstration sites	Completed	8,000	8,000	0	0	7,000
2. Preparation of baseline studies	Completed	90,000	90,000	0	0	90,000
3. Preparation of special studies	Completed	42,000	42,000	0	0	28,000
4. Consensus building and stakeholder participation	Completed	40,000	40,000	0	0	40,000
5. Development of the full project proposal	Completed	170,000	170,000	0	0	25,000
Total		350,000	350,000	0	0	190,000

^{*} Uncommitted amount should be returned to the GEF Trust Fund. Please indicate expected date of refund transaction to Trustee.