

Rehabilitating coastal ecosystems in a post tsunami context: consolidation phase

Third Quarterly Report July-September, 2007



Ecosystems & Livelihoods Group Asia

Name of project	Rehabilitating Coastal Ecosystems in a Post Tsunami Context: Consolidation Phase
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End date	December 31 2007
Grant	€ 150,000


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Background to the Project

This project was developed to address the long-term threats to mangroves in countries affected by the December 2004 Indian Ocean Tsunami. The project aims to restore, rehabilitate and conserve these vital ecosystems. Through this project awareness raising materials are being developed to inform stakeholders of the links between mangrove ecosystems and livelihoods. Furthermore training programmes and resources materials are being produced for those involved with the coastal development and conservation sector on subjects such as rapid environmental impact assessments and participatory ecorestoration practices.

The project is now in the consolidation phase, which uses the knowledge gained from the first phase to carry out awareness raising and capacity building activities for those involved with mangrove restoration, particularly Protected Area managers. The consolidation phase aims to share information and learning with additional sites and groups in Sri Lanka and Thailand and to extend learning with other tsunami-affected countries.

Funding for the project is being provided by the Organismo Autónomo Parques Nacionales (OAPN), Ministry of Environment of Spain, which has provided key support to IUCN's post-tsunami work from its early stages. Between September 2005 and December 2006, OAPN made available a grant to assist with mangrove rehabilitation in tsunami-affected areas of Sri Lanka and Thailand. OAPN has made available a second grant, running between January and December 2007, to consolidate and share the lessons learned in the course of carrying out mangrove rehabilitation during the first phase of the project. As of October 2007 a third grant was awarded by OAPN to carry out additional capacity building activities.

Project Summary

Project goals, objectives, outputs and activities

Goal		
To support ecosystem restoration and conservation in tsunami-affected coastal areas as a mechanism to strengthen sustainable coastal zone management policy and to reduce the vulnerability of coastal populations in tsunami-affected countries		
Objectives	Main Outputs	Activities
1. Document and share lessons and experiences on participatory approaches on post-tsunami ecosystem restoration, post-disaster reconstruction and sustainable coastal zone management	1.1 Information and lessons learned on post-tsunami ecosystem restoration produced and shared with coastal policy-makers and planners	<ul style="list-style-type: none"> • Document best practices and methods for mangrove restoration in Indonesia, Sri Lanka and Thailand • Review ecosystem aspects of post-tsunami reconstruction in Sri Lanka and Thailand • Establish and maintain web-based portal for disseminating and sharing of project information
	1.2 Awareness materials on the links between mangrove restoration and livelihood security produced and shared at the local level	<ul style="list-style-type: none"> • Produce local-language awareness materials on mangroves and livelihoods in Indonesia, Maldives and Sri Lanka
	1.3 Multi-stakeholder regional dialogue for sharing of information, experiences and lessons learned on natural disasters, coastal ecosystems and Protected Areas held for Indian Ocean countries	<ul style="list-style-type: none"> • Hold regional dialogue
2. Enhance the capacity of agencies involved in post-tsunami reconstruction to incorporate participatory eco-restoration approaches in a post-disaster context	2.1 Capacity built for post-disaster environmental assessment and management among conservation agencies	<ul style="list-style-type: none"> • Conduct field training courses in rapid environmental impact assessments and participatory eco-restoration practices in Indonesia, Maldives and Sri Lanka
	2.2 Field manual produced to guide Protected Areas managers and conservation practitioners in post-disaster coastal ecosystem assessment and restoration	<ul style="list-style-type: none"> • Produce and disseminate field manual on post-disaster coastal ecosystem assessment and restoration

Workplan of activities

	Q1 Jan-Mar	Q2 Apr-Jun	Q3 Jul-Sep	Q4 Oct-Dec
Document best practices and methods for mangrove restoration in Indonesia, Sri Lanka and Thailand				
Review ecosystem aspects of post-tsunami reconstruction in Sri Lanka and Thailand				
Establish and maintain web-based portal for disseminating and sharing of project information				
Produce local-language awareness materials on mangroves and livelihoods in Indonesia and Sri Lanka				
Hold regional dialogue				
Conduct field training courses in rapid environmental impact assessments and participatory eco-restoration practices in Indonesia, Maldives and Sri Lanka				
Produce and disseminate field manual on post-disaster coastal ecosystem assessment and restoration				

Milestones in the delivery of project outputs

Milestones	
By end Q1	Project planning matrix, workplan and milestones have been developed
By end Q1	Awareness raising materials have been designed for Sri Lanka and Thailand
By end Q2	Project website has been designed
By end Q2	Case studies on lessons learned in Sri Lanka and Thailand have been produced
By end Q3	Synthesis report on lessons learned in mangrove restoration in Sri Lanka and Thailand has been produced
By end Q3	Capacity-building workshops have been held in Indonesia and Sri Lanka
By end Q3	Local language materials have been produced for Indonesia, Sri Lanka and Thailand
By end Q3	Draft field manual has been produced
By end Q3	Draft field manual has been pilot tested
By end Q4	Field manual has been produced
By end Q4	CD Rom of field manual and other materials has been disseminated
By end Q4	Regional dialogue has been held
By end Q4	Country status reports have been produced for Sri Lanka and Thailand

Report for this quarter

Summary of progress to date

This has been a very successful quarter for this project.

During this quarter additional funding of Euro 110,000 was awarded to IUCN for capacity building activities. In light of this development there are plans to postpone the regional dialogue, which was to be held in November 2007. The conference will still be held in Sri Lanka, but by conducting it at the completion of all project activities we would benefit from incorporating the lessons learned from the additional capacity building initiative. This would enhance the output of the conference. This was rationale for suggesting the postponement.

As explained in the previous progress report, partnerships were formed with Mangrove Action Project (MAP), Australian Red Cross and Environment Research Centre, which enable the extension of the project's first phase focus of Sri Lanka and Thailand, into Indonesia. These partnerships continue to develop within the context of implementing the project activities.

With regards to the preparation of awareness raising materials, a four page brief is being prepared by IUCN Sri Lanka on the value of mangroves to local communities and livelihoods. This will also be translated in to a poster. Art competitions have been organized to get the art work for the poster from the Department of Painting of the Faculty of Visual Arts, University of Visual and Performing Arts, Colombo. Both of these will also be produced in local languages. Currently IUCN is working with 15-20 students to provide them with the necessary scientific background needed to draw the posters. Further to lectures, field visits to restoration sites have been organized.

Both Sri Lanka and Thailand are making good progress in preparing the report on their assessment of three aid organization who took a lead role in the post tsunami restoration work, in their respective countries. Field work, and literature reviews are nearing completion, and Thailand has already submitted a draft report for review by ELG II.

The organization of training workshops in Sri Lanka are progressing with a slight delay, due to the scheduling conflicts of the participants. The workshops were re-scheduled to October 16th – 18th, 2007.

MAP has made good progress with regards to producing the awareness materials in Indonesia. Completion date for all materials is the 31st of October, 2007.

Progress towards project outputs

Output 1.1 Information and lessons learned on post-tsunami ecosystem restoration produced and shared with coastal policy-makers and planners

Document best practices and methods for mangrove restoration in Indonesia, Sri Lanka and Thailand

The case study was prepared based on the experience of the mangrove restoration and livelihoods support interventions of OAPN 1. The draft case study produced has been further revised and now it is being converted to a 4 page brief on value of mangroves to local communities and livelihoods. This decision has been taken as such a simple qualitative text would the appropriate level of awareness raising in comparison to quantitative highly technical report. Further it will be translated to a poster. Sinhala and Tamil translators have been selected to translate the case study into local languages.

A manual titled, "Community Based Mangrove Policy: A compilation of Indonesian case-studies", will be prepared by October 31. If requested MAP is prepared to produce an English version of the manual for the region.

Review ecosystem aspects of post-tsunami reconstruction in Sri Lanka and Thailand

The review of coastal restoration and conservation activities commenced in both Sri Lanka and Thailand, involving the compilation of information on agencies involved, types of activity, scope of work, geographical site, progress to date, and budgets.

With regards to the Thailand component, a preliminary assessment of key organizations involved in coastal rehabilitation has been carried out by a National consultant (funded partially through OAPN Phase 2) and IUCN staff. The draft report has been submitted to ELG II for review. Once the comments from ELG II are received, the report will be updated and finalized. The findings of the report will be presented at the stakeholder dialogue meeting for the Thailand Component of "Ecologically and socio-economically sound coastal ecosystem rehabilitation and conservation in tsunami-affected countries of the Indian Ocean". The workshop will bring together stakeholders from Government, Academia, Communities and NGO's to identify critical issues for the coastal stretch between Northern Phang Nga Province and Ranong Province where it is being implemented.

In Sri Lanka the literature survey was carried out for get basic idea of the environmental, geographical, and institutional and post tsunami environmental initiatives aspects. This information was complimented by information from the environmental rehabilitation surveys conducted in Matara. These surveys, conducted over a period of 5 days assessed the post tsunami interventions to rehabilitate natural ecosystem destroyed by tsunami. Final report will be ready by end of October.

Establish and maintain web-based portal for disseminating and sharing of project information

Website has been uploaded at <http://www.iucn.org/places/asia/oapn>. Updates are been done as needed.

Output 1.2 Awareness materials on the links between mangrove restoration and livelihood security produced and shared at the local level

Produce English language synthesis report

The report is at the final stage of completion, and has been circulated for comments internally within IUCN. The synthesis report will take the form of a discussion paper where an integrated framework for undertaking an ecosystem services and human well-being assessment is presented. Examples from phase one activities as well as valuation case studies are included as well as an example from Sri Lanka in establishing a ecosystem services and human well-being baseline.

Produce local-language awareness materials on mangroves and livelihoods in Indonesia, and Sri Lanka

Based on the initial discussions held in the last reporting period, firm plans have been made on this item during the reporting quarter. IUCN is now working with the Department of Painting of the Faculty of Visual Arts, University of Visual and Performing Arts, Colombo. 15-20 students specializing painting will be given all painting materials, scientific background to mangroves and

taken to mangroves forests for them to draw how they see mangroves. Their products will be exhibited at '**Expressions – what mangroves mean to an artist**' and used in OAPN mangrove communications materials. Depending on the success, the programme between two institutions will be turned to an annual event. Final production of the information brochure will be completed by end of October.

A key scientific paper produced by Robin Lewis "Ecological Mangrove Restoration" has been translated into Indonesian, and some extra sets of "before and after" shots were added. Another manual was produced based on the challenges made by Brian Walker and David Salt, the authors of "Resilience Thinking", to apply resilience into the readers own field of work/study/expertise. This paper looks at key concepts from within their paper such as thresholds, adaptive capacity, key slow moving variables, the pitfalls of optimization, etc. in the context of Indonesia's mangroves. It also provides 4 case studies looking at four separate mangrove forests in Indonesia with attention to differing states of social-ecological resilience. The purpose of this manual is to get Indonesian managers thinking about resilience, and to undertake resilience assessments in their stewardship areas. The manual will be produced in English and Bahasa Indonesia.

Also, an awareness poster illustrating the MAP/Lewis' "6 Steps to Ecological Mangrove Restoration," was produced in English and Indonesian.

Output 1.3 Multi-stakeholder regional dialogue for sharing of information, experiences and lessons learned on natural disasters, coastal ecosystems and Protected Areas held for Indian Ocean countries

Hold a Regional Dialogue

In lieu of the additional funding support of Euro 110,000, it has been proposed to postpone the regional dialogue to the beginning of 2008. This will allow the lessons learned from the additional capacity building activities carried out with the new funding to be taken in to consideration when preparing the conference agenda and identifying the topics for discussion, authors and presenters.

Output 2.1 Capacity built for post-disaster environmental assessment and management among conservation agencies

Conduct field training courses in rapid environmental impact assessments and participatory ecorestoration practices in Indonesia, Maldives and Sri Lanka

District level workshop was held in Hambantota Sri Lanka, from the 16-17th of October to address the environmental concerns of those involved with disaster management. Participants for the workshop included Forest Department, Biodiversity secretariat of the Environment Ministry, Coast Conservation Department, National Aquatic Resources Agency (NARA), Department of Wildlife Conservation, Small Fisheries Federation and Sewalanka Foundation among others. There will be presentations on mangroves and one field trip included in the training workshop.

CARE organized a three day workshop in Hambantota, Sri Lanka from August 15th to 17th 2007 on Emergency Preparedness Planning. Here, IUCN personnel participated as resource persons to sensitize CARE staff to environmental issues and had a one-day session about putting down environmental safeguards in Emergency Preparedness Planning. An output of this workshop was a draft environmental checklist for disaster managers and a draft proposal to incorporate impacts of potential disasters into the national EIA process. Draft documents will be circulated to national level professional to get their comments to finalize the documents. Finalized documents will be available by the end of November.

Output 2.2 Field manual produced to guide Protected Areas managers and conservation practitioners in post-disaster coastal ecosystem assessment and restoration

Produce and disseminate field manual on post-disaster coastal ecosystem assessment and restoration

The field manual is nearing completion. In view of its importance, it is proposed that a more thorough field testing of about 1 year is carried out before finalizing the manual.

In Indonesia, MAP built on the resource materials sent by IUCN and added country specific information. The document is in layout and will be produced by October 31.

Production of video documentary (technical panel) as a training material to be part of multi-media CDROM field manual

Footage collected thus far includes an introduction for mangroves, mangrove biodiversity, ecological importance of mangroves, mangrove restoration techniques, successes and failures of mangrove restoration. Additional footage will be taken during the 3 day workshop held from the 16th -18th October, 2007, in Hambantota.

Achievement of milestones

Milestones		Achievement this quarter (end Q3)
Q1	Project planning matrix, workplan and milestones have been developed	Achieved
Q1	Awareness raising materials have been designed for Sri Lanka and Thailand	Achieved
Q2	Synthesis report on lessons learned in mangrove restoration in Sri Lanka and Thailand has been produced	Progressing with Slight Delay
Q2	Project website has been designed	Achieved
Q2	Case studies on lessons learned in Sri Lanka and Thailand have been produced	Achieved
Q3	Capacity-building workshops have been held in Indonesia, Maldives and Sri Lanka	Progressing with one week's delay
Q3	Local language materials have been produced for Indonesia, Maldives, Sri Lanka and Thailand	Progressing as expected
Q3	Draft field manual has been produced	Progressing with slight delay
Q3	Draft field manual has been pilot tested	Delay proposed for more thorough testing
Q4	Field manual has been produced	Delay proposed for more thorough testing
Q4	CD Rom of field manual and other materials has been disseminated	Progressing as expected
Q4	Regional dialogue has been held	Delay proposed in light of additional funding received for more capacity building activities
Q4	Country status reports have been produced for Sri Lanka and Thailand	Progressing as expected

Changes to the workplan

As specified in the OAPN workplan, ELGII was organizing a regional conference to be held by mid November in Colombo Sri Lanka. Its purpose was to provide researchers with a platform to share valuable lessons learned during the post tsunami reconstruction phase, with the goal of increasing the sustainability of coastal zone management and disaster response activities. It is while organizing this conference that information regarding the additional funding support of euro 110,000 was received, which would be used for capacity building activities (e.g., workshops). In lieu of this development, it has been suggested to postpone the regional conference. This way lessons learned from the additional activities can be incorporated to further refine the focus of the conference.

The training workshop on rapid environmental impact assessments and participatory ecorestoration practices being held in Sri Lanka had to be postponed due to scheduling conflicts of the participants. The workshop was held from October 16-18, 2007.

ELG II is currently compiling the information for the field manual. During the research phase many information sources were found. In light of this, a delay has been suggested in order to ensure the production of the most comprehensive and accurate document.

Lessons learned during the reporting period

While carrying out the assessments both the Sri Lankan and Thailand Country offices observed the relatively low level of coordination effort employed by the various NGOs, aid agencies and government departments while carrying out the post tsunami rehabilitation activities. Much of the work was found to have been done on a site-specific basis, therefore it lacks a coordinated approach or an overall landscape approach. Avenues should be identified to increase communication between the different agencies.

As a consequence of not following proper guidelines, some of the rehabilitation efforts have had unintended impacts on the people and the environment. For example in Sri Lanka, most of the green belt restoration projects carried out in the study site (Matara) had not followed basic restoration guidelines. Furthermore, it has been very difficult to obtain clear evidence of the success of environmental rehabilitation efforts because data is of poor quality. For example figures for mangrove restoration are given but without detail about location and without survival rates. Therefore there is a need to promote accurate record keeping and regular monitoring. This will not only allow for the documentation of progress made with the rehabilitation activities, but will help identify instances where the activity is having more of a negative impact than positive, and identify intervention strategies.

Plans for the next quarter

The emphasis during the next quarter would be on:

- The production of local language awareness raising materials for mangrove conservation and management will be disseminated in Indonesia, Thailand and Sri Lanka.
- Finalizing and field testing the field manual
- Using the additional funding more capacity building activities such as workshops will be held in Sri Lanka, the Maldives, Indonesia and Thailand
- Organizing the regional dialogue

The World Conservation Union in Asia

The IUCN Asia region covers 23 countries, stretching from Pakistan in the West to Japan in the East, Indonesia in the South to Mongolia in the North. IUCN maintains offices in Bangladesh, Cambodia, China, Lao PDR, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. The Asia Regional Office is in Bangkok, Thailand.

IUCN's seven regional thematic programmes, known collectively as the Ecosystems and Livelihoods Group (ELG), are based in two clusters: one in Colombo, Sri Lanka (environmental economics, marine and coastal, species conservation), and one in Bangkok, Thailand (environmental law, forests, protected areas, wetlands and water resources).

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