

EuropeAid

**Target Country**

Sri Lanka

**Implementation period**

23 Dec 06 – 31 Dec 2008

**EC co-financing**

665,433.47 €

**Partners**

- EMACE, Sri Lanka
- Nagenahiru Foundation, Sri Lanka
- Fundación Global Nature, Spain
- Crenieo, India

**Area:**

Coastal Zone Management

**Coordinator**

Udo Gattenloehner  
Global Nature Fund  
Fritz-Reichle-Ring 4  
78315 Radolfzell, Germany  
Tel.: +49-7732-9995-80  
Fax: +49-7732-9995-88  
Email:  
gattenloehner@globalnature.org



EUROPEAN  
COMMISSION

## Asia Pro Eco IIB – Post Tsunami

Assisting the rehabilitation and reconstruction of the areas affected by the India Ocean Tsunami in Asia

**Title:** Post Tsunami Restoration of Mangroves, Education & Reestablishment of Livelihoods in Sri Lanka

The project addresses Tsunami affected families in the lake areas of Bolgoda, Maduganga and Madampeganga in Sri Lanka. The activities focus on the restoration of mangrove habitats through the establishment of mangrove nurseries. In total 15 hectares will be rehabilitated. Further goals are the re-establishment of livelihoods of affected families in those regions and environmental education (installation of two environmental education centres) including innovative and cost-effective wastewater treatment technologies.

### 1. Introduction and Project Description

The project aims are the restoration of Tsunami affected areas, long-term environmental education and the re-establishment of livelihoods of people in affected communities. The main target groups are families from poor communities in the lake areas of Bolgoda, Maduganga and Madampe in Sri Lanka. Central goals are to rehabilitate mangrove habitats in order to protect local communities against potential disasters, improve the people's self-reliance, mitigate poverty effects, and increase long-term access of people to sustainable use of natural resources.

Among the main activities are the installation of mangrove nurseries, the re-plantation of damaged mangrove forests and the establishment and operation of regional education centres. The latter serves to educate and inform local people of negative impacts from logging in forested areas.

The project is planned and implemented mainly by two local grassroot NGOs with very close links to various stakeholder groups from the communities involved, such as fishermen families, traditional wetland users such as farmers and people living in the wetland, women groups and handicraft experts, teachers and school children, students, mayors, community leaders and other relevant government authorities, conservation opinion leaders, entrepreneurs such as tourist boat operators. The project is working with Local stakeholder committees consisting of representatives from the schools located in the surrounding wetlands, National Youth Services Council, Head priests of the nearby temples, representatives from lagoon fisher societies, farmers and representation from the other users of the wetland.

Apart of the tangible benefits for the people living in the area such as the creation of new livelihoods, the destruction and degradation of endangered mangrove habitats will be reduced. The project is transferring know-how and skills to the local population in the villages and will help wetland users to use nature resources with less stress for the environment. The education programmes and campaigns will help to make users understand how to maintain the ecosystem for their own benefit.

The project supports the overall reconstruction in the region as all project measures are coordinated with relevant local and central government authorities.

## **2. Description of activities**

### **Mangrove Nursery and Mangrove Re-planting and Restoration**

Three bigger mangrove demonstration nurseries and approx. 20 smaller household nurseries are being established in all three wetlands. During the project approx. 20 hectares of mangroves will be restored and replanted. The mangrove nurseries include small fruit-orchards in order to generate additional income to the communities and to cover at least a part of long-term maintenance costs of the nurseries. The preparation of the nursery beds, shading, filling of planting pots, and replanting will be carried out by the local women and youth who lost their income with the destruction of their livelihoods by the tidal waves of the Tsunami.

### **Building of two Environmental Education Centres (EECs)**

The approach of the EECs is to educate wetland users, especially young people, women and school children living in the surrounding wetlands and to involve them in tangible actions combining "practice & knowledge". The partner organisations conduct "training of trainer programmes" for qualified people with agricultural or biological background (i.e. teachers). The centre will provide basic facilities to accommodate a maximum of 25 people at any time. These facilities include dormitories, kitchen and an Eco-Camping site.

### **Boat Campaign**

A campaign to reduce the pollution caused by gasoline leakages from boats.

### **Model Farms**

The project will introduce and promote sustainable agriculture techniques to selected farmer families.

### **Organic Home Gardens**

This activity addresses two issues of Tsunami affected communities in the lake areas by promoting the long-term economic recovery while protecting and restoring the ecological system in the Tsunami damaged areas. This will be taken as the basis of sustainable farm systems to grow fruits & vegetable plants.

### **Introduction of Solar Lamps**

Solar lamps will be provided to 30 fisher families engaged in prawn catching at night.

### **Provision of Fishing Gear to Wetland Fishermen**

The project will provide fishing nets with a mesh-size that is in accordance with sustainable fishing practices to approx. 50 families whose fishing gear was destroyed by the Tsunami. Selective fishing practices will be promoted.

### **Handicraft Production**

The handicraft production includes the manufacturing of door mats and other household articles made from the coconut husk fibre (coir) and other ornamental articles from reed for approx. 30 families.

### **Sustainable Tourism**

Establishment of local eco-tourism units (environmentally friendly motels and guesthouses) involving 40 families providing sustainable tourism services. A demonstrative eco-lodge will be installed separately.

The implementation on site is coordinated by the two local project partner organisations Nagenahiru Foundation and EMACE in close collaboration and consultation of local experts such as teachers, governmental experts, research institutes, and other opinion leaders representing important stakeholder groups such as women associations.

In the original application it was planned to include the reconstruction of a small number of model houses in the project activities. After an intensive consultation process involving experts from the EU Commission in Sri Lanka we have decided to refrain from building houses for high bureaucratic obstacles against the background of a very small number of houses to be build and secondly increased prices for labour and building material. A solution to demonstrate the innovative Green Filters was to install the Green Filters in the frame of the Environmental Education Centres (EEC). Obtaining suitable plots of land for this building proved to be also very difficult.

Besides administrative difficulties some mangrove nurseries have been affected by heavy rains and storms.

### **3. Results**

By now 18 nurseries have been installed creating new job opportunities and livelihoods for more than 30 families. The replanting of mangroves has been started as well. Concerning the EEC and the model sewage treatment plants (Green Filters) we have allocated the lot of land as well as realised first technical planning. Educational Trainings for school children were carried out in the Interim EECs. New nets and other gear were provided to approx 50 fishermen families. Seminars to avoid unsustainable over-fishing have been carried out in the interim EECs. Solar lamps for night prawn fishing have been tested and are currently provided to fisher families. Demonstration events for 120 fisher families are planned for the following months. Model farms have been started. Machinery for handicraft production as well as training courses for new livelihoods and eco-tourism development were provided to 50 families.

There are clear benefits for the local population living in the area, i.e. with respect to the creation of new livelihoods as well as educational aspects (training on know-how and skills). The project helped very much to intensify existing relationships, i.e. between the project partner organisations as well as to establish new promising relationships to local stakeholders groups and other international organisations and institutions.

#### **4. Lessons Learnt**

The number of partners is appropriate and good. The same is true for the geographical area. The tense political situation in terms of ethnical conflicts has not affected the project too much by now, but is a potential threat and problem, particularly concerning the involvement of foreign partners or governmental agencies. So far no shortcomings can be seen concerning the staff involved. The implantation of a number of activities such as new model houses have proved to be very difficult, as explained earlier. The bureaucratic hurdles with respect to local administrative processes are sometimes very time consuming and have caused delays in building the EECs. The mangrove nurseries are very vulnerable to all kinds of changing conditions (draught, floods, storms, etc.).

The most important factor concerning the successful implantation of the project is the strong involvement of local stakeholder groups from the riparian communities to the wetlands. Hence a major focus was laid on the involvement of potentially disadvantaged stakeholder groups such as poorer 30 families, fishermen families, farmer families and their children as well as women groups.

There have been no major difficulties in achieving local ownership in the project, as the stakeholders see the benefit for themselves.

#### **5. Outreach and dissemination**

The project was presented on various international events (i.e. Naturschutztage Radolfzell 01/2006, Reisepavillon, Hannover 02/2006, Alcan Sustainability Summit Vancouver 02/2006, 4th World Water Forum Mexico 03/2006, DNT Bonn 05/2006, Eco-Tourism Workshop Balaton 09/2006, 11th Living Lakes Conference China 11/2006) as well as public events in Sri Lanka such as the inauguration in Colombo in January 2007. On all major events media representatives were present. A documentation of collected press clippings is available. In addition the project is presented on two bilingual websites [www.globalnature.org/Post-tsunami](http://www.globalnature.org/Post-tsunami) and <http://www.bolgodalakesrilanka.com/>. The approach and results of the project were communicated to other international multipliers (such as GTZ, Mangreen, MAP, Wetlands International, IUCN, UNEP, Ramsar) and national institutions (University, NARA, Ministry of Environment). A number of publications are published at the end of 2006 and in early 2007 and will be presented on the first project conference and workshop from 23 to 26 April 2007 in Sri Lanka.

We have linked the project activities to a GTZ project that is implemented in the same region with a focus on Solar Energy and Energy Saving Light Technology. We have also established contacts and intensive information exchange with other Mangrove rehabilitation projects such as Mangreen in Tamilnadu (India) and MAP in USA and Thailand, Wetlands International in Indonesia as well as other projects in Sri Lanka such as IUCN Sri Lanka and EU Eco Asia funded projects in Sri Lanka such as the project COLEM. On a local scale contacts have been established by EMACE with institutions such as the University of Moratuwa/Colombo, NARA (National Aquatic Research Agency), Ministry of Environment and other NGOs and CBOs. We have tried to contact even more Post Tsunami projects in Sri Lanka, but we have experienced severe problems in obtaining information on non-EC-funded Post-Tsunami activities.

These synergies have a positive impact on the overall results of the project, e.g. contacts to experts outside and inside Sri Lanka help to improve the technical and organisational quality of the project.

Transfer of know-how and lessons learned is a central objective of the project thus the visibility plays a very important role. At all sites of project implementation and project activities such as mangrove nurseries, education centres, handicraft centres etc., information signs and displays can be found with a large indication of the role of the EU Eco Asia programme as the main donor. Cars and other vehicles are also labelled. In all articles and project reports published by GNF in the bilingual GNF newsletter as well as in the magazine DUHwelt (circulation 15.000) the contribution and consulting role of the EU Commission is highlighted.

The project will also reach out to stakeholders not directly involved in the project, mainly fisher and farmer families. The project tries to reach as many stakeholders as possible in other countries with comparable problems.

#### **6. Sustainability**

The project has a sustainable, long-term approach and via the existing network as well as newly established contacts and partnerships a large number of experts is involved in the project in order to evaluate and assess the project on the basis of appropriate sustainability indicators.

The transfer of knowledge to the local stakeholders through training activities, workshops, etc is a central strategy of the project from the beginning. The purpose of the Environmental Education Centres is to educate wetland users, in particular fishermen, farmers and young people living in the vicinity of the wetlands and to involve them in concrete actions with a clear benefit for the local communities.

Within the frame of the project appropriate tools for dissemination, awareness raising and PR are planned such as Workshops, Conferences and Publications (project brochures, guidebooks, exhibitions, video documentary on DVD).



Many regions in the world suffer from very similar degradation of habitats and results can be transferred to other regions in Sri Lanka, other affected areas in South-East Asia bit also to tropical regions in Africa and South-America.

### 7. Recommendations

The "Asia Pro Eco Post-Tsunami Networking Meetings" (the 2006 meeting in Bangkok and the planned meeting in Jakarta) offer excellent possibilities to optimise the dissemination as well as the Cooperation with other tsunami projects and programmes supported by the EU. The cooperation with the local Eco-Asia office in Colombo as well as with the desk officers and counterparts in Brussels has worked excellently so far. The monitoring visit by an external EU auditor at an early stage of our project has helped to identify weaknesses and improve the structure, implementation and outcomes of the project.

### 8. Photos

A group of five families started a small joint business of doormats production by using coconut fibre

