Environmental Leadership & Training Initiative

COURSE REPORT

Community-Based Mangrove Rehabilitation Training

Tigbauan, Iloilo, Philippines
June 17–21, 2013

An event organized by:
Environmental Leadership & Training Initiative (ELTI)
Zoological Society of London (ZSL)
Southeast Asian Fisheries Development Center Aquaculture Department (SEAFDEC/AQD)

Background: Located primarily in tropical and sub-tropical coastal locations, mangrove forests constitute less than 1% of all forest areas worldwide, but play an extremely important role in providing environmental services. Mangroves protect the coast from the destructive power of waves and enhance sediment deposition. They serve as an essential nursery for coastal and offshore fisheries and provide an array of timber and non-timber forest products to local communities. They also sequester and store a large amount of carbon, mitigating the impact of global climate change.

Unfortunately, mangroves have been undervalued worldwide, leading to their conversion and/or degradation through the development of fishponds and shrimp ponds, wood harvesting for fuel wood and charcoal, and other unsustainable forms of coastal development. This loss of mangroves has had a major impact on coastal communities—a point brought home during the Indian Ocean Tsunami of 2004 when communities with intact mangroves were generally less affected than areas where mangroves had been lost.

In the Philippines, the importance of mangroves is increasingly being recognized and efforts are underway to restore mangroves as coastal greenbelts and rehabilitate abandoned fishponds and shrimp ponds. Funding for mangrove rehabilitation is included under the government's six-year National Greening Program (NGP). Peoples' Organizations (POs) affiliated with members of the Rain Forest Restoration Initiative (RFRI) can participate under a special Memorandum of Agreement between the Department of Environment and Natural Resources (DENR) and members of RFRI. ELTI, in collaboration with other members of RFRI, ZSL, and SEAFDEC/AQD, developed this field-based training on mangrove rehabilitation in order to provide technical assistance and prepare the POs to actively engage in mangrove rehabilitation in their own areas, while meeting NGP targets.

Objectives:

- Increase awareness of the importance of mangrove ecosystems in providing environmental services;
- Provide a detailed understanding of the ecology of mangrove ecosystems through field visits to intact mangrove areas and lectures;
- Introduce and develop hands-on rehabilitation techniques, including establishment of nurseries, site- and zone-appropriate planting, and maintenance;
- Showcase successful mangrove rehabilitation sites to better understand the ecological and social factors contributing to these efforts;
- Provide a thorough understanding of community rights and obligations when participating in the NGP; and
- Facilitate the exchange of lessons and experiences among participants.

Training Format: The first day of the training took place at SEAFDEC and revolved around a series of introductory lectures and exercises. After the opening ceremonies, introductions, and a quick tour of the SEAFDEC facilities, Dr. Jurgenne Primavera (ZSL) discussed mangrove biology, ecology, and taxonomy of different mangrove tree species, underlining the importance of zonation of these species when it comes to reforestation activities. Ms. Rona Loma (ZSL) walked the participants through the identification of the different mangrove species with an interactive exercise using identification keys and vegetative samples that were brought into the classroom. Dr. Primavera then followed up with a presentation on the different environmental and economic services that mangrove ecosystems provide to local communities. Mr. Jofel Coching (ZSL) ended the day with an overview of mangrove nursery establishment and germination techniques.

The second day touched upon more technical and socio-political aspects of mangrove rehabilitation. First, Dr. Primavera and Mr. Coching discussed appropriate methods in handling, planting, and maintaining mangrove seedlings. Dr. Primavera and Ms. Josephine Savaris (ZSL) then talked about the establishment of eco-parks as a way to gain long-term support for the conservation of existing mangrove areas. Ms. Femme Penafiel (DENR Region 6) went over the different policies relating to mangrove conservation, rehabilitation, and management, while Ms. Hazel Consunji (ELTI) led a discussion on the NGP and the terms of engagement for RFRI-partner POs. Ms. Savaris concluded the second day with a brief discussion on the role of communities in mangrove rehabilitation and conservation as well as an orientation to the site visits scheduled for the following days.

On day 3, participants boarded a bus early in the morning and headed to the town of Ivisan to learn about the mangrove rehabilitation work of a PO known as "New-Bama." Following a presentation on the formation of the PO, its mangrove rehabilitation efforts, and recent engagement with the NGP, the participants engaged in an exchange of experiences, lessons learned, and best practices with the PO members. The group was then taken to visit some of the community nurseries and planting sites, reviewing the concepts that they learned during the past days. Mr. Coching demonstrated how to collect and bag wildings from a nearby mangrove forest patch and how to properly conduct plantings in the field.

For day 4 of the training, the group travelled to another town, Ajuy, where the "Pedada" PO, in collaboration with ZSL and the local government unit (LGU), established a boardwalk and eco-park around its intact mangrove forest area and conducted an experimental mangrove rehabilitation project in a heavily eroded coastal site. Members of the PO discussed in detail the process that they underwent, and are still undergoing, with their initiatives. The participants were then led to the PO's planting sites, seeing firsthand the difficulties of implementing a mangrove rehabilitation project on the ground and, at the same time, witnessing innovative local practices at work.

The last day of the training started with a small group discussion on the key lessons learned during the field trips and how the participants plan to apply these when they return home. In time for the day's low tide, the group

then travelled to the town of Leganesto to visit a LGU-led 9.5-hectare mangrove rehabilitation demonstration site which used to be an abandoned fishpond. Mr. Wilson Batislaon (Leganes LGU) and Mr. Coching discussed the activities undertaken by the LGU, together with ZSL, since the start of the project in 2009 and gave the group a tour of the site. The last stop was in the town of Dumangas to see another LGU initiative to establish a greenbelt facing the sea. The training officially concluded with a formal closing ceremony at the Leganes City Hall, which was graced by the Mayor who had initiated the successful mangrove rehabilitation project the group had visited earlier in the day.

Participants: Twenty-two representatives from different POs from the islands of Luzon, Palawan, and Samar participated in the 5-day training. All of the POs are RFRI member partners and have signified their willingness to participate in NGP-supported mangrove rehabilitation.

Outcome & Follow-up: The trainings prepared the participants to engage with mangrove rehabilitation as part of the NGP. ELTI will continue to work with the other members of RFRI and ZSL to provide support to the participants as they begin to develop their mangrove rehabilitation sites. A second training for participants from other parts of the Philippines is tentatively being planned.

This event was possible thanks to Arcadia Fund, whose Environmental Conservation grants support programmes that protect and enhance biodiversity, and provide field training and academic research.