Environmental Leadership & Training Initiative

COURSE REPORT

RAINFORESTATION TRAINING FOR CLIMATE-RESILIENT RECOVERY

Palapag, Northern Samar, Philippines
November 20-22, 2019

A course organized by:
Environmental Leadership & Training Initiative (ELTI)
Institute of Tropical Ecology & Environmental Management of Visayas State University (VSU-ITEEM)
Municipal Local Government of Palapag, Northern Samar, Philippines

Training participants with resource people

Background: On November 8, 2013, one of the strongest tropical cyclones ever recorded hit central Philippines. Super Typhoon Haiyan, locally known as Yolanda, wreaked havoc in Samar and Leyte provinces, causing widespread damage and over 6,300 casualties. Local and international relief operations immediately focused their efforts on providing the basic needs of the 4.1 million people displaced by the disaster, such as temporary shelters, clean drinking water, food assistance, medical supplies, and sanitation facilities. Rehabilitation efforts followed with the rebuilding of homes, community infrastructures, and livelihoods.

One of the main sources of income in this region is coconut production. In many areas of Northern Samar, such as the Municipality of Palapag and Gamay, more than 50% of the land area is devoted to coconut plantations. During Super Typhoon Yolanda, more than 33 million coconut trees were damaged. This greatly impacted

Participants during hands-on training activities

many coconut farmers who are already among the poorest and most vulnerable in the country. Some of the farmers have replanted their lands with seedlings provided by aid groups and the national coconut agency, however, they need to wait six to eight years for the trees to become productive. Other farmers have sold their land due to a lack of resources available to rehabilitate the land.

Rehabilitating natural ecosystems is crucial in post-disaster recovery to support human livelihoods and sustain the delivery of ecosystem goods and services, including a steady supply of water and protection from future extreme weather events. This is an integral part of a climate-resilient recovery strategy, where communities are not only provided with assistance to recover from climate change events but are also equipped to deal with future disasters better. Many communities, however, have received little support for this purpose, especially those areas that did not suffer from the highest level of devastation. Moreover, government departments and aid agencies have moved on to address more pressing and immediate issues of concern, including areas hit by subsequent typhoons.

Realizing the need to address this gap in rehabilitation efforts, ELTI and ITEEM-VSU have been conducting a series of site-based trainings in Samar and Leyte. The training series aims to rehabilitate damaged watershed areas and augment the current farming systems in the surrounding areas using the Rainforestation approach – a participatory, native species-based reforestation/agro-forestry strategy developed by ITEEM-VSU. This particular training, which was organized in collaboration with the Municipality of Palapag, focused on increasing the capacity of local farmers and government staff to introduce a farming system that's more resilient and sustainable.

Objectives: The course was designed to develop and strengthen the capabilities of local government authorities and other local stakeholders to design and implement Rainforestation farms in Northern Samar. The course was structured to provide participants with a solid understanding of the importance and value of forest ecosystems and restoration activities, the theory and principles underlying Rainforestation, the process and practice of establishing a Rainforestation project, as well as the concept of Ecosystem-based Disaster Risk Reduction as a measure to mitigate climate change. Another goal of this course was to develop Rainforestation demonstration areas in the Municipalities of Palapag and Gamay, which could be used to convince more coconut farmers and land owners to integrate native trees in their respective farms.

Participants constructing a low-cost nursery

Participants installing a recovery chamber

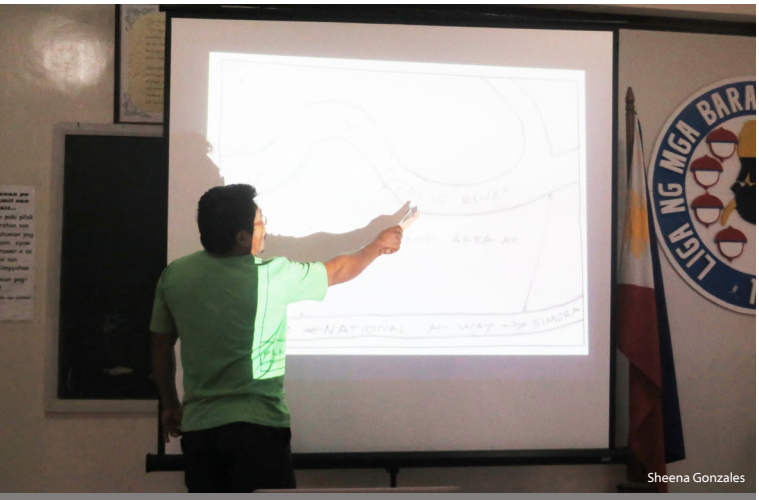
Demonstration of lay-outing

Program

Day 1

The training started with a formal opening ceremony, which included a prayer, the Philippine National Anthem, an introduction of the participants, and levelling of expectations by Ms. Ester Batangan (Monitoring & Evaluation specialist from the United Nations Development Programme-Global Environmental Facility). Ms. Lyra Chu (ELTI Philippines Coordinator) then provided an overview of the training, followed by Ms. Madel Maarat (ELTI Research Assistant giving a lecture on Philippine biodiversity that highlighted different flora and fauna found in the Philippines and the threats to the country's biodiversity. Sheena Gonzales (ELTI Research Assistant) next gave a talk, "Linking Climate Change to Disaster Risk Reduction," which emphasized the effects of climate change on people's lives, particularly how the changing rainfall pattern in the Philippines heavily affects the agriculture sector. Mr. Archie Romo (ITEEM Training Assistant) then provided an introduction to disaster risk reduction and geo-spatial planning tools which highlighted the importance of determining hazard-prone areas in the community. In the afternoon, Ms. Chu provided an introduction to Rainforestation which explained the history, objectives, establishment process, and benefits of the approach. She also presented a list of native trees that participants can use for special purposes (e.g., landslide mitigation, windbreaks, sediment retention, etc.) and discussed best practices and success stories of Rainforestation adopters in the Philippines. As the last event of the afternoon, Mr. Paolo Longatang (ITEEM Research Aide) gave a lecture on nursery establishment and propagation techniques, which outlined nursery management, fruiting phenology, seed treatment, collection of wildlings, and the development of a recovery chamber.

Participants planting native seedlings at the demonstration site in Palapag



Participant presenting his farm plan during the training

Participant receiving planting materials after farm plan presentation

Day 2

The second day of the training was held at the proposed demonstration site in Palapag. Mr. Fidelito Almeroda (ITEEM Agriculture Technician) led the participants in hands-on activities on nursery and site establishment. Participants first learned how to construct a low-cost nursery. They then prepared potting mix and filled up polybags for transplanting the wildlings (i.e., seedlings taken from the natural forest or other areas). Wildlings of *Artocarpus blancoi* were then transplanted to the polybags and the recovery chamber was installed. Afterwards, participants were taught how to properly lay out a site for the integration of trees and other agricultural crops, like cacao, into their coconut farms. Participants then engaged in a tree planting activity in the area, during which over 600 seedlings were planted amidst coconuts. In the afternoon, the organizers planted additional seedlings in a small open area within the demonstration site so that the small patch would not be covered over with cogon grass. Later in the afternoon, ELTI and ITEEM-VSU staff had a meeting with the landowner of the demonstration site, who is also a participant of the training, to discuss the maintenance and protection of the planted seedlings.

Day 3

In the morning of the last day of the training, participants presented their proposed farm plans, after which resource speakers provided comments and recommendations to improve the plans. Due to high participant interest in adopting Rainforestation (specifically integrating native trees into their coconut plantations), the organizers provided seedlings to the participants to start-off their Rainforestation farms. For the closing session, Ms. Chu presented ELTI's Leadership Program. Time was also allocated for all participants to share their learning experience during the training. Ms. Chu then distributed certificates to the participants and gave a closing statement.

Demonstration site in Gamay, Northern Samar

Participants:
The training was attended by 34 participants from Gamay and Palapag, most of whom represented the local government, while the others were teachers, farmers, and landowners.

Follow-up:
ELTI provided 3,500 seedlings of mixed timber and fruit trees (see appendix for the list of species) for the establishment of the Rainforestation demonstration site in Palapag and Gamay. Out of the total number of seedlings, 1,000 were planted in Gamay, 700 were planted in Palapag, and the rest were distributed to the training participants so that they could start the establishment of their own Rainforestation farms. ELTI and ITEEM-VSU will continue to follow-up with the participants regarding their planted seedlings.

List of species:
Dalindingan *(Hopea foxworthyi)*
Marang *(Litsea perottetti)*
Cacao *(Theobroma cacao)*
Bagtikan *(Parashorea malaanonan)*
Tanguile *(Shorea polysperma)*
Toog *(Petersianthus quadrialatus)*
Narra *(Pterocarpus indicus)*
Lanipga *(Toona calantas)*
Narig *(Vatica mangachapoi)*
Mangachapoi *(Hopea acuminata)*
Yakal yamban *(Shorea falciferoides)*
Apitong *(Dipterocarpus grandiflorus)*
Mangasinorro *(Shorea assamica)*
Palosapis *(Anisoptera thurifera)*
Yakal saplungan *(Hopea plagata)*
White lauan *(Shorea contorta)*
Apatot *(Morinda citrifolia)*
Guisok-guisok *(Hopea philippinensis)*
Dao *(Dracontomelon dao)*
Yakal malibato *(Shorea malibato)*
Mayapis *(Shorea palosapis)*

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