

COURSE REPORT

RAINFORESTATION TRAINING FOR CLIMATE-RESILIENT RECOVERY

October 10-12, 2018

Guiuan, Eastern Samar, Philippines

A course organized by:

Environmental Leadership & Training Initiative (ELTI)

Institute of Tropical Ecology and Environmental Management of Visayas State University (ITEEM-VSU)

Municipal Local Government of Guiuan, Eastern Samar, Philippines



Coconut trees in Guiuan's watershed damaged during Typhoon Yolanda.

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 Eastern 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.

ELTI is an initiative of: **Yale SCHOOL OF FORESTRY & ENVIRONMENTAL STUDIES**



Participants conducting a site assessment exercise at Barangay Gahoy.

One of the main sources of income in this region is coconut production. Indeed, Eastern Samar and Leyte are the 2nd highest producing region in the country with almost 270,000 hectares of coconut plantations between the two provinces. The typhoon is estimated to have damaged 33 million coconut trees, with approximately 13 million trees having been completely destroyed. This loss has greatly impacted over a million 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 still 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 Eastern Samar and Leyte. The training series aims to rehabilitate damaged watershed areas and augment the current farming system 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 Guiuan, focuses on assisting five local barangay units located within Guiuan's watershed.

Objectives: The course was designed to develop and strengthen the capabilities of local government authorities and other local stakeholders to design, implement, and monitor Rainforestation initiatives in rehabilitating the watershed in Guiuan, Eastern 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, and the process and practice of establishing a Rainforestation project.

Course Format: The training was held at Gwen's Restaurant in Guiuan, Eastern Samar. It was chosen as the site of the training because it is easily accessible for the participants from five barangays located in Guiuan's watershed area.



Participants transplanting wildings into polybags.



Participants installing a recovery chamber.

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 a welcome address given by Mr. Philip G. Aranas from the Office of the Municipal Mayor. The program then continued with a training overview and lecture on Philippine biodiversity by Ms. Lyra Chu (ELTI Philippines Program Assistant) that highlighted different flora and fauna found in the Philippines and the threats to the country's biodiversity. Ms. Chu also provided an introduction to Rainforestation which explained the history, objectives, establishment process, and benefits of the approach. In the afternoon, Sir Jovino L. Padullo (Associate Professor at Eastern Samar State University, Salcedo Campus) gave a lecture on Rainforestation farming and conservation agriculture, which discussed the problems with monocultures and described several different approaches to integrating economically valuable crops, like abaca and cacao, with local forest trees. In his discussion, he also emphasized that there is a need to balance ecology and economy. Later in the afternoon, the participants conducted a field assessment at the proposed planting site in Barangay Gahoy as part of site preparation. The participants learned how to collect data on the presence/absence of disturbances (e.g., fire, livestock, etc), and the number of existing trees and other sources of natural regeneration.

Day 2

The second day of the training started with a recap of the topics and activities done on the first day, followed by a farm planning workshop, during which the participants were grouped by barangay and then developed spatial plans to outline how and where they would help rehabilitate the watershed. Some participants, who wanted to apply Rainforestation to their private lands, also presented their own individual farm plans. The participants then presented their plans to the resource speakers and



Participants planting native seedlings at Barangay Gahoy.



Participants celebrating the completion of the tree planting.

staff from the municipal government for comments and feedback. Later in the afternoon, Engr. Jimmy Pogosa (Faculty at ITEEM-VSU) gave a presentation about nursery establishment and propagation techniques during which he discussed about nursery management, fruiting phenology, seed treatment, collection of wildlings, and the development of a recovery chamber. This was followed by a lecture given by Ms. Angelita Orias (Faculty at ITEEM-VSU), on the best practices and success stories of Rainforestation adopters in the Philippines. Day 2 concluded with a presentation from Mr. Recti Melquiades of the Municipal Government of Guilan, who shared information on Guilan's watershed and why it's important to rehabilitate it.

Day 3

The last day of the training consisted of a tree planting activity and a site visit to a Rainforestation site at Salcedo. Ms. Orias demonstrated how site preparation is usually done and then explained the best way to plant seedlings. Together with the training organizers, the participants then planted 55 seedlings in the demonstration site at Barangay Gahoy. Afterwards, Engr. Jimmy Pogosa led a hands-on activities geared towards teaching participants how to start their own nursery. Participants first learned how to prepare potting mixes and then prepared polybags for transplanting wildlings (i.e., seedlings taken from the natural forest or other areas). Participants also learned how to construct a temporary and low-cost nursery. Wildlings of *Streculia* sp., which had previously been collected from the VSU Rainforestation site, were then transplanted to the polybags and installed in a recovery chamber. In the afternoon, everyone went to the Farmers Entrepreneur Association (FEA) in Salcedo, where Mr. Luis Bayarong, Jr. (President of FEA) shared the FEA's experience establishing and maintaining a Rainforestation site. For the closing session, participants were given an opportunity to share their thoughts and experience during the training. Ms. Chu then distributed certificates to the participants and gave a closing statement.



Training participants and resource people.

Participants:

The training was attended by 31 participants, most of whom represented the local offices of the five local barangay (i.e., Barangay Hagna, Surok, Kantahay, Bagua, and Gahoy). The remaining participants came from the Municipal Government of Guiuan.

Follow-up:

ELTI provided 4,000 seedlings (see appendix for the list of species) to jump start watershed rehabilitation in Guiuan. Each barangay was given more than 600 assorted native seedlings to be planted in their respective areas. ELTI and ITEEM-VSU will continue to follow-up with the participants regarding their planted seedlings.

Appendix:

List of species:

Anagasi (*Leucosyke capitellata*)
Antipolo (*Artocarpus blancoi*)
Bagtikan (*Parashorea malaanonan*)
Balobo (*Diplodiscus paniculatus*)
Bitanghol (*Calophyllum blancoi*)
Kalumpit (*Terminalia microcarpa*)
Manggasinoro (*Shorea assamica*)
Molave (*Vitex parviflora*)
Narra (*Pterocarpus indicus*)
Subiang (*Bridelia insulana*)
Talisay (*Terminalia catappa*)
Yakal Saplungan (*Hopea plagata*)

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