

COURSE REPORT

RAINFORESTATION TRAINING FOR CLIMATE-RESILIENT RECOVERY

December 13-15, 2018
Villaba, Leyte, Philippines

A course organized by:
Environmental Leadership & Training Initiative (ELTI)
Institute of Tropical Ecology and Environmental Management of Visayas State University (ITEEM-VSU)
Municipal Government of Villaba, Leyte



Participants and resource speakers during the Rainforestation training in Villaba, Leyte.

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 particularly to Eastern Samar and Leyte provinces, resulting in casualties and damages by the millions. International and local aid immediately focused on relief operations to provide the basic needs of the 4.1 million people displaced by the natural disaster, such as relocation and temporary shelters, clean drinking water, food assistance, medical supplies, and sanitation facilities. Rehabilitation efforts followed with the rebuilding of homes, community infrastructures, and livelihood.

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



Rainforestation demonstration site established in Barangay Cabunga-an, Villaba, Leyte.

With almost 270,000 hectares of coconut plantations just between the two provinces, Eastern Samar and Leyte is the 2nd highest coconut-producing region in the country. The typhoon had damaged 33 million coconut trees overall, with an estimated 13 million totally destroyed in Eastern Samar and Leyte. This 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 to 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 in areas that did not suffer from the highest level of devastation. Moreover, government department 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 are 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 was organized in collaboration with the Municipal Government of Villaba, Leyte and VSU's satellite campus in the area.

Objectives: This course was designed to develop and strengthen the capabilities of local government offices (Municipal Agriculture Office, Disaster Risk Reduction Management Office, Municipal Environment and Natural Resources Office, etc.) and other local stakeholders to develop, implement, and monitor Rainforestation initiatives in Villaba, Leyte. It 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 site.

Course Format: VSU's Satellite Campus in Villaba, Leyte, was chosen as the primary training venue since a Rainforestation demonstration site for watershed rehabilitation would be established within the campus as an output of the training. Field training also took place in Barangay Cabunga-an for a Rainforestation demonstration site to be established for an individual farmer.



Farm plan presentation of participant on establishing a Rainforestation site.



Participants conducting layouting and staking during the training fieldwork.



Dr. Marlito Bande demonstrating proper planting to the participants.

Program

Day 1

The training started with a formal opening, which included a prayer, singing of the Philippine National Anthem, and the introduction of participants. It was followed by a welcome address given by Dr. Daisy Capon (Head of the Research, Development, and Extension of VSU-Villaba Campus) and an inspirational message from Prof. Efren Saz (Director of VSU- Research, Development, and Extension). Ms. Lyra Chu (ELTI Philippines Program Assistant) then gave a lecture on Philippine biodiversity, which highlighted the different flora and fauna found in the Philippines and the threats to biodiversity in the country and emphasized the importance of using Philippine native trees for climate change mitigation and adaptation. Afterwards, Ms. Angelita Orias (ITEEM-VSU faculty) presented an introduction to Rainforestation, discussing the drivers of deforestation and sharing the history of how Rainforestation was conceptualized, as well as its objectives and benefits. In addition, participants were given an overview of the different activities in establishing a Rainforestation site as well as the different typologies of Rainforestation.

After lunch, Dr. Marlito Bande (Director of ITEEM-VSU) gave a presentation called "Native Trees as an Alternative Option of Agroforestry Systems in the Philippine Uplands" which highlighted challenges in the tropical uplands (e.g., soil quality, inappropriate farming practices, climate change, etc.) and described several different approaches to integrating economically valuable crops, like abaca and cacao, with local forest trees. Later in the afternoon, Prof. Saz gave an overview of a follow-up training on "Climate Change and Disaster Risk Reduction and Management" to be conducted by VSU in 2019 through the Yolanda Recovery and Rehabilitation Program (YRRP); he also talked about the expectations and roles of the participants and future partners of the project.



Participants partaking in the site establishment in Barangay Cabunga-an.



Participants planting native seedlings in Barangay Cabunga-an.



Participants planting native seedlings at the VSU-Villaba campus.

Day 2

The second day started with a lecture on nursery establishment and propagation techniques given by Engr. Jimmy Pogosa (ITEEM-VSU faculty) where details about nursery establishment, fruiting phenology, seed treatment, collection of wildlings, and the development of a recovery chamber were discussed. Participants then presented individual farm plans to develop their unutilized private lands into a Rainforestation site in order to get comments and recommendations from the resource speakers.

The second day ended with fieldwork on site establishment in the proposed demonstration site within the VSU-Villaba campus. There Dr. Bande discussed the activities done when developing a watershed rehabilitation site with native species and demonstrated the proper way of planting. The organizers and participants then planted 1,960 seedlings in the Villaba campus site.

Day 3

The last day of the training was held in Barangay Cabunga-an, Villaba to develop the unutilized land of a private individual into a Rainforestation site. Dr. Bande gave a short presentation on how to conduct site preparations in an open area before demonstrating how to do layout, staking, and planting. Training organizers and participants then planted more than 1,600 seedlings at the site.

After lunch, a short session was conducted for participants to share their thoughts and experiences during the training. Ms. Chu then gave a closing statement before distributing certificates to the participants.

Participants:

The training was attended by 41 individuals from Villaba, Leyte. The majority of the participants were from the Local Government Unit, but there were also representatives from Farmer's associations and the academe.

Follow-up:

ELTI has allotted 440 seedlings as replacements for seedlings planted in the two sites in Villaba, Leyte. Through VSU's YRRP project, the participants will also visit three Rainforestation sites in Baybay City, Leyte on December 20, 2018.

Appendix:**List of species:**

Almon (*Shorea almon*)
Antipolo (*Artocarpus blancoi*)
Anilaw (*Colona serratifolia*)
Anislag (*Securinega flexuosa*)
Anabiong (*Trema orientalis*)
Bagtikan (*Parashorea malaanonan*)
Bahai (*Ormosia calavensis*)
Banai-banai (*Radermachera pinnata*)
Binunga (*Macaranga tanarius*)
Dao (*Dracontomelon dao*)
Dita (*Alstonia scholaris*)
Gisok-gisok (*Hopea philippinensis*)
Hairy leaf Apitong (*Dipterocarpus philippinensis*)
Hagakhak (*Dipterocarpus validus*)
Igyo (*Dysoxylum gaudichaudianum*)
Kamagong (*Diospyros blancoi*)
Kalumpit (*Terminalia microcarpa*)
Manggasinoro (*Shorea assamica*)
Manggachapui (*Hopea acuminata*)
Molave (*Vitex paviflora*)
Narra (*Pterocarpus indicus*)
Narig (*Vatica mangachapoi*)
Palosapis (*Anisoptera thurifera*)
Red Lauan (*Shorea negrosensis*)
Subiang (*Bridelia insulana*)
Tanguile (*Shorea polysperma*)
Talisay (*Terminalia catappa*)
White lauan (*Shorea contorta*)
Yakal (*Shorea astylosa*)
Yakal kaliot (*Hopea malibato*)
Yakal malibato (*Shorea malibato*)
Yakal saplungan (*Hopea plagata*)
Yakal yamban (*Shorea faliciferoides*)

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