

COURSE REPORT

COMMUNITY-BASED RAINFORESTATION TRAINING

August 30 - September 1, 2018
Baybay City, Leyte, Philippines

A course organized by:

Environmental Leadership & Training Initiative (ELTI)

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

Department of Liberal Arts and Behavioral Sciences of Visayas State University (DLABS-VSU)



Background: Rainforestation is an agroforestry approach developed in the early 1990s by ITEEM-VSU in collaboration with the German Agency for Technical Cooperation (GTZ, now GIZ). Rainforestation uses mixtures of native forest tree species, fruit trees, and agricultural crops to rehabilitate degraded land, restore key ecosystem services, and provide alternative sources of livelihood. Many private individuals have reached out to ELTI and ITEEM-VSU to be trained in Rainforestation techniques so that they can utilize their unused and unproductive land.

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



Participants during the Rainforestation site visit to Barangay Patag.

DLABS-VSU, headed by Dr. Guinaldo Fernandez, Jr., has formed a partnership with ITEEM-VSU to conduct research on the social aspects of Rainforestation. To better understand Rainforestation, DLABS faculty members requested an orientation training. Dr. Fernandez, who is an alumnus of previous Rainforestation trainings and often serves as a resource person, offered the use of his land as a demonstration site for this training and future community outreach in Baybay City, Leyte. Other DLABS faculty members are interested in developing Rainforestation sites as well.

Objectives:

The three-day training was designed to strengthen the capabilities of the participants to design, implement, and monitor Rainforestation sites. The objectives of the training were to:

- provide an orientation to the concept of Rainforestation;
- demonstrate the techniques needed to implement Rainforestation, ranging from wildling collection to the development of a temporary nursery;
- assist participants in the development of their own individual farm plans; and
- involve participants in the enhancement of a Rainforestation demonstration area as a learning site for potential adopters.

Course Format: The training was held at Visayas State University (VSU) in Baybay City, Leyte. The location allowed the participants to easily visit three Rainforestation demonstration sites located near the campus.



Participant presenting her Rainforestation farm plan.



Demonstration of seed propagation of native species.



Dr. Marlito Bande showing the growth performance of native trees and abaca.

Program

Day 1

The training started with a formal opening program, including a prayer, the Philippines national anthem, an introduction of participants, and a welcome message by Dr. Fernandez. Ms. Lyra Chu (ELTI Philippines Program Assistant) then gave a presentation on Philippine biodiversity which highlighted the status of the Philippines as a biodiversity hotspot, outlined the 12 primary forest formations found throughout the country, discussed the economic value of the ecosystem services provided by Philippine forests, and emphasized the use of Philippine native trees for climate change mitigation and adaptation. Afterwards, Dr. Fernandez discussed the importance of sustainable environmental management in avoiding natural resource conflicts. Ms. Angelita Orias (VSU-ITEEM Lecturer) then gave a presentation outlining the drivers of deforestation, the origins and main objectives of Rainforestation, and the process of Rainforestation site establishment. She also provided some success stories of Rainforestation adopters.

After lunch, Dr. Marlito Bande (ITEEM-VSU Director) gave a presentation, "Rainforestation Farming: Conservation Agriculture with Native Trees as an Alternative Option of Agroforestry Systems in the Philippine Uplands," which highlighted challenges of farming 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. Engr. Jimmy Pogosa (ITEEM-VSU Lecturer) then covered nursery establishment, fruiting phenology, seed treatment, collection of wildlings, and the development of a recovery chamber. Afterwards, Dr. Bande shared the results of research on the propagation of native species conducted by ITEEM-VSU. Participants then broke into small groups to develop their individual Rainforestation farm plans and present them to the resource speakers for feedback. The first day of the



Participants installing a recovery chamber for transplanted wildings.



Participant planting native seedlings at the Rainforestation demonstration site in Barangay Kambonggan.

training ended with an inspirational message delivered by Dr. Efren Saz (VSU Director for Extension).

Day 2

The second day of the training started with visits to two Rainforestation demonstration sites. Participants first traveled to Barangay Marcos to see a Rainforestation agroforestry site established on private land by a former VSU faculty member. At the second site, they learned about the development of a Rainforestation site developed on private land in Barangay Patag, which is managed by a farmer's association. Upon returning to VSU after the site visits, Ms. Chu gave a presentation about the ELTI Leadership Program.

Following lunch, the participants went to the ITEEM-VSU nursery area to learn more about research projects being conducted by the Institute, as well as to go on a tour of an agro-ecological demonstration site to see options for integrating high-value crops with native trees, and visit the first Rainforestation demonstration site within the VSU Nature Park. A demonstration on how to harvest abaca was also done after the tour at the nursery area for participants who were interested in integrating abaca into their Rainforestation site.

Day 3

The third and final day of the training took place at an upland site in Barangay Kambonggan, where Dr. Fernandez's family provided two hectares of their private land for development of a Rainforestation demonstration area. The participants were taught how to lay out the site and plant trees. They then proceeded to plant four species of native tree seedlings (see Appendix) in the 0.6 hectares area. Afterwards, the participants visited an adjacent area of the same site, where Forester Hernando Mondal (VSU College of Forestry & Environmental Science Faculty Member) provided an introduction to an ongoing research project on insect herbivory. Participants completed a course evaluation before listening to a closing message by Dr. Fernandez.



Group photo of Community-Based Rainforestation Training participants.

Participants:

The training was attended by 20 participants. The majority of the participants were DLABS-VSU faculty members who are involved in research on the social aspect of Rainforestation. Several additional participants from Luzon and Negros, who had previously contacted ELTI and ITEEM-VSU about attending a training, were invited as well.

Follow-up:

ELTI and ITEEM-VSU will continue to work with training participants to establish their individual Rainforestation sites and provide planting materials (if needed). Dr. Fernandez has also requested and received ELTI Leadership Program support for the acquisition of additional seedlings to further develop his site.

Appendix: Tree Species Planted in Barangay Kambonggan

Species	Number
Almon (<i>Shorea almon</i>)	25
Bagtikan (<i>Parashorea malaanonan</i>)	25
Yakal Malibato (<i>Shorea malibato</i>)	25
Yakal Saplungan (<i>Hopea plagata</i>)	25
TOTAL	100

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.