

**COURSE REPORT**

**RAINFORESTATION TRAINING  
OF TRAINERS**

Visayas State University, Baybay City, Leyte, Philippines  
April 22-26, 2019

A course organized by:  
Environmental Leadership & Training Initiative (ELTI),  
Institute of Tropical Ecology & Environmental Management of Visayas State University (VSU-ITEEM),  
World Wildlife Fund-Myanmar (WWF-Myanmar), and  
Kawthoolei Forestry Department (KFD)



Participants with ELTI and ITEEM resource persons and facilitators.

**Background:** Myanmar relies heavily on the extraction of its forest resources to boost its economy. In recent years, operations in the natural resources sector have become more intensive, resulting in the widespread loss of biodiversity and key ecosystem services. Much of the deforestation and forest degradation has targeted areas controlled by Myanmar's ethnic minorities. Realizing the need to avert this ongoing trend, WWF-Myanmar and the KFD have been working together to conserve and restore environmentally degraded areas in the Southeastern region of the country bordering Thailand. This area is controlled by the

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Participants visiting the Rainforestation demonstration site at VSU.

Karen National Union (KNU), which engaged in an armed struggle against the Myanmar government until a peace deal was reached in 2012.

In early 2018, a representative from WWF-Myanmar paid a site visit to Visayas State University (VSU) to learn about Rainforestation. VSU, in collaboration with the German Agency for Technical Cooperation (formerly GTZ, now GIZ) developed Rainforestation in the 1990s as an agroforestry system which uses native species to rehabilitate degraded landscapes while providing forest-dependent communities with a more sustainable source of livelihood. Over time, Rainforestation has been refined into a cost-effective and widely applicable strategy for reforestation.

Based on that initial site visit, WWF-Myanmar requested that VSU and ELTI conduct a training for its own staff, as well as KFD's, which manages the forest in KNU controlled areas. The five-day training of trainers was held at VSU in Baybay City, Leyte. Site visits during the training were conducted at Rainforestation sites in Baybay City, Inopacan, and Cabucgayan.

### **Objectives:**

The specific aims of this training course were as follows:

1. To provide participants with fundamental knowledge about forest restoration;
2. To demonstrate different techniques and approaches to forest restoration;
3. To teach the process for implementing Assisted Natural Regeneration (ANR) for forest restoration through field exercises;
4. To provide a solid understanding of the theory and principles underlying Rainforestation and its application to various social and ecological contexts;
5. To teach the process and practice of establishing a Rainforestation site and native species nursery through hands-on, experiential learning;
6. To showcase different restoration projects on Leyte and Biliran Island and interact with implementers and community members involved in the projects.





Participants touring the Rainforestation research site in Inopacan, Leyte.



Participant during the field exercise on grass pressing.



Participants collecting wildlings.

## Program

### Day 1

The course started with an opening ceremony during which Ms. Lyra Chu, ELTI Philippines Program Coordinator, gave an overview of the program and rationale for the training. This was followed by welcome remarks given by Dr. David Neidel, ELTI Asia Program Advisor, and an inspirational message from Professor Efren Saz, VSU Director for Extension. All of the participants, speakers, and facilitators then introduced themselves and the participants were given an opportunity to share background information about the challenges they face in conducting forest restoration in Myanmar. Ms. Lyra Chu then started the training proper with an introductory lecture on forest restoration which highlighted the role of forests in biodiversity conservation, climate change mitigation, and restoring key ecosystem services. Afterwards, Ms. Angelita Orias, ITEEM Instructor, discussed the concept and history of Rainforestation, outlining the history of forest loss in the Philippines, the limitations of conventional reforestation approaches, and how Rainforestation was conceptualized. The last lecture for Day 1 was given by Dr. Marlito Bande, Director of ITEEM, on the dissemination of Rainforestation in the Philippines, during which he discussed the social and technical processes of establishing a Rainforestation site and highlighted the ecological and social benefits of Rainforestation. To give the participants a better sense of the approach, the group then visited the Rainforestation demonstration site of the CIENDA San Vicente Farmers Association (CSVFA) in Barangay Gabas where they interacted with community members to learn more about how the community implemented and managed their restoration project. The participants also visited CSVFA's one hectare demonstration site, which is intended for timber production.

### Day 2

The second day of the training was held at the Rainforestation research site in Sitio Batuan, Inopacan, Leyte. The program started with a lecture by Dr. Neidel on different restoration strategies, during which he emphasized the importance of site protection and





Paolo Longatang

Participants transplanting the wildlings in preparation for the installation of the recovery chamber.



Paolo Longatang

Dr. Bande showing the growth performance of native forest trees with abaca at the ITEEM Agro-Ecological area.



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Participants and training facilitators with community leaders and DSWD staff in Cabucgayan, Biliran.

underscored that there is no single best restoration strategy for all circumstances. This was followed by presentations on research currently being conducted by ITEEM in the area. First, Dr. Bande presented a study on the ectomycorrhizal infection to dipterocarp seedlings and then a study on the performance of the dipterocarps under different nutrient treatments. Ms. Sheena Gonzales, an ELTI Science Research Assistant, described in more detail the research protocol used for the mycorrhizae study and the surprise finding of endomycorrhizal infection in some dipterocarps as well. Lastly, Ms. Orias shared some key results of a species combination study and site condition matching of early successional species. In the afternoon, the participants toured around the 7-hectare research site and saw the growth performance of several dipterocarp species in different study areas. These trees showed that the conventional wisdom about dipterocarps not performing well in open conditions is not always true. Afterwards, the participants were guided in a fieldwork exercise through which they learned how to conduct a rapid site assessment and learned ANR techniques (i.e., identification of regenerants, staking, ring weeding, grass pressing, and mulching). Day 2 ended with a demonstration on how to conduct a biophysical assessment and how to properly collect a soil sample.

### Day 3

On the third day of training, the participants first visited a Rainforestation demonstration farm intended for micro-watershed rehabilitation in Barangay Marcos, where they discussed the implementation strategy with the owner of the site. Next, Ms. Orias led the participants on a tour of the ITEEM Nursery Area at VSU. The participants first stopped by the Rainforestation Knowledge Center and then visited the screen house area to learn more about ongoing research being conducted by ITEEM. The group also went to the first Rainforestation demonstration site, which was developed in 1991 and intended for biodiversity conservation. Lastly, the participants went to the Agro-Ecological site where they saw the integration of forest trees with fruit trees and some high-value crops. During this visit, Ms. Kleer Galgo, ITEEM graduate teaching assistant, also discussed the results of a study on the herbivory of dipterocarp trees



where she explained that not all insects that feed on the trees are harmful. In the afternoon, the participants had a hands-on exercise harvesting abaca, mixing potting medium, and placing the potting mix in polybags. Afterwards, Mr. Fedil Almeroda, ITEEM Research Aide, instructed the participants on how to propagate seeds, collect wildings, prepare a recovery chamber, transplant wildings to the polybags, and inoculate the seedlings with mycorrhizae. The day ended with a short lecture on how to process the results of the rapid site assessment (conducted the previous day in Inopacan), particularly on calculating the number of seedlings to be planted in a restoration site.

#### **Day 4**

For the fourth day of the training, the participants and facilitators traveled to Cabucgayan, Biliran, to visit the municipal Rainforestation demonstration site in Barangay Baso. The Department of Social Welfare and Development (DSWD) field office also welcomed the participants. Mr. Jojito Acla, officer in-charge of the DSWD-Kapit-Bisig Laban sa Kahirapan – Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS) project in Cabucgayan, also gave a presentation about their community-based projects on Rainforestation to give an idea how the project was conceptualized and implemented with the communities. Afterwards, Ms. Orias shared the results of a site evaluation, using the Response Induced Sustainability Evaluation Tool (RISE), which was conducted in one of the DSWD project sites to show the participants how the implementers decided which areas and programs to prioritize. In the afternoon, the participants went to the DSWD project sites in Barangay Talibong, Casiawan, and Looc to see the actual sites for restoration intended for watershed rehabilitation, agroforestry, and landslide rehabilitation. The participants also had a dialogue with community leaders and other implementers on how to get the support and active involvement from members of the community.

#### **Day 5**

The last day of the training started with a lecture and demonstration by Mr. Juanito Poliquit on the process of making Indigenous Microorganism 6 (IMO6), an organic fertilizer that is used to enhance the growth of seedlings. Afterwards, Prof. Saz gave a presentation on Forest Land Use and Management where he showed important elements that need to be included in the plan and shared some examples from the Philippines. This was followed by a workshop for the participants to develop re-entry or action plans outlining how they will implement what they've learned during the training back in Myanmar. In the afternoon, the participants presented their re-entry plans and received comments and recommendations from the course resource people. During this session, the participants (particularly the KFD) indicated that they're interested in adopting Rainforestation to improve watersheds and provide additional livelihoods to the local communities. Afterwards, the participants shared feedback on the training and highlighted their favorite sessions. The training ended with closing remarks from Prof. Saz, followed by the distribution of certificates and a ceremonial tree planting at the VSU Molave Hill.

#### **Participants:**

The training was attended by six participants from Myanmar: two from WWF-Myanmar and four from KFD.

#### **Follow-up:**

ELTI and ITEEM-VSU will continue communicating with KFD about the development of a Rainforestation field training course in the Doo Pla Ya District in Myanmar. The objective of that course would be to train local communities on Rainforestation and assist in the establishment of an agro-ecological site that would aim to reduce human-elephant conflict in the area.

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