COURSE REPORT



National Rainforestation Trainers' Training

Leyte, Philippines November 4-8, 2015

A workshop organized by:

The Environmental Leadership & Training Initiative (ELTI)
Visayas State University - Institute of Tropical Ecology & Environmental Management (VSU - ITEEM)

Background: It is estimated that the Philippines has lost approximately three-quarters of its forest cover and that primary forests now account for less than three percent of the country's total land area. Critical environmental goods and services have been lost, disasters such as landslides and flashfloods have become more common, and the livelihoods of many rural and indigenous communities have been compromised. Massive reforestation programs have thus been implemented throughout the country to counter these problems. However, most have used only a handful of fast-growing, exotic tree species, which are not particularly well suited to meet the objectives of the programs. They also tend to be carried out on a wage basis with little to no follow up, rather than involving local communities in a more meaningful way.

Starting in the 1990s, Visayas State University (VSU) and the German Agency for Technical Cooperation (formerly GTZ, now GIZ) developed an agro-forestry system known as "Rainforestation Farming," which uses native species to rehabilitate degraded landscapes, while providing forest-dependent communities with a more sustainable source of livelihood. Equally important, they worked on a social approach in order



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to stimulate interest in forest restoration, organize communities, address land tenure issues, and ensure an equitable distribution of benefits. Subject to extensive research and experimentation, "Rainforestation Farming" has been refined into a cost-effective and widely applicable strategy for reforestation. Since then, other methods, known simply as "Rainforestation", have also been developed to rehabilitate critical watersheds, denuded portions of protected areas, and land slide areas, where income generation plays a less important role.

The Department of Environment and Natural Resources (DENR) has endorsed Rainforestation as an official reforestation strategy, but dissemination of this approach to the provinces has been limited and technical capacity remains inadequate. In order to overcome these hurdles, ELTI and VSU have been conducting a series of trainers' training courses on Rainforestation since 2009 aimed at scaling up the adoption of this restoration strategy throughout the country.

Objectives: The more specific aims of this training course were as follows:

- 1. To provide participants with a solid understanding of the theory and principles underlying Rainforestation, and its application in various social and ecological contexts;
- 2. To teach participants through hands-on, experiential learning, the process and practice of establishing a Rainforestation site and native species nursery;
- 3. To catalyze further training on Rainforestation;
- 4. To develop more Rainforestation demonstration sites throughout the Philippines, and;
- 5. To foster an exchange of experiences, lessons learned and best practices for applying Rainforestation to different areas in the country.

Course Format:

Day 1: The course started with opening remarks by the new VSU President, Dr. Edgardo Tulin, and the ELTI Asia Program Coordinator, Dr. David Neidel. Participants and resource people were then introduced by Ms. Angelita Orias from ELTI. Dr. Marlito Bande (ITEEM) started the training proper with an introductory lecture that outlined the history of forest loss in the Philippines, the limitations of conventional reforestation approaches, the social and technical processes of establishing Rainforestation sites, and the ecological and social benefits of forest restoration. Mr. Ulysses Ferreras, one of the country's foremost field botanists, provided an introduction to the different forest formations of the Philippines, emphasizing the importance of understanding the forest ecosystem where rehabilitation is being









planned. Dr. Neidel followed with a presentation discussing alternative strategies to forest restoration, such as Assisted Natural Regeneration and the Framework Species Method, and compared the two to Rainforestation based on ecological and social contexts and management objectives. To give the participants a better sense of the approach, the group visited three Rainforestation demonstration sites in the area, where they also had an opportunity to discuss the implementation process with the communities and individuals who developed the sites.

Day 2: Dr. Bande provided an introductory presentation on the establishment and operations of native tree nurseries. Participants then went around the ITEEM nursery facilities, where they learned about several ongoing experiments that support the further refinement of the Rainforestation methodology, including ones looking at root development of forest trees in different soil types, relative tree growth under different nutrient levels, and seedling shading requirements. The participants proceeded to the original Rainforestation demonstration site, where they surveyed the impact of typhoons on indigenous trees and understory growth, and examined the characteristics of the soil in the region. Participants also conducted exercises on the monitoring of seedling growth in the nursery, where they learned to measure seedling height and root collar diameter, and monitoring of planted trees by geo-tagging them and measuring the tree height and diameter. Engr. Jimmy Pogosa (ITEEM) then facilitated a session on data analysis using the information collected during the exercises.

Day 3: The participants traveled to Silago, Southern Leyte, where some of the remaining primary forests in the province and in the country can be found. Before reaching the forest, participants walked along a portion of a recently established interpretative trail, where they were introduced to forest dynamics such as degradation, succession and natural regeneration along spatial and temporal gradients. Participants also stopped at coconut and banana plantations, and a quarry site along the trail to shortly discuss the socio-political factors behind deforestation. The group then met with a forest community, and learned about their efforts to protect and rehabilitate the watershed and to sustainably manage their forest area. Dr. Bande demonstrated how to properly collect wildings, transfer them to polybags, inoculate the seedlings with mycorrhizae, establish

a recovery chamber, and plant the seedlings. The participants then did all the activities themselves in the community's watershed area as a way to contribute to the community's rehabilitation initiative.

Day 4: Dr. Renezita Come (VSU) started the day with a discussion on the importance of site-species matching and the morphological characteristics of native species. Afterwards, the participants visited a Rainforestation experimental site in a marginal area, exploring the different species combinations and shade and nutrient treatments. In the adjoining area, the participants were grouped together and conducted an initial site assessment, doing a vegetation survey and a simulated landholder interview. Using the results of the survey and interview, the groups deliberated on an appropriate strategy for reforesting the area and presented their plans for feedback. Following this exercise, participants were then given time to develop their own action plans, which lay out in detail how they plan to apply what they have learned from the training once they return to their own communities.

Day 5: The last day of the course was dedicated to presentations of action plans, and feedback from fellow participants and training instructors. Ms. Hazel Consunji, ELTI's Philippine Program Coordinator, then gave a presentation about the ELTI Leadership Program and discussed the different opportunities for follow up support to implement their action plans. The training ended with a course evaluation, closing remarks by Dr. Tulin, Dr. Jose Bacusmo and Dr. Paciencia Milan (former VSU Presidents), and Dr. Neidel, and the issuance of certificates.

Participants: The training was attended by 29 participants, including representatives from Local Government Units, private sector, research institutions, People's Organizations, and other civil society organizations. Majority of the participants came from Luzon (Northern Philippines) region.

Follow Up: All of the participants have been added to the Rainforestation Discussion Group and their profiles available in the Rainforestation website's Trainers page (www.rainforestation.ph/trainers.html). VSU, ELTI, and RFRI will track the progress of the participants in implementing their action plans, and provide assistance as requested directly to ITEEM or through the ELTI Leadership Program. This is part of the National Rainforestation Trainer's Training series, and there will be more courses to come, as the need arises.



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