#### **COURSE REPORT**



## A Technical and Policy Forum on Mainstreaming Native Species for Restoration and Production

Quezon City, Philippines November 8, 2016

#### An event organized by:

Environmental Leadership & Training Initiative (ELTI) Rain Forest Restoration Initiative (RFRI) Department of Environment and Natural Resources (DENR)

**Background:** The Philippines is slowly undergoing a transformation in the way that it conducts reforestation. Conventionally, reforestation efforts plant mostly fast-growing exotic tree species, like *Swietenia macrophylla*, *Gmelina arborea*, and *Acacia mangium*. The usage of these species have in some cases succeeded in reestablishing tree cover, but they do not deliver the same level of ecosystem services, such as biodiversity conservation, carbon storage, water purification, pollination, and soil erosion control, as mixed stands of native species do. Moreover, they do not provide the range of timber and non-timber forest products that are valued by local communities. As a result, the conventional reforestation programs have not had a significant influence both in recovering good quality forests and in reducing the pressure on the already threatened remaining forests.

The Rain Forest Restoration Initiative (RFRI), together with other civil society organizations, has been advocating for the shift from conventional reforestation to *Rainforestation*, a locally developed form of native species reforestation. A number of successes have been achieved, including the passing of national policies that support Rainforestation, the adoption of the approach in the National Greening Program, the



ELTI is an initiative of: Yale SCHOOL OF FORESTRY & in collaboration with: ENVIRONMENTAL STUDIES Smithson

Smithsonian Tropical Research Institute







development of a cadre of certified trainers, and the establishment of several Rainforestation sites all over the country. Despite the accomplishments, reforestation using exotic species still prevails.

To investigate the reasons for this resistance to the paradigm shift, ELTI, RFRI and the Department of Environment and Natural Resources (DENR) organized this technical and policy forum to assess the current state of native species reforestation in the Philippines and to explore avenues to further facilitate the transition. This forum was held at the Biodiversity Management Bureau Training Center at the Ninoy Aquino Parks & Wildlife Compound in Diliman, Quezon City.

**Objectives:** The technical and policy forum had the following objectives:

1. to highlight the importance of native species in restoring ecosystem services that support both local communities and biodiversity, and in recapturing international markets for premium timber species and other forest-based products, while meeting the local needs.

2. to have a dialogue with the DENR and other relevant bureaus on the current technical capacity and existing policies and programs on native species propagation and production.

3. to examine the constraints and gaps in research, development and implementation, brainstorm ways to address these issues, and plan the steps moving forward.

**Course Format:** The forum was opened by Dr. David Neidel (ELTI) and Dr. Antonio Manila (DENR). The Keynote Address was presented by Mr. Marlo Mendoza, the Officer-in-Charge Undersecretary for Policy and Planning, who discussed the current focus of the DENR in the use of native species within the National Greening Program. According to Mr. Mendoza, there are plenty of DENR policies that call for the use of native tree species, so the focus should be more on governance and management issues of implementing them on the ground.

Prof. Mark Ashton (Yale University) then gave a lecture on the dynamics of deforestation and reforestation, including a detailed account of why best to plant native species. Prof. Edwino Fernando (University of the Philippines-Los Baños) discussed ecosystem services of forests and the multilateral agreements that necessitate the focus on the use of native species for biodiversity conservation,

environmental sustainability, climate resiliency, and human development. This was followed by Dr. Marlito Bande (Visayas State University), who presented the ecological and socio-economic benefits of Rainforestation from their 20 years of field experience. Finally, Dr. Antonio Daño (Ecosystems Research & Development Bureau) provided an overview of his agency's research efforts into identifying native species that are most appropriate for growing in different biophysical conditions and for achieving a variety of environmental and economic goals.

Ms. Ester Batangan, together with other RFRI members, namely Ms. Lyra Chu (RFRI), Ms. Katherine Galido (Non-timber Forest Products-Exchange Programme or NTFP-EP), Mr. Dazzle Labapis (NTFP-EP), Mr. Eric Buduan (Philippine Tropical Forest Conservation Foundation), and Ms. Hazel Consunji (ELTI), facilitated the afternoon workshop. The participants were divided into three groups: Research and Development, Policy, and Markets. Focusing on their assigned topic, the groups identified the accomplishments, challenges, gaps, and immediate actions that need to be done in order to address the constraints and chasms surrounding native species propagation and reforestation. The groups outlined their discussion results and presented them to the larger group. Discussions on these issues followed.

The forum was closed by Dr. Perry Ong (University of the Philippines-Diliman or UPD), who discussed parallels between this forum and the Mainstreaming Native Species-based Forest Restoration Conference that was held in UPD in 2010. He raised the question of whether we have made adequate progress in our advocacy over the last 6 years and suggested we need to critically examine our focus in order to come up more effective strategies. He also recommended a new DENR policy which clearly delineates a transition from the current reforestation and production situation to the exclusive use of native species in the near future.

**Participants:** The forum was attended by 65 participants from government agencies, non-governmental organizations, state universities and colleges, and the private sector.

**Follow Up:** The output of the workshop will serve as valuable input for deliberations within RFRI on strategic directions for the advocacy and capacity building efforts of the network, as well as basis for recommendations to DENR and other concerned agencies and institutions.





# **Research and Development**

ACCOMPLISHMENTS	CHALLENGES	GAPS	IMMEDIATE ACTIONS
1. Rainforestation experiences	Documentation and dissemination Monitoring & Evaluation Funding for replication in other areas	Some documented in gray literature; not accessible to general public Robust socio-economic and biophysical impacts of Rainforestation	Encourage peer- reviewed publications of Rainforestation research and sharing of publications through the Rainforestation website Develop a more robust ecological and socio- economic impact assessment strategy Increase dissemination of successful experiences and capacity building efforts for scaling up
2. Integration of Rainforestation in forestry curriculum	Coordinating research efforts of government agencies, state universities and colleges, and research institutions	Centralized information clearinghouse for native species research (e.g. germination, growth performance, etc.)	Create a unifying body to develop a master plan for research and coordinate research results Encourage studies on phenology, mapping of mother trees, germination, etc. of native species
3. List of native species with economic uses	Social acceptability of some native species Limited capacity for proper taxonomic identification	Equivalent native species to replace currently used exotic species Lack of tree domestication protocols Poor dissemination and market adoption	Create policy support for greater integration of these native species into greening programs and for market adoption Encourage further research on market potential of other native tree species

ACCOMPLISHMENTS	CHALLENGES	GAPS	IMMEDIATE ACTIONS
4. Quality seedlings	Ineffective implementation of Department Administrative Orders (DAO)/ Memorandium Circulars (MC) pertaining to Production of quality seedlings Seedling sources	Poor dissemination of information and field adoption	Wider dissemination of quality seedlings protocols
5. National Greening Program (NGP)	Proper site-species matching Verification of NGP outcomes	Genetic diversity of using clonal seedlings and assessment of growth performance in the field	Develop a more robust ecological and socio- economic impact assessment framework

### Market (Demand and Potential)

ACCOMPLISHMENTS	CHALLENGES	GAPS	IMMEDIATE ACTIONS
1. Initial list of native species with market potential	Accessibility and/or wider dissemination Continuous update of the list	Insufficient information on the potential market for a broader range of native species Untapped regional and global markets	Encourage market research on native species not only for timber and wood products but also for non-timber forest products Develop a comprehensive and accessible database on market values of native trees Host a dialogue with foresters and investors for market matching
2. Market demand for resins from native trees	Low supply vs. high demand	Lack of Quality Control protocols	Develop sustainability plans







ACCOMPLISHMENTS	CHALLENGES	GAPS	IMMEDIATE ACTIONS
3. Biodiversity- friendly products or Standards and labels for eco-friendly products (e.g. Forest Stewardship Council, Climate, Community & Biodiversity Alliance)	Premium price, therefore, marketability Capital investment for suppliers	Marketing (i.e. information campaign since not everyone is aware of this)	Conduct market research. If feasible, come up with appropriate marketing strategy
4. Payment for Ecosystem Services (PES) e.g. San Carlos, Negros Occidental, National Power Corporation	Replicability Willingness to pay for ecosystem service	Poor documentation and dissemination of good practices and success stories Lack of policy support for PES schemes Lack of ecosystem services valuation studies	Raise awareness on PES success stories to influence policy, gain support from the general public and encourage more valuation studies
5. Reforestation sites in Peñablanca and Quirino (assisted by Conservation	Capital investment (i.e. costly carbon certification fees)	Lack of policy support for forest carbon schemes	Conduct cost-benefit analysis of forest carbon projects
International) to receive carbon credits	High risk, low return of investment	Bundling of ecosystem services to offset certification fees	Policy support for forest carbon projects such as tax breaks
6. Ongoing developments on Forest Certification standards in the Philippines	Lengthy and costly permit application process (i.e. cutting, transport) Potential policy conflict (e.g. Republic Act 9147)	Lack of policy support for market compliance	Clarify and streamline planted native tree harvesting policy and protocols
7. Increase in number of native seedling nurseries for greening programs	Low diversity (i.e. only a few known native species grown) Source of planting material Quality control	Nursery accreditation program not being implemented Still more exotic seedlings sold by large commercial nurseries	Develop incentive mechanism to produce and plant more native seedlings for reforestation programs, as well as disincentives for not producing and planting them

## Policy

ACCOMPLISHMENTS	CHALLENGES	GAPS	IMMEDIATE ACTIONS
Current policies/ programs promoting native species: a. Executive Order 26: National Greening Program b. MC 1989-17: Assisted Natural Regeneration c. MC 2004-06: Rainforestation d. MC 2009-03: Upland Development Program e. DAO 2010-11: Forest Tree Seed and Seedling Production	Policy implementation (Mis-)Interpretation of policies Different forest definitions Overlapping land tenure instruments Accountability	Dissemination of information, i.e. not all field personnel are aware of the policies No unified policy on native species Delay in release of funds Monitoring& Evaluation protocol and implementation Indicators of success, e.g. what is survival? Targets: quantity vs. quality	Wider dissemination of policies and continuous capacity building of field personnel Harmonize policies and definition of terms, or develop a single and comprehensive policy on native species (propagation, production, harvesting, utilization, etc.) Use native species in all government programs and projects Redefine indicators and Implementing Rules and Regulations, i.e. for more realistic goals, for more timely disbursement of funds, etc.



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