

CONFERENCE REPORT

Restoring Forests for Communities, Biodiversity and Ecosystem Services

Bogor, Indonesia

September 12-14, 2011

A conference/workshop/fieldtrip organized by:

Environmental Leadership & Training Initiative, in cooperation with
Bogor Agricultural University
Tropenbos International-Indonesia Programme

Background: Indonesia has lost tens of millions of hectares of forest cover since the 1960s due to logging, agricultural conversion, mining, infrastructure development, and fires. This has resulted in the loss of biological diversity and ecosystem services including carbon sequestration, water regulation, soil stabilization, and the provision of forest products to rural communities. While some of the forest loss was intentional, being considered an acceptable trade off for economic development, much of the deforestation and forest degradation have been unplanned, resulting in large areas of degraded land that can be found in all land-use categories, including protected areas.

Indonesia has a long history of reforestation programs and recognizes the need for concerted efforts on reversing this trend in its current national forest plan. Most of these programs, however, have been government-driven and have often resulted in ineffective implementation on the ground. Reasons for this ineffectiveness are myriad in nature. Technical problems include poor site-species matching, delayed planting, poor quality seedlings, over-reliance on exotics, and inadequate maintenance, while social and institutional problems include limited participation by community and other stakeholders, land-tenure conflicts, insufficient and/or inequitable local economic benefits, and inadequate and short-term funding.



In Indonesia and across the region, universities, research institutions, NGOs, and other organizations have been experimenting with a variety of reforestation approaches that use local trees, are conducted in unison with local communities, and are fine-tuned to the local, ecological and social conditions. These forest restoration programs have achieved impressive results in terms of restoring some of the main ecological processes and functions of tropical forests and providing livelihood benefits to local communities, but remain relatively unknown among forestry officials and other practitioners. A basic problem is that there are few mechanisms in place through which technical knowledge and practical experience can be shared and exchanged.

In order to explore these forest restoration approaches and their applicability across Indonesia, the Environmental Leadership and Training Initiative (ELTI), a joint program of the Yale School of Forestry & Environmental Studies and the Smithsonian Tropical Research Institute, the Bogor Agricultural University- (IPB) Faculty of Forestry, and Tropenbos International-Indonesia Programme (TBI) held a conference at the IPB International Convention Centre on September 12 that featured different successful forest reforestation strategies and experiences from Indonesia and across the region. The conference was followed on September 13 by a one-day workshop held at the Bogor Botanical Garden's Center for Plant Conservation to evaluate the capacity-building, research, and institutional needs for developing, disseminating, and implementing more effective forest restoration approaches in Indonesia. A field trip was then held on September 14 to examine the forest restoration strategies being pursued at the Gunung Gede Pangrango National Park.

Conference Objectives:

1. Increase awareness of the need for forest reforestation as a means to benefit communities, conserve biodiversity, and restore environmental services;
2. Introduce different forest restoration approaches with reference to initial social and ecological site conditions and management objectives;
3. Identify the obstacles to and opportunities for more effective forest restoration in Indonesia.



Conference Format: Conference participants were welcomed by Prof. Dr. Herry Suhardiyanto, IPB Rector. Dr. David Neidel (ELTI) gave the opening remarks, which provided the rationale for the conference. The Keynote Address was presented by Dr. David Lamb (University of Queensland), who described the advantages and disadvantages of different reforestation approaches, including monocultures of fast-growing exotics, monocultures of slower growing natives, mixed species plantations, forest restoration, and natural regeneration. The conference was then officially opened by Dr. Tachrir Fatoni, the Director General of the Forest Research and Development Agency (FORDA), who delivered an address on the government's reforestation program on behalf of Mr. Zulkifli Hasan, the Indonesian Minister of Forestry who had to cancel his attendance at the last minute.

The morning session of the conference consisted of a series of presentations which provided more detailed discussions of different native species reforestation approaches being employed in Indonesia and throughout the region. Drawing upon his efforts in the Philippines, Mr. Patrick Dugan (Bagong Pagasa Foundation) discussed

the concept of Assisted Natural Regeneration, which tries to reduce the cost of reforestation by protecting and encouraging the growth of small saplings already found on the site instead of establishing nurseries and actively planting trees. Dr. Stephen Elliott (Chiang Mai University) gave an introduction to the research underlying the Framework Species Method, which calls for the planting of 20-30 carefully selected native tree species to rapidly re-establish forest structure and function. Dr. Yadi Setiadi (IPB) ended the session with a presentation on the rehabilitation of mined lands using soil amelioration techniques and planting native tree species.



The afternoon session was started by Mr. Benjamin Brown (Mangrove Action Program), who discussed six steps needed to execute successful mangrove restoration based on his experience in Indonesia. Mr. Ishak Yassir (FORDA/Wageningen University) described his work at Samboja Lestari, a high-profile 1,800-ha *Imperata* grassland area in East Kalimantan, restored for orangutan and other endangered wildlife habitat, and for community livelihood development. Mr. Tonni Asmawan (World Agroforestry Centre) presented a community forest management program in Sesaut, West Lombok, which uses agroforestry to diversify community income streams, while protecting the watershed and local biodiversity. The last presentation of the session was by Dr. Petrus Gunarso (TBI), who provided a general discussion on the need for a multi-stakeholder approach to forest landscape restoration in Indonesia.

Dr. Campbell Webb (Harvard University-Arnold Arboretum) closed the conference with a summary and highlights of the day's program, and laid out questions for discussion during the workshop the following day.

The conference was designed by Dr. David Neidel with input from Dr. Yadi Setiadi and Dr. Petrus Gunarso. The conference was facilitated by Ms. Sarah Marini Simantjuntak (IPB) and the panel discussions after each session were moderated by Dr. Yeni Mulyani (IPB). Event logistics were handled by Ms. Aritta Suwarno and other TBI staff, Ms. Hazel Consunji (ELTI), Mr. Arif Setiawan (IPB), and a large number of student volunteers from IPB.



Participants: The conference was attended by close to 300 people, representing government agencies, NGOs, and research and academic institutions. The conference was also broadcasted online through live-streaming technology, which allowed anyone with an internet connection to participate remotely in the conference.

Media Coverage: The conference was covered by the Indonesian media through the following articles:

Forest Restoration Conference / Konferensi Restorasi Hutan (<http://www.antaranews.com/foto/22075/konfrensi-restorasi-hutan>)

Ministry of Forestry Restores the Forest / Kemenhut Restorasi Hutan
<http://www.radar-bogor.co.id/index.php?rbi=berita.detail&id=79083>

The Forest Estate in Indonesia Experiencing Degradation / Kawasan Hutan di Indonesia Alamai Degradasi
<http://www.pikiran-rakyat.com/node/158215>

Republic of Indonesia Invites 10 Forested Countries, including Singapore / RI Undang 10 Negara Pemilik Hutan, Termasuk Singapura
(<http://panglima-ali.com/2011/09/ri-undang-10-negara-pemilik-hutan-termasuk-singapura/>,
<http://bataviase.co.id/node/797345>)

Attracting Investors for Restoring Indonesian Forests / Menjaring Investor Restorasi Hutan Indonesia
(<http://www.kotahujan.com/2011/09/geliat-menjaring-investor-restorasi.html>)

Workshop: The conference was followed on September 13 by a workshop for approximately 50 participants who are actively involved in forest restoration projects.

The workshop objectives were to:

1. Identify impediments in the current forest restoration paradigm in Indonesia and discuss opportunities to overcome them;
2. Highlight examples of successful projects/programs and identify the enabling factors for their success;
3. Survey existing sources of information, determine what types of additional information are needed, and assess the need for a centralized location where all forest restoration-related information can be accessed;
4. Determine what institutions are currently involved in providing capacity-building and training related to forest restoration, assess where there is additional need, and explore institutionally how that need is best filled;
5. Serve as a forum to begin building a network of researchers, advocates, and project implementers working on forest restoration, and plan for avenues of information exchange.

The morning session was largely devoted to introductory presentations about the participants' forest restoration projects to familiarize each other with the work that is currently being done in Indonesia. During the afternoon session, the participants were divided into small groups and discussed the opportunities and constraints to forest restoration in Indonesia based on different stakeholders' perspectives.



Field Trip: The workshop was followed on September 14 by a field trip to the Gunung Gede Pangrango National Park. The Park is one of the most important in Indonesia, providing water for 20 million people living in the cities and towns of Jakarta, Bogor, Bekasi, Tangerang, Banten, Sukabumi and Cianjur and feeding into the reservoirs of four hydroelectric power plants. The park is also an important refuge for biodiversity, including 1,000 species of flora, 251 of the 450 bird species found on Java, and over 100 species of mammals. With its close proximity to major population centers, the park also has significant value for recreation as a hiking destination.

The reforestation site visited is part of an expansion area of the National Park, which was formerly a state timber concession and is now being cultivated by local community members. With approximately 75% of the population in the area earning their income from agriculture, there is a lot of pressure from encroachment on the park. Due to this fact, the National Park in cooperation with various partners, have launched an “Adopt a Tree” program, which incorporates forest restoration with alternative livelihoods development for affected communities. This site was particularly useful to many of the participants who are working on forest restoration in community-inhabited parts of protected areas.

Follow-Up: A Conference Proceedings is currently underway, which will be translated into Indonesian and distributed to relevant stakeholders. ELTI plans to follow up on the conference by establishing a network of forest restoration practitioners and developing a web-based central clearing house of technical information and pertinent resources. ELTI is also working with partners to develop a training program which will build capacity for Indonesians to undertake forest rehabilitation for a variety of land-use management objectives, including ecosystem restoration and mine rehabilitation.



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