

CONFERENCE REPORT

Restoring Working Forests in Human-Dominated Landscapes of the Wet Evergreen Forest Region of South Asia

Kandy, Sri Lanka

July 16-17, 2012

A conference sponsored by:
Environmental Leadership & Training Initiative (ELTI)
Sri Lanka Program for Forest Conservation

Background: The wet evergreen forests of southern India and western Sri Lanka were the first in the tropics to undergo large-scale clearance for conversion to agriculture. Starting in the mid nineteenth century, this deforestation was largely driven by colonial land use policies that promoted the establishment of commercial tree and shrub crops, especially tea, rubber and coffee. The resultant land use change had damaging effects throughout the region on biodiversity and provisioning of environmental services, including soil stabilization and watershed protection.

Reforestation has emerged as the primary solution to address these problems. During the “green revolution” of the 1960’s, 70’s and 80’s, South Asia underwent dramatic reforestation with a small number of exotic tree species, particularly *Pinus caribbaea* and *Eucalyptus* spp. While this tree planting partially restored forest cover, small-holders and subsistence farmers disliked such species because of a lack of multiple products from such trees and a perception that they had detrimental effects on the hydrology of adjacent areas. Conservationists also disliked such plantations because they were regarded as monocultures that harbored little native species diversity.



In recent years, there has been a shift towards integrating more native trees into reforestation and land restoration efforts in this region. Researchers have focused on gaining a greater understanding of the ecology and silviculture of native tree species, which are often promoted as being more ecologically and socially sustainable than exotic species. Recent studies have also highlighted the importance of native trees for agricultural communities, emphasizing the goods and services that these trees provide to local farmers. Researchers are also focusing on the recovery of second growth forests as a way of combating forest fragmentation through the development of corridors.

The important role that tropical forests play in sequestering carbon to mitigate climate change and in providing clean surface water supplies for downstream irrigated agriculture and drinking water has increased the level of interest in forest restoration. Given the above-mentioned trends, ELTI and the Sri Lanka Program for Forest Conservation organized a conference to review the scientific data and experiences relating to the ecology and management of native tree species and second growth forests in order to inform reforestation and land restoration activities in Sri Lanka and southern India.

Objectives:

1. Provide participants with a holistic understanding of the opportunities and constraints for forest restoration in the region;
2. Identify ecological opportunities to work with forest dynamics and processes to effect successful restoration;
3. Develop an understanding of the role of secondary forests in biodiversity conservation in a global biodiversity hotspot;
4. Identify socioeconomic opportunities and social constraints in forest restoration;
5. Provide participants with practical guidance from the diverse experiences of practitioners from throughout Sri Lanka and the Western Ghats; and
6. Provide a networking opportunity for restoration advocates and practitioners.



Format: The conference was opened by Dr. David Neidel (ELTI), who facilitated the conference, and Dr. Siril Wijesundara (Royal Botanic Gardens, Peradeniya), who provided the official Opening Remarks. The remainder of the conference was then organized around four moderated panel sessions, each of which addressed a key theme and which were designed to bring scientists and practitioners from Sri Lanka into dialogue with their colleagues from southern India.

The first panel, which was moderated by Dr. Peter Ashton (Harvard University), focused on "Restoration Pathways of Native Species." Dr. David Burslem (University of Aberdeen) started this panel by discussing the ecological dynamics and need for the restoration of anthropogenic grasslands in the montane highlands of Sri Lanka. Dr. Mark Ashton (Yale University) explored the possibility of using existing pine plantations as nurse trees to facilitate

the enrichment planting of late successional rainforest trees in western Sri Lanka. Mr. M.O. Anand, presenting on behalf of Dr. Raman Sukumar (Indian Institute of Science), examined management requirements for the restoration of wildlife habitat in Mudumalai



National Park and Wildlife Sanctuary, India, focusing particularly on the control of fire and invasive weeds. Dr. Uromi Goodale (University of California, San Diego) then described the ecological characteristics and potential use of native pioneers as facilitators of secondary forest succession.

The second panel was moderated by Dr. Nimal Gunatilleke (University of Peradeniya) and focused on "Community Forests and Non-Timber Forest Products". Dr. Kamaljit Bawa (University of Massachusetts/ Ashoka Trust for Research in Environment and Ecology) started this session by discussing the ecology and management of NTFPs in the Western Ghats of India. Dr. Kushan Tennakoon (University of Brunei Darussalam) examined the possibility and likely socio-economic impacts of cultivating NTFPs in pine plantations in western Sri Lanka. Mr. Ashish Kothari (Kalpavriksh & ICCA Consortium) discussed the importance of recognizing and protecting indigenous community rights for successful forest restoration and the sustainable management of NTFPs. Mr. Nitin Rai (Ashoka Trust for Research in Environment and Ecology) then concluded this session by examining government forest policies in southern India as they pertain to NTFP cultivation and management, and the socio-economic impacts that they have on local indigenous communities.

The third panel, which was moderated by Dr. Eben Goodale (University of California, San Diego), focused on "Second Growth Forest and Biodiversity Conservation." The first presentation by M.O. Anand (Nature Conservation Foundation) discussed the need for a landscape approach to conserving biological diversity in the highly fragmented forests of the Western Ghats. Dr. U.M. Chandrashekhara (Kerala Forest Research Institute) then examined the role of sacred groves in preserving biological diversity and cultural heritage, with a particular emphasis on the sacred groves in Kerala. Dr. Eben Goodale (University of California-San Diego) discussed the landscape factors that affect the density and diversity of birds in mixed species flocks in Sri Lanka and southern India. Finally, Mr. Madhava Meegaskumbura (University of Peradeniya) discussed the biogeography of amphibian species in Sri Lanka, and the importance of designing forest restoration approaches that take tax-specific ecological requirements into account.

The fourth and final panel, which was moderated by Dr. David Neidel (ELTI), focused on "Land Rights, Tenure, and the Socio-Economics of Restoration." Siddhartha Krishnan (Ashoka Trust for Research in Environment and Ecology) took a historical-sociological perspective on grassland afforestation and restoration efforts in lands managed by the Toda people in Tamil Nadu, India. Dr. K.N. Ninan (Institute for Social and Economic Change) presented the results of an economic analysis of the value of biodiversity conservation in a coffee-growing area of southern India, where elephant-human conflicts are common. Dr. Shonil Bhagwat (University of Cambridge) provided a



discussion on the historical emergence and ecological significance of sacred groves in India. Finally, Mr. Anura Sathurusinghe (Sri Lanka Forest Department) discussed the drivers of deforestation and evolution of forestry policy as it pertains to restoration in Sri Lanka.

The conference concluded with closing remarks by Dr. Mark Ashton (Yale University), who delivered a brief summary of the two-day event, provided the conceptual linkages between the four panels, and underlined the value in bringing Sri Lankan and Indian forest restoration scholars and practitioners together. Dr. Ashton also expressed his appreciation to Mr. Campbell Moore, the primary organizer of the conference, and all of the institutions involved in bringing the event to fruition.

Participants: The conference was attended by 110 people representing a variety of universities, government agencies, NGOs, and private sector firms from Sri Lanka, India, and a small handful from other countries.

News Coverage: The conference was announced and covered in the Sri Lankan press through the following articles:

- [International Conference on Forest Restoration](#), Daily News. July 12, 2012
- [‘Protecting Forests, Responsibility of All’](#), Daily News. July 19, 2012

Field Trip: Immediately following the conference, a small number of conference organizers and resource people participated in a field trip to the villages of Kuddawa and Pitekele on the border of Sinharaja National Park. The purpose of this trip was to learn more about enrichment planting trials that had been conducted under pine plantations in the buffer zone of the National Park, and to examine the possibility for conducting follow-up ELTI training activities.



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.