



International Model Forest Network News

Connections

LANDSCAPES PARTNERSHIPS SUSTAINABILITY

2012 Issue 1

OUR VISION

To support, through Model Forests, management of the world's forest resources in a sustainable manner, reflecting environmental and socio-economic issues from the perspective of local needs and global concerns.

IN THIS ISSUE

- 1 **Forest Landscape Restoration: Ideas Transform Landscapes**
- 1 How do Model Forests and the IMFN relate to the forest landscape restoration approach?
- 2 How can the IMFN contribute to the Global Partnership on Forest Landscape Restoration?
- 3 **Restoring Valuable Forest in Kodagu Model Forest, India**
- 4 **Analog Forestry: A Tool for Landscape Restoration in Model Forests**
- 5 **A World of Opportunity for Forest and Landscape Restoration (Map)**
- 6 **The Chiquitano Almond Tree: an Ally in Mitigating Agricultural Deforestation**
- 7 **Landscape Restoration and the Establishment of a Model Forest in Rwanda**

FOREST LANDSCAPE RESTORATION: IDEAS TRANSFORM LANDSCAPES

IUCN analysis has shown that a significant portion of nearly 2 billion hectares of degraded and deforested biomes across the world present rich opportunities to restore important ecosystem functions. With restoration of ecosystem functions comes restoration of opportunities lost: for climate benefits, improved livelihoods, more productive agroforestry, and social/cultural benefits. Through the Global Partnership on Forest Landscape Restoration (GPFLR), of which the International Model Forest Network is a member, a challenge target of 150 million hectares for restoration by 2020 (the "Bonn Challenge") has been set. This directly supports international agreement under the Aichi Target of the Convention on Biological Diversity to restore 15% of degraded ecosystems by 2020.

Forest landscape restoration (FLR) is not a single approach, given that landscapes and biomes across the world differ significantly from one another. Rather, FLR is an approach that sees the value of building relationships between communities, government authorities, commercial interests and the landscapes and ecosystems on which they depend. Stakeholders work together "to identify, negotiate and implement practices that restore an agreed optimal balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land uses" (<http://www.ideastransformlandscapes.org/what-we-do>).

The goal of FLR is to establish a forest landscape that can fulfill the needs of both people and the environment by using different strategies that focus on forest functions and the configuration of the landscape. Its main principles include:

- Promoting active engagement, negotiation and collaboration between all stakeholders
- Restoring an agreed, balanced package of forest functions
- Working across landscapes
- Continuously learning and adapting

The Global Partnership on Forest Landscape Restoration (GPFLR) is a network of governments, organizations, communities and individuals. The GPFLR was formed to "catalyze and reinforce a network of diverse examples of restoration of forests and degraded lands that deliver benefits to local communities and to nature, and fulfill international commitments on forests" (Ibid).

How do Model Forests and the IMFN relate to the forest landscape restoration approach?

The IMFN is governed by a set of Principles and Attributes that are very similar to that of the FLR. Three key common principles between the Model Forests and FLR are: working with large landscapes that include a forest, promoting sustainable development

of that landscape through stakeholder engagement and collaboration, and networking, knowledge sharing and continuous learning of members. Fundamental to both the Model Forest and the FLR are the social, environmental, economic and cultural values of a given landscape and the need to engage those living in and from the landscape to devise truly sustainable natural resource management systems.

Call for Pledges at “The Bonn Challenge”

On September 2, 2011, a core commitment to restore 150 million hectares of lost forests and degraded lands worldwide by 2020, was launched at a ministerial conference in Bonn. By some calculations this could be worth USD 85 billion per year to national and global economies (IUCN: <http://www.iucn.org/?uNewsID=8147>).

The IMFN Secretariat invites all Model Forests to join the GPFLR movement and to pledge an area of land for restoration under the Bonn Challenge. For information on pledges see: <http://www.plantapledge.com>.

How can the IMFN contribute to the Global Partnership on Forest Landscape Restoration?

Model Forests have a wealth of on-the-ground experience that demonstrates the value of partnerships for the sustainable management of landscapes and ecosystems. The IMFN has already contributed to the GPFLR by joining the network and by attending the Bonn Challenge in September 2011. The IMFN, with 20 years of experience in landscape level approaches to sustainable natural resource management, has much to offer this initiative:

- Model Forest members can contribute the learning they have acquired through restoration-type projects
- Model Forests and/or IMFN regional networks can become members of the GPFLR and pledge an area of their landscape for restoration (see side box)
- Model Forest members and regional networks can use the tools of the GPFLR to support restoration projects in their communities, countries and regions
- Model Forest members can commit to collecting data that supports the analysis of FLR initiatives; data that provides information on the benefits of restoration projects
- Model Forests with appropriate experience and capacity can offer themselves as demonstration areas for others seeking to learn how they can address their own FLR objectives

Tools that the GPFLR is using:

Maps:

By building on existing knowledge, the partners in the GPFLR have created a global map that shows forest restoration opportunities. Through this map members can identify areas in their respective countries that would benefit from FLR. (<http://www.ideastransformlandscapes.org/large-map-new>)

Analysis:

To promote restoration activities across the world, the GPFLR has also undertaken a comprehensive appraisal of forest landscape restoration practices (<http://www.ideastransformlandscapes.org/what-we-do/economic-rationale>).

Learning Network:

The GPFLR maintains an FLR Learning Network Website at: <http://www.forestlandscaperestoration.org>. Through this website members can discuss issues, view videos, post documents, sign up for workshops and share knowledge on FLR practices.

Comparable tools that the IMFN uses:

Maps:

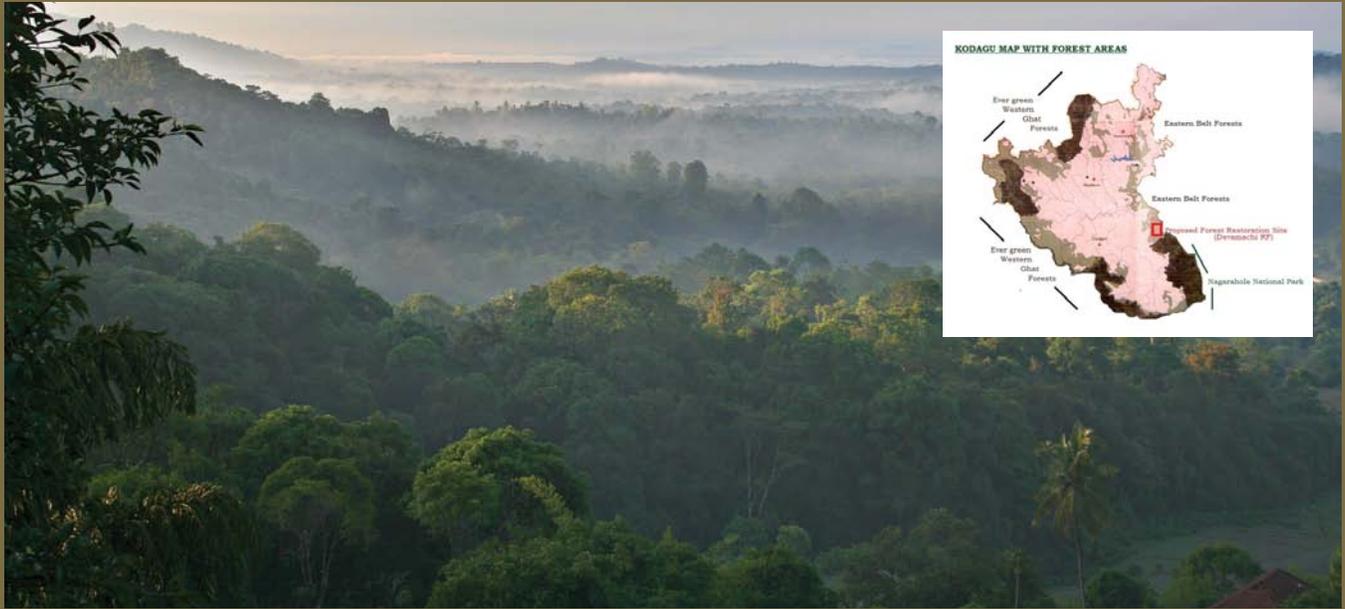
The IMFN Secretariat maintains up-to-date global and regional maps of Model Forest locations around the world. These maps serve to identify members and show the breadth of the IMFN: 58 Model Forests in 30 countries on five continents, representing over 100 million hectares and thousands of partner organizations worldwide. See: <http://www.imfn.net/maps-and-stats>.

IMFN Strategic Initiatives:

Strategic Initiatives were established to enable members to develop and implement programming and research priorities that address thematic issues that extend beyond one Model Forest. The goal of the three IMFN Strategic Initiatives—climate change, community sustainability and ecological goods and services—is to use Model Forests as a platform for examining the links between international policy objectives and on-the-ground actions.

Networking, knowledge sharing and capacity building:

The IMFN Secretariat maintains a website and produces regular communications products to disseminate Network information and knowledge. Regional, cross-regional and international meetings, conferences, capacity building workshops and study tours also provide venues for networking and knowledge sharing.



RESTORING VALUABLE FOREST IN KODAGU MODEL FOREST, INDIA

Kodagu Model Forest, located in the southwestern Indian State of Karnataka, contains one of the most important and fragile ecosystems in the world. Named one of the eight “hottest hotspots” of biodiversity, the natural resources of the Western Ghats of Kodagu have been under increasing pressure from the competing demands of plantation agriculture and elephant herds that roam free.

Since the establishment of the Model Forest in 2003, stakeholders of the Kodagu Model Forest Trust (KMFT) have worked together to address the challenges of sustainably managing the natural resources of the area. For example, elephants in national parks were increasingly coming into conflict with local coffee growers. In an effort to resolve this animal-human conflict, in 2009 KMFT worked on a project overseeing the construction of elephant-proof fences and trenches that protected the elephants from wondering onto coffee plantations.

More recently, KMFT members have embarked on a forest landscape restoration pilot project which will see 20 hectares of land reforested in the Devmachchi range of the southeastern forests of Kodagu. The program will be carried out by the local Village Forest Committee (VFC), in coordination with the Coorg Wildlife Society (CWS), the College of Forestry in Ponnampet, the Forest Department, the Thithimathi Green Village Community Forum, all stakeholders and partners of the KMFT.

This pilot project is a part of a larger restoration project of 150 hectares planned for 2013. The objective of the current Devmachchi range pilot project is to build the capacity of the local population in the area of forest landscape restoration.

As the president of the Village Forest Committee in the project area stated, “involvement of local people in restoration activities like planning, planting, and protection measures provides employment opportunities to people residing in and around the proposed forest area...VFC will play key role in participatory planning using a bottom-up approach to include local management principles with traditional management practices. The program will be suitably planned with advanced techniques to ensure success.”

Based on the premise that a biologically diverse and healthy habitat attracts a wide array of pollinators, which in turn improves the productivity of local agricultural crops and supports birds and animals in the forest, the pilot project will favour conversion of teak monoculture into weed-free native mixed wildlife habitat and model bamboo plantation.

This pilot project is another important step that the stakeholders of KMFT have taken to protect an ecologically important area, while at the same time encouraging local participation and providing socio-economic benefits.



ANALOG FORESTRY: A TOOL FOR LANDSCAPE RESTORATION IN MODEL FORESTS

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(Former regional coordinator of the Ibero-American Analog Forestry Project)

During the period 2008-2010, the Model Forests of Atlántida (Honduras), Colinas Bajas (Dominican Republic) and Reventazón (Costa Rica) participated in the project “Biodiversity Restoration and Community Development through the Analog Forestry Project” funded by the International Development Research Centre (IDRC) of Canada.

Analog Forestry is a system of restoring degraded sites by introducing trees and plants that are similar to the original species found in that ecosystem—thereby creating an “analog” ecosystem with ecological structures and functions similar to the original climax or sub climax vegetation. Analog Forestry is described as a complex holistic form of agroforestry that seeks to maintain a functioning tree-dominated ecosystem while providing marketable products that can sustain rural communities, both socially and economically (<http://www.analogforestrynetwork.org>).

Since 2008, 20 demonstration sites have been established in participating Model Forests. These demonstration

sites have permitted a wide range of people, including farmers, students, college and university professors, members of municipalities, members of botanical gardens and environmental parks, to build capacity, apply the methodology, and observe the evolution of the system. They have identified lessons learned and best practices through this process of observation.

The project trained a total of 20 trainers and 150 producers who were then able to train others in their respective communities and organizations, thereby multiplying the effect. Several plant nurseries were also created that produce multipurpose timber tree seedlings as well as palms, ornamental and medicinal plants. Finally, 33 demonstration sites were established that were adapted to particular context of each community. Today these sites produce several products that benefit farmers and their families. Fundamental changes have been observed in the demonstration sites in the improvement of soil fertility and the diversity of flora and fauna. For example, bird species, such as the *Chorcha*, that have not been seen in many years were observed in Honduras.

The biggest challenge faced by the project was the resistance to change from a traditional production system to a highly diverse organic production system. The training of extension workers and farmers, as well as support offered throughout the project, boosted the motivation of the participants and resulted in substantial progress despite initial challenges. In particular, participants indicated that the demonstration sites were ideal to involve and educate children, youth and other community members on the conservation and sustainable production of natural resources, while respecting the traditional knowledge and cultural identity of local rural inhabitants. Analog Forestry is a low cost, attractive restoration strategy for producers. It offers opportunities to diversify income sources while increasing production and maintaining the environment.

The fact that producers, extension workers, technicians and others were implicated in the Analog Forestry project allowed for the exchange of experiences, knowledge and collaborative learning across all three Model Forests. The

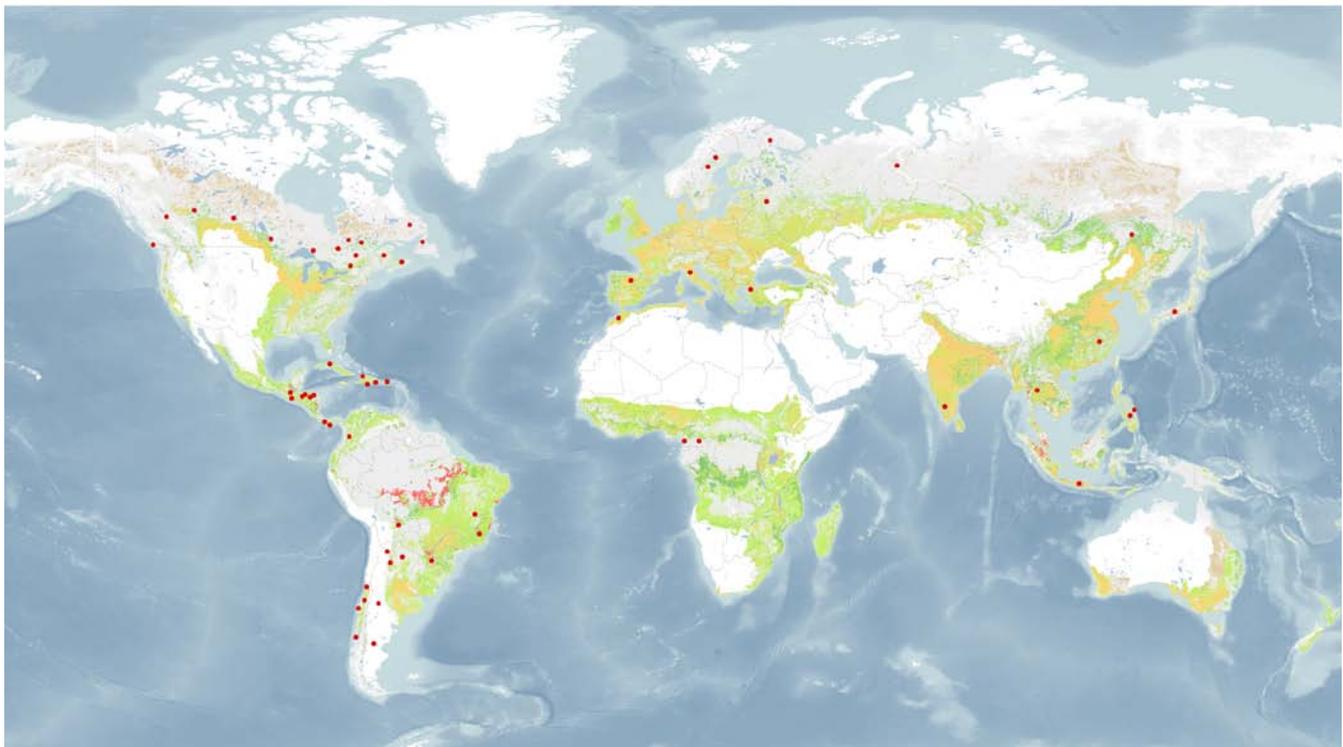
producers stressed that the development of this system has motivated them and instilled a sense of pride in their work.

On the regional level, a practical guide for monitoring biodiversity was developed, a quarterly newsletter was issued, and a virtual Analog Forestry training program was designed. A final publication compiled project experiences and lessons learned and included several recommendations identified by project participants.

Currently, Atlántida Model Forest is conducting another Analog Forestry project to restore mangrove forests in a wildlife refuge. In Colinas Bajas Model Forest, the concept is promoted as a strategy for landscape restoration as part of a biological corridor project in the region.

In a vision of landscape restoration, regional project participants were unanimous: Analog Forestry is improving landscape aesthetics, connectivity of ecosystems and the restoration of ecosystem services.

A World of Opportunity for Forest and Landscape Restoration



Map courtesy of the GPFLR: <http://ideastransformlandscapes.org/>

Forest and Landscape Restoration Opportunities

- Wide-scale restoration
- Mosaic restoration
- Remote restoration

Other Areas

- Agricultural lands
- Recent tropical deforestation
- Urban areas
- Forest without restoration needs
- Model Forests





THE CHIQUITANO ALMOND TREE: AN ALLY IN MITIGATING AGRICULTURAL DEFORESTATION

Javier Coimbra & Reinaldo Flores, Foundation for the Conservation of the Chiquitano Forest, Bolivia

Since 2011, in three municipalities located in the Chiquitano Model Forest, a project supporting the cultivation of the native Chiquitano Almond tree (*Dipteryx alata*) in silvopastoral and agroforestry systems has been active.

The original motivation of the project was based on the need to increase the availability of seeds of this tree, as there was a growing market demand and the supply was proving to be inadequate. Market demand, however, was not the only reason to support such a project; in fact the Chiquitano Almond tree has other attributes that support its increased cultivation. For example, the outer pulp of the fruit provides good fodder for cattle at the time of year when pasture is at a deficit, it is fire resistant (an annual threat), it grows in soils that are lacking in fertility, and is considered a hardy and pest free tree.

Since farming is one of the main economic activities in the ecoregion, which implies land-use change leading to some deforestation, incorporating the cultivation of almond trees within livestock raising systems can help reduce the environmental impacts of cattle ranching. The planting of almond trees not only provides an incentive to restore or maintain a minimum tree cover, but it also ensures stability to the pasture system by the production of fodder for livestock.

The Foundation for the Conservation of the Chiquitano Forest and the Association of the Municipalities of Chiquitano, with funds provided by the European Union and Swiss Cooperation, have conducted a pilot project of almond tree seedling propagation and planting. The proposed technology has been adapted to the two types of major players in the region: small indigenous farmers and private ranchers.

The project aimed to plant 100 hectares of Chiquitano Almond in two years under silvopastoral and agroforestry systems. Planting during the first year surpassed expectations, as 200 hectares in 25 communities were planted. It is expected that private farmers will plant close to 500 hectares in total over the two year period.





LANDSCAPE RESTORATION AND THE ESTABLISHMENT OF A MODEL FOREST IN RWANDA

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Background and justification

Since 2011, the African Model Forest Network (AMFN) in partnership with the International Union for Conservation of Nature (IUCN) and the World Agroforestry Centre (ICRAF) have been supporting the Government of Rwanda in the implementation of its national landscape forest restoration program. This national FLR initiative is a truly remarkable and ambitious undertaking that will ultimately implicate all landscapes in the country in rebuilding a range of ecosystem functions that have been degraded over past decades.

One of the pioneer initiatives under this national FLR program is a new Model Forest being established in the northwest region of Giswhati. Funded by Natural Resources Canada through the International Model Forest Network Secretariat, the AMFN is working with IUCN and the Rwandan Ministry of Natural Resources (MINIRENA) to assist in its creation. The new Model Forest will provide a framework for implementing FLR in Giswhati by focusing on participatory governance in the conservation and sustainable

use of natural resources. The AMFN is providing technical support in the area of stakeholder engagement, local governance and agroforestry.

The Rwandan government is primarily concerned with building capacity of local and national actors in order to reduce poverty, protect the environment and promote sustainable development in line with national and international policies.

In 2011 several workshops were held to discuss the Model Forest and FLR approach and to identify the expectations and roles of stakeholders. These workshops resulted in the active engagement of stakeholders in the FLR and Model Forest approaches; the establishment of a Provisional Steering Committee to create the project proposal for the Model Forest; analysis of major reforestation sites and income generating opportunities; a roundtable discussion on issues of natural resource governance and landscape management; and steps towards the establishment of agroforestry nurseries.



Lessons Learned

After a year of workshops and negotiations, several lessons have been learned. These include:

- **Local and national engagement and appropriate, prior consultation are imperative:** while the involvement of local stakeholders ensures that project objectives primarily serve the interests of local people and the values they represent, it is equally important to involve the national government (MINIRENA in this case) to encourage participation and create an enabling environment for success
- **Networking with those with direct experience, in this case with Cameroon's Model Forests, accelerated the design of the governance structure of the Giswhati site**
- **Concrete actions such as planting trees and giving preference to native species adapted to local conditions has been essential to engage local communities in the project**
- **Project success will largely depend on support of innovative economic development activities**

Next Steps

In the coming months, the Giswhati Model Forest stakeholders and partner organizations will establish the governance structure for the Model Forest, identify the exact boundaries of the site, undertake an inventory of existing nurseries, and map out priority sites for reforestation.



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