

FOREST LANDSCAPE RESTORATION

BONN CHALLENGE AND INDIA

PROGRESS ON RESTORATION EFFORTS ACROSS STATES AND LANDSCAPES

The delicate balance that exists between and within ecosystems has, over the course of the past century, been grossly disrupted due to anthropogenic activities. Urbanization, expansion of agriculture, logging and hunting has severely damaged forest lands and destroyed biodiversity. It has also severely impacted communities who depend on the forest for subsistence.

In the past, restoration efforts were rooted in applied ecological science, but today it is moving towards a more community centric approach, such as forest landscape restoration.

“A study in 2010 undertaken by IUCN and WRI produced a World of Opportunity Map, reporting that globally more than two billion hectares of lands offer opportunities of restoration” – Maginnis et al. 2014.

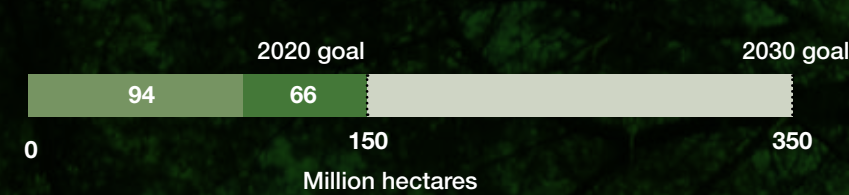
Forest landscape restoration is more than just planting trees – it is restoring a whole landscape to meet present and future needs by offering multiple benefits and land uses over time.

GLOBALLY
100
million hectares
of tropical forests
were converted to
farmland from 1980
to 2012

THE BONN CHALLENGE

The Bonn Challenge is a global effort to bring 150 million hectares of deforested and degraded land into restoration by 2020 and 350 million hectares by 2030.

The restoration of 150 million hectares of degraded and deforested lands in biomes around the world- in line with the forest landscape restoration approach- will create approximately USD 84 billion per year in net benefits that could bring direct additional income opportunities for rural communities. Economics of Land Degradation Initiative (ELDI) estimated that sustainable land management globally could create an additional 2.3 billion tonnes of crop production per year worth approximately USD 1.4 trillion, thus addressing the prevalent food crisis (ELDI 2013).



PROGRESS SO FAR

47
commitments

160.2 million
hectares pledged; 94 million
hectares till 2020 and 66 million hectares till 2030

15.66 GtCO₂
potential climate benefit

INDIA ACCEPTS THE CHALLENGE

The landscape of India is as diverse as it is rich. A sizable portion of the country's population live around forested landscapes. They are heavily dependent on the resources and services provided by these natural ecosystems. However, the march towards progress and economic growth has led to deforestation, degradation and fragmentation of forests and other ecosystems.

There is an urgent need to address the food, water and livelihood security for these local communities while ensuring long-term conservation of our forests. An integrated approach such as forest landscape restoration which engages all stakeholders in restoration activities is the way forward.



INDIA'S POTENTIAL

US\$ 6.5 million
economic benefit of restoration

1.99 GtCO₂
potential climate benefit

FLR IN INDIA

RESTORATION EFFORTS BY LEADING AGENCIES 2011-2017



India already has in place policies and laws aimed at participatory and sustainable management of degraded forests. Notable among them are the National Forest Policy (NFP), National Afforestation Programme (NAP), National Agroforestry Policy and Green India Mission (GIM). The Compensatory Afforestation Management and Planning Authority (CAMPA) attempts to mitigate the losses that arise when forest lands are diverted for non-forest purposes.

Restoration efforts are carried out across regions by multiple implementing agencies.

Government agencies, especially the state forest departments, lead restoration efforts in the country. On ground implementation of restoration targets is made possible by active Joint Forest Management Committees. This partnership between the state forest departments and local communities is in line with forest landscape restoration.

Private companies undertake restoration of forests and other ecosystems either as part of their corporate social responsibility (CSR), or as a result of legal compliance (for e.g., compensatory afforestation for forest land diversion) or as acts of philanthropy.

A number of **Non-governmental organizations** across the country have expertise in the field of forestry, biodiversity conservation and rural livelihood programmes. As repositories of knowledge through longstanding engagement at the grassroots, NGOs play a vital role in the planning and implementing stages of any restoration project. Specific restoration projects also extend focus to unique and threatened ecosystems such as grasslands and mangroves.

PLANTATION MODELS

Restoration efforts by NAP using different plantation models

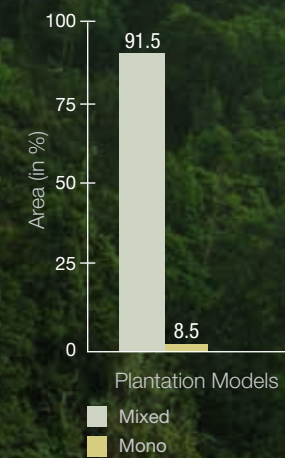


A majority of restoration efforts by NGOs and private companies were under the mixed plantation model.

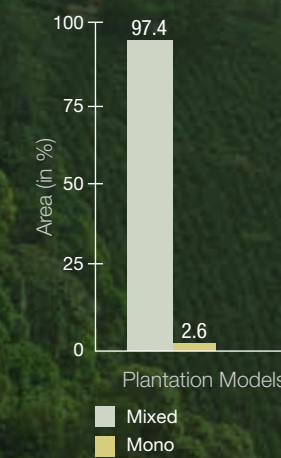
Restoration using monocultures is detrimental to biodiversity conservation whereas a diversity of species in plantations inevitably benefits wildlife as well as the local communities by providing ecological and economic benefits.

The use of native species dominated restoration activities. Native species are adapted to the local conditions and are better suited to assist faunal diversity. Such species also ameliorate soil and water conditions apart from offering multiple economic benefits to communities.

Restoration efforts by the NGOs using different plantation models



Restoration efforts by the private companies using different plantation models



So far,

9,810,944.2
hectares under restoration across India

of which,

9,264,976
hectares by government

352,677.9
hectares by NGOs

193,290.3
hectares by private companies

Around 282,389 hectares of degraded forests were restored under NAP (2012 - March 2017) and an additional 32,066 hectares by GIM (2016-17).

Of total land restored by NGOs, 322,610.9 hectares was restored using mixed plantation model and 30,067 hectares was restored using mono plantation model.

188,226.3 hectares of the 193,290.3 hectares of land restored by private companies was under mixed plantation. The remaining 5,064 hectares was under mono plantation.

WAY FORWARD

India is appropriately positioned to meet its restoration commitments under the Bonn Challenge pledge. Policies have evolved to focus on restoring landscapes while ensuring that the associated benefits are available to people and habitats. IUCN will continue to engage with MoEFCC and document in finer detail the restoration efforts being carried out in all States by the various agencies and also encourage cross-learning between States and across agencies by promoting best practices, so that India's progress towards the Bonn Challenge pledge continues unhindered.

Photographs: Kalyan Varma, Anushree Bhattacharjee



For more information contact
anushree.bhattacharjee@iucn.org

INTERNATIONAL UNION
FOR CONSERVATION OF NATURE

India Country Office
C-10, Gulmohar Park,
New Delhi 110049,
India
Telefax - +91 11 2652 7742
www.iucn.org/india

Designed by DamageControl

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Supported by UKaid from the UK government