

DEFORESTATION AND FOREST DEGRADATION

- Deforestation and forest degradation **are the biggest threats to forests worldwide.**
- **Over half of the tropical forests worldwide have been destroyed since the 1960s,** and every second, more than one hectare of tropical forests is destroyed or drastically degraded.
- **The degradation and loss of forests threatens the survival of many species, and reduces the ability of forests to provide essential services.**
- **Deforestation and forest degradation impact the lives of 1.6 billion people** whose livelihoods depend on forests. One billion of them are among the world's poorest.
- Nature-based Solutions such as **forest landscape restoration (FLR) can reverse the effects of deforestation and degradation** and regain the ecological, social, climatic and economic benefits of forests.

What is the issue?

Deforestation and forest degradation are the biggest threats to forests worldwide. Deforestation occurs when forests are converted to non-forest uses, such as agriculture and road construction. Forest degradation occurs when forest ecosystems lose their capacity to provide important goods and services to people and nature.

Over half of the tropical forests worldwide have been destroyed since the 1960s, and every second, more than one hectare of tropical forests is destroyed or drastically degraded. This intense and devastating pressure on forests is not limited to the tropics – an estimated 3.7 million hectares of Europe's forests are damaged by livestock, insects, diseases, forest fires, and other human-linked activities.



Deforestation in Myanmar. Photo: Li Jia/IUCN

Why is this important?

Biodiversity

Over 80% of the world's terrestrial biodiversity can be found in forests - from pine trees in the boreal North

to the rainforests in the tropics. The degradation and loss of forests threaten the survival of many species, and reduce the ability of forests to provide essential services such as clean air and water, healthy soils for agriculture, and climate regulation.

Sustainable livelihoods

Healthy forests support the livelihoods of 1.6 billion people globally, one billion of whom are among the world's poorest. Deforestation and forest degradation have real and tangible impacts on the lives of these vulnerable communities. For example, 52 per cent of all land used for food production is moderately or severely impacted by the erosion of healthy soil. This occurs when trees are removed from a landscape, leading to increased food insecurity.

Climate mitigation and adaptation

The world's forests absorb 2.4 billion tonnes of carbon dioxide (CO₂) per year, one-third of the annual CO₂ released from burning fossil fuels. Forest destruction emits further carbon into the atmosphere, with 4.3–5.5 GtCO₂eq/yr generated annually, largely from deforestation and forest degradation. Protecting and restoring this vast carbon sink is essential for mitigating climate change.

Forests also play a crucial role in climate change adaptation efforts. They act as a food safety net during climate shocks, reduce risks from disasters like coastal flooding, and help regulate water flows and microclimates. Improving the health of these forest ecosystems and introducing sustainable management practices increase the resilience of human and natural systems to the impacts of climate change.

What can be done?

Forest landscape restoration (FLR)

Nature-based Solutions such as forest landscape restoration can help countries reverse the effects of deforestation and degradation and regain the ecological, social, climatic and economic benefits of forests.

FLR brings people together to identify and implement the most appropriate restoration interventions in a landscape. It seeks to accommodate the needs of all land users and multiple land uses.

FLR is not just about planting trees – it can include multiple activities like agroforestry, erosion control and natural forest regeneration. FLR also addresses the underlying drivers of forest loss. For example, it provides farming communities living in and around forests with knowledge on sustainable agricultural methods that do not rely on destroying forests.

Countries and other land owners are committing to FLR through the Bonn Challenge – a global effort to restore 350 million hectares by 2030, launched by IUCN and Germany in 2011. The Bonn Challenge has so far generated pledges from governments and organisations to restore over 210 million hectares.



Learn more at BonnChallenge.org

Assessing restoration opportunities

With IUCN's support, over 30 countries are applying the Restoration Opportunities Assessment Methodology (ROAM) – a framework that assesses the extent of degraded and deforested landscapes in a country or area, and identifies the best strategies for restoring them. ROAM helps governments and decision makers use FLR interventions to meet

multiple national priorities and international goals on climate, biodiversity and land degradation.

For example, a ROAM assessment in Malawi helped the government introduce sustainable agricultural systems to address food insecurity. In Colombia, FLR interventions have supported the rehabilitation of landscapes after decades of conflict.



Forest landscape restoration (FLR) in Colombia. Photo: James McBreen/IUCN

Where can I get more information?

IUCN's Forest Programme
iucn.org/forest
forests@iucn.org

The Bonn Challenge
BonnChallenge.org

Forest landscape restoration
InfoFLR.org

Gichuki, L., et al. (2019) [Reviving land and restoring landscapes](#). Gland, Switzerland: IUCN