On behalf of:
Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection
of the Federal Republic of Germany

IKI INTERNATIONAL CLIMATE INITIATIVE

Ministry of Environment, Forest and Climate Change

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

RECAP4NDC Restore to Prosper

Restore, Conserve and Protect Forest and Tree Cover for NDC implementation in India (RECAP4NDC)

IUCN

Forest Survey of India

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Creating Innovative Solutions for a Sustainable Future

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Indian Council of Forestry Research and Education (ICFRE)
International Centre for Integrated Mountain Development (ICIMOD)

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On behalf of the
Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN)

New Delhi, August 2025

RECAP4NDC

Restore, Conserve and Protect Forest and Tree Cover for NDC Implementation in India (RECAP4NDC) is an Indo-German development cooperation project that the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements on behalf of the Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) under the International Climate Initiative (IKI) of the German Federal Government. The project was launched in July 2023 by the Union Minister for Environment, Forest and Climate Change, Shri. Bhupender Yadav and Ms. Steffi Lemke, former German Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection at the Environment, Climate and Sustainability Working Group (ECSWG) meeting under G20 in Chennai.

Context on Forest Landscape Restoration (FLR)

Forests provide an array of benefits to people in the form of ecosystem services. They act as carbon sinks absorbing carbon dioxide from the atmosphere, provide food and fodder in many different forms, help clean water and regulate water cycles, enrich the soil and provide habitat for a wide range of plant and animal species, including pollinators, which is a key service for agriculture. The degradation of forest has far-reaching implications for India's environment and economy. By restoring degraded forests and planting new trees, India can increase its carbon sequestration capacity, increase resilience of its ecosystems and people living in close proximity to forests or depending on forest resources, such as for water, food or fibre. Recovering ecological functionality of forests and surrounding areas also contributes to global efforts to combat climate change.

Forests in India have faced significant degradation due to deforestation, urbanisation, unsustainable practices in agriculture, mining, and infrastructure development. This loss has exacerbated issues like soil erosion, sedimentation, and biodiversity loss. Restoration is imperative for addressing such environmental challenges, including climate change and biodiversity loss. According to the Forest Survey of India (FSI), India State of Forest Report (ISFR) 2023, the total forest cover is 21.76% (7,15,342.61 km^2) whereas the tree cover is 3.41% (1,12,014.34 km^2) of total geographical area. There have been slight increases in forest cover in recent years, still the overall health of India's forests remains concerning. Restoration can support creating and maintaining critical habitats for wildlife, preventing species loss and promoting ecological balance.

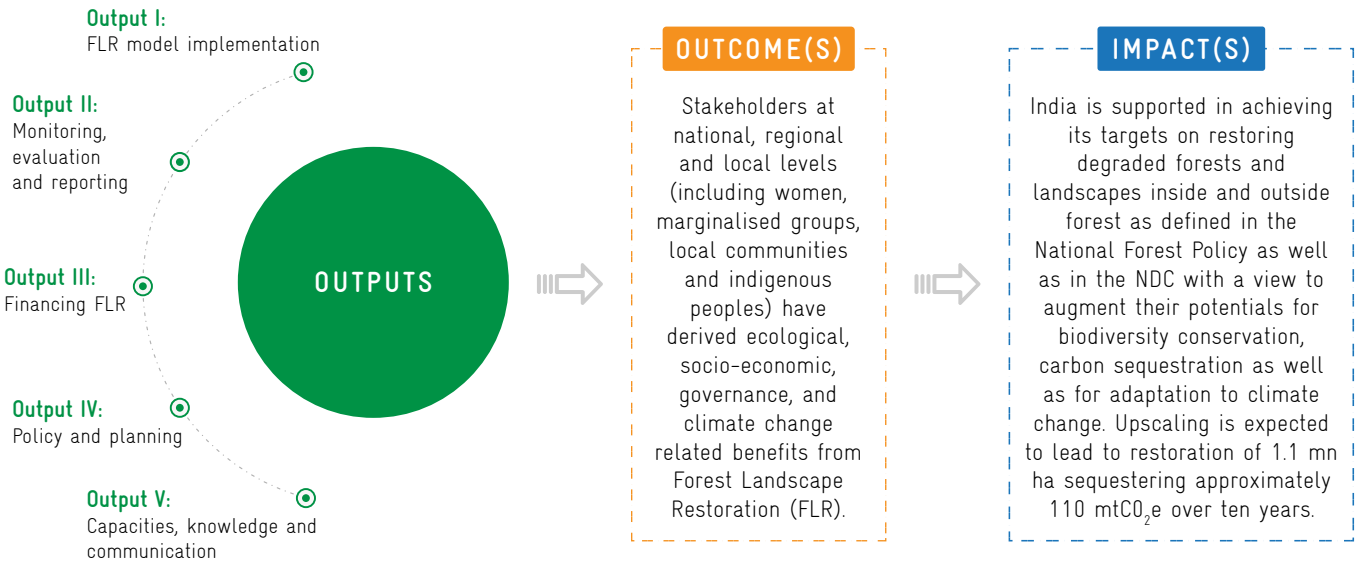
Forest Landscape Restoration (FLR) is the ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes. FLR is more than just planting trees – it is restoring a whole landscape to meet present and future needs and to offer multiple benefits and land uses over time. It is a comprehensive approach to restore degraded forest ecosystems to their original state or a more ecologically functional condition. It involves a range of interventions, from active plantation and reforestation to passive restoration techniques such as soil and moisture conservation that allow natural processes to take place. The goal of forest landscape restoration is to address the root causes of forest degradation and to create resilient and sustainable forest ecosystems. This approach recognises that forest degradation is often a result of complex social, economic, and environmental factors. FLR goes beyond the boundaries of forest having a direct/indirect impact on forest and other land uses. Implementation of FLR is hindered by conceptual gaps, practical challenges (e.g., plant material availability, survival rates), policy misalignment, financial constraints,

and knowledge dissemination issues. Therefore, successful forest landscape restoration requires a holistic approach that addresses these underlying issues. This may involve working with local communities to develop sustainable livelihoods and improving land management practices.

What is RECAP4NDC?

India is among the few countries to have achieved a positive trend in forest and tree cover which stands at 25.17% against the 33% National Forest Policy 1988 target. India is making concerted efforts to meet its national targets under the Bonn Challenge commitment and Nationally Determined Contributions (NDCs), and RECAP4NDC is one of the initiatives to provide support in achieving these targets. The project aims to bridge gaps in the adoption of landscape approaches by tackling implementation challenges, improving access to funding, strengthening the Monitoring, Evaluation, and Reporting (MER) system for FLR, and promoting knowledge exchange through capacity building, stakeholder engagement, and enhanced policy support. By 2029, RECAP4NDC aims at achieving ecological, socio-economic, governance and climate change benefits in 0.4 mn ha of landscape, capturing 10 $mtCO_2e$ in 10 years. 10 million people will benefit from improved ecosystem services. Upscaling will lead to restoration of 1.1 mn ha and sequestration of 110 $mtCO_2e$ in 10 years.

The project has five outputs as follows:



Output I: FLR model implementation

Model approaches for forest landscape restoration including sustainable forest management, sustainable management of trees and vegetation outside forests and agroforestry, are implemented in selected states in cooperation with stakeholders from public service, agriculture, private sector, and advisory services.

Output II: Monitoring, evaluation and reporting

Integrated systems for Monitoring, Evaluation and Reporting (MER) of ecological and socio-economic benefits of FLR are used.

Output III: Financing FLR

Models and tools for financing FLR from private, public and international sources are applied.

Output IV: Policy and planning

Policies and guidelines for forest landscape restoration are anchored in existing policy and planning processes.

Output V: Capacities, knowledge and communication

Individual capacities, knowledge and communication mechanisms for FLR have been transferred to and communicated among involved stakeholder groups.

Selected states for the implementation of RECAP4NDC

Under the RECAP4NDC project, four states have been selected briefly characterised by a range of specific starting conditions:

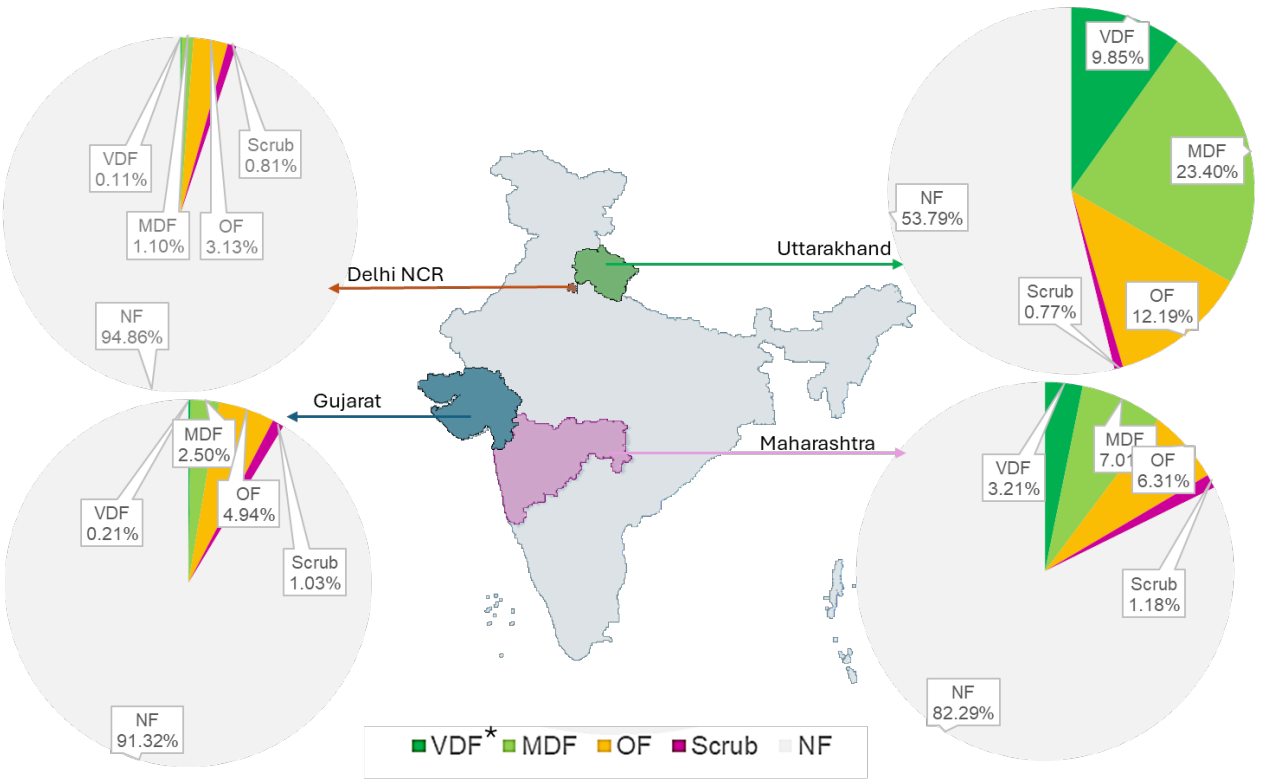
The Delhi National Capital Region (NCR) comprising of Delhi and the neighbouring districts from the states of Uttar Pradesh, Haryana, and Rajasthan demonstrates the challenges of rapid urban development and encroachment with resulting stresses on green spaces and forests, due to competing development needs on limited land. At the same time, the NCR presents interesting potentials to engage in restoration of urban tree cover. The project has taken a focused approach to the restoration of the Aravalli landscape within the NCR, aligned with the priorities of the MoEFCC and the respective State Forest Departments (SFDs).

Gujarat comprises several habitats and agro-climatic zones, such as grasslands, mangroves, and mudflats. It exposes specific challenges such as coastal degradation and pressures by grazing activities in grasslands, requiring specific approaches for landscape restoration and sustainable management.

Maharashtra accommodates 9 agro-climatic zones such as Central Plateau, the Eastern Vidarbha and Coastal Zones. The state provides potential for the comparative testing of different approaches in up to five to six potential sites across various agro-climatic zones.

Uttarakhand with its topography along different – mostly hilly and mountainous – elevation zones has already implemented different forms of community forestry via the strengthening of village forest management committees (Van Panchayats), microplanning, fund management, spring-shed management, and promotion of non-timber forest products. There are opportunities to supplement these programmes with targeted interventions around forest fire management and restoration of fire-impacted sites, invasive species management and strengthening existing community forestry structures.

Forest cover in selected states and UT as per ISFR 2023



*Very Dense Forest (VDF) , Moderately Dense Forest (MDF), Open Forest (OF), Non Forest (NF)
* India State of Forest Report (ISFR)

Implementation Partners and their role in RECAP4NDC

The political and implementation partners of the project are the Ministry of Environment, Forest and Climate Change (MoEFCC) and the State Forest Departments (SFD) respectively, along with other line departments such as Agriculture, Horticulture and Rural Development which are crucial for agroforestry, development of value-chains and upscaling of FLR. The partners will support, oversee, coordinate and guide the implementation of project. The activities of the project will be carried out by a group of six consortium partners i.e., the International Union for Conservation of Nature (IUCN), the Indian Council of Forestry Research and Education (ICFRE), the Forest Survey of India (FSI), The Energy and Resources Institute (TERI), the International Centre for Integrated Mountain Development (ICIMOD) and GIZ being the lead partner of the project.

Agro-forestry land in Aravallis, Delhi NCR.

The role of each partner and the governance structure is provided below.

Restore, Conserve and Protect Forest land Tree Cover for NDC Implementation in India (RECAP4NDC)

Governance and Implementation structure

National Project Steering Committee

To oversee and coordinate the implementation of Indo German bilateral cooperation project RECAPANDC

Chaired by Additional Director General of Forests (ADG), MoEFCC

State Project Steering Committee

Chaired by Principal Secretary, State Government

To undertake state-level policy decisions and important guidelines issuance for effective implementation of the project

Project Executive Committee

Chaired by Head of Forest, State Forest Department

To guide in preparing department level implementation strategy and annual action plan for effective implementation of the project

Consortium Partners

IUCN, ICFRE, FSI, ICIMOD, TERI, GIZ

Lead by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

All Consortium Partners are responsible to carry out project activities in coordination with SFDs and effectively implement the project and achieve the outcome of the project

Consortium partners and their role

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Key Responsibility: Output IV (Policy and planning)

GIZ is the project implementing organisation on behalf of BMUKN. GIZ will coordinate the overall project. As main applicant, GIZ will provide grants to the other partners, oversee financial management as well as liaise with and report to BMUKN. GIZ is also responsible for coordinating regional and country level implementation with the respective partners. Further, GIZ is responsible for the specific implementation of output IV (policy and planning) and will contribute to outputs I (FLR model implementation), II (monitoring, evaluation, reporting), III (financing FLR) and V (capacities, knowledge and communication). It will coordinate exchange and cooperation in South-South formats and seek private sector financing and public-private partnerships at the global level.

Activities:

1. Overarching policy development for FLR
2. Development of concrete mainstreaming and up-scaling mechanisms

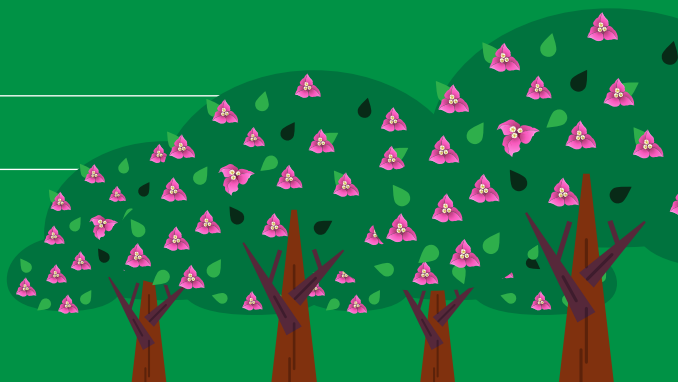
International Union for Conservation of Nature (IUCN) India

Key Responsibility: Output I (FLR model implementation)

IUCN, a membership union and a global leading organisation in nature conservation, is uniquely able to offer sustainable forest and land-use solutions from the concept stage over knowledge and data generation, and from policy and decision making at all levels to results on the ground. As a representative of indigenous peoples' groups and civil society organisations, IUCN places strong emphasis on equitable outcomes from landscape management, particularly championing the rights and responsibilities of women and indigenous peoples. IUCN India Country office has inter alia tracked India's progress towards its restoration pledges by preparing the first country progress report on the Bonn Challenge in 2018 published together with Ministry of Environment, Forest and Climate Change (MoEFCC). In the same year, IUCN India's work in Uttarakhand was initiated wherein Restoration Opportunities Assessment Methodology (ROAM) was piloted, and landscape restoration interventions were proposed. In 2019, MoEFCC launched a flagship project to build capacity on Forest Landscape Restoration (FLR) and Bonn Challenge in partnership with IUCN. ROAM, being one of the components of the project, is currently being implemented in five States (Haryana, Madhya Pradesh, Maharashtra, Nagaland and Karnataka).

Activities:

1. Scoping of FLR sites and models
2. Planning for restoration in these sites
3. Implementation of restoration work



Forest Survey of India (FSI)

Key Responsibility: Output II (Monitoring, Evaluation, Reporting)

FSI is a premier national organisation under the MoEFCC responsible for regular assessment and monitoring of the country's forest resources. It prepares the biennial State of Forest Report, providing assessment of the current forest and tree cover in the country, monitors change, conducts inventories of forest and non-forest areas and maintains a database on forest tree resources. FSI also provides trainings for forestry personnel in the application of technologies such as remote sensing and Geographic Information System (GIS) and supports State Forest Departments (SFD) in forest resources survey, mapping and inventory.

Activities:

1. Establish Monitoring, Evaluation and Reporting (MER) mechanisms to measure FLR impacts
2. Develop reporting frameworks
3. Operate monitoring, evaluation and reporting frameworks

The Energy and Resources Institute (TERI)

Key Responsibility: Output III (Financing FLR)

TERI is a leading think tank dedicated to conducting research and pilot implementation for sustainable development in India and the Global South. TERI has vast experience in policy advisory, technology development and dissemination in the field of climate change, in particular topics such as forestry, circular economy, energy efficiency and soil conservation. TERI and GIZ have a long history of successful cooperation in the respective fields, especially in energy and resource efficiency, as well as economic and environmental analysis, for instance in the forestry component of the successfully completed IKI-BMUKN funded project "Development and Management of Nationally Appropriate Mitigation Action (NAMA) in India". Additionally, the IKI-BMUKN funded project "Indo-German Support Support Project for Climate Action in India" is jointly implemented by GIZ, MoEFCC and TERI.

Activities:

1. Develop financing models and action plans
2. Develop/customise existing financing tools and mechanisms for concrete FLR measures
3. Develop approaches for private sector involvement

Indian Council of Forestry Research and Education (ICFRE)

Key Responsibility: Output V (Capacities, Knowledge and Communication)

ICFRE is an autonomous body of the MoEFCC and responsible for research and education in the forestry sector. It has developed models and practices for FLR (restoration of degraded forests, restoration of mined degraded lands) and trees outside forests (TOF), especially agroforestry models for increasing farmers' incomes. In addition, ICFRE has prepared the National REDD+ Strategy which outlines a detailed framework for the implementation of REDD+ activities in India to address drivers of deforestation and forest degradation and to conserve and enhance forest carbon stocks. ICFRE has been announced as the Centre of Excellence on Sustainable Land Management for South-South Cooperation in India with a mandate to facilitate networking of national and international institutions working on sustainable land and ecosystem management.

Activities:

1. Training for FLR
2. Community empowerment for FLR
3. Knowledge exchange / management for FLR

International Centre for Integrated Mountain Development (ICIMOD)

Key Responsibility: Output V (Capacities, Knowledge and Communication)

ICIMOD is a regional intergovernmental organisation working on forest conservation and management in the Hindu Kush Himalayan region. Through its REDD+ Initiative, ICIMOD has been supporting capacity building for results-based management of forest resources in Bhutan, India, Myanmar, and Nepal from 2014 to 2020. Its activities include capacity building, technical backstopping, setting up a regional learning platform for nature-based solutions and developing methods for the Monitoring, Reporting, Verification (MRV) of forest carbon. ICIMOD has supported in the respective REDD+ readiness phase of these countries. It also developed several manuals for implementing forest activities based on scientific methods which can be implemented by the State Forest Departments. Currently, the Sub-National REDD+ Action Plans (SRAP) Manual is used in India to address deforestation and forest degradation and promote Afforestation, Reforestation and Revegetation (ARR).

Activities:

1. Community empowerment for FLR
2. Knowledge exchange / management for FLR

Selected landscape in Almora, Kumaon, Uttarakhand.

Scrub and shrub land with rocky patches in Parola Range Forest, Jalgaon District, Maharashtra.

Aravalli Mountain Range Banaskantha, Gujarat.

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