



Sustainable Management of Forest Ecosystem Services

Situation

Forest and agroforest ecosystems play a larger role in our survival, apart from being a timber source. Water is the most critical ecosystem service for sustaining life, amongst a wide array of other services provided by forests. Forests are intrinsically linked to water as forested watersheds and provide 75 percent of our accessible freshwater resources (*Millennium Ecosystem Assessment, 2005*).

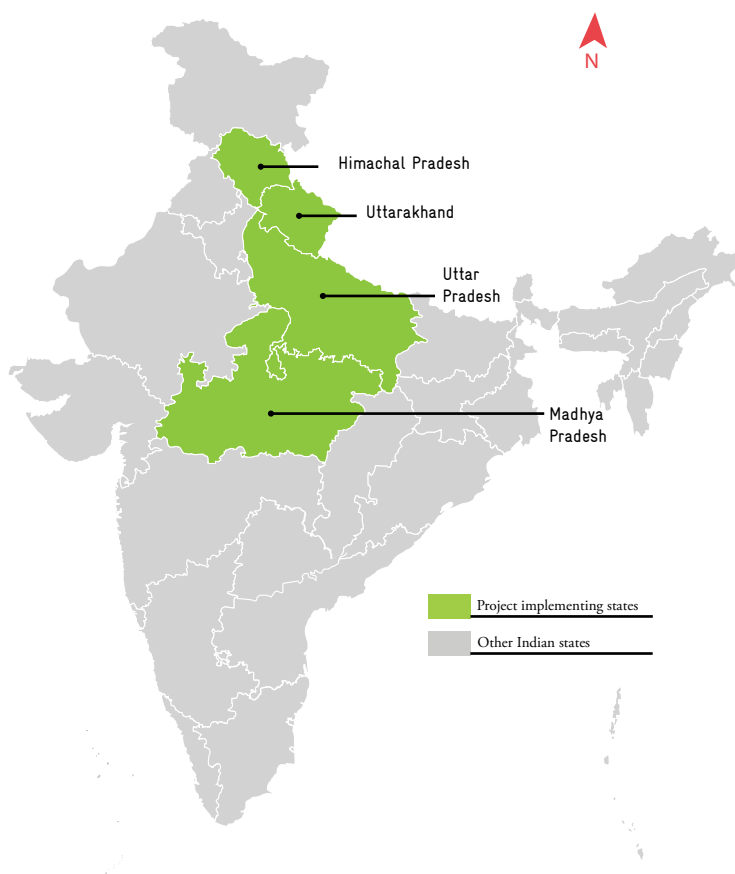
Restoring degraded forest and agroforest lands and maintaining them to regulate stream flow will improve the accessibility of water resources. Landscape approaches also emphasise the need to manage forests for ecosystem services to maximize their flow and ensure their equitable distribution. (*Advancing the Forest and Water Nexus, FAO, 2019*)

However, despite its importance, forest and agroforest management is not yet sufficiently oriented to integrate the Forest Ecosystem Services (FES) approach. It is therefore important to consider the FES approach while making forest and agroforest management decisions so that these are managed in a sustainable manner and steered towards enhancing the flow of FES, especially water availability.

The project supports **the increased orientation of forest and agroforest management towards FES**, with a focus on water availability.

Objective

The main objective of the project is to strengthen the forest and agroforest management to integrate the FES approach with emphasis on water availability.



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Approach

The project is being implemented in close cooperation with the Indian Ministry of Environment, Forest and Climate Change (MoEF&CC), the Himachal Pradesh, Uttarakhand, Uttar Pradesh and Madhya Pradesh Forest Departments. The following four core areas define the implementation approach of the project:

- Institutionalisation and up-scaling of the FES approach in forest management: by development of working tools such as guidelines, templates, toolkits *etc.* for decision making for sustainable FES management, documenting and disseminating best practices for improving water availability.
- Providing implementation support, to demonstrate the feasibility of cross-sectoral approaches and innovative approaches for FES management: by developing and implementing FES management plans at the project sites focusing on incentive based mechanisms, inter sectoral linkages and physical interventions for improving water availability.
- Knowledge management, for improved access to available knowledge on sustainable FES management: by developing digital formats for knowledge exchange on sustainable FES management, capacity development of stakeholders and upgrading the existing curricula for forest training courses.
- Improving the operational conditions for ecologically and economically sustainable value creation from agroforestry systems in U.P. and M.P. by documenting and disseminating best practices for Indian agroforestry models and their value chain, identification and implementation of innovations for

value chains, development of working aids for farmers and Farmer Producer Organisations (FPOs), strengthening/setting up of FPOs, capacity development of various actors and knowledge sharing through forestry and agricultural networks.

Contribution to 2030 Agenda

The FES project directly contributes to the already formulated national indicators for Sustainable Development Goal (SDG) 2: Zero Hunger:

- Value added by agricultural workers
- Share of organic farming

and SDG 15: Life on Land

- Share of forest areas in the total land area,
- Percentage of trees outside the forest in the total forest cover,
- Decadal change in the extent of water bodies within forest areas from 2005-2015.

It is of utmost importance to **integrate FES management as an essential solution** for the sustainable flow of water and related ecosystem services.

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