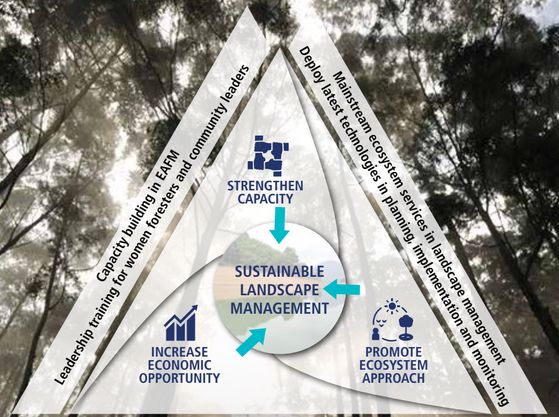

Forest-PLUS 2.0
RATIONALE AND EXPECTATIONS

- To assist India with its ambitious growth targets through enhancement in forest-based goods and services using improved sustainable landscape management techniques
- To develop forest-based value chains and incentive mechanisms to attract investment in forests and enhance ecosystem services
- To further the understanding of the values of forest ecosystem services (ecological, economic, social, cultural, scientific)
- To promote an ecosystem approach for a coordinated, efficient and integrated forest landscape management
- To adopt new technologies and innovative tools for forest landscape planning, implementation and monitoring
- To assist in the preparation of Working and Management Plans innovatively for land within and outside recorded forest areas

USAID
FROM THE AMERICAN PEOPLE

Ministry of Environment, Forest and Climate Change

Forest-PLUS 2.0
forest for water and prosperity

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Strengthening Forest Management in India

Context

At almost 3.3 million km^2, India is the seventh-largest country in the world. Across this vast area, the topographical diversity – including four major mountain ranges (Himalayas, Western Ghats, Eastern Ghats, and Aravallis) – combined with varied climatic conditions (ranging from 300 to more than 3000 mm precipitation per year on average) has given rise to tremendous ecological diversity. These diverse ecosystems, which include 16 distinct forest type groups, support more than 91,000 animal and 45,500 plant species making India one of 17 "megadiverse countries" which harbor 60-70 % of the planet's biodiversity.

Ecosystem Services and Value of Forests

The forests of India provide an array of benefits to its people, especially the 300 million that are dependent on forest for sustenance and livelihood, and ecosystem goods and services including timber and other wood products, non-timber forest products, clean water and air, climate regulation, soil stabilization, recreation, spiritual values, etc. Forests are at the core of India's natural capital "bank account" that has provided economic security to surrounding communities and wider society for millennia. An expert panel convened in 2013 estimated that the net present value of India's forests is $1.7 trillion.

Water is one of the very important ecosystem services that the forested landscapes provide and in times where India, with just 4% of world's water, is catering to 16% of the world's population and 18% of the livestock, it assumes a much greater significance and importance. A 2016 analysis of 290 rivers of India's 400 rivers reported that over 70% of them were in the critical category: their water flows were diminished, tributaries were dwindling or cut off, pollution was rampant, riverbanks built up and encroached, and catchment areas denuded of forests. The increasing freshwater scarcity has elevated the importance of forests as "water tanks" as a large number of rivers originate and are sustained by forested landscapes.

Role of Forest-PLUS 2.0

The ability of forests to provide the goods and services needed for India's growing population and economic growth is limited by the pressure on the landscapes (of which forests are part). There is a need for a coordinated effort towards integrated landscape management and enhancement of ecosystem services particularly water aided by planning and decision-support tools.

To address this need, Forest-PLUS 2.0: forest for water and prosperity, a five-year program of the United States Agency for International Development (USAID) and the Government of India's Ministry of Environment, Forest and Climate Change (MoEFCC) initiated in December 2018 will demonstrate an ecosystem approach to forest landscape management that increases their ecological and socioeconomic sustainability. Further, the program will contribute to a deeper understanding of the forest ecosystem services flow in each landscape. This knowledge will support the development and institutionalization of systems and tools that support the sustainable management of those services, and balance sustainability with the need for inclusive economic growth.

Forest-PLUS 2.0 will build on the success of USAID's predecessor program, the Partnership for Land Use Science (Forest-PLUS), which was implemented from 2012 to 2017. Forest-PLUS 2.0 will continue the close collaboration and cooperation among forest departments in targeted states, academic and research institutions, private sector entities, and forest-dependent communities.

The program targets are:

- 1,200,000 hectares of land under improved management
- Three incentive mechanisms demonstrated in managing landscapes for ecosystem services
- $12 million of new, inclusive economic activity conducted
- 800,000 households accrue measurable economic benefits

The program will focus on:

DEVELOPING TOOLS FOR MANAGING FORESTS FOR MULTIPLE SERVICES

- Help improve management of the forested watersheds to enhance water flow and quality, and improve the livelihood opportunities and resilience of forest-dependent communities.
- Develop model forest management plans (Working Plans and Landscape Management Plans) based on an established ecosystem approach.
- Automation of forest planning processes using innovative apps and tools.

INCENTIVE-BASED INSTRUMENTS FOR LEVERAGING FINANCE

- Develop tools for better monitoring and valuation of ecosystem services
- Demonstrate incentive-based mechanisms for efficient delivery of these services e.g. a municipality or industry would make payments to upstream forest communities for using water flowing down from the forests because of improved forest management.

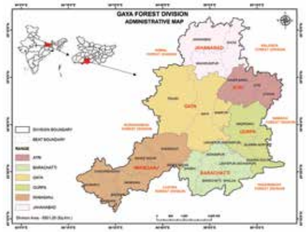
UNLOCKING ECONOMIC OPPORTUNITIES WITH CONSERVATION

- Focus on modeling and setting up conservation enterprises to provide viable economic opportunities to forest-dependent people (rather than subsistence-scale livelihoods) and leverage investment from the private sector

Forest-PLUS 2.0 Landscapes

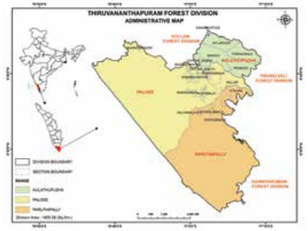
Gaya, Bihar:

Gaya division is in the south of Bihar, bordering Jharkhand and is an important Buddhist pilgrimage site. The division includes Gaya and Jehanabad districts. The natural forest cover, tropical dry deciduous, is sparse. Gautam Budh Wildlife Sanctuary is part of the division. Non-timber forest products available in the forests include Tendu, Bel, Mahua, Amla and Chironjee. Many rivers that originate from the Chhota Nagpur region including Phalgu, Morhar Dhardha, Paimar flow through Gaya. The landscape is densely populated, with agriculture being the main occupation.



Thiruvananthapuram, Kerala:

Thiruvananthapuram landscape lies at the southern tip of Kerala State, encompassing two forest divisions: Thiruvananthapuram territorial (TTR) and Thiruvananthapuram Wildlife (TWL). Thiruvananthapuram has mostly tropical evergreen and semi-evergreen type forest and is part of the Western Ghats, which has very high endemism and exceptionally high biodiversity. As an indicator of the rich biodiversity of the landscape, the area is teeming with endangered species including lion-tailed macaque, Nilgiri tahr, and Nilgiri langur. The landscape has three rivers – Neyyar, Karamana and Vamanapuram.



Medak, Telangana:

Medak forest division comprises Medak district and is located in the central-west part of Telangana. The forest type found in the division is Tropical Dry Deciduous. A part of the division covers the biodiversity-rich Pocharam Wildlife Sanctuary. There are high value tree species such as Teak, Mahua and Dalbergia coupled with the NTFP base including Neem, Amla, Seetaphal and some medicinal plants. The Manjeera river and its tributaries form an important watershed which harbors the forest resource base.