



Restoring Landscapes In India For Climate and Communities

Nature-based solutions like landscape restoration are a triple-win: They can cost-effectively create jobs and protect local livelihoods, safeguard biodiversity, and help limit global warming to below 1.5°C. In India, restoring land can bring economic prosperity to nearly 700 million people while protecting the environment and conserving biodiversity.

India has played an active role in supporting landscape restoration, with commitments to restore 26 million ha and draw down 2.5–3 gigatonnes of carbon dioxide equivalent (GtCO₂e) by 2030, the equivalent of the yearly emissions of 650 million cars, through the Paris Climate Agreement. India has also set national targets to help meet the Sustainable Development Goals and several domestic targets for restoration, becoming the first country in the world to enact a national agroforestry policy in 2014.

THE TRUE OPPORTUNITY OF RESTORATION

WRI India's [Restoration Opportunities Atlas](#) shows that nearly **140 million hectares could benefit from forest protection and landscape restoration**. By protecting and restoring land, India can **sequester 3 to**

4.5 gigatons of above-ground carbon by 2040, secure critical ecosystem services like biodiversity and water quality, and fulfill the food, fuelwood, and fodder needs of dependent communities.

To realize this potential and achieve international commitments, local people must be at the centre of planning, designing, and implementing restoration projects. That is why WRI India [adapted](#) the Restoration Opportunities Assessment Methodology ([ROAM](#)), designed by IUCN and WRI, to measure not just the environmental benefits of restoration but also its economic and climate benefits. The goal was to include and lift up the voices of the local women, tribal communities, and marginalized groups that are heavily dependent on forests, the commons and unproductive land for their sustenance.

Figure 1 | Adapting ROAM for Sidhi Assessment: Overview of Analysis and Methodolgy



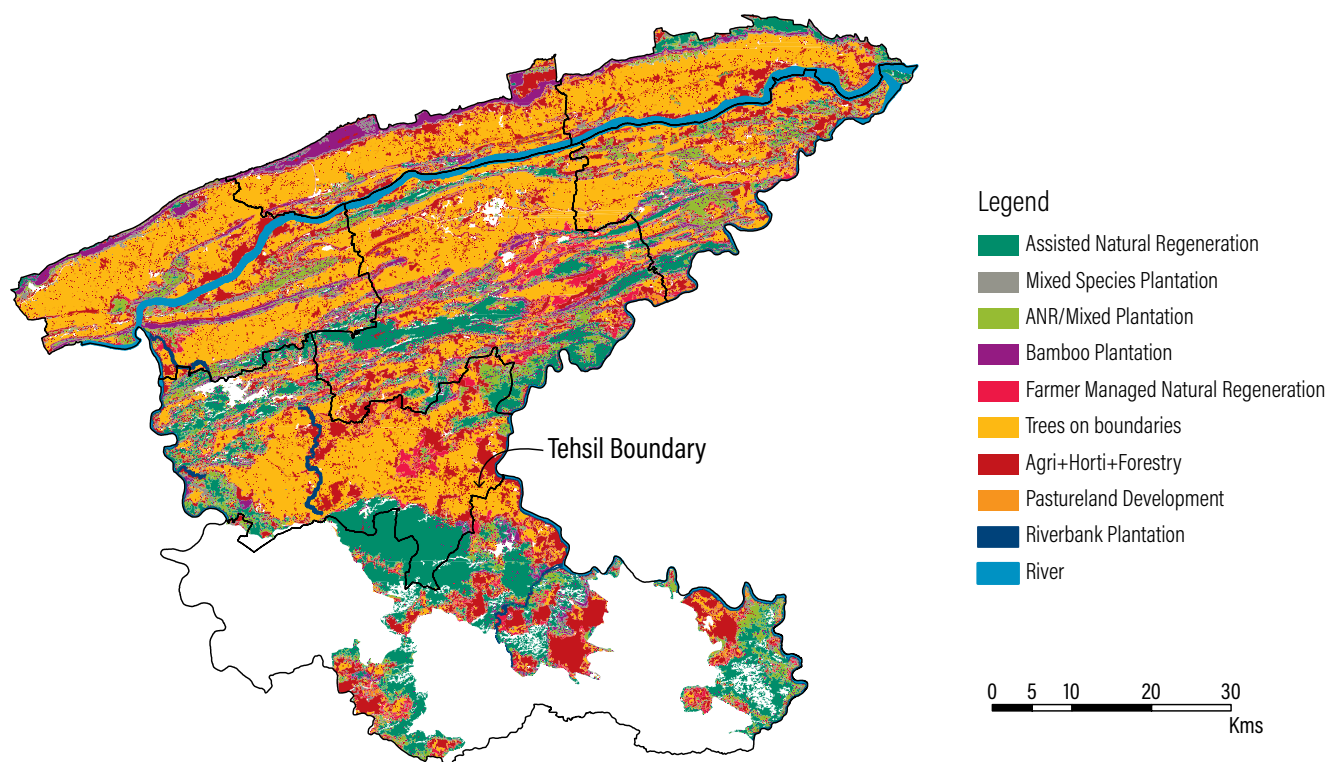
Source: Singh et al. 2020

THE CASE: REVITALIZING SIDHI'S LAND

In Sidhi District, a resource-rich but largely impoverished district in Madhya Pradesh, most people depend on forests and the land to survive. That makes Sidhi typical of the dozens of underdeveloped landscapes in India and worldwide. Changes in forest composition, land degradation, rising temperatures, and desertification have made it harder than ever for people there to thrive. To assess the true impact of restoration on people's lives, researchers from WRI India, CEL WWF-India, and the Institute of Livelihood Research and Training (ILRT) implemented the adapted ROAM in Sidhi in close collaboration with local farmers and communities, producer companies, government departments, and civil society.

Our findings show that nearly **75% of land could benefit from restoration** through eight techniques like growing trees on farm boundaries, helping trees naturally regenerate, creating native tree plantations, and growing sustainable orchards on farms. Restoring Sidhi's forests can sequester more than **7 million metric tons of carbon over 10–20 years**. Restoring land can provide key ecosystem services, like preventing erosion by growing trees on steep slopes, and products that local people rely on. It can also conserve biodiversity in the three protected areas of the district.

Figure 2 | Types of Potential Restoration Interventions in Sidhi: Map of Potential Restoration Interventions



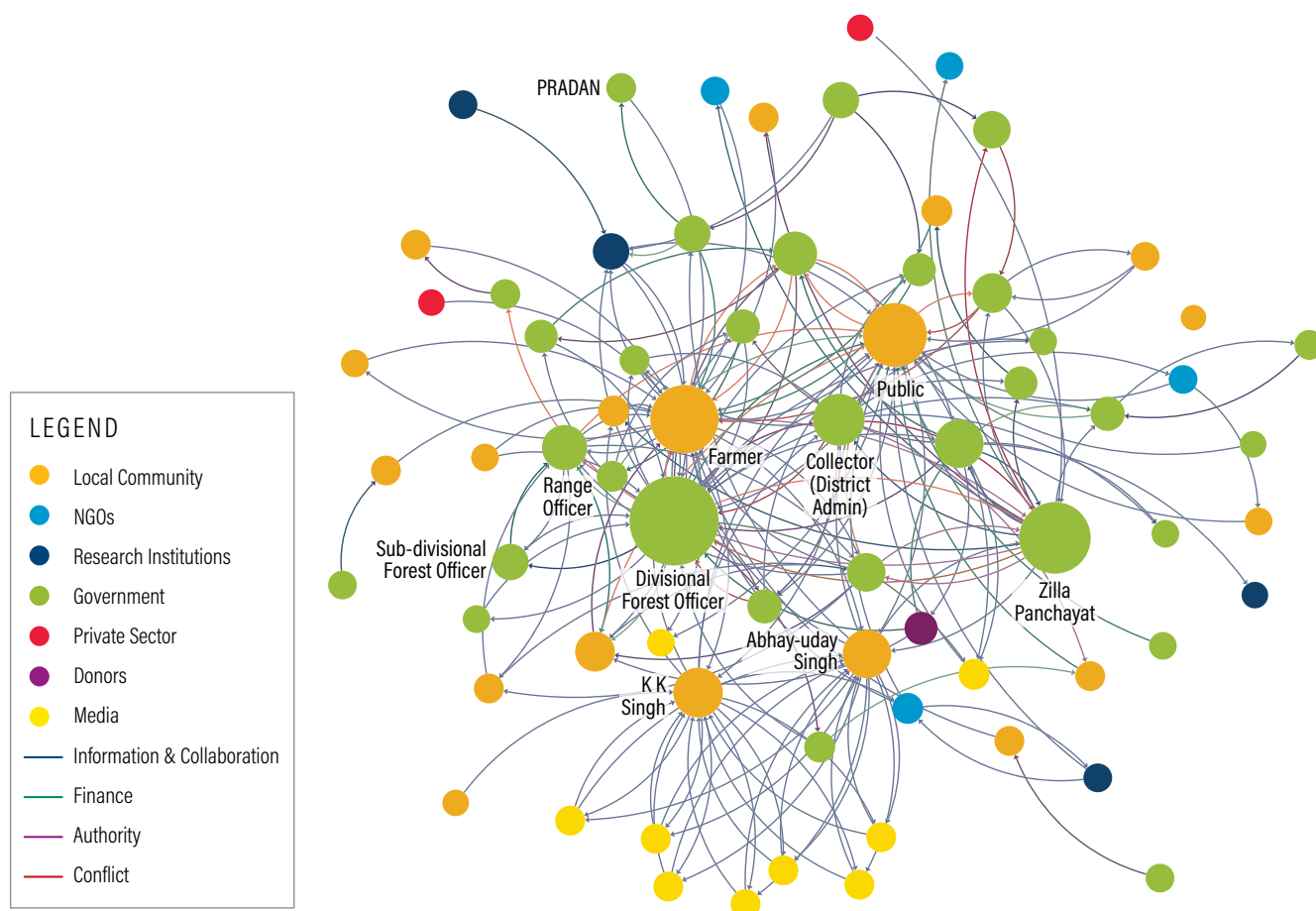
Source: Singh et al. 2020

RESTORING A THRIVING RURAL ECONOMY

Restoring land is a major economic opportunity for the dozens of communities, government officials, NGOs, and companies shown below. Planting **39.5 million saplings** would create 3.75 million paid working days for local people over two years. This would result in **INR 710 million (US\$10 million) of extra income** for local and rural communities in just two years. Local people could also earn an additional **INR 592.3 million (\$8.46 million USD) from selling saplings to restoration projects.**

Harvesting, processing, and selling high-value tree crops like bamboo, jackfruit, and moringa could **create 30,000 jobs and 3,000 microenterprises** in five to seven years. People from marginalized groups, including the women, unemployed youth, and landless people who disproportionately rely on the resources that healthy land provides, could fill many of these opportunities.

Figure 3 | Social Network Map of Actors Who Could Support Implementation of Landscape Restoration in Sidhi



Source: Buckingham et al. 2018

The Government of Madhya Pradesh, Sidhi District Administration and WRI India are now working together with local communities to make the true opportunity of restoration a reality. Read more about this work in the publication *Restoring Landscapes In India for Climate and Communities*.