KEY ACHIEVEMENTS - KARNALI CORRIDOR
MAKING HEADWAY IN RIVER CORRIDOR CONNECTIVITY THROUGH
PROMOTION OF SUSTAINABLE FOREST MANAGEMENT AND CLIMATE
RESILIENT ECOSYSTEM AND COMMUNITY
Spanning an area of 2,471,013 Ha and stretched between the Bagmati river in the East and Mahakali river in the West, the Terai Arc Landscape in Nepal (TAL) functions as the trans-boundary conservation landscape between Nepal and India. The landscape hosts a rich assortment of species including the endangered Royal Bengal Tiger and Greater One-Horned Rhinoceros. Covering 75% of the Terai, the low land and Chure (mid-hills) forest, the TAL remains a critical landscape accommodating six protected areas, connected by seven forest corridors that provide ecological connectivity and support meta populations of important mega-faunas.

Named after the famous river ‘Karnali’, the biggest tributary of the Indian Ganges river by volume, the Karnali corridor is one of the seven corridors within TAL, sprawling across an area of of 22,700 Ha of Kailali and Bardiya districts in Western Nepal. Connecting Bardiya National Park to India’s Katerniaghat Wildlife Sanctuary, the corridor helps maintain contiguous habitat by linking natural ecosystems between these biodiversity hotspots. It also maintains critical connectivity between the Churia hills and the lowlands in Kailali District, supporting environmental flows to sustain ecological communities and ecosystem services. Almost two-third (65.6%) of the corridor is covered by forests comprised of ecologically and commercially valuable tree species such as the Sal (Shorea robusta) and Khayar (Acacia catechu). This vast expanse of the forest also harbors critical terrestrial and aquatic species ranging from rhinos, elephants, tigers, gharials to Gangetic dolphins and helps facilitate their north south movement. Alongside these species, the corridor is also home to a diverse group of communities belonging to different ethnicities and economic strata, most of them either forest or river dependent for livelihoods - Sonha, Tharu and Majhis to name a few.

Regardless of its merits, the Karnali corridor remains imperiled by climatic and anthropogenic threats, rendering its population, both human and wildlife, highly vulnerable to adverse impacts. A litany of threats including illegal logging, poaching, forest fire, flood, riverbank cutting, and landslide continue to challenge this narrow strip of forest, threatening its functionality as a corridor.

BACKGROUND


ABOUT THE PROJECT

Some of the key project interventions included forest management and restoration along with fire line maintenance, bioengineering and provision of firefighting equipment and techniques, geared towards reducing climatic and anthropogenic impacts such as forest fires, riverbank cutting, flood risks and proliferation of invasive species. A large part of the project focused on leveraging SFM practices to generate employment opportunities and alternate income generating activities for the community members, successfully safeguarding their livelihoods. Some instances of income-generative activities include vegetable farming, mushroom farming, endowment fund support and skill-based training. The overall project performance was further complemented by awareness campaigns such as radio programs and capacity building on SFM, along with climate change and good governance practices. More importantly,
embracing community driven initiatives such as local participation in wildlife rescue and release, monitoring and anti-poaching activities backed by multistakeholder engagement and promotion of innovative and practical solution to reduce Human Wildlife Conflict (HWC) have greatly propelled conservation efforts in the corridor, contributing to the success of this project.

The project engaged extensively with all three tiers of government—local, provincial, and federal—drawing attention to the importance of maintaining the ecological and economical value of the complex. This multi-pronged approach has helped strengthen government and IPLC’s sense of ownership towards conservation efforts in the region.

ACHIEVEMENTS

Within a span of three years, the project was successful in achieving numerous milestones:

| 12,000+ | 12,000+ Hectares of forests under improved management
|         | • 1,600+ Hectares of forests under SFM
|         | • 1200+ m³ Timber sustainably harvested
|         | • 100,000+ Person hours of employment generated
|         | • 450+ Hectares of forests restored
| 64      | Community Forests successfully managed
| 70%     | Reduction in firewood consumption through the use of alternative energy
| 7,000   | Households (55.36% Indigenous and Marginalized People) supported with livelihood diversification options
|         | • NPR 1.5 million secured in gross profits
| 1,500   | Youth (56.56% female) engaged in conservation
| 26      | Local resource persons developed for SFM

COMMUNITY VOICES

“Tigers, blue bulls, spotted deer and wild boars frequently forayed into our village, often killing our livestock, and destroying our crops – our primary source of livelihood. We developed certain resentment towards them and chose to retaliate. We blamed the forest officials and CFUG members because we thought that it was a result of their forest conservation efforts. Things have changed now. With the support of the project “Communities in Transformation: Building Resilient Communities”, a 3 km mesh wire was placed around our village, restricting wildlife from entering the village. The project also established wetlands for the wildlife and maintained grasslands in the forest for foraging. This intervention has had positive impact in our village - we can now happily grow our crops while wildlife is also protected from retaliatory killing.”

- Ranga Rawal
Beneficiary, Kopila CFUG, Lamkichiwa

“Our village—Udaypur—is perched on the fringes of Bhagora river and hosts around twenty households, with most of its members previously engaged as bonded labors. Traditionally, our agricultural produce only included cereal crops that we would grow across a small area of agricultural land. This barely met our basic needs, which is why we depended on extracting and selling wood, timber, sand, and gravel. Our journey towards self-reliance took flight with the introduction of this project in 2018. We received trainings on mushroom farming and were also provided mushroom spawns and the necessary equipment we would need to scale the business. Our mushroom farming business is doing very well at present. The best thing is that the buyers come to us on their own to collect the mushroom.”

- Ms. Sharmila Chaudhary
Member of Mukta Kamaiya lead farmer group, Birendra CFUG
LESIONS LEARNED

• Practicing SFM improves forest conditions, productivity and provides continuous forest products and services for present and next generations. It creates ample opportunities to uplift local and national economy, thereby contributing to Sustainable Development Goals (particularly SDG 1, 2, 3 and 15). However, this is a new practice and requires substantial financial resources and technical expertise along with good governance within the Community Forests where it is practiced.

• Designing innovative and multi-faceted interventions provide multiple benefits and helps effectively address a diverse range of issues such as HWC and forest degradation. A case in point: Mesh wire fencing constructed through the project benefited the community and biodiversity in multiple ways, particularly in promoting forest restoration, reducing human wildlife conflict, and protecting wildlife.

• Nature-based solutions such as bioengineering, wetland and grassland management, plantation, alternative energy promotion among others have successfully reduced ecological and economic losses, while making people and the ecosystem more resilient to climate hazards.

WAY FORWARD

Sustainable forest management that enhances social, economic, and environmental benefits and leverages strong partnerships with local communities and government authorities is essential for forest ecosystem conservation. While this project has made some remarkable progress in implementing such sustainable forest management approaches, these initiatives need to be further replicated and expanded. Similarly, conservation solutions that integrate local livelihoods, nature-based solutions and disaster risk reduction measures should be scaled up to reimagine a future where ecosystems and communities are resilient to the impacts of climate change.

Building on the achievements of the project, the following outcomes should be prioritized in the future:

• Maintaining connectivity from lowland Terai to Churia and mid hills through forests and habitats restoration within the corridor.
• Increasing benefits from forests through sustainable management and sustainable use of forest resources.
• Strengthening community stewardship and multi-stakeholder partnership along with community based natural resource management and nature-based solutions.