



## Building Agroforestry-based Adaptation Plans for Resilient Floodplains (BAGAR)

### Background & Rationale

The Building Agroforestry-based Adaptation Plans for Resilient Floodplains (BAGAR) project focuses on regenerating and sustainably managing floodplains in Nepal's Marin and Gadhimai municipalities within the Bagmati river basin. Nepal is highly vulnerable to climate change, particularly due to regular monsoon floods and unpredictable flooding, which have exacerbated food insecurity and livelihoods loss, especially for marginalized communities. The project targets vulnerable groups, including Indigenous communities (Tamang, Magar, Majhi) and Dalits, who make up 60% of Marin's population and 35% of Gadhimai's. These groups face challenges in local governance and land tenure systems. Sedimentation in floodplains has made land uncultivable, worsening their situation. BAGAR will collaborate with these communities to develop ecosystem-based agroforestry plans that integrate native fodder species, which are resilient to floods and can provide food and livestock feed. These plans aim to reduce flood risks, improve ecosystem services, and generate livelihood opportunities. By focusing on floodplain regeneration, the project will create models for scalable riparian restoration and floodplain management across similar municipalities.

### Goal

To build resilience among 1,050 smallholder livestock farmers in Karnali and Sudurpaschim provinces by engaging them in climate-smart livestock farming enterprises that are profitable and sustainable.

### Working Areas

**Madhesh Province:** Rautahat District, Gadhimai Municipality  
**Bagmati Province:** Sindhuli District, Marin Rural Municipality

### Project Period

November 2024- November 2026

## Innovative Contributions

The project is making two key innovative contributions:

- Empowering communities through the co-design of Ecosystem-based Adaptation (EbA) plans using Heifer's community development approach, which fosters agency and active participation.
- Leveraging Heifer's existing partnerships with local governments to build trust and scale the program across the region.

## Alignment With EbA's Strategic Objectives

- **Strategic Objective 1:** Raise awareness and understanding of natural assets' critical role in resilience, expand the knowledge base to support nature-based approaches, and enhance institutional capacities for mainstreaming Ecosystem-based Adaptation (EbA) into national plans, policies, and across sectors.
- **Strategic Objective 2:** Address planning and governance gaps to increase the attractiveness and feasibility of using and scaling up ecosystem-based approaches for climate change adaptation.
- **Strategic Objective 3:** Expand access to sustainable short- and long-term finance mechanisms for applying and scaling up ecosystem-based approaches for climate change adaptation, encourage private sector investment in EbA, and reduce EbA's reliance on high management capacity and continuous financial input.

## Target Groups

BAGAR will target groups in seven wards of Marin and nine wards of Gadhimai municipalities, providing support for addressing their EbA-related knowledge and skills gaps. It will bring together marginalized and vulnerable groups and diverse stakeholders to develop ecosystem-based Bagmati river floodplains development plans. These groups and stakeholders will primarily work through 35 Heifer-supported community-based organizations (CBOs) from the municipalities' 16 wards. The direct beneficiaries are the entire population of the two municipalities (78,232), including vulnerable and marginalized riparian communities (40% Dalits and Indigenous groups) who depend on climate-sensitive natural resources for their livelihood and are represented in the CBOs.

## Alignment with SDGs

BAGAR project aligns with 6 Sustainable Development Goals: No Poverty (1), Decent Work and Economic Growth (8), Reduced Inequalities (10), Responsible Consumption and Production (12), Climate Action (13), and Partnerships for the Goals (17).

## Expected Outcomes

To collaboratively develop ecosystem-based agroforestry plans for the Gadhimai and Marin floodplains, focusing on climate-induced flood risk reduction, and enhancing food and fodder production.

