

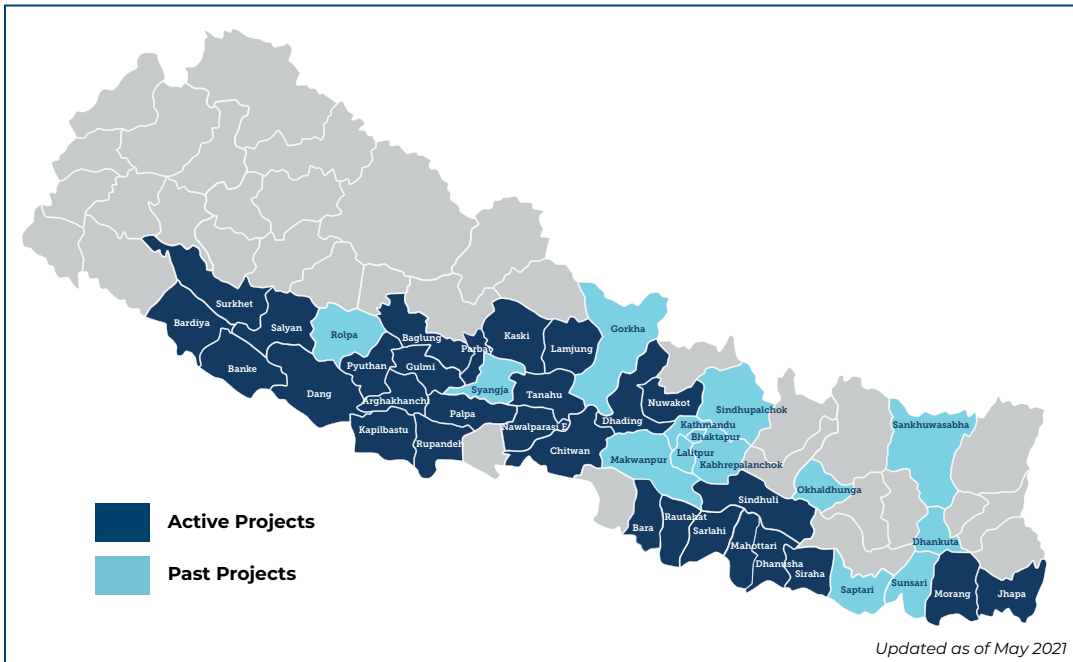


Commitment to the Environment

Between 2020 and 2030, Heifer Nepal aims to support 650,000 farming families to establish sustainable and resilient food and farming businesses in the goat and dairy value chains. It works directly with farmers and a range of different partners to increase farmer incomes and build social capital. Technical assistance is provided to farmers to improve production, animal well-being and other aspects of their businesses. It includes training on sustainable farming practices to improve resilience with the goal of making farmers less vulnerable to climate change.

Climate Smart Agriculture (CSA) is an integral part of Heifer International's work. It enables farmers to build income-generating food and farming businesses, while protecting and restoring the environment, ensuring long-term agricultural productivity. Training sessions promote increased sustainable productivity, climate adaptation and mitigation, providing integrated responses to the economic and environmental risks that rural households face.

Heifer Nepal applies a climate lens to its work, with the goal of strengthening communities and ecosystems in the short, medium and long-term. By building technical and financial capacity, adopting CSA practices and reaching formal markets, farming communities reduce stress on water and restore local ecosystems, while ensuring sustainable production, productivity and income.



An Integrated Approach To Tackling Climate Change

Heifer Nepal's work covers three core areas of Climate Smart Agriculture:



Promoting fodder and zero grazing. Heifer Nepal has promoted the use of quality species of fodder and forage, to help farmers control overgrazing, reduce deforestation and degradation to help mitigate climate change. By replacing less nutritious grasses with higher yielding, digestible forage, feed quality is improved, which helps reduce greenhouse gas emissions from livestock and increases animal productivity. Fodder cultivation with locally adapted species contributes to a more resilient farming system by increasing vegetation cover, improving natural habitats, maintaining the microclimate, reducing soil loss and increasing the water retention capacity of soil.



Water management. Water availability is expected to decrease due to climate change and population growth. Water efficient technologies will enable farmers to sustain their production and income and increase their resilience to water shortages. Heifer Nepal has piloted Barsha Pump technology on agricultural sites with limited water but high potential. The Barsha pump has enabled farmers to cope with drought and water stress, allowing them to resume growing vegetables in previously unirrigated areas. This technology has contributed to reductions in the amount of diesel used for irrigation pumps and introduced drip irrigation for vegetable farming.



Inclusive value chains. By envisioning farmer-owned enterprises as a force for ending hunger and poverty and building resilience to climate and economic shocks, Heifer Nepal's project interventions nurture, feed, develop and guide cooperatives to accelerate the engagement and profitability of smallholder livestock producers in sustainable meat and dairy value chains. Initiatives build on in-depth market system analysis that identifies business opportunities at different stages of the goat and dairy value chains. The analysis also helps address bottlenecks and constraints in the market system, creating additional benefits for all actors.

EXAMPLES OF CSA PRACTICES



Data based on International Center for Tropical Agriculture (CIAT)-Heifer Survey 2019

CSA PRACTICES AND PARTNERSHIPS

Families reached directly and indirectly through CSA projects (2019): 475,000

Hectares under CSA practices (2019): 12,790

Key partnerships and collaborations in climate work:

- Local NGOs
- Farmers groups and associations
- The private sector, Federation of Nepalese Chambers of Commerce and Industry, Agro-Enterprise Center
- Universities

Strategy

Climate change is an ever-present reality that affects all sectors of society in Nepal. Addressing the risks and impacts associated with it requires coordinated actions with multiple stakeholders. Leveraging existing partnerships and fostering new ones to help drive innovation is critical to making agriculture an economically and environmentally sustainable source of livelihood.

Building on its experiences of working with communities and with the environment, Heifer Nepal continues to use a Climate Smart Agriculture approach as a way for smallholder farmers to improve their livelihoods. It aims to:



- **Encourage adaption** by climate-proofing all interventions. Heifer Nepal makes sure its programs respond to local climate needs, risks and impacts, reducing the climate vulnerability. Farmers are practicing soil conservation techniques, using biogas stoves, planting trees and other techniques to protect the environment.
- **Create opportunities**, incentivizing farmers, especially women, to adopt and scale up holistic approaches to farm risk management. Heifer Nepal combines agricultural practices and technologies that increase productivity, income and resilience. It supports farmers to access information, financial services and capacity building opportunities, as ways of improving their adaptive capacity and willingness to shift toward climate-friendly farm practices.
- **Develop innovations** that promote resilience by scaling up CSA practices. In collaboration with local governments and other stakeholders, activities such as the construction of abattoirs are helping provide safe and quality meat products to consumers, maintaining a sustainable flow of meat to markets.