



Zhemgang, Phobji Gewog,  
Bhutan // South Asia

## The Local Climate Adaptive Living Facility (LoCAL) in Bhutan

### Country Information

#### Population

788,158

(World Population Review, 2023)

#### UNFCCC National Adaptation Plan

Yes, 2023

#### GINI

(Scale of 0-100)



(World Bank, 2017)

#### Intervention Information

~\$223,840 (USD)

Cost

2010-Present

Timeline

#### ND-GAIN Vulnerability Score

(Scale of 0-1)



(ND-GAIN, 2023)



#### Rationale for Selection

Cases were selected for review based on general screening criteria, including timeframe of intervention, location of implementation, and evidence-based outcomes, as available. This effort was highlighted for its focus on addressing the crucial barrier of climate adaptation financing and its focus on facilitating locally-driven investments for adaptation in Least Developed Countries (LDCs).



#### Outcome Area(s)

Infrastructure, Climate/Disaster Planning, and Income/Livelihoods



#### Funding Partner(s)

United Nations Impact Capital Development Fund, European Union, and the Government of Sweden



#### Implementation Partner(s)

UNCDF, European Union, Government of Phobji Gewog, and Bhutan

## Context of Intervention

As a small country in the eastern Himalayan, Bhutan is one of the most climate-vulnerable countries in the world. It is vulnerable to a variety of climate disasters, such as heatwaves, droughts, wildfires, and glacial lake outburst floods (GLOFs). Landlocked and mountainous, Bhutan has more than 2500 glaciers, which are melting. Together, these challenges have led to deadly flooding and landslides in urban and rural areas.<sup>1</sup> In addition to the loss of human lives, flooding causes significant economic and social loss. With climate change, flooding is increasing in intensity and frequency, with these intensifying hazards posing a threat to Bhutan's economy, disrupting agricultural production, movement of goods and services, and labor supply in labor markets.

While Bhutan is projected to graduate out of the Least Developed Countries (LDC) category, climate change impacts threaten to reverse decades of development progress.<sup>2</sup> Bhutan has surpassed LDC thresholds<sup>3</sup> for both gross national income (GNI) per capita and its human assets index. Nonetheless, it is below the LDC threshold for the World Bank's economic and environmental vulnerability index (EVI). A key challenge in adaptation is that the countries most vulnerable to climate change lack the financial, institutional, and technical capacities to invest in and implement effective adaptation strategies. Current studies estimate investments of hundreds of billions annually over the next ten years.<sup>4</sup>

## Description of Intervention

The UN Capital Development Fund (UNCDF) is the United Nations' leading financing entity for the world's 46 LDCs. In response to intensifying climate hazards, the UNCDF established the Local Climate Adaptive Living Facility (LoCAL) approach to encourage climate resilient communities and economies through locally led climate adaptation actions in developing countries, particularly LDCs and Small Island Development States (SIDS). LoCAL does this through a performance-based strategy that aids local government to access climate financing, capacity-building, and technical assistance. By supporting locally-led climate adaptation actions, it also empowers these communities to effectively respond and adapt to climate change impacts.<sup>5</sup> Finally, LoCAL plays a key role in assisting countries with the review and implementation of their Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs). However, the initiative is primarily led by participating countries through the four-phase approach (Design, Piloting, Learning, Scaling-up) and their priorities are determined through their LoCAL Board.<sup>6</sup>

LoCAL was piloted in Bhutan first in 2010, and it has since contributed to 344 small-scale investments throughout 100 Geowogs (group of villages). Prior to implementing a LoCAL program, UNCDF works to set up institutional structures of support, including clarity on lead departments/ministries to sign the memorandum of understanding (MOU), definition of roles and responsibilities regarding the Performance-Based Climate Resilience Grants (PBCRG), and capacity building. The latter might include support for developing local coordination and oversight of capacities for adaptation planning, implementation, monitoring, reporting, and financial accountability.<sup>7</sup>

A project in the Phobji Gewog provides an example of LoCAL in practice. Elected officials, along with community stakeholders, identified a range of potential small-scale adaptations, including issues with wooden bridges that suffered severe damage every few years due to intensifying and frequent flooding. Water surges would, at times, demolish the bridges fully, rendering it impossible for children to go to school, families to procure essential goods, and farmers to sell produce. In 2012, the Phobjikha Bridge was built – an iron bridge, two water levels higher than normal surges, and connecting several roads and a school; it is one of many small-scale investments LoCAL made in the rural, mountainous town.

The bridge was built after a process of consultative, community-based decision-making led by the local elected officials. It connects over 140 households in two villages on either side of the river and is also near the Rameychen Primary School. Community stakeholders were split between the choices of having the bridge closer to the markets or closer to the public school. Ultimately, they decided to build near the school, recognizing that access to quality, equitable primary education is the prerequisite to achieving Gewog's development goals. The investment also aligns with national aims (e.g., Education Blueprint, 2014-2024)<sup>8</sup> and the United States Integrated Country Strategy for Bhutan, which outlines health, education, innovation, and economic opportunities as focus areas to achieve Mission Goal 1.<sup>9</sup> Although flooding in 2019 impacted one of the bridge's sections, its climate-proof design ensured easier repairs and limited damage.

## Intervention Funding

There is limited information on the specific funding scheme for LoCAL projects in Bhutan. The Phobjikha Bridge project was fully funded by UNCDF LoCAL. Micro-investments in the Gewog were supported by the EU and the Swedish International Development Agency (SIDA). Additionally, LoCAL enables these countries to directly access international funding from entities like the Adaptation Fund and Green Climate Fund through the structures developed through the LoCAL program.

## Outcomes from the Intervention and Dissemination

As a strategy, LoCAL has two core outcome aims: 1) increasing local government access to climate finance to implement interventions for Climate Change Adaptation (CCA); and 2) establishing a country-based mechanism for channeling climate finance through PBCRGs that is an internationally recognized standard. Beyond these broad aims, the process generates additional capacity outcomes.

### Empowering and Building of Local Capacity and Agency

The widespread success of LoCAL interventions is a result of their focus on building local capacity and empowering collective efficacy necessary for community-led adaptation. The LoCAL program broadly involves two processes: the creation and execution of an adaptation intervention. With assistance from UNCDF, local governments take the lead on crafting climate change adaptation plans. They receive technical support and environmental education to ready them for the PBCRG as well as micro-investments that focus on capacity-building measures for planning and executing projects. In the example from Phobji Gewog, rather than working with the Royal Government of Bhutan, LoCAL worked at the Gewog level to ensure efficiency and well-targeted climate solutions. Elected officials identified the infrastructure and livelihood investments necessary to support their community's needs. The Phobjikha Bridge responded to local needs of access to education and an easier flow of agricultural goods. This highlights the importance of LoCAL's approach to empowering community actors through a decentralized approach.

### Sustainable Structures for Sustained, Diverse, Context-Driven Investment

The model of LoCAL provides structures and lending mechanisms for grants that are designed to be "systemic, yet flexible," allowing them to respond to a diverse set of local climate challenges and address UN Sustainable Development Goal (SDGs) #1 (no poverty), #11 (sustainable cities and communities), and #13 (climate action).<sup>10</sup> For example, after the success of the Phobjikha Bridge, LoCAL granted more climate funds to Phobji Gewog, to strengthen public infrastructure. A road, three kilometers (1.86 mi) long was built to connect two towns near the bridge. A concrete and stone bridge, partly funded by LoCAL, was built to expedite farmers' transportation of their crops to the market. LoCAL further expanded its grants to small bridges, irrigation schemes to support crop production, rural water supply projects, erosion prevention strategies, stormwater drainage systems, and culverts. These projects were aimed at reducing flood and landslide vulnerabilities, while simultaneously strengthening economic, educational, and residential infrastructure.<sup>11</sup> On the national level, LoCAL supported the Bhutan Trust Fund for Environmental Conservation (BT FEC) in applying for accreditation as Bhutan's first National Implementing Entity of the Green Climate Fund.<sup>12</sup>

### Creating an Evidence Base and Standardization

The UN has also been amplifying the work through creating an information repository, with more research on the LoCAL's challenges and opportunities local government contexts (e.g., Phobji Gewog, Bhutan) expected to be released. Primary source information on the Performance-Based Climate Resilience Grants is published through the UNCDF or the UN LDC Portal. The examples coming from Bhutan, along with other research will deepen practitioner and investor knowledge on how training and implementation, as well as scaling investments. Moreover, these successes led to the development of a new standard – ISO 14093. It was informed by UNCDF's experiences and methods with LoCAL to utilize performance-based climate resilience grants (PBCRGs). This international standard establishes an approach and methodology for a country-based mechanism to channel climate finance to subnational authorities in support of resilience building and climate change adaptation.<sup>13</sup>

# Considerations

## Decentralized Approach to Adaptation Interventions

One of the key components of LoCAL is the engagement and direct control by local governments of designing, planning, and implementing LoCAL-funded projects. Collaboration between international LoCAL staff and community leaders allows for well-crafted, more sustainable solutions. In the example, inclusion of the local community was crucial to informing the decision to build the Phobjikha Bridge close to the public school, while still creating links between a network of farm roads and local markets. This strategy has been replicated across the 34 countries LoCAL operates in, a move away from traditional top-down, development project systems.

## Flexible Model

The LoCAL program process of phased implementation is designed to accommodate different contexts, allowing for well-targeted, local climate responses. This flexibility allows for the phases of the program to be tailored. Because governments and communities control the decision-making process regarding which adaptations the grants should fund, it also allows LoCAL to effectively build adaptation strategies across a range of diverse climatic contexts.

## Integrated Approaches and Connections to SDGs

Integrated approaches that take into account multiple impact areas (economic, social, environmental) are more likely to show sustained outcomes. The Gewog communities' choice to pilot LoCAL funds on the Phobjikha Bridge illustrates this principle; the bridge investment supported multiple SDGs. The context of Bhutan's example allowed for choosing a project whereby education and economic growth are mutually reinforcing priorities; in another context, a community may have to choose one or the other. Because these investments have potential tradeoffs for the multi-objective interventions, it again underscores the importance of stakeholder involvement.

## Citations

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