

# From global ambition to country action

Low-carbon climate-resilient development in Bhutan

Case study  
October 2018



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Published by IIED, October 2018

Namgyel, T, Gebreyes, B Y, and Tenzing, J (2018) From global ambition to country action: low-carbon climate-resilient development in Bhutan. IIED, London.

<http://pubs.iied.org/17477IIED>

ISBN 978-1-78431-619-8

Printed on recycled paper with vegetable-based inks.

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# 01

## Introduction

Many Least Developed Countries (LDCs) are working towards strengthening their national policy and legislative frameworks to implement climate action and play their part in global ambition. Although each country operates within a distinct context, there are many overarching constraints and priorities, and sharing experiences is invaluable to support mutual learning. Yet few opportunities exist for LDCs to compare their experiences, success stories and challenges around how climate action unfolds at the national level.

In this case study, we take a look at why and how Bhutan is moving towards enacting the Paris Agreement and following a low-carbon climate-resilient pathway. It draws on learnings shared at an Asia-Pacific regional workshop, organised by IIED and Janathakshan in June 2018, which also benefited from the experiences of multiple countries. Bhutan's experiences offer transferable lessons that could support climate action across developing countries.

### **A missing link: the need for country-to-country learning**

The experience-sharing workshop held in Sri Lanka in June 2018 brought together 22 climate change and adaptation policymakers from 10 countries across the Asia-Pacific region. They discussed their experiences not only of realising the global goals on climate change, but also of pushing for greater global ambition through country-driven action.

Each LDC working to implement climate action operates within a distinct political, institutional, socioeconomic and environmental context. Yet there are many lessons to be learnt from each country, in particular around how climate change priorities can be integrated into national planning and budgets (see Box 1), and what types of institutional mechanisms facilitate cross-sector coordination and policy coherence.



Creating this enabling environment for climate action at the national level can also strengthen global ambition. As Parties to the United Nations Framework Convention on Climate Change (UNFCCC) negotiate the 'rulebook' to the Paris Agreement – setting out the rules for turning the commitments of Paris into effective implementation – it is essential that national implementation approaches, challenges and opportunities in vulnerable developing countries are understood, to ensure negotiation outcomes meet these countries' needs. Yet, LDCs have few opportunities during negotiation sessions to share their insights about how climate action unfolds at the national level.

Although each country operates within distinct contexts, there are many transferable lessons, in particular around integrating climate change priorities into national planning and budgets, or institutional mechanisms to ensure cross-sector policy coherence

## BOX 1. SHARING CLIMATE CHANGE PRIORITIES: EXAMPLES FROM DEVELOPING COUNTRIES

**Nepal:** prioritises low-carbon technological investment using international and private financing; also developing a low-carbon economic development plan for forestry and waste sectors.

**Bangladesh:** focuses on adaptation and mitigation; pledged to cut global greenhouse gas (GHG) emissions by 20% (conditional on support from the international community) and by 5% (unconditionally) by 2030.

**Pakistan:** plans to reduce up to 20% of 2030 projected GHG emissions, subject to availability of international grants to meet the total abatement cost (currently about US\$40 billion).

**Vanuatu:** focuses on sustainable development planning, especially climate disaster resilience and natural resource management; also developing a national energy roadmap to reach 100% renewable energy.

**Laos:** prioritises adaptation (flood and drought resilience) and mitigation (working on a clean development mechanism; hydropower energy; boosting forest cover).

Source: Janathakshan/IIED experience-sharing workshop, June 2018

# 02

## The climate context in Bhutan

The Himalayan Kingdom of Bhutan is one of 47 Least Developed Countries, landlocked between India and China. The economy is climate sensitive: the agriculture and livestock sectors comprise 14% of GDP<sup>1</sup> and are the main source of livelihood for more than half of the population;<sup>2</sup> hydropower contributes to 12.5% of GDP and 20% of government revenues.<sup>3</sup> Forestry, logging, mining and quarrying also play an important economic role.

With a population of about 735,000,<sup>4</sup> a small geographic area, and over 70% forest cover<sup>5</sup> with a rich biodiversity, Bhutan's contribution to global greenhouse gas (GHG) emissions is negligible. However, like its neighbours, Bhutan is experiencing shrinking glaciers and

freshwater reservoirs; a higher incidence of diseases spread by mosquitos and flooding; more erratic and heavy rainfall, causing flash floods and landslides in the monsoon season; and warmer, dryer winters associated with increasing risk of forest fires.<sup>6</sup>

Climate change threatens to reverse national progress on sustainable development and poverty alleviation. Sixty percent of the population lives in rural areas and relies on agriculture-dependent livelihoods.<sup>7</sup> Landslides, surface runoff, land erosion and floods pose genuine dangers not only for Bhutan's own population but also for millions of people living in downstream countries.<sup>8</sup>

In Bhutan, where 60% of the population lives in rural areas and depends on agriculture, climate change impacts threaten to reverse progress on sustainable development and poverty alleviation

Despite these challenges, Bhutan has embarked on a low-carbon climate-resilient development path. The country is already a net carbon sink, and at the 15<sup>th</sup> Conference of the Parties to the UNFCCC in 2009 it pledged to remain carbon neutral, in part by committing that 60% of total land area remains forested.<sup>9</sup>

Bhutan's low-carbon climate-resilient development pathway has two main objectives:

- to bring adaptation and mitigation into a single agenda;
- to enhance green growth and employment creation initiatives.

While working towards these objectives, Bhutan also considers 'Gross National Happiness' in its plans and evaluation criteria (see Box 2), and aims to continue its efforts in the area of gender equality.

The government is also integrating climate change action into development planning through its five-year development plans<sup>10</sup> ('five-year plans') and adaptation and resilience projects.



Pungtang Dechen Photrang ('palace of great happiness')

## BOX 2. GROSS NATIONAL HAPPINESS

Bhutan's holistic approach to development is built around the philosophy of Gross National Happiness (GNH).<sup>11</sup> The concept has gained prominence as the 'GNH index',<sup>12</sup> which provides a set of values and priorities aiming to guide public policy and actions across society. Rooted in Bhutan's traditions and cultural values, it also serves to evaluate social change in terms of the collective happiness of people and the quality of the natural environment.<sup>13</sup>

# 03

## Policy and legislative foundations for climate action

### A strong national vision for sustainable development

In line with the nation's traditional deep reverence for nature and all living beings, the Bhutanese government has integrated both ecological and cultural considerations in national strategies and sustainable development plans for some time (see Figure 1). With this approach, the country has made rapid strides in development and is poised to graduate from LDC status by 2023.<sup>14</sup> It is important to note, however, that Bhutan depends on international cooperation and support to pursue low-carbon climate-resilient development.<sup>15</sup>

### Inclusive and consultative processes

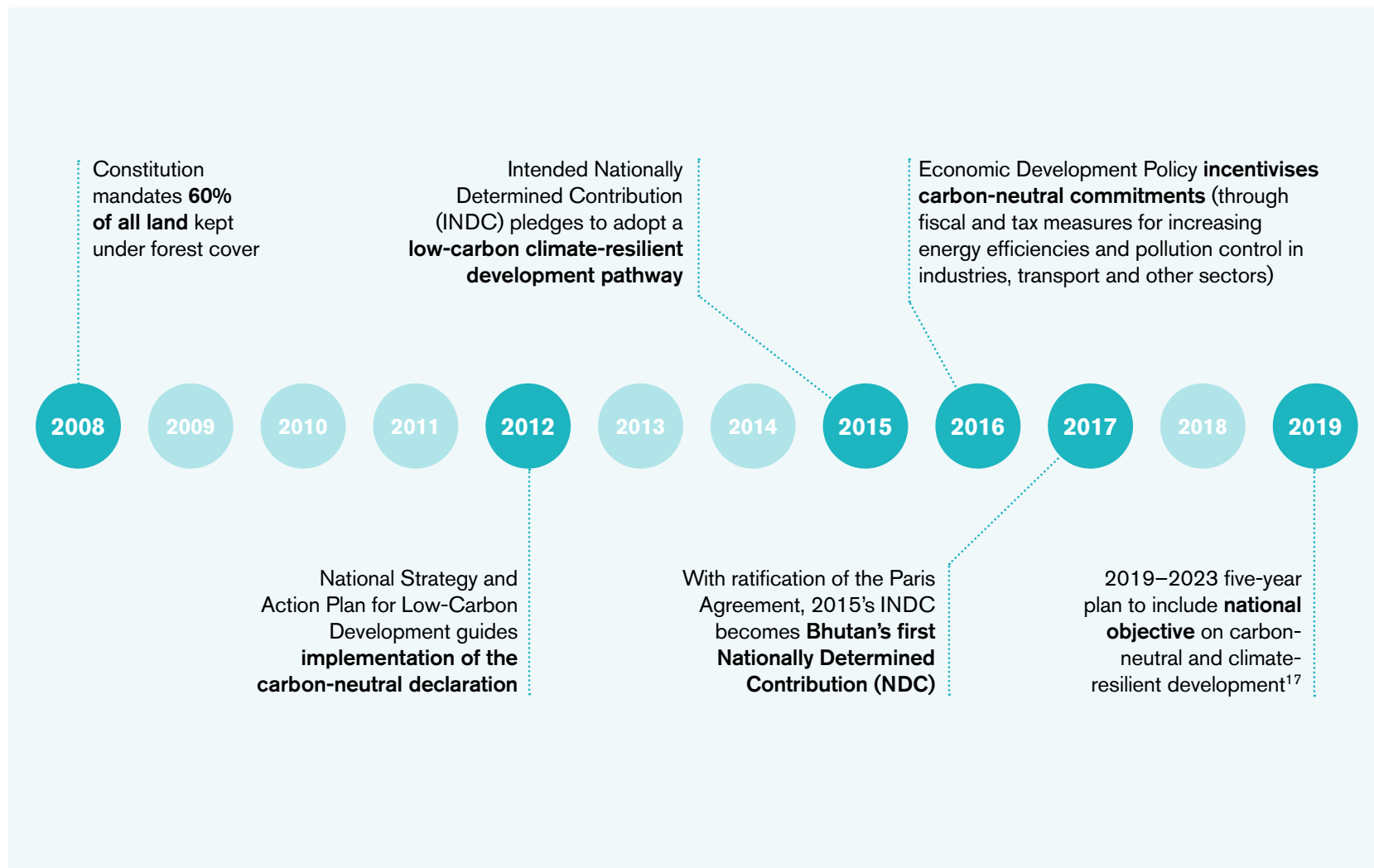
The process to develop Bhutan's Nationally Determined Contribution (NDC) is an example of how the country has achieved an ambitious policy record in sustainable development through collaboration.

In 2015, the National Environment Commission (NEC) and a team of experts from across government, civil society and the private sector supported a full, inclusive and participatory consultation process to inform the NDC formulation. This included a national dialogue, four technical sessions and one

executive-level consultation. In May 2015 the three-day 'Dialogue on Climate-Resilient and Carbon-Neutral Development' was launched by the prime minister to assess progress on climate change action at both national and international levels. One clear outcome from this process was the need to include a strong adaptation and resilience component in the INDC.<sup>16</sup> Additionally, the NDC was also informed by government-led consultations with the industrial sector to develop the Low Emission Development Strategy (LEDS).



# FIGURE 1. SUSTAINABLE DEVELOPMENT POLICY IN BHUTAN: A TIMELINE



More detail on these plans and strategies can be found in the unabridged version of this case study, available at [pubs.iied.org/10195IIED](https://pubs.iied.org/10195IIED)

# 04

## Linking national plans to global goals

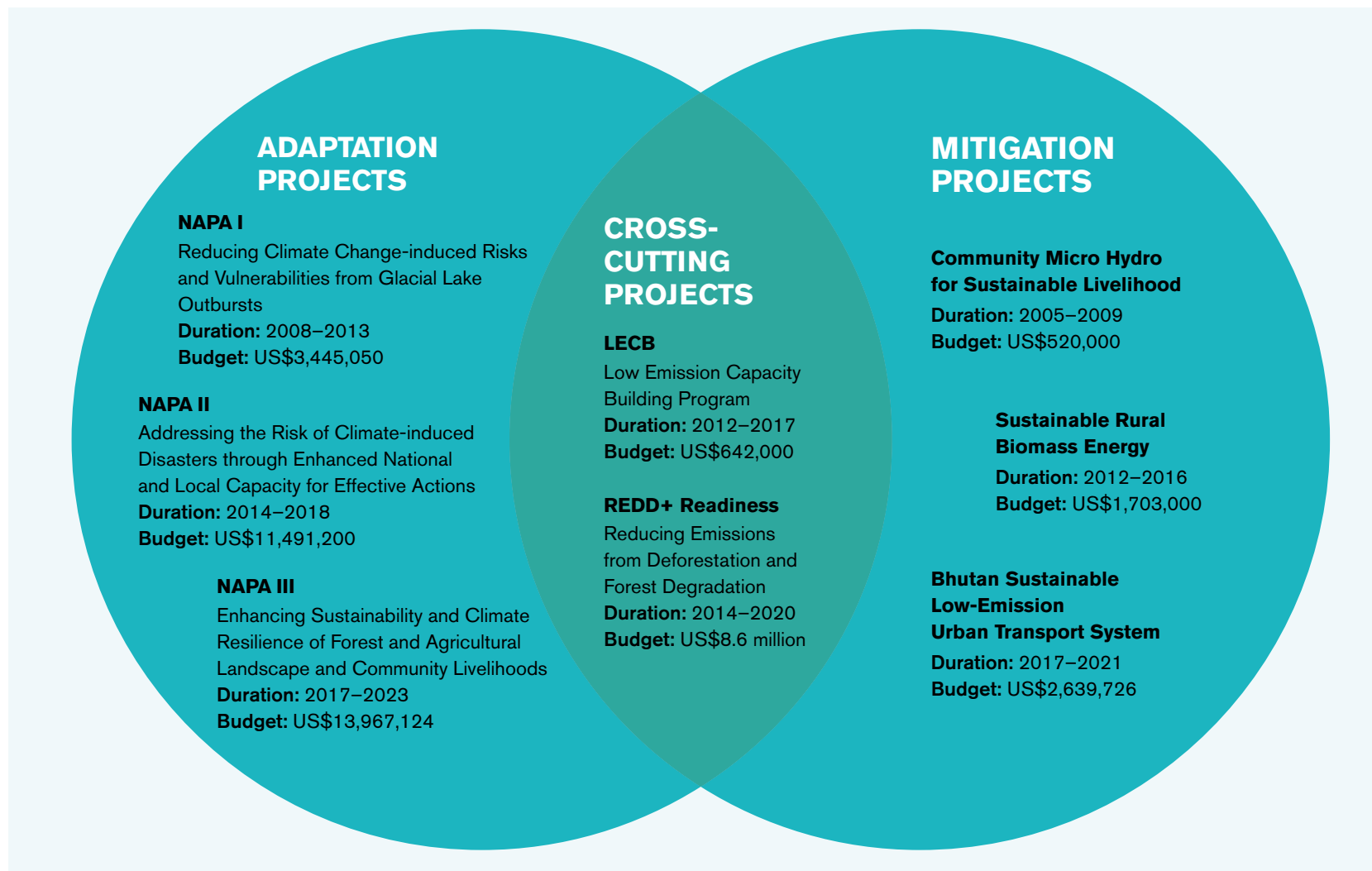
### Planning and implementation

The Paris Agreement and NDC process provide a platform to reaffirm Bhutan's commitments for a low-carbon climate-resilient society and to identify priorities for adaptation and mitigation. The country's first NDC is now integrated across its 12<sup>th</sup> five-year plan and proposed low-emission development strategy.

Although its NDC covers adaptation, Bhutan also plans to develop a National Adaptation Plan (NAP) that will outline medium- to long-term priorities and give a long-term vision to short-term adaptation planning of the country. The country has also outlined plans to strengthen NAP processes when funding for the activities is secured. To deliver on the Paris Agreement, Bhutan is implementing a range of adaptation and mitigation projects (see Figure 2).

National adaptation programmes of action (NAPAs) provide a process for LDCs to identify priority activities that respond to their urgent and immediate needs to adapt to climate change

**FIGURE 2. OVERVIEW OF BHUTAN'S MAIN CLIMATE ACTION PROJECTS**



## Accessing climate finance

Programmes involving capacity building, institutional strengthening and technical assistance for developing policies or strategies have been successful in securing support. But Bhutan continues to face challenges in raising funds for implementation. Although NAPA projects supported under the Least Developed Countries Fund are recognised as resilience success stories, other projects have yet to secure adequate financing.

### BOX 3. DECENTRALISING BHUTAN'S NATIONAL PLANNING PROCESS

Bhutan follows a five-year planning cycle. The NEC mainstreams environment and climate change in this process through the National Environment Protection Act 2007.

Previously, central government led on planning and implementation. Following a process of decentralisation and capacity building, local governments and agencies now develop and implement local-level plans. Central agencies provide technical support while implementing broader programmes and activities.

Half the national budget for the upcoming 12<sup>th</sup> five-year plan (2018-2023) is allocated to implementing local-level plans, representing a notable shift from its predecessor, which earmarked just 30% for local governments.

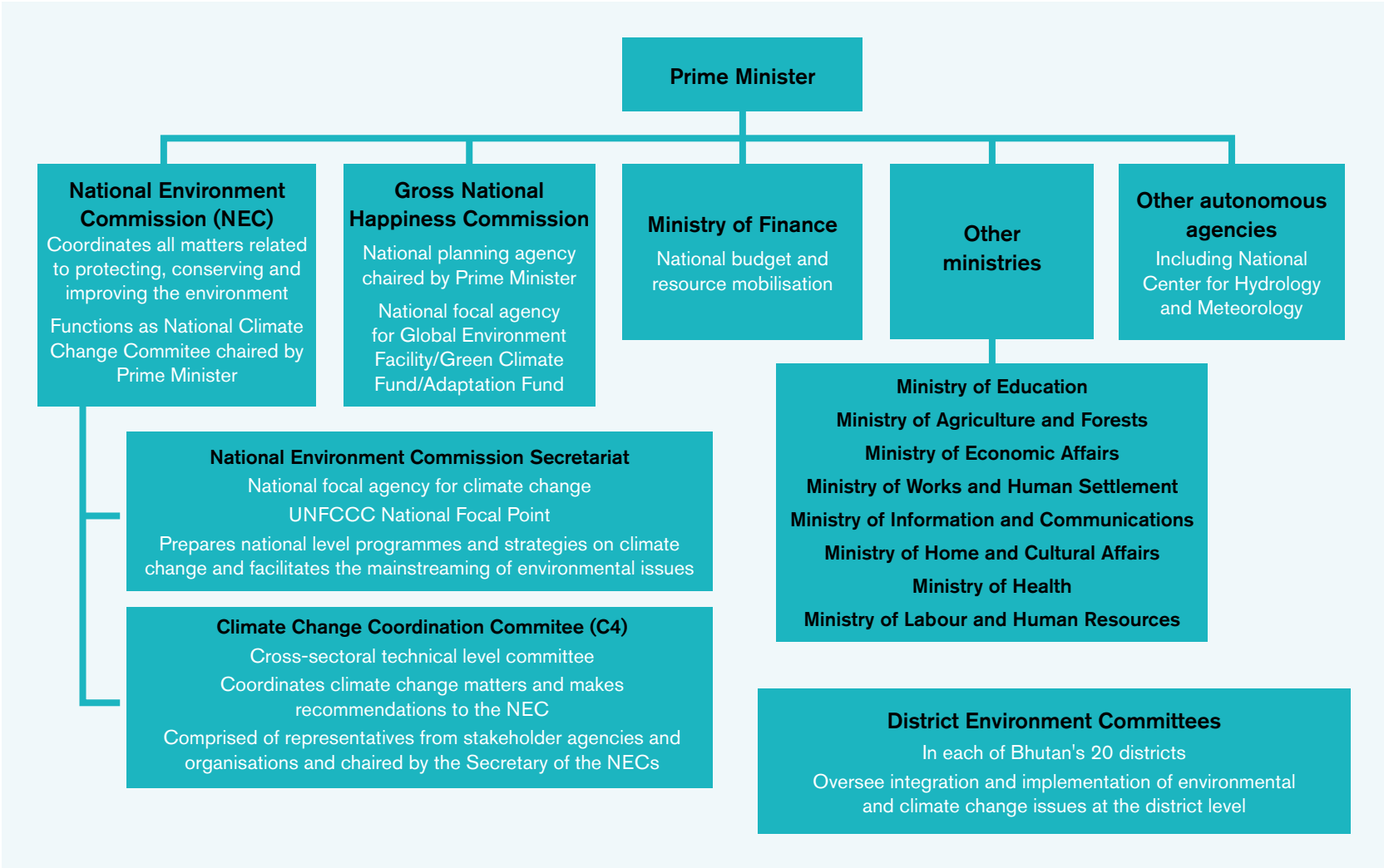
## Understanding the actors and institutions

Bhutan's institutional framework gives various national and local institutions key roles and mandates for climate action (see Figure 3 and Box 3). A number of civil society organisations and research institutions are also regularly active in national climate change action, consultation and research, including the Bhutan Trust Fund for Environmental Conservation, the Royal Society for the Protection of Nature, the Tarayana Foundation, the Bhutan Chamber of Commerce and Industry, the Association of Bhutanese Industries, the Royal University of Bhutan and the Ugyen Wangchuck Institute for Conservation and Environmental Research. More details on each of these non-governmental actors can be found in the unabridged version of this case study, available at [pubs.iied.org/10195IIED](https://pubs.iied.org/10195IIED).

The different actors have distinct mandates and roles, but all face human resource challenges, specifically a lack of sufficient knowledge and expertise of climate change and broader sustainable development-related intergovernmental processes.



**FIGURE 3. BHUTANESE INSTITUTIONAL FRAMEWORK TO MAINSTREAM CLIMATE ACTION**



## Establishing transparent processes

There is a firm basis for establishing a transparent system for climate change action: Bhutan has a strong track record for transparency in programme planning and implementation and regularly ranks highly in international transparency rankings.

“Since the peaceful inception of constitutional democracy in 2008, Bhutan has invested in developing and strengthening its democratic institutions, including the parliament, with increasing transparency”

H.E. Haoliang Xu, UN Assistant Secretary General and UNDP Regional Director for Asia and the Pacific

The country's draft Climate Change Policy (2017), for example, will include transparency in its monitoring and evaluation processes. Existing institutions for national reporting on climate action as well as auditing processes on finance and performance could be strengthened to integrate transparency requirements. In addition, tracking and reporting on financial flows for climate change could be reviewed under the Biodiversity Finance Initiative (BIOFIN) and the Climate Public Expenditure Review (CPEIR).

In terms of climate change reporting, Bhutan submitted its Initial and Second National Communications to the UNFCCC in 2000 and 2011. The Third National Communication and first Biennial Update Report are in progress.

Although Bhutan has complied with reporting requirements, national capacity to do so remains limited, and this is common to other LDCs (see Box 4). The country lacks proper systems and procedures for collecting necessary data and information to complete GHG emission inventories and mitigation assessments. Similarly, there are challenges in achieving the expected level of detail for vulnerability and adaptation needs assessments given limited availability of tools, information and capacity. Building long-term institutional capacity for such reporting, monitoring and accounting is a priority.

### BOX 4. BARRIERS TO MEETING REPORTING REQUIREMENTS AND INCREASING TRANSPARENCY

Workshop participants specifically identified a lack of:

- Capacity to manage, analyse and collect data, and robust data systems
- Affordable and efficient technology
- Different reporting systems and complex reporting templates at international and national levels
- Technical expertise
- Coordination among relevant entities (resulting in data mismanagement)
- Political willingness to share information with the public.

Source: Janathakshan/IIED experience-sharing workshop, June 2018





NAPA II flood protection walls, built by the Phuentsholing Municipality to protect the Pasakha Industrial zone

# 05

## Moving forward: some challenges and opportunities

The Janathakshan/IIED workshop allowed Bhutan to share how it has been implementing international commitments on climate change and advancing low-carbon climate-resilient development, and what it has learned so far. The workshop also provided a crucial space for Bhutan to learn from the experiences of other LDCs in the region (see Box 5).

Going forward, the country hopes to explore technologies and approaches that would support such development for small market economies and/or mountainous countries. We suggest here how these efforts, and those of other LDCs, could be better supported and enabled.

### Support to find the finance

To continue making progress on low-carbon climate-resilient development, Bhutan – like other LDCs and vulnerable countries – requires scaled-up and predictable climate finance and better access to international funding. But, like other LDCs, its small market and population make attracting mitigation and adaptation investments challenging. To continue developing a low-carbon pathway, Bhutan needs:

- Clear guidelines/metrics for measuring progress on adaptation and building resilience as well as suitable tools to conduct vulnerability and adaptation assessments tailored to its situation and physical geography;

- Improved climate and weather data and technical capacity to enable the development of climate change models and projections.

To maintain Bhutan's momentum toward low-carbon climate-resilient development, the country needs support for both 'soft' climate action (eg planning, developing policy, conducting assessments) and 'hard' interventions (ie implementation of the plans and assessments). Yet as Bhutan transitions from climate planning to implementation, finding the necessary support is proving difficult.



In Bhutan's experience, there need to be concerted and continuous efforts from lead agencies and actors to collaborate with one another – climate change is a multifaceted and multi-sectoral issue which requires efficient and coordinated action at all levels.

In addition, ensuring coordination among stakeholders has been challenging. As a multifaceted and multisectoral issue, climate change requires efficient and coordinated action among all actors, at all levels. This is of critical importance now, as the international community tracks progress towards the goals set out in the Paris Agreement and the operationalisation of the Green Climate Fund. It is vital to ensure close communication and collaboration between national-level actors in this process.



Mr Thinley Namgyel describes implementing climate plans and policies in Bhutan Asia-Pacific experience-sharing workshop, 2018

### BOX 5. DELIVERING ON CLIMATE AMBITIONS: LESSONS LEARNED BY LDCS

- A climate action planning process needs **political engagement** and **leadership**; institutional coordination and consultations; broad stakeholder consultation; and integration with broader planning and budgetary processes.
- **Legal frameworks** and **institutional arrangements** are key to the success of climate planning and implementation.
- It is necessary to **build capacity** across the relevant actors to be able to mainstream and better implement climate change action.
- Planning and implementation need to be aligned with **national, local and community priorities**.
- Building **better transparency** and **adequate reporting mechanisms** will bring greater efficiency.

Source: Janathakshan/IIED experience-sharing workshop, June 2018

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Cover shows new techniques and technologies to arrest landslides, introduced along the national highway connecting the capital city (Thimphu) to the border city of Phuentsholing



Forest fire behind the historical Trashichho Dzong, Thimphu. The risk of forest fires is increasing with warmer, drier winters.

Many Least Developed Countries (LDCs) are working towards strengthening national policy and legislative frameworks to implement climate action and play their part in global ambition. While each country operates within a distinct context, there are overarching constraints and priorities: sharing experiences is invaluable for mutual learning. Yet few opportunities exist for LDCs to compare their knowledge, success stories and challenges around how climate action unfolds at national level.

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## Climate Change

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*Keywords:*  
LDCs, climate change,  
Paris Agreement, climate  
action, global ambition,  
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This report was produced with the generous support of the Swedish International Development Cooperation Agency (Sida). However, the views expressed do not necessarily represent those of Sida.