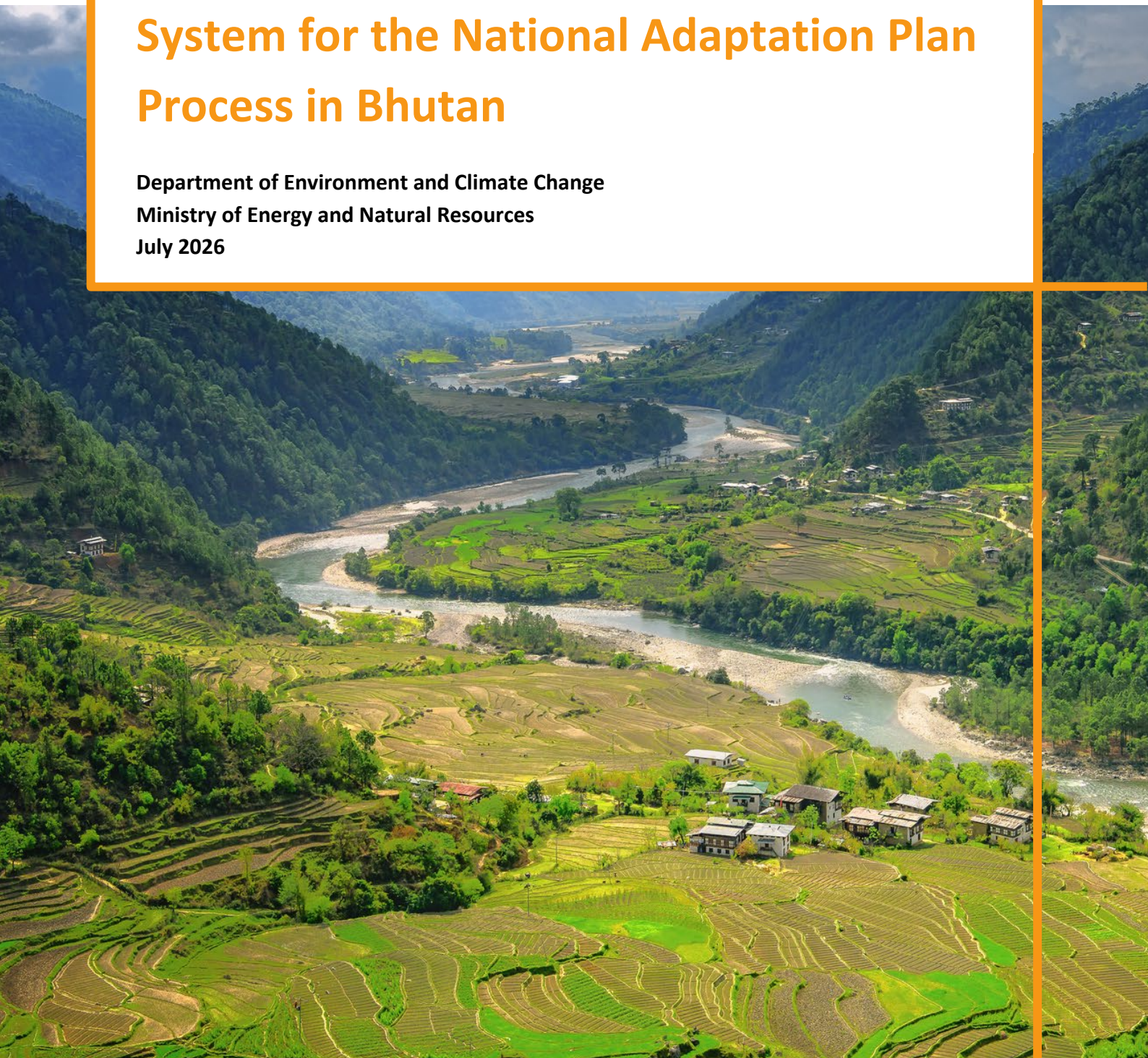




Royal Government of Bhutan

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

Department of Environment and Climate Change
Ministry of Energy and Natural Resources
July 2026



© Royal Government of Bhutan, 2026

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

Department of Environment and Climate Change, Ministry of Energy and Natural Resources

July 2026

Photo: iStock

About the Ministry of Energy and Natural Resources

The Ministry of Energy and Natural Resources is the lead government agency responsible for the sustainable management and development of Bhutan's energy, water, forests, geological resources, environment, and climate change. Headed by the Minister and Secretary, the Ministry provides strategic policy direction through its central divisions and five technical departments: the Department of Energy, Department of Geology and Mines, Department of Forest and Park Services, Department of Water, and Department of Environment and Climate Change. Together, these departments promote sustainable resource management, environmental conservation, climate resilience, renewable energy development, and the responsible use of Bhutan's natural resources to support the country's socio-economic development and Gross National Happiness. For more information, visit <https://www.moenr.gov.bt>

About NAP Global Network

The NAP Global Network was created in 2014 to support developing countries in advancing their NAP processes, and help accelerate adaptation efforts around the world. To achieve this, the Network facilitates South-South peer learning and exchange, supports national-level action on NAP formulation and implementation, and generates, synthesizes, and shares knowledge. The Network's members include individual participants from more than 170 countries involved in NAP processes. Financial support for the Network has been provided by Austria, Canada, Germany, Ireland, the Netherlands, the United Kingdom, and the United States. Additional support has been provided by the ClimateWorks Foundation. The Secretariat is hosted by the International Institute for Sustainable Development (IISD). For more information, visit www.napglobalnetwork.org.



This project is undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :

Secretariat hosted by:
Secrétariat hébergé par :



Irish Aid
An tAidís Éireannach agus tAidís
Department of Foreign Affairs and Trade



Foreword

FOREWORD

Climate change is one of the greatest challenges to our sustainable development. Despite our strong commitment to environmental conservation and carbon neutrality, the country remains highly vulnerable to climate-related disasters, threats to water resources, biodiversity loss, and risks to livelihoods and human wellbeing. To address these challenges, the country launched its first National Adaptation Plan (NAP) in 2023 to strengthen resilience and safeguard the well-being and happiness of the people.

The NAP provides a framework to address climate risks across seven priority sectors and aims to integrate climate adaptation into development planning at all levels. Effective implementation of the NAP requires a strong Monitoring, Evaluation, and Learning (MEL) system to track progress, support informed decision-making, and ensure accountability.

This assessment of our country's existing MEL systems highlights important strengths, gaps, and opportunities for improvement in areas such as institutional coordination, technical capacity, data systems, and resilience measurement. The report also provides practical recommendations to strengthen coordination mechanisms and establish a more comprehensive MEL system that supports both national planning and international reporting commitments.

A key recommendation is the development of a national system to measure resilience and adaptive capacity over time, building on the country's existing Climate Change Vulnerability Assessment framework. This will support evidence-based planning and better responses to future climate risks.

As we move forward with the implementation of the NAP, collaboration among government agencies, stakeholders, and development partners will be essential. I am confident that the findings and recommendations of this report will contribute to building a more climate-resilient and sustainable country.

I would like to sincerely acknowledge all agencies, stakeholders, and partners who contributed to this assessment and reaffirm our shared commitment to protecting the lives, livelihoods, and well-being of our people from the impacts of climate change.



Karma Tshering
Chairman, National Environment Commission
Secretary, Ministry of Energy and Natural Resources

Executive Summary

Bhutan launched its first national adaptation plan (NAP) in 2023 to address climate vulnerabilities across seven key sectors: water, agriculture, forest and biodiversity, human settlements, energy, health, and disaster risk reduction. The primary goal of the NAP is to “protect the health, lives, livelihoods and happiness of the people of Bhutan from the adverse impacts of climate change by building adaptive capacity and enhancing resilience to reduce vulnerability and by integrating adaptation actions into the development planning process at all levels.”

A robust monitoring, evaluation, and learning (MEL) system is essential to ensure the effective implementation of the NAP and NAP process and fulfill reporting obligations under the Paris Agreement and Sendai Framework for Disaster Risk Reduction. An assessment was conducted to take stock of existing MEL systems and tools, identify gaps and challenges, and propose recommendations. Some of the key findings and recommendations are presented below.

Institutional Arrangements

While the Climate Change Policy 2020 defines clear roles of the National Climate Change Committee and the Climate Change Coordination Committee (C4), it faces operational challenges. The C4 mechanism—established with 16 members representing government agencies, civil society, the private sector, and academia—is proposed to operationalize it to ensure effective coordination and guidance for the implementation of NAP and the NAP process.

Strategic Coordination Mechanism

The Climate Change Policy mandates the Department of Environment and Climate Change (DECC), Office of the Cabinet Affairs and Strategic Coordination (OCASC) and Ministry of Finance (MoF) to lead integration of adaptation priorities in the NAP into the subsequent national and local development plans and programs. The assessment of the 13th Five Year Plan (FYP) at national and local levels indicated some level of integration, but challenges remain in quantification and measuring progress. To streamline these efforts and ensure effective coordination and integration, it is proposed to establish a coordination mechanism between DECC, OCASC, and MoF.

A Comprehensive MEL System

A comprehensive MEL system should be developed, building on the existing system. In addition, a mapping of the existing MEL system should be carried out, and options should be considered for either building on the existing system or developing a new comprehensive system that caters to domestic and international reporting, such as the Paris Agreement, Sustainable Development Goals, Sendai Framework, etc. This is to be coordinated through the coordination mechanism established between DECC, OCASC, and MoF.

Awareness and Capacity Building

The assessment indicates significant capacity gaps across all government agencies. The 2020 skills assessment indicates some level of expertise in vulnerability assessment and sectoral policy integration at the central level, but there is a critical need for capacity building at both national and local levels.

A National System for Measuring Resilience

The current MEL system has limits in measuring resilience and adaptive capacity at the national level. The NAP recommends a system based on the approach used in the climate change vulnerability assessment (CCVA) and mapping, for which the baseline was already developed in 2021 during the first CCVA exercise. This system could be refined and updated to track progress and trends in climate risk and adaptive capacity over time. This will also update the CCVA index, which is currently used as one of the criteria for the Resource Allocation Framework for the local governments.

Table of Contents

1.0 Introduction	1
2.0 Methodology.....	3
3.0 Challenges and Limitations	4
4.0 Conceptual Framework: Understanding the MEL system for the NAP process	5
4.1 MEL for NAP Process.....	6
5.0 National Context: NAP and MEL system for the NAP process	9
5.1 Monitoring the Progress of NAP Implementation	10
5.2 The M&E Framework Proposed Measuring Progress of Climate Resilience and Adaptive Capacity at a National Level.....	10
5.3 Building a National M&E System for the NAP Process	10
6.0 Review of Policies and M&E Framework in Bhutan.....	11
6.1 Review of the Climate Change Policy 2020.....	11
6.1.1 Overall Coordination and Oversight of the Climate Change Policy	11
6.1.2 Resource Mobilization and Allocation	12
6.1.3 Climate Change Data and Information	12
6.1.4 Sectors and Line Agencies.....	13
6.2 Review of the M&E Framework of the Five-Year Development Plans	14
7.0 Assessment and Key Findings	18
7.1 Institutional Arrangements for the MEL System for the NAP Process	18
7.2 Integration of the NAP Priorities in the 13th FYP	19
7.2.1 Integration of NAP Priorities in the 13th FYP—National level.....	19
7.2.2 Integration of NAP Priorities in the 13th FYP—Local level	21
7.3 Data, Information, and Learning.....	22
7.4 Gender and Social Inclusion.....	23
7.5 Capacity Building and Outreach.....	24
7.6 M&E for Measuring Progress on Climate Resilience and Adaptive Capacity	24
8.0 Key Issues, Challenges, and Recommendations	26
8.1 Strategic Coordination Mechanism	26
8.2 Strengthening M&E System	26
8.3 Data and Information.....	27
8.4 Capacity Building and Outreach.....	27
8.5 A National System for Measuring Resilience	28
References	29
Appendix A. List of officials consulted and discussion notes.....	31

Appendix B. Validation Workshop Report	35
Appendix C. Action Plan and Timeline Concept Note	42

List of Tables

Table 1. Technical guidelines for NAP process (2012, 2025)	5
Table 2. MEL definitions.....	7
Table 3. Enabling factors for MEL for the NAP Process	7
Table 4. The M&E framework for the NAP and the NAP process	13
Table 5. M&E Institutional setup for the implementation of FYP	14
Table 6. The M&E system established between the 10th and 12th FYP periods	15
Table 7. Monitoring accountability framework	15
Table 8. Evaluation accountability framework	16
Table 9. Integration of adaptation priorities in the 13th FYP	20

List of Figures

Figure 1. Impact chain of vulnerability factors	25
---	----

Acronyms and Abbreviations

CBS	Center for Bhutan Studies
C4	Climate Change Coordination Committee
CCVA	climate change vulnerability analysis
CCD	Climate Change Division
CSO	Civil Society Organization
DECC	Department of Environment and Climate Change
DPBP	Department of Planning, Budgeting and Performance
GNHC	Gross National Happiness Commission
LGKRAS	Local Government Key Result Areas
MEL	monitoring, evaluation, and learning
MoF	Ministry of Finance
NAPA	National Adaptation Programme of Action
NAP	national adaptation plan
NCCC	National Climate Change Committee
NDC	nationally determined contribution
NEC	National Environment Commission
OCASC	Office of the Cabinet Affairs and Strategic Coordination
PlaMS	Planning and Monitoring System
PPD	Policy and Planning Division
UNFCCC	United Nations Framework Convention on Climate Change

1.0 Introduction

Bhutan prepared its first national adaptation plan (NAP) in 2023. The NAP was prepared by building on the experience from the implementation of national adaptation program of action (NAPA) projects, vulnerability assessment, and adaptation priorities in Bhutan's National Communications (National Environment Commission [NEC], 2000, 2011, 2020b), first nationally determined contribution (NDC), and climate risk assessment undertaken under the NAP Readiness Project. Based on these assessments, NAP 2023 identified adaptation priorities across seven sectors—water, agriculture and livestock, forest and biodiversity, human settlements, human health, energy, and climate services and disaster risk reduction.

The NAP's goal is “to protect the health, lives, livelihoods and happiness of the people of Bhutan from the adverse impacts of climate change by building adaptive capacity and enhancing resilience to reduce vulnerability and by integrating adaptation actions into the development planning process at all levels” (Department of Environment and Climate Change [DECC], 2023, p. iv).

The objectives of the NAP process are to

- ensure a continuous, progressive, and iterative process to assess the vulnerability and adaptation needs across all sectors and levels in Bhutan, recognizing the special needs of vulnerable groups;
- promote integration of climate change adaptation planning and implementation of adaptation actions into national and local level plans where feasible;
- enhance the climate information and knowledge system to support a long-term, iterative process of adaptation planning and implementation; and
- assess progress in adaptation, including measurement of resilience to climate change.

A monitoring, evaluation, and learning (MEL) system plays an important role in ensuring implementation of the NAP and learning from the experience of planning and implementation of the NAP to inform subsequent iterations of the NAP. Bhutan's 2023 NAP identified the monitoring and evaluation system as a key requirement to ensure that key stakeholders at all levels implement adaptation plans and priorities and meet the reporting obligations under the Paris Agreement. The M&E framework of the NAP 2023 proposes three levels:

1. Monitoring progress of NAP implementation;
2. Establishing a national system for measuring progress of resilience and vulnerability at the national level;
3. Developing and building a national M&E system that supports national requirements in line with the Climate Change Policy 2020, as well as international reporting requirements under the Enhanced Transparency Framework of the Paris Agreement.

However, current M&E practices are largely sector-driven, with individual ministries and agencies employing mechanisms that are predominantly program or project based, focusing narrowly on financial expenditures and physical outputs, rather than on the broader outcomes of climate

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

adaptation and resilience-building. The current fragmented approach underscores the need for a formal, cross-sectoral, national-level M&E system that consolidates existing systems, harmonizes indicators, and shifts the focus to measuring the effectiveness and long-term impacts of the NAP process in Bhutan.

In view of the above issues, the DECC, under the Ministry of Energy and Natural Resources, with support from the NAP Global Network (NAP-GN), aims to strengthen the national M&E system for the NAP process and build the capacity of government officials in monitoring and evaluation. An assessment was carried out to

- review existing M&E system for adaptation, tools, data, etc. in Bhutan;
- identify gaps, barriers, and challenges and provide recommendations; and
- identify needs and priorities, and propose action plans and a timeline.

2.0 Methodology

A literature review was conducted to clarify concepts and deepen understanding of the MEL system for NAP processes, along with practical challenges, issues, and opportunities for strengthening it in Bhutan.

We carried out a desk review of policies, strategies, and plans and related reports on climate change with a focus on adaptation, resilience, and monitoring and evaluation, including the Climate Change Policy, 2020; National Adaptation Plan, 2023; and the M&E framework of the Five-Year Development Plans. This review of the policies, strategies, plans, and related documents helped shed light on the existing 5-year development planning systems, as well as the M&E framework for development plans and programs, institutional arrangements, mandates, and reporting system in Bhutan.

One-on-one consultations were held with key stakeholders to further clarify the existing M&E system, national reporting system, gaps, barriers, and key challenges and potential areas to strengthen the M&E system, and integration of adaptation priorities in the 13th Five Year Plan (FYP) and programs. The key stakeholders consulted, along with the discussion points, are listed in Appendix A.

A validation workshop was held with relevant officials from the national and local governments on January 30, 2026. The key findings and recommendations on the stocktake of the MEL system for the NAP process in Bhutan were presented for further input, including priority actions and timeline. The list of participants is attached as Appendix B, and the validation workshop report as Appendix C.

3.0 Challenges and Limitations

Efforts have been made to assess the integration of the key outcomes, priority activities, and performance indicators of the seven priority sectors identified in the NAP. However, due to limited access to the published 13th FYP documents from ministries, agencies, and local governments, in-depth analysis could not be conducted. The findings are thus mostly limited to governance, coordination, capacity, and related challenges and issues.

4.0 Conceptual Framework: Understanding the MEL system for the NAP process

Adaptation is a critical component of the long-term global response to climate change to protect people, livelihoods and ecosystems (United Nations Framework Convention on Climate Change [UNFCCC], n.d.-c). The Intergovernmental Panel on Climate Change (2007, p. 6) defines adaptation as an “adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects.”

At the 16th United Nations Climate Change Conference (COP 16), the NAP process was established to support developing countries in formulating their medium and long-term adaptation needs and implementation strategies and programs to address those needs and priorities. In 2011, COP 17 concluded that the objective of the NAP process is to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience, and to facilitate the integration of climate change adaptation into relevant new and existing policies, programs, and activities, in particular development planning processes and national strategies within all relevant sectors and at different levels, as appropriate (UNFCCC, n.d.-a).

To increase the long-term effectiveness and efficiency of adaptation efforts, the NAP Technical Guidelines for the NAP Process issued by the Least Developed Countries Expert Group (2012, 2025) outlines key elements and a step-wise process for development and implementation of the NAP and NAP process as outlined in Table 1.

The process is designed to be flexible as there is no one-size-fits-all. Countries can choose those elements and steps that are relevant and needed in the formulation and implementation of their NAP and NAP process.

Table 1. Technical guidelines for NAP process (2012, 2025)

Technical guideline 2012	Updated technical guideline 2025
Element A: Lay the groundwork and address gaps - Assess available information on climate change impacts, vulnerability, adaptation, capacity gaps, and weaknesses in undertaking the NAP process.	Element A: Impact, vulnerability, and risk assessment - Frame adaptation at the national level, develop plausible climate change and socio-economic scenario for the medium and long terms, conduct assessment of hazard/exposure, vulnerability and risk
Element B: Preparatory elements - Analyzing current & future scenarios, assessing vulnerabilities, reviewing adaptation options, preparing the NAP, and integrating adaptation into national, local, and sector plans.	Element B: Plan development - Understand vision for development, synthesize the best available information, identify adaptation options, estimate cost, and prepare NAP
Element C: Implementation strategies - Prioritizing adaptation in national planning, enhancing capacity, promoting coordination & synergies at regional and international multilateral agreements.	Element C: Financing and implementation - Determine financing needs for implementation

Technical guideline 2012	Updated technical guideline 2025
Elements D: Reporting, monitoring, and review - Monitoring the NAP, reviewing the process to assess progress, effectiveness, and gaps, iteratively updating the NAPs, outreach on NAP process and reporting on progress and effectiveness.	Element D: MEL and reporting - Systematic data collection, periodic evaluation and learning, progress reporting at the national level, promoting synergy with international reporting
	Element E: Cross-cutting—building readiness and accessing funding and other support for the whole process - Strengthening institutional arrangements, regulatory frameworks, building/updating data, knowledge, and tools - Accessing Green Climate Fund readiness and other sources to support formulation, implementation, capacity building, etc.

Source: Adapted from Least Developed Countries Expert Group, 2012, 2025.

4.1 MEL for NAP Process

The Paris Agreement underscores the importance of MEL systems for NAP processes, emphasizing that

Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include ... monitoring and evaluating and learning from adaptation plans, policies, programmes and actions. (UNFCCC, 2015, p. 10)

Similarly, the Intergovernmental Panel on Climate Change (2022) places a strong emphasis on the importance of M&E, noting that “it is a key prerequisite for successful iterative risk management and achieving effective and just adaptation outcomes at local to global levels.”

As presented in Table 1, the MEL system is a core component of the NAP process. It provides a structured approach to monitoring progress, evaluating results, and facilitating learning for NAP processes and their activities to effectively achieve their intended outcomes. Such a system will help provide regular updates on the progress of NAP implementation and lessons learned to inform subsequent iterations of the NAP (Beauchamp et al., 2024).

Further, the updated Technical Guidelines for NAP process emphasize that systematic data collection, periodic evaluation and learning, and progress reporting at national and local levels will help strengthen reporting under the Enhanced Transparency Framework, including the global stocktake, United Arab Emirates Framework for Global Climate Resilience and the Global Goal on Adaptation under the Paris Agreement (LEG, 2025).

While the importance of the MEL system for the NAP process is widely recognized, it is equally vital to understand how MEL is integrated across its stages. The Toolkit for MEL for NAP processes defines MEL as an inherent component of the NAP processes and provides conceptual clarity (Beauchamp et

al., 2024). According to Beauchamp et al. (2024), MEL functions through three distinct but interconnected pillars:

- Monitoring involves the continuous collection and analysis of data to track NAP progress.
- Evaluation occurs at strategic points throughout the NAP process to assess outcomes.
- Learning is ongoing throughout the MEL cycle that informs planning and implementation.

Table 2. MEL definitions

Component	Definition
Monitoring	Systematic tracking of implementation and performance to understand progress toward goals, identify problems, and inform decision making. It involves continuous data collection, observation, and documentation to allow for corrective actions.
Evaluation	Periodic assessments conducted at strategic points to determine the success of implementation of NAP process against stated goals. It provides a deep-dive analysis into criteria such as relevance, effectiveness, efficiency, coherence, equity, and sustainability.
Learning	The deliberate process of acquiring, assessing and sharing new knowledge within the MEL system. This results in changed or reinforced attitudes and behaviour specifically related to climate change adaptation.

Source: Adapted from Beauchamp et. al., 2024.

Further, a robust enabling environment is critical for developing and sustaining the MEL system for the NAP process. The key enabling factors include leadership, institutional arrangements, inclusive stakeholder engagement, financing, capacities, information, knowledge, and communication.

Table 3. Enabling factors for MEL for the NAP Process

Enabling factor	Importance in the development and implementation of MEL system for NAP processes
Leadership	Establish accountability and ensure strategic alignment with national adaptation goals. High-level commitment to drive policy integration, coordination, and resource allocation.
Institutional arrangements	Provide mandates and organizational structures needed for effective coordination and collaboration among various stakeholders involved in MEL. Clear roles and responsibilities, communication channels, interagency coordination mechanisms, focal points and units, and data-sharing protocols are essential.
Engagement	Involving diverse stakeholders, including local communities, civil society organizations, the private sector, the media, and academia. Build trust and ensure the MEL system is responsive to local needs.
Financing	Securing and managing funds effectively is crucial for the sustainability of MEL activities, covering both the initial setup and the ongoing costs of data collection, analysis, and dissemination.

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

Enabling factor	Importance in the development and implementation of MEL system for NAP processes
Skills and capacities	Developing and sustaining the necessary skills and capacities among MEL practitioners and stakeholders is essential for the effective implementation of MEL activities. This includes technical skills in data collection and analysis, stakeholder engagement, and communication. This allows the system to respond to the evolving needs.
Data, knowledge, and communications	High-quality data and effective knowledge management form the foundation of effective MEL. This entails collection, analysis, dissemination, and effective communication of insights and learning to make evidence-based decision making for adaptation actions. Robust data, knowledge, and communication enhance the transparency, accountability, and impact of MEL activities.

Source: Adapted from Beauchamp et al., 2024.

The review was useful for conceptual clarity and to define the scope of the review of the MEL system for the NAP process in Bhutan.

The following section provides the national context of the NAP and M&E framework for the NAP process.

5.0 National Context: NAP and MEL system for the NAP process

Bhutan remains highly vulnerable to the impacts of climate change. Bhutan's first nationally determined contribution stated that as climate change accelerates and intensifies, the nation faces increasing threats from climate hazards and extreme events, including flash floods, glacial lake outburst floods, windstorms, forest fires, landslides, and the depletion of spring water sources. These events threaten to destroy critical infrastructure and disrupt livelihoods and ecosystem services, potentially derailing over 6 decades of significant progress in sustainable socio-economic development and poverty reduction (NEC, 2015).

For Bhutan, adaptation and building resilience are no longer merely policy choices but matters of survival. The impacts of climate change are now felt across all sectors and levels of society, disproportionately affecting the most vulnerable communities.

Highly vulnerable to climate change impacts, Bhutan began its adaptation journey in the early 2000s, with the preparation of the NAPA in 2006, which was updated in 2012. Subsequently, Bhutan implemented three NAPA projects supported through the Global Environment Facility/Least Developed Countries Fund. The first NAPA project was Reducing Climate Change-Induced Risk and Vulnerabilities From Glacial Lake Outburst Floods in the Punakha-Wangdi and Chamkar Valleys, implemented from 2008 to 2012. The second NAPA project was called Addressing the Risk of Climate-Induced Disaster Through Enhanced National and Local Capacity for Effective Actions. It was implemented from 2014 to 2018. The third NAPA project, Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods in Bhutan, was implemented from 2017 to 2023. These initiatives have significantly enhanced national and local capacities, mitigated the loss of economic assets, and operationalized an integrated landscape approach to sustainable forest management. Further, Bhutan submitted its first, second, and third national communications to the UNFCCC in 2000, 2012, and 2020, respectively, outlining its adaptation priorities.

Bhutan prepared its first National Adaptation Plan in 2023. In line with the Climate Change Policy 2020, M&E is integrated as a core component of the NAP. This ensures that adaptation plans and priorities are implemented by all key stakeholders and at all levels. The M&E framework for the NAP process is proposed at three levels:

- monitoring progress of the implementation of the NAP;
- measuring progress of resilience and vulnerability at the national level; and
- building a national M&E system that meets domestic requirements while also fulfilling reporting requirements under the Enhanced Transparency Framework of the Paris Agreement.

5.1 Monitoring the Progress of NAP Implementation

The initial monitoring of the implementation of NAP is proposed to focus on the seven key sectors—water, agriculture, forests and biodiversity, energy, health, urban planning and infrastructure development, and climate services and disaster risk reduction. However, in terms of implementation, the key approach proposed in the NAP 2023 is to integrate adaptation priorities into the respective ministries’ and agencies’ 5-year development plans and programs and secure funding for the priority activities in line with the national planning and budgeting process.

As the 13th FYP implementation is ongoing, the assessment will focus on the level of integration and possible entry points for integration in the current 13th FYP of the ministries, agencies and local governments.

5.2 The M&E Framework Proposed Measuring Progress of Climate Resilience and Adaptive Capacity at a National Level

This is very important to reduce risk and vulnerability to the impacts of climate change. However, tracking progress in climate resilience and adaptive capacity is complex, and Bhutan has not yet adopted a system to assess them. The assessment will review existing tools and systems and explore options for tracking progress in climate resilience and adaptive capacity at the national level.

5.3 Building a National M&E System for the NAP Process

This is to lay the foundation for an enabling environment that supports the NAP process over the long term, ensuring informed and effective adaptation planning and implementation. The national-level M&E system is also intended to meet reporting requirements under the Enhanced Transparency Framework of the Paris Agreement. The assessment will review the existing system and explore options for further assessment.

6.0 Review of Policies and M&E Framework in Bhutan

The Climate Change Policy of the Kingdom of Bhutan 2020 and the M&E framework of the Five-Year Development Plans were reviewed to assess the key mandate, institutional arrangements, and reporting requirements.

6.1 Review of the Climate Change Policy 2020

The Climate Change Policy of the Kingdom of Bhutan 2020 was adopted with a vision for “a prosperous, resilient and carbon neutral Bhutan where the pursuit of gross national happiness for the present and future generations is secure under a changing climate” (NEC, 2020a, p. 3). As climate change is a cross-cutting issue that affects all sectors and stakeholders, the Climate Change Policy outlines clear roles and responsibilities for all government agencies and institutions to integrate climate change action into their respective mandates, policies, plans, and programs to implement this policy.

Further, the policy outlines the following institutional arrangements for overall coordination and oversight of its implementation.

6.1.1 Overall Coordination and Oversight of the Climate Change Policy

1. National Climate Change Committee

The NEC functions as the high-level National Climate Change Committee (NCCC). Chaired by the Prime Minister or their nominee, the NEC is the highest cross-sectoral environmental policy and regulatory body responsible for coordinating all matters relating to the protection, conservation and improvement of the environment. The NEC derives its mandate from the National Environment Protection Act 2007, the Water Act, the Waste Prevention and Management Act, the Environmental Assessment Act, and other government directives.

The NCCC is supported in implementing its mandates and functions through the National Environment Commission Secretariat (NECS). The NECS, in supporting NEC/NCCC, leads the preparation of national strategies and plans on climate change, such as NDCs, NAPs, Long-Term Low-Emission Strategies, the Long-Term Low-Emission Development Strategy, as well as monitoring and evaluation of climate change actions. As of December 30, 2022, the NECS has been reconstituted and renamed the DECC under the Ministry of Energy and Natural Resources and will serve as the secretariat to the NEC/NCCC.¹ The NCCC shall monitor progress in implementation of this policy on an annual basis through the Climate Change Coordination Committee (C4) and DECC.

2. Climate Change Coordination Committee

¹ Press release from the Royal Civil Service Commission (RCSC/LD-63/2022/2265) dated December 30, 2022.

The C4 is the technical body serving as a forum for discussion and coordination of matters related to climate change in Bhutan, and makes recommendations for consideration by the NCCC/NEC. It comprises high-level executive representatives from stakeholder agencies and organizations and is chaired by the Secretary of NECS. The committee derives its mandate from the Executive Order of the Prime Minister of October 16, 2016. The C4 is supported in implementing its mandates and functions through the Climate Change Division of DECC. It monitors and provides guidance on the overall implementation of the Climate Change Policy and has a specific mandate to ensure the effective and coordinated implementation of climate change actions in Bhutan. The C4 monitors the implementation of the policy and action plan biannually through the Climate Change Division of DECC. The C4 also reviews the policy as and when required to ensure effectiveness and adequacy in addressing mitigation and adaptation actions.

6.1.2 Resource Mobilization and Allocation

1. Ministry of Finance

The Ministry of Finance (MoF) is mandated to formulate and implement dynamic fiscal policies and sound financial management by maximizing resource generation, efficiently allocating resources, prudently managing expenditure and debt, and ensuring proper accountability for public resources. The mandates and functions of the MoF are governed by the Public Finance Act, Public Debt Policy, Income Tax Act, Revised Taxes and Levies Act, and Fiscal Incentives 2017.

In line with the provisions of various pieces of legislation, MoF has a mandate for resource mobilization and budget allocation, and also provides fiscal incentives and other instruments to support private sector lending to implement the policy.

With the merger of the Gross National Happiness Commission (GNHC) with the MoF, several mandates of GNHC, including management of external grants and responsibilities of central and local government planning, are now with the Department of Macro-Fiscal and Development Finance, and the Department of Planning, Budget, and Performance (DPBP). With this change, the national mandate for facilitating international climate change support from GCF, Global Environment Facility, Adaptation Fund, etc., is now managed by the MoF.

6.1.3 Climate Change Data and Information

1. National Center for Hydrology and Meteorology

The National Center for Hydrology and Meteorology is mandated to provide hydrometeorological data, services, and advice to meet the needs of the general public, emergency services, and other specialized users.

The National Center for Hydrology and Meteorology provides hydrometeorological data and information, climate modelling and scenarios, and other early warning services.

2. Royal University of Bhutan & Research Institutions

The Royal University of Bhutan and other research institutions, in line with their respective mandates, shall conduct needs-based research to support informed decision making and the planning and implementation of climate change action.

6.1.4 Sectors and Line Agencies

All Agencies and Organizations

The roles and responsibilities of all other sectoral agencies and organizations, including civil society and the private sector, are defined in the annex of the Climate Change Policy. These organizations are to integrate climate change actions within their respective mandates, policies, plans, and programs. All agencies and organizations shall provide updates and reports to C4 on progress made toward implementing respective actions under this policy and action plan.

Further, the Climate Change Policy mandates DECC, OCASC (earlier GNHC) and MoF to lead the integration of priorities identified in NAPs and NDCs into the subsequent national and local level plans, along with indicative budgetary requirements. Further, it mandates the development of tools and methodologies for costing, prioritization, and integration of climate change actions to assist planners and decision-makers.

In line with the M&E framework provided by the Climate Change Policy, the NAP 2023 outlines the following institutional arrangements, line of reporting, and frequency for the M&E for the NAP and NAP process in Bhutan.

Table 4. The M&E framework for the NAP and the NAP process

Monitoring and evaluation mechanism				
M&E level	M&E review committee	Coordinating and lead agency	Reporting frequency	Report to
National	NCCC	DECC	Annually	Cabinet/Parliament
National	C4	Climate Change Division (CCD)/DECC	Biannually	NCCC
All agencies & organizations	Ministries and agencies	CCD/DECC		C4

Source: Adapted from DECC, 2023.

As per the mandate, all agencies and organizations are to integrate adaptation priorities into their respective policies, plans, and programs, and report biannually to the C4 on the progress of their implementation through the CCD of the DECC. The CCD/DECC will compile, analyze, and submit reports biannually to C4 and annually to the NCCC. The NCCC will submit an annual report to the Cabinet/Parliament.

The review shows that institutional arrangements, roles and responsibilities and line of reporting, including institutional lead agencies for integration of adaptation priorities, are clearly defined in the Climate Change Policy. However, there are many operational challenges and gaps. For instance, the

three agencies (DECC, OCASC, and MoF) are to lead the integration of adaptation priorities into the subsequent national and local plans and programs. There is no mechanism established between the three agencies for the coordination and implementation of the mandate. Further, all agencies and institutions are to report the progress of the implementation of adaptation priorities to C4 through DECC biannually. Such requirements are not yet operationalized, and no institutional linkages have been established mandating that agencies submit reports to DECC. Detailed findings are presented under Section 7 of this report.

6.2 Review of the M&E Framework of the Five-Year Development Plans

Bhutan has followed a 5-year cycle of development plans since 1961. M&E is an important element of the 5-year planning cycle in Bhutan. The review of the M&E framework of the FYP was important as the key approach to implementation of the NAP is to integrate into the FYP and programs of all agencies and organizations.

Prior to the 13th FYP (2024–2029), M&E was established at four levels: national, ministry/agency, district, and sub-district, as presented in Table 5.

Table 5. M&E Institutional setup for the implementation of FYP

Monitoring and evaluation mechanism				
M&E level	M&E review committee	Review members	M&E coordinator/focal point	Focus of M&E
National	GNHC	GNHC members, chaired by Prime Minister	GNHC secretariat	Outcome, impacts
			Department of Budget, MoF	Expenditure performance at output level
Ministry/Agency	GNHC	Head of Department or equivalent. Chaired by Minister or Head of Agency	Policy and Planning Division	Outputs, outcomes, impacts
Dzongkhag (districts)	Dzongkhag Tshogdu	Dzongkhag Tshogdu members, Dzongda, Planning Officers, Sector Heads. Chaired by Dzongkhag Tshogdu Chairperson	Dzongkhag Planning Unit	Activities, outputs
Gewog (sub-districts)	Gewog Tshogde	Gewog Tshogde members, Gewog Sector staff. Chaired by Gewog Tshogde Chairperson	Gewog Administrative Officer	Activities, outputs

Source: GNHC, 2009.

The M&E was conducted at four levels: a) Gewog level, b) Dzongkhag level, c) ministry/agency level, and d) national level. At each level, the GNHC or M&E Review Committee was instituted as a reviewing and decision-making body for issues related to development policies, programs, and projects. An M&E coordinator or focal point was appointed at each level to undertake monitoring and evaluation at that level and support the review committees.

Furthermore, a web-based, centralized, computerized data collection and information management system was established. This enabled real-time online data entry, analysis, data storage, and report generation of FYP development programs and projects.

Table 6. The M&E system established between the 10th and 12th FYP periods

FYP period	Lead agency	M&E system	Activities
10th FYP (2008–2013)	GNHC	Established a web-based computerized Planning and Monitoring System (PlaMS), including M&E Manual	5-year plans and programs, annual planning
11th FYP (2013–2018)	GNHC, Department of Budget and Department of Public Accounts	Integrated PlaMS, Multi-Year Rolling Budget System, and Public Expenditure Management System	Annual planning and budgeting, and annual expenditure reporting
12th FYP (2018–2023)	Government Performance Management Division, Prime Minister’s Office	Government Performance Management System	Annual planning, budgeting, and performance

Source: Adapted from GNHC, 2009, 2013; Cabinet Secretariat, 2024.

The M&E framework in the 13th FYP (2024–2029) was slightly revised, with a major reform in the civil service, a change in mandate and the merger of some agencies. While reporting frequency remained the same, the reporting agencies, accountability levels, and coordination agencies were revised in line with the new structure of the civil service. Table 7 shows the current monitoring accountability framework of the 13th FYP.

Table 7. Monitoring accountability framework

Areas of monitoring	Reporting agency	Frequency of review	Accountability	Coordinating agency to report to
National goals	OCASC	Annual, mid-term, final	Cabinet and Cabinet Secretary	Cabinet
Plan and cluster outcomes	Policy and planning divisions (PPDs) of cluster coordinating secretaries	Annual, mid-term, final	Cluster coordinating secretaries	OCASC, Cabinet Secretariat

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

Areas of monitoring	Reporting agency	Frequency of review	Accountability	Coordinating agency to report to
Agency outputs	PPDs of Agencies	Mid-term	Head of agencies	OCASC, Cabinet Secretariat
Local Government Key Result Areas (LGKRAs)	PPDs of local governments and OCASC	Final	<i>Dzongdags/Dzongkhag Tshogdu Thrizins/Thrompons/</i> Executive Secretary	OCASC, Cabinet Secretariat
Annual performance target and budget delivery	Agencies	Annual, mid-term, final	Head of agencies and local governments	DPBP, MoF

Source: Cabinet Secretariat, 2024.

As outlined in the 13th FYP monitoring accountability framework, the Department of Planning, Budgeting and Performance under the Ministry of Finance shall, on an annual basis, monitor the implementation of projects and activities through annual performance targets and the budget, in coordination with OCASC.

The OCASC, in collaboration with the line ministries, agencies, and local government, will conduct annual, mid-term, and final reviews based on the monitoring accountability framework. The result matrix outlined in the 13th FYP will form the basis for assessing the national goals, clusters and plan outcomes, agency outputs, and LGKRAs.

Table 8. Evaluation accountability framework

Areas of evaluation	Who will evaluate?	Frequency	Coordinating agency
GNH Index	Center for Bhutan and GNH Studies (CBS)	Every 3 to 5 years	CBS
Final evaluation of the 13th FYP	CBS	End of FYP period	OCASC
Cluster and plan outcomes	CBS	Annually, a minimum of two evaluations	OCASC
Selected national programs policies and regulations	CBS and relevant teams	Annually, a minimum of one evaluation for the economic and social cluster	OCASC
Selected projects of respective agencies	PPDs of agencies and local governments and relevant teams	Annually, a minimum of one evaluation for each cluster and local governments	Head of agencies and local governments

Source: Cabinet Secretariat, 2024.

In the 13th FYP, evaluation is treated separately from monitoring to enable systematic and objective assessment of the design, implementation, and results of development interventions in the 13th FYP. This is also to ensure that the 13th FYP achieves the desired outcomes and results. The evaluation accountability framework of the 13FYP is provided in Table 8.

The OCASC will be the main coordinating agency to conduct evaluation, while the areas of evaluation shall be identified by the Cabinet, Committee of Four Coordinating Secretaries (C4CS), heads of agencies, and local governments, and develop annual plans and commission evaluation accordingly.

The Monitoring and Evaluation Accountability Framework of the 13th FYP is a national framework for M&E of the progress of the implementation of the programs, projects, and activities of the 13th FYP. The ministries, agencies, and local governments are required to submit annual, mid-term, and final reports on the implementation progress of activities, projects, and programs to DPBP and OCASC.

Consultations with the OCASC and some ministries revealed that the web-based M&E system used for planning, budgeting, reporting, and monitoring in previous plans was no longer in use. The challenges of using Excel sheets for monitoring and reporting progress to higher authorities were identified as a key barrier to the efficiency and effectiveness of service delivery. The OCASC shared similar concerns and indicated that they are in the process of developing an M&E system. This provides an opportunity for DECC to closely collaborate with OCASC to work toward a comprehensive MEL system that addresses DECC's needs and both national and international reporting obligations. This will be discussed further in detail under Section 7 of this report.

7.0 Assessment and Key Findings

7.1 Institutional Arrangements for the MEL System for the NAP Process

In accordance with the Climate Change Policy 2020, the NCCC serves as the high-level body responsible for coordinating all matters relating to the protection, conservation, and improvement of the environment. The NCCC provides oversight of the implementation of the Climate Change Policy, including the implementation of the NAP, and submits an annual progress report to the Cabinet/Parliament.

At a technical level, the C4 is to coordinate on matters relating to climate change, provide guidance on implementation, ensure an effective and coordinated approach to the implementation of climate action, and provide recommendations for consideration to NCCC.

However, at the operational level, there are many challenges and issues for effective enforcement of the mandate and institutional arrangements. Some of the key issues and challenges are highlighted below.

- Currently, the NCCC is chaired by the Secretary of the Ministry of Energy and Natural Resources and comprises only five members. They include: the Secretary of the Ministry of Agriculture and Livestock, Director of the Department of Industry, a private sector representative, special advisor to NEC/NCCC, and Director of the DECC as member secretary. The NCCC does not have full representation of the various ministries and agencies, and this limits its oversight of the implementation of climate change.
- The C4 was established with representation of 16 members, including members from government agencies, civil society, the private sector, and academia. The C4 coordination mechanism is yet to be operationalized. There is an urgent need to operationalize the C4 coordination mechanism with clear terms of reference and rules of procedures to ensure an effective and coordinated approach to the implementation of climate actions.
- The Climate Change Policy mandates DECC, OCASC, and MoF to lead the integration of the NAP into the subsequent national and local plans and programs, along with indicative budgetary requirements. A strategic coordination mechanism among the three agencies is pivotal not only to the MEL system but also to the overall coordination and implementation of climate change actions and resource mobilization. However, such coordination mechanisms are yet to be established.

The DECC is mandated to lead all climate change-related matters, including policy development, preparation of NAPs, NDCs, Long-Term Low-Emission Strategies, Long-Term Low-Emission Development Strategies, support implementation, monitoring, and reporting, including reporting obligations under the UNFCCC. However, the DECC is currently constrained by limited staffing, technical capacity, and financial resources. There is an urgent need to enhance the department's capacity to ensure it can provide effective support to the NCCC and C4 while successfully leading the implementation of climate change policy, including the MEL system for the NAP process. The M&E

system doesn't run itself. It requires a clear role, coordination mechanism, and sustained capacities across ministries and agencies.

7.2 Integration of the NAP Priorities in the 13th FYP

7.2.1 Integration of NAP Priorities in the 13th FYP—National level

The NAP 2023 identifies seven priority sectors critical to Bhutan's climate resilience: water, agriculture, forest and biodiversity, energy, health, urban planning and infrastructure development, and climate services and disaster risk reduction. Monitoring NAP implementation involves tracking progress against specific objectives, outcomes, actions, and key performance indicators established across these seven thematic areas.

The primary approach to implementing the NAP is integrating adaptation priorities into the 13th FYP. To assess the level of integration, a review was conducted of the 13th FYP and respective ministries and agencies' plans and programs.

The 13th FYP (2024–2029) set a transformative vision for Bhutan to become a “High-Income GNH Economy by 2034,” anchored in the pillars of People, Progress, and Prosperity. Central to this vision is the commitment to development that is environmentally sustainable, socially responsible, and economically viable—balancing the needs of the present while also preserving natural resources for future generations.

The Ecological Diversity and Climate Resilience Program is identified as a strategic program for achieving the economic development cluster of the 13th FYP. Given that Bhutan's economy relies heavily on climate-sensitive sectors such as water, hydropower, agriculture, livestock, forestry, biodiversity, and tourism, any climate-driven disruption could result in irreversible and devastating impacts on Bhutan's social well-being and economic development.

While the 13th FYP acknowledges the importance of reducing risk and vulnerability while building resilience, a significant gap remains. The plan currently lacks specific tools or metrics to measure progress in strengthening resilience and reducing risk within these key economic sectors.

At the sectoral level, an assessment was conducted to determine how well NAP priorities are reflected in the 13th FYP's activities/outputs/outcomes. Table 9 illustrates the alignment between climate vulnerabilities and adaptation priorities reflected in the 13th FYP.

The assessment indicates that while adaptation priorities have been integrated into the 13th FYP to some extent, the degree of integration remains difficult to quantify. This is mainly because detailed sectoral activities of the ministries are either not finalized or not officially available for reference. Furthermore, the plan lacks quantifiable indicators to measure progress of the implementation of the adaptation priorities.

For the progress reporting of the implementation of the 13th FYP, the PPD of the line ministries and agencies submit annual reports to the Department of Planning, Budgeting and Performance and OCASC based on annual work plans and budgets. However, a significant institutional gap exists as there are no established linkages between PPDs and DECC. This presents challenges for DECC in preparing biannual progress reports on the implementation of NAP to C4 and then to NCCC.

Table 9. Integration of adaptation priorities in the 13th FYP

Sectors	Climate risk and vulnerabilities	Adaptation priorities	13th FYP priorities
Water	Drying of springs, reduced winter precipitation, and intense monsoons are undermining water security and threatening communities and infrastructure.	Integrated watershed and spring-source management, nature-based approaches to recharge and conservation of water, efficient irrigation systems, and strengthened governance and coordinated water management.	Implement nature-based solutions for watershed conservation, natural and built water storage, an integrated water resource management plan, a river basin management plan, a guideline for climate-resilient water infrastructure, payment for water services, a water-based venture, along with water-efficient and innovative technologies to be explored.
Agriculture and livestock	Erratic rainfall, soil erosion, pests, and water scarcity threaten food production and rural livelihoods.	Climate-smart and sustainable land management, diversified cropping systems, resilient livestock practices, agroforestry, improved post-harvest storage, and risk management tools to strengthen food and nutrition security.	Climate-smart farming practices, climate-resilient infrastructure and technologies, sustainable land management, improved value chain across farm products, and insurance to reduce risk from climate change impact.
Forest and biodiversity	Increasing temperature and drier conditions heighten forest fire risk and alter habitat, threatening biodiversity and Bhutan's carbon sink.	Forest fire prevention and management, ecosystem restoration, scientific forest management, biodiversity monitoring, control of invasive species, and community-based conservation are aligned with the National Biodiversity Strategies and Action Plan and the National REDD+ strategy and Action Plan.	Landscape level approach to forest management, expand forest area under a sustainable forest management regime, improve forest harvesting efficiency, introduce commercial plantation of high-value species, enhance protected area management, robust monitoring and evaluation system using advanced technologies.

Sectors	Climate risk and vulnerabilities	Adaptation priorities	13th FYP priorities
Energy	Hydropower, the backbone of Bhutan’s economy, is vulnerable to changing river flows, sedimentation, and glacial lake outburst flood risks.	Climate-proofing existing hydropower plants, strengthening water resource management for energy security, and diversifying renewable energy sources, such as solar and wind, to reduce dependence on seasonal flows.	Completion of existing hydropower plants, construction of small hydropower projects in a phased manner, and alternative renewable energy, such as solar, wind, and hydrogen.
Human Settlements	Rapid urbanization and exposure to floods, landslides, and storms increase risk to infrastructure and housing.	Climate-resilient and energy-efficient infrastructure, risk-sensitive land-use planning, green urban development, and use of ecosystem-based approaches for managing urban flooding and heat.	Implement robust planning, risk management, and infrastructure investments that are resilient to climate hazards and disasters to safeguard human lives and property.
Human health	Changing temperature and precipitation patterns are increasing incidences of vector-borne and water-borne diseases, while disasters pose direct threats to health and well-being.	Strengthening disease surveillance and control systems, resilient health facilities, emergency preparedness, and integration of climate risk management into health sector planning and capacity development.	Implement interventions to mitigate health risk from climate change and environmental factors. Strengthen water, sanitation, and hygiene.
Climate services and disaster risk reduction	Limited hydrometeorological data and forecasting capacity constraint effective early warning and disaster management.	Strengthen weather, climate, and hydrological services, enhancing data and forecasting systems, developing early warning mechanisms, and integrating risk reduction into sectoral and local planning.	Strengthen key systems and services including national hydromet observation network and infrastructure, aviation meteorological services, weather and climate services, hydrological and GLOF early warning services. Construction of 24/7 national weather and flood warning centre and scientific communication facilities.

Source: DECC, 2025.

7.2.2 Integration of NAP Priorities in the 13th FYP—Local level

As His Majesty has stated, “Local government is not the lowest level of government, but the nearest and closest level of government for the people” (Cabinet Secretariat, 2024). The local government, consisting of dzongkhags (district) and gewogs (sub-districts), serves as the primary vehicle for

delivering national goals, addressing the needs of the grassroots, and realizing the objectives of the successive FYPs.

In alignment with the national objectives and outcomes, the 13th FYP identifies seven LGKRAs to be achieved by 2029: developing a vibrant local economy; increasing access to quality education and skills development; improving health and well-being; enhancing social security; increasing safety and reducing disaster risks; strengthening cultural identity and value; and ensuring efficient and effective public service delivery. The local government is also to deliver a common minimum infrastructure that includes all-weather pliable roads, safe drinking water supply, functional drainage, a sewerage system, and a waste management system.

The assessment shows that, while local governments are mandated to integrate adaptation priorities into their 13th FYP and programs, a comprehensive review was not possible due to the lack of officially available 13th FYP documents for the dzongkhags and gewogs. The review of the Mongar Dzongkhag Administration's 13th FYP (Mongar Dzongkhag Administration, 2024). shows a primary focus on green and sustainable economic growth and basic infrastructure development. There was no mention of adaptation priorities and focus on building climate resilience. This presents a significant gap in awareness and technical capacity to address adaptation needs of the dzongkhag and gewogs levels.

In terms of reporting the progress of the implementation of 13th FYP of the dzongkhags and gewogs, the local governments are required to submit annual reports to the DPBP and OCASC based on the LGKRAs. The Planning Office Unit is responsible for planning, monitoring, and reporting on the progress of the implementation of the 13th FYP.

Unlike the central ministries and agencies, the environment officers in the dzongkhag and thromde (municipality) are directly under the DECC. As such, environment officers at the local governments could play an important role in submitting reports on the implementation of adaptation priorities at the local level. However, there is a significant gap in the local government's technical capacity to identify, integrate, and implement adaptation priorities at the local level. In addition, a clear coordination mechanism between the Planning Unit and Environment Unit at the dzongkhag level is crucial.

7.3 Data, Information, and Learning

The Climate Change Policy 2020 mandates the National Center for Hydrology and Meteorology to provide hydrometeorological data and information, climate modelling, and early warning services to the public and specialized agencies. Furthermore, the Royal University of Bhutan and other institutions are mandated to conduct need-based research to support informed decision making, planning, and implementation of climate actions informed by the latest science.

Currently, data and information are collected and published by various agencies and at different levels. At the national level, data are collected and published by the National Statistical Bureau and various ministries, agencies, and academia on a regular basis. At the local level, the dzongkhags, gewogs, and sector heads collect and compile data for use within their jurisdictions.

Regarding progress on the implementation of the 13th FYP activities, the ministries, agencies, and local governments submit annual progress reports on the implementation of the plans and programs to the DPBP and OCASC. Further annual review meetings are conducted to review the past progress and prepare the next annual plans and budgets. All these are reliable sources of data and information for monitoring and evaluation of the NAP and NAP process.

However, there are many challenges related to data collection, management, and dissemination. During the validation workshop, participants raised issues on methodological inconsistency, granularity gaps, and systemic fragmentation of data collection and management. The need to have standard operating procedures, granular data for planning at the community level and a robust, comprehensive M&E system was highlighted.

Learning is an important element of the NAP process. In the context of the MEL system for the NAP process, Beauchamp et al. (2024) define learning “as a collective and deliberate process of acquiring, assessing, and disseminating new knowledge that results in changed or reinforced knowledge, attitudes, and behaviours related to climate change adaptation.” While informal learning occurs in various forms and at various stages, a structured process of acquiring, assessing, and disseminating new knowledge and feeding into the process is new to Bhutan. Building a culture of learning and feeding back into the system was given high priority, emphasizing the need to inculcate this culture within the MEL system to continuously improve and build adaptive capacity.

7.4 Gender and Social Inclusion

Climate change affects people of different genders and social groups in different ways and can exacerbate existing inequalities. People who face discrimination tend to be more vulnerable to the impacts of climate change and have less access to decision-making space related to adaptation. At the same time, they can have essential knowledge to inform adaptation action and can act as critical agents of change in their communities and beyond (Beauchamp et al., 2024).

The Climate Change Policy 2020 recognizes how climate change impacts different gender and social groups differently and emphasizes the need to take into consideration of different groups of population while taking actions. It states that gender and social issues shall be integrated into and addressed across all climate change actions. This integration shall be informed by a situational analysis of gender gaps and issues and their interlinkages with climate change, and should advance the identified gender aspects that need to be addressed through gender-responsive climate actions.

The NAP process recognizes the limited assessments of gender issues in climate change and has made concerted efforts to consider gender and its differentiated climate change impacts by assessing water, health, agriculture, and forests and biodiversity, as well as through consultations with stakeholders. However, many challenges remain, including disaggregated data, dedicated ministry and local government focal points, and capacity.

During the validation workshop, the representative from the National Commission for Women and Children emphasized the need to integrate gender equality and social inclusion into the learning system. They stated that the study on gender and climate change, with a focus on agriculture, energy,

and waste, shows close interlinkage between climate issues and gender, and it is important to understand how climate impacts genders differently.

To address these gaps and issues, the NAP recommends collecting gender-disaggregated data during M&E to ensure that adaptation activities consider differences in the knowledge, capacity, and decision-making needs of women. Further, the NAP advocates for targeted capacity building to empower officials to identify gender specific adaptation needs, ensuring that the benefits of adaptation investments are equitably accessible to all.

7.5 Capacity Building and Outreach

Capacity building is important for effective adaptation planning, implementation, and M&E of the NAP process. Capacity building involves enhancing knowledge, skills, institutions, resources, training, guidelines, tools, access to finance, research, public awareness, transparency, and other climate-related topics. It plays a vital role in educating, empowering and engaging all stakeholders on climate actions (UNFCCC, n.d.-b).

The skills assessment carried out for the NAP process in 2020 showed that stakeholders generally lack an understanding of the environment and climate change impacts from development. The assessment report showed that some level of expertise exists with central ministries and agencies for vulnerability assessment and integration of sectoral policies and activities. However, application-based skills are needed to assess adaptation cost, integrated climate change financing framework and climate change adaptation into the budget management system. At the local level, training is needed on adaptation assessment, economic assessment, climate change adaptation budgeting, etc. Further, the need to strengthen institutional memory, the urgent need to increase the level of awareness, knowledge and skills in various aspects of climate change at all levels were emphasized in the assessment report (NEC, 2020c).

The validation workshop also presented capacity constraints as a major issue across all agencies and at all levels. Further, MEL for the NAP process is new, and a rigorous targeted capacity building must be carried out to ensure effective implementation of the MEL system.

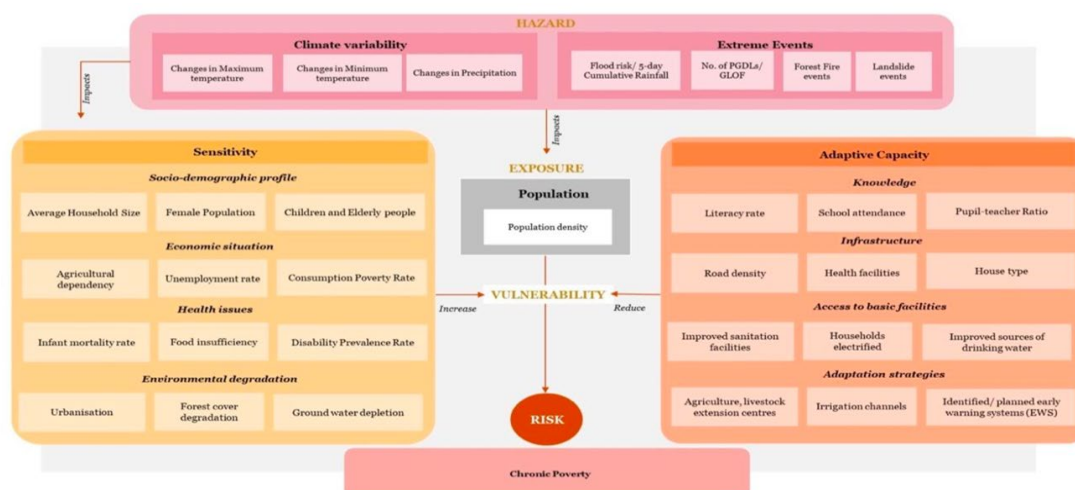
As officials keep changing, the NAP 2023 recommends continual capacity building to ensure that new actors are kept up to date with emerging findings, methodologies, and techniques for adaptation planning and implementation.

7.6 M&E for Measuring Progress on Climate Resilience and Adaptive Capacity

The NAP 2023 proposes M&E for measuring progress on climate resilience and adaptive capacity at the national level. However, measuring climate resilience and adaptive capacity is a complex issue and requires continuous research and reporting and numerous inputs and variables to inform the status and progress in assessing climate resilience and adaptive capacity. To this date, Bhutan has not adopted a system to assess climate resilience and adaptive capacity.

During the NAP preparation process, CCVA mapping was carried out to assess vulnerability and risk assessment across administrative regions in Bhutan to inform decision making for adaptation planning and budget allocation. The index serves as a proxy for resilience across dzongkhags and, over time, could be used to assess trends in adaptive capacity and resilience. The data and variables informing this assessment are illustrated in Figure 1.

Figure 1. Impact chain of vulnerability factors



Source: DECC, 2023.

Currently, the CCVA index is used as one of the criteria for the Resource Allocation Framework for 20 dzongkhags and 205 gewogs. The Framework provides a structured approach for fairly allocating resources to local governments to address development needs and local priorities, and to enable them to prioritize and address key development challenges and maximize the impact of allocated resources. Its inclusion in the resource allocation formula's criteria supports fair allocation to address the needs of vulnerable dzongkhags and gewogs.

Therefore, CCVA provides a good basis and tool to build on to assess the adaptive capacity and resilience to reduce vulnerability to climate change. The CCVA and Mapping report also recommends that the climate vulnerability and risk index can act as a diagnostic tool to understand the resilience of dzongkhags based on socio-economic parameters, and shape adaptation planning, practices, and investment. The risk index can be used for monitoring through repeated calculation, with updated indicator values. The CCVA can help design location-based and hazard-specific plans and development strategies for vulnerable areas. The baseline for Bhutan was developed in 2021 during the first CCVA exercise and should be further refined and updated to track progress and trends in climate risk and adaptive capacity over time.

Further, the NAP recommends that a system for measuring climate resilience be developed based on the CCVA tool developed during the NAP process.

8.0 Key Issues, Challenges, and Recommendations

8.1 Strategic Coordination Mechanism

The Climate Change Policy 2020 mandates DECC, OCASC, and MoF to take the lead in integrating adaptation priorities identified in the NAPs into subsequent national and local plans and programs, and to develop tools and methodologies for costing, prioritizing, and integrating climate action to assist planners and decision-makers.

The assessment noted that the three agencies play a central role not only in integrating adaptation priorities into national and local plans but also in providing strategic oversight and coordination of implementation, monitoring, evaluation, and resource mobilization for climate actions.

To streamline these efforts, it is proposed that a formal coordination mechanism between DECC, OCASC, and MoF be established. The coordination mechanism will help to address the following, among others:

- provide strategic guidance for the integration of adaptation priorities into national and local plans and programs
- issue guidelines for prioritization of adaptation activities in the ministries, agencies, and local annual planning and budgeting
- centralized data from national and local levels for analysis and submission to C4 and NCCC
- coordinated approach for resource mobilization and allocations
- establishment of a robust M&E system that caters to the requirements of all stakeholders
- timely update of the CCVA indices used in the Resource Allocation Framework.

Recommendation 1: Establish a coordination mechanism between DECC, OCASC, and MoF.

8.2 Strengthening M&E System

The assessment noted that M&E systems, such as PlaMS, Multi-Year Rolling Budget System, Public Expenditure Management System, and the Government Performance Management System, were used for planning, budgeting, and expenditure accounting. These systems were useful for centralized planning, monitoring, and reporting. However, these web-based systems are no longer in use, and currently, ministries and agencies maintain Excel sheets for annual reporting to the DPBP and OCASC. This has posed significant challenges for data providers, aggregators, and users.

In consultation with ministries and agencies, efforts and initiatives are underway by different agencies. For instance, DECC is currently working on a Monitoring, Reporting, and Verification system development to support domestic needs as well as to meet reporting requirements under the Paris Agreement. The Ministry of Finance is also working on the Integrated Financial Information Management system that would integrate procurement, tender, investment, and a Plan Information Management system. The OCASC is also exploring the development of a national M&E system to monitor and evaluate plans and programs across ministries, agencies, and local governments.

Therefore, to ensure institutional efficiency and avoid duplication of effort, it is proposed to map existing systems and platforms to explore building on or developing a unified, comprehensive system that serves the broader needs of all ministries, agencies, and local governments.

Resources for developing a robust M&E system can be drawn from various agencies. Such a system should also fulfill the requirements of the Paris Agreement, Sustainable Development Goals, and Sendai Framework for Disaster Risk Reduction. The coordination mechanism established among DECC, OCASC, and MoF should serve as a platform for discussing such strategic issues and policies. The development of a national M&E system should be carried out in close coordination and collaboration with the Government Technology Agency.

Recommendation 2: Establish a comprehensive national M&E system that caters to the needs of all stakeholders.

8.3 Data and Information

Data and information are collected and maintained by different agencies and at different levels. Data and information on monitoring NAP progress and implementation are to come from ministries, agencies, and local governments. While the Climate Change Policy mandates the submission of progress reports to DECC, these mandates are not in effect and lack clear institutional linkages among DECC, ministries, agencies, and local governments.

Measuring the progress of resilience and adaptive capacity is complex and requires data and information from multiple sources. The validation workshop highlighted many challenges and issues related to data, including inconsistency in methodologies, multiple sources, and a lack of standard operating procedures. A coordinated, systematic approach to data collection, compilation, validation, and information generation was stressed.

Further, there is no common platform to serve as a repository for climate change-related knowledge and information to share with stakeholders. A Roadmap and Strategy for Strengthening Climate Change Research in Bhutan 2021–2025 (NEC, 2020d), prepared as part of the National Adaptation Plan process recommends establishing the Bhutan Climate Portal as a repository for climate information, research services and knowledge sharing.

In consultation with DECC, it was suggested that since the development of the Monitoring, Reporting, and Verification system is ongoing, it could be explored to serve as a platform for a repository for climate change knowledge and information sharing.

Recommendation 3: Develop a Monitoring, Reporting, and Verification system as a platform for climate-related knowledge and information sharing.

8.4 Capacity Building and Outreach

Feedback from the validation workshop and the 2020 skills assessment highlights significant capacity gaps across all government agencies. While central ministries and agencies possess some expertise in vulnerability assessment and sectoral policy integration, there is a critical need for practical, application-based skills. At the local level, training is needed in adaptation assessment, economic

assessment, adaptation budgeting, and related areas. In general, awareness of climate change impacts, risks, vulnerabilities, and risk-reduction and adaptation options, including Indigenous knowledge, is important for all stakeholders.

Further, the NAP 2023 recommends ongoing capacity building to ensure that new actors are enabled to plan and implement effective adaptation. New skills and capacity will need to be upgraded for others in response to continually emerging findings, methodologies, and techniques for adaptation practices. The MEL for the NAP process is new, and a rigorous targeted capacity building must be carried out to ensure effective implementation of the MEL system for the NAP process.

Recommendation 4: Raise general awareness and provide targeted training and peer-to-peer learning across national and local government agencies.

8.5 A National System for Measuring Resilience

The current M&E system for measuring progress in implementing the NAP limits the assessment of climate resilience and vulnerability at the national level. The annual progress reports from the line ministries, agencies, and local government are largely driven by sectoral annual plan targets focusing on financial and physical outputs.

Therefore, to measure progress on resilience and vulnerability at the national level, the NAP recommends developing a system based on the approach used in the Climate Change Vulnerability Analysis and Mapping for NAP formulation in Bhutan (DECC, 2023).

The Climate Change Vulnerability Analysis and Mapping (NEC, 2022) provides a good baseline for Bhutan, developed in 2021 during the first CCVA exercise, and should be further refined and updated to track progress and trends in climate risk and adaptive capacity over time.

Recommendation 5: Establish a system to regularly update the climate change vulnerability index.

References

- Beauchamp, E., Leiter, T., Pringle, P., Brooks, N., Masud, S., & Guerdat, P. (2024). *Toolkit for monitoring, evaluation, and learning for national adaptation plan processes*. NAP Global Network and Adaptation Committee, International Institute for Sustainable Development. <https://napglobalnetwork.org/wp-content/uploads/2024/05/napgn-en-2024-mel-toolkit-nap-processes.pdf>
- Cabinet Secretariat. (2024). *Thirteenth five year plan 2024-2029*. Royal Government of Bhutan. <https://pmo.gov.bt/wp-content/uploads/2026/02/document-1751451996345.pdf>
- Department of Environment and Climate Change. (2023). *National adaptation plan (NAP) of the Kingdom of Bhutan*. Royal Government of Bhutan. <https://unfccc.int/sites/default/files/resource/NAP-Bhutan-2023.pdf>
- Department of Environment and Climate Change. (2025). *Third nationally determined contribution (NDC) of the Kingdom of Bhutan (provisional)*. Royal Government of Bhutan. <https://unfccc.int/documents/497366>
- Gross National Happiness Commission. (2009). *Tenth five year plan (2008–2013)—Volume 1: Main document*. Royal Government of Bhutan.
- Gross National Happiness Commission. (2013). *Eleventh five year plan. Volume I: Main document 2013-2018*. Gross National Happiness Commission, Royal Government of Bhutan.
- Intergovernmental Panel on Climate Change. (2007). *Climate change 2007: Impacts, adaptation and vulnerability. Contribution of Working Group II to the fourth assessment report of the Intergovernmental Panel on Climate Change*. M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C.E. Hanson (Eds.). Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg2_full_report.pdf
- Intergovernmental Panel on Climate Change. (2022). *Climate change 2022: Impacts, adaptation and vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (Eds.). Cambridge University Press. https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf
- Least Developed Countries Expert Group. (2012). *National adaptation plans: Technical guidelines for the national adaptation plan process*. United Nations Framework Convention on Climate Change. https://unfccc.int/sites/default/files/resource/NAP_technical_guidelines_EN.pdf
- Least Developed Countries Expert Group. (2025). *The NAP technical guidelines: Updated technical guidelines for the process to formulate and implement national adaptation plans*. United Nations Framework Convention on Climate Change. <https://unfccc.int/documents/649321>

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

- Mongar Dzongkhag Administration. (2024). *13 five year plan document*. Royal Government of Bhutan. <https://mongar.gov.bt/wp-content/uploads/2025/08/13-FYP-Documents-MDA.pdf>
- National Environment Commission. (2000). *Initial national communication under the United Nations Framework Convention on Climate Change*. Royal Government of Bhutan. <https://unfccc.int/documents/67671>
- National Environment Commission. (2011). *Second national communication to the United Nations Framework Convention on Climate Change*. Royal Government of Bhutan. https://unfccc.int/resource/docs/natc/snc_bhutan.pdf
- National Environment Commission. (2015). *Intended nationally determined contribution of the Kingdom of Bhutan*. Royal Government of Bhutan. <https://unfccc.int/documents/497353>
- National Environment Commission. (2020a). *Climate change policy of the Kingdom of Bhutan*. Royal Government of Bhutan. <https://faolex.fao.org/docs/pdf/bhu207787.pdf>
- National Environment Commission. (2020b). *Third national communication to the United Nations Framework Convention on Climate Change*. Royal Government of Bhutan. <https://unfccc.int/documents/268161>
- National Environment Commission. (2020c). *Skills assessment for national adaptation plan (NAP) formulation process in Bhutan*. Royal Government of Bhutan. <https://www.undp.org/sites/g/files/zskgke326/files/2022-08/Skills%20Assessment%20Report.pdf>
- National Environment Commission. (2020d). *A roadmap and strategy for strengthening climate change research in Bhutan 2021-2025*. Royal Government of Bhutan. <https://www.undp.org/bhutan/publications/roadmap-and-strategy-strengthening-climate-change-research-bhutan-2021-2025>
- National Environment Commission. (2022). *Assessment of climate risks on agriculture for national adaptation plan (NAP) formulation process in Bhutan*. Royal Government of Bhutan. <https://www.undp.org/bhutan/publications/climate-change-vulnerability-analyses-and-mapping-national-adaptation-plan-nap-formulation-process-bhutan>
- United Nations Framework Convention on Climate Change. (n.d.-a). *National adaptation plans*. <https://unfccc.int/national-adaptation-plans>
- United Nations Framework Convention on Climate Change. (n.d.-b). *Introduction to capacity-building*. <https://unfccc.int/topics/capacity-building/introduction/introduction-to-capacity-building>
- United Nations Framework Convention on Climate Change. (n.d.-c). *Introduction*. <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction>
- United Nations Framework Convention on Climate Change. (2015). *Paris agreement*. https://unfccc.int/sites/default/files/resource/english_paris_agreement.pdf

Appendix A. List of officials consulted and discussion notes

Discussion Details

Date	Key Person	Discussion
23/12/2025	Karma Tshering, Chief Planning Officer, PPD, MoAL	BRECSA project - Covers Sarpang, Trongsa, Tsirang, and Zhemgang. - \$24.00 million (\$13.00m grants and 11.00m loan) by IFAD. - Covers both mitigation and adaptation project - Establishing dashboard for M&E RNR-Job project - \$35.00million project by WB - To develop dashboard for M&E GEF-8 cycle project - \$10.00 million, accessed by FAO - Covers 6 eastern dzongkhags - Inception workshop held Current 13th FYP - Annual monitoring and reporting - Reported assess only activity and expenditure - OCAS conducted evaluation for last 2 years of 13th FYP implementation. - Not sure of the institutionalization For MoAL - Submit annual progress report to cabinet - All project based, plan-based, activity-based monitoring - Not differentiated at mitigation and adaptation measures. GESI - Found out female attendance is more than male because women stay at home. High number of women participation but less say in decision-making - Decision driven by husband. For example in Tali village, the participation of men to women ratio was 15 to 85, but in terms of decision-making process, women are less.
23/12/2025	Mr. Tshering Dhendup, Dy. Chief Planning Officer, PPD, MoENR	MEL system - Covers only two elements, monitoring and evaluation. Learning element is missing in the current MEL system. Without the learning elements, it does not cover the whole cycle of MEL system. - Government do not have M&E system. Without a system, it is difficult to track progress. - There was a system but this is no longer in use. In a way, Bhutan is back tracking, as now the ministries use excel sheet to submit progress report. - The M&E system that was in use got defunct after GNHC was dissolved. GESI
		- One of the principle component of the MEL system as well as in interventions - Mainstreaming in the plans and programmes, but the question is how do we mainstream and track progress of it. OCAS & MoF - Role between OCAS and MOF is not clear - If we propose MEL standalone system, who will lead, how do we do that, and how do we link it to the national M&E system. MoENR - PPD is not in the picture of project proposal development and implementation stage. Need mainstreaming - Do submit monthly progress report (activity and expenditure only) to the Cabinet but there is no analysis. - Revived Policy and Planning coordination mechanism (PPCM) Dashboard - Plan to establish for NCHM, agriculture, NEC/Climate, air quality, NLC, water, etc. need harmonization -
23/12/2025	Tshering Choden, Finance Officer, Department of Macroeconomic, MoF. Focal point for GCF, GEF and UN agencies	Local Government - Mainstreaming done through resource allocation formula (RAF). RAF criteria includes population, climate vulnerable index, GNH index. - Climate vulnerable index is highly used in local resource allocation. GCDP - Gender, climate, disability and poverty mainstreaming focus on 13th plan GCF CARE project - GCF grant supported project of \$10 million accessed by BTF - Caters to 120 gewogs capacity building GEF-8/LDCF - Climate resilient project for Thimphu and Paro IFMIS, MOF - Focus and environment and social governance - Track expenditure - CBIT MoF - Portfolio based information - ePEMS - MYRB - GPMS - BioFIN - Political challenges and capacity building - Project-based learning GESI

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

		- Vulnerability index and GNH index covers 13th FYP - Linkage with 13th FYP, DoECC to play key role in capacity building to enable mainstream adaptation interventions in the 13th plan. - Also should include in FY plan formulation and annual workplan and budget preparation guidelines. -
23/12/2025	Tenzin Khorlo, Chief Environment Officer, Department of Water, MoENR	NAP process - Identified 7 key sectors for NAP. - Government prioritized 3- energy, water and agriculture for implementation - Prepared resource mobilization strategy for water sector - ADB support to water sector – prepared Bhutan's climate adaptation investment plan (CAIP). This is at final stage with estimated cost of \$ 847 million. Adaptation Fund - Through BTF accessed \$ 10.00 million ACREWAS project through GEF -8 - \$ 8.7 million for water and sanitation division under MoIT MEL - Project-based - DoECC should take the lead - Stand alone system may not work. Integrated system is quite important. having a system will help to track progress. - Water security index will be revamp to track progress of water security issues 13th FYP - Annual workplan and budget linked to individual annual workplan - Annual progress report - Mid-term review of the 13th FYP - Annual review GESI - Incorporated as part of the project due to donor requirement MEL system - Integrating all sectors might be a challenge as all sectors do not have adaptation component - How could MEL system for adaptation be linked to the existing system
24/12/2025	Reena Tamang, Chief Programme Officer, Women and Children Division, Department of Education and	- Women and Children Division functions as secretariat to the National Commission for Women and Children. - Cabinet Secretary services as chair of the NCWC. Although NCWC is merged with MoF, the function remained the same. However, some of the mandates such as protection of women and children was handed over to the Pema Tewa and services are provided by agencies such as RENEW. GEMS- Gender equality monitoring system
	Skills Development, MoE	- Have gender and child focal point in all 20 dzongkhags. Initially legal officers were the GCFP (gender and child focal point) but now dzongkhag planning officers as the focal point as the protection mandate is with Pema Tewa. - The GEMS is also under revamp as it was not in use with the civil service transformation. It will take at least a year to revive the system. GESI - Officials from the division of women and children participate in many other meetings and spent a lot of time including meeting with OCAS, DoECC, biodiversity, etc for preparation of plans, programmes, NDC.3, biodiversity framework, etc. - 13th FYP comprised only two components – reduction in sexual violence and exploitation International reporting - CEDAW - GEMS is also to meet the data and information for international reporting obligations. - MEL system and GEMS should not have double counting and duplication. This must be avoided if MEL system gets implemented.
26/12/2025	Chencho Tshering, Chief Program Officer, Office of Cabinet Affairs and Strategic coordination	- M&E framework was ready when GNH was there. It went as high as to cabinet level. Due to high budgetary constraints, it could not be approved. - Later transformation came, most mandate came to OCASC. - Monitoring is being done, but evaluation not yet done. - Learning is new concept. - Strategic evaluation division – headed by Chencho. - Evaluation to be done by PPD in ministries - CBS conducting year-end evaluation of the first and second year of 13th FYP. - Planning and Economic Development sector, headed by planning officers in the dzongkhag. - Evaluation learning part-
21/01/2026	Chencho Tshering, OCASC	- Monitoring is done by the Department of Planning, Budgeting and Performance. - OCASC prepare annual deliverables. Based on annual deliverables, sectors prepare annual workplan and budget and submit to DPBP. - This is similar to APA prepared under GPMS (government performance management system). Unlike APA, annual deliverables is not signed between prime minister and the minister. - The annual deliverables use the format based on RBM structure. – inputs – activity – outputs – outcomes – impacts. Monitoring is carried out for inputs – activity – outputs. Evaluation is done for outcomes and impacts. - OCASC carried out year-end evaluation – focus mainly on annual deliverables. This was outsourced to CBS last year. - OCASC plan to carry out mid-term review of the 13th FYP next year. Opportunity to incorporate and make adjustment to the plan. - Important to reflect in the IWP (individual work plan) – mandatory indicators and other indicators.

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

		- Entry point for integration include: IWP is prepared based on annual deliverables, call for budget notification; mid-term review of the 13th FYP - OCASC in the process of developing an evaluation framework. Unlike in the past evaluation is to be carried out by an independent body. Evaluation will be carried out based on the concept note, methodology, scope, objectives as outlined in the concept note. - Some references – budget report,
21/01/2026	T N Sharma, Sr. Analyst, DPBP	- Key deliverables by OCASC prepared in November and December. - Annual work plan prepared based on key deliverables. - Conduct mid-year review of the workplan and budget- usually carried out in January. Review both upward and downward revision - IFIMS – Integrated financial information management system development ongoing. The IFIMS would have integrated system – RCSC, procurement, tender, investment management, PIMS, etc. - Reference – annual financial statement available in the website
21/01/2026	Sonam, Research, Office of the Vice Chancellor	- Out of station. She is in Nepal and will be back on 23 January. - Met Tobgay
21/01/2026	Netra Sharma, UNDP	- GCDP – revive the GCDP. Capacity building – lost Mainstreaming group. - Department of Planning, Budget and Performance – resource allocation criteria. 1. Climate vulnerability analysis and mapping - Resource allocation formula criteria. CARE LG – gewog adaptation plan. - World bank supporting – socio-economic vulnerability indicators. Department of local governance and disaster. it goes to the chiwog. Also has capacity building component. - M&E manual – what is the gap and how much - M&E guideline for adaptation. Institutional arrangement? - Monitoring guideline by DPBP. Guideline for resource allocation. - Upscaling – good to engage the RUB colleges. 2. Bhutan climate portal - Climate change portal – bought server. Gov. tech wanted to control. Nothing was there as it got burned. - DECCC developing MRV system. - Both mitigation and adaptation component. - Nima - developed the system for Bhutan climate portal. 3. Capacity building - Why do NAP - Trained - Local government – climate change tailor made. Including financial institutions, media – right reporting – climate vs development - Assessment report.
		4. M&E for biodiversity – 5. Government to pull resources -
21/01/2026	Sonam Gyelpo, DECC	- MRV system - Bhutan climate MRV system – developing ETF requirements. Have international experts and requirement are quite clear. Completed requirement and gov. tech as partner. They are also partnership to work on this. First of its kind on system development. Phase 1- focusing on ghg inventory, template, data collection, feed into the system and data repository system to be established. - System to generate different information. Mitigation, adaptation and finance tracking to be worked in phase II. - This is under CBIT project. It will complete by November 2026.

Discussion points:

Background

- MEL system part of NAP Process
- Key component of NAP and NAP processes
- Challenges, issues and gaps

Bhutan's NAP

- Progress on NAP implementation
- Progress on NAP process
- International reporting obligations

MEL system

- Stocktake, gaps, needs and recommendation for MEL system

Existing MEL system

- Existing systems, 13th plan
- Sectors, projects
- Gaps and needs
- Recommendations

Guiding questions

- Review existing system
- What are some of the gaps, challenges
- Solutions, mainstreaming

Assessment and Key Findings of the Monitoring, Evaluation, and Learning System for the National Adaptation Plan Process in Bhutan

- Other related information on projects/sectors/initiatives
- How much of the NAP activities are mainstreamed in the five year plan

Some key enabling factors

- Leadership
- Institutional arrangement
- Source of data, reporting system,
- Stakeholder engagement
- Skills and capacity

Appendix B. Validation Workshop Report

Draft Report

**Validation Workshop on Assessment of Monitoring, Evaluation and Learning System
for National Adaptation Plan (NAP) and NAP Process in Bhutan held on 30 January
2025, Tashi Namgay Resort, Paro, Bhutan**



1. Background and objectives

The Department of Environment and Climate Change (DECC), Ministry of Energy and Natural Resources (MoENR) with support from the NAP Global Network organized a validation workshop on 30 January 2026 in Paro, Bhutan. The workshop was participated by eighteen officials from the ministries and agencies of the government of Bhutan (attached list of participants as annex-1).

To enable participation of officials from NAP Global Network, the workshop was convened after lunch and stretched over late evening.

The workshop objectives were to:

- Validate key findings of the assessment on MEL system in Bhutan;
- Receive further inputs on gaps, barriers, challenges and possible way forward on the establishment of a robust MEL system in Bhutan;
- Identify key priority activities and timeline for establishment of a robust MEL system;
- Enhance capacity and understanding of the MEL system for officials from the national and local governments.

2. Proceeding of the workshop

The workshop was facilitated by Mr. Sonam Gyelpo, NAP Focal Point from the Department of Environment and Climate Change. Mr. Sonam Tashi, Director of the Department of Environment and Climate Change, and Mr. Partick Guerdat from the NAP GN joined online for the opening remarks. (attached validation workshop agenda as annex-2)

Opening and welcoming

The Director, DECC welcomed the participants and thanked them for their participation at the workshop, Patrick Guerdat from the NAP GN for their support and Tenzin Wangmo for her flexibility in carrying out the assessment within a short time. The Director highlighted that adaptation is key for Bhutan due to its high vulnerability to the impacts of climate change and pivotal to building adaptive capacity across sectors, national and local governments, private sectors, local communities including gender. Having a MEL system helps us to monitor and track progress of our adaptive capacity and resilience and reduce risk to the impacts of climate change. The need to establish a M&E system was highlighted in the 2025 annual audit report by the Royal Audit Authority of Bhutan, which gives us a strong basis to push for a robust MEL system. Establishment of such a system should consider linking with Global Goal on Adaptation indicators adopted at COP30 in Belem. The Director emphasized that DECC cannot do it alone and needs support and cooperation from all agencies. DECC can only facilitate and coordinate but implementation has to happen in the ministries and dzongkhags. He concluded by thanking everyone and wished the meeting a fruitful deliberation.

Mr Partick Guerdat from the NAP GN thanked the Director and team from the DECC for their leadership and close collaboration, and participants for their time and contribution. He mentioned that Bhutan is well known for sustainable development but highly vulnerable to the

impacts of climate change. A robust MEL system will help to monitor and track progress on how effectively the country is implementing adaptation priorities, how it is building its adaptive capacity and increasing its resilience. Bhutan could assess the gaps and build on the current system, and not necessary to build a new system. It should be country owned and must be fit-for-purpose. The MEL system should not be just for compliance, but reflect ground realities and address real needs of people to help build resilience and adaptive capacity. He said he looks forward to the discussion.

Context setting

Mr. Sonam Gyelpo, provided an overview of the NAP and NAP process highlighting the role and importance of the MEL system for the NAP process. He further elaborated the NAP priority sectors, implementation modalities and indicators (*attached presentation on NAP and NAP Process in Bhutan as annex-3*).

Mr. Partick presented MEL system for NAP Process providing conceptual understanding of monitoring, evaluation and learning and why MEL system is important for NAP process, different approaches taken by the countries, as well as the enabling factors for a good MEL system (*attached presentation on MEL system for NAP Process as annex-4*).

The presentation on the MEL system including enabling factors and the NAP and NAP process in Bhutan has enabled participants conceptual understanding of the MEL system and state of play of Bhutan's MEL system.

3. Discussion and outcomes

The national consultant presented the key findings of the assessment of the MEL system for NAP and NAP process in Bhutan, gaps and challenges, and recommendations. The key findings focused on institutional arrangements, NAP integration in 13th FYP, M&E framework of 13th FYP and NAP, M&E systems, learning and knowledge, and data and information, etc. (*attached presentation on key findings as annex -5*)

Key discussions and outcomes:

The meeting discussed in-depth on the key findings and some of the key discussions and outcomes are highlighted below:

What is a MEL system: Some participants sought clarification on the MEL system as it was not clear and understood it as a web-based system. Patrick clarified that the MEL system is a comprehensive system rather than just a web-based system. The MEL system considers institutions, data inputs, capacity, data process, financing, etc. and should be part of the process and should start from the beginning of the NAP process.

Establishment of a MEL system: Participants expressed that without a MEL system, it is difficult to monitor and track progress of the development plans and programs. The representative from Thimphu Dzongkhag mentioned that there are multiple sources of data- administrative data, data collected by central agencies through sector heads, data collected by the National Statistical

Bureau (NSB), etc. In absence of standard operating procedures of data collection, it prevails lack of consistency in data. For instance, when administrative data was collected by dzongkhag, it did not match with data collected by the NSB. On the other hand data collected by NSB did not provide data at the chiwog (village) level, which they needed for planning purposes. Participants expressed the need for a robust MEL system, which could either build on the existing system or establish a new system but must be a comprehensive system that caters to the needs of all agencies – national and local levels.

Further the representative from UNDP highlighted the importance of alignment of the MEL system with the vision of the 21st century economic roadmap. He also suggested pulling funds from different projects to support the establishment of the MEL system. However, there is a clear need for a leadership role by the Office of Cabinet Affairs and Strategic Coordination (OCASC) supported by the DECC.

Others mentioned that establishment of such a system should involve local governments including gewogs to reflect the needs and priorities of the local government.

Gender Equality and Social Inclusion (GESI): The representative from National Commission for Women and Children (NCWC) expressed the need to include GESI in the learning system. She said the study on gender and climate change with focus on agriculture, energy and waste show close interlinkage between climate issues and gender. Climate is core to gender issues and it is important to understand how climate impacts gender differently.

Gender, Environment, Climate Change, Disaster, and Poverty (GECDP) Mainstreaming Reference Group: During the 10th and 11th Five-Year Plan period, mainstreaming reference group was established in the ministries and dzongkhags to mainstream cross cutting issues such as environment, gender, climate change, disaster and poverty reduction in the development plans and programs. However, this group is no longer active and some propose to reactivate the GECDP mainstreaming reference group. Others view that such a group may be useful for short term, but not necessarily useful for long term purpose as the members core mandate is not mainstreaming and they may not have the full expertise, knowledge and understanding of all the issues that relate to gender, environment, climate change, disaster and poverty.

Capacity building and learning: Participants expressed capacity as a major concern across all agencies. The meeting was informed that rigorous capacity building was carried out during the NAP preparation process, however, officials keep changing and capacity building must be a continual process.

The discussion also acknowledged that learning was never part of the M&E framework and must build a culture of learning and feed back into the system. There must be efforts to inculcate learning culture in the MEL system to continual improve and build adaptive capacity.

Data sources and related issues: Inconsistent data due to multiple sources of data and data collection and lack of common approach and protocol for data collection were reiterated by the

representative from Thimphu Dzongkhag. Also expressed the need for a bottom-up approach for addressing needs and priorities of the local communities. Additionally, participants suggested efficient data generation through use of advanced satellite and technology.

Coordination Mechanism: The discussion highlighted that while overall coordination at various levels is pivotal, the close coordination between OCASC, DECC and MoF is crucial for strategic direction, integration of adaptation priorities in the 13th FYP, annual workplan and budget, resource mobilization, and establishment of a national MEL system for monitoring and tracking progress of implementation of 13th FYP and beyond, and to support climate actions.

The representative from OCASC suggested DECC prepare a note to establish a coordination mechanism and submit it to OCASC to discuss this matter.

M&E Manual: The meeting also suggests preparing a M&E Manual to provide clear roles and responsibilities of respective agencies including frequency of reporting, who should report to whom and what is to be reported, etc.

4. Priority Activities and Timeline

The participants were divided into two groups, each group comprising around eight to nine members. The following guiding questions were provided for the group activities:

- What are the gaps, barriers and challenges of the MEL System for NAP and NAP Process?
- What are your suggestions to overcome the barriers, gaps and challenges of establishment or operationalization of MEL System for NAP and NAP Process?
- What are your priority activities and timeline for implementation of these activities?

The table below provides key barriers, challenges, possible solution, priority activities and timeline proposed by the two groups:

#	Gaps, barriers and challenges	Solution	Priority	Timeline (July 2026–Dec 2027)
1	No M&E systems in place to measure adaptation progress; M&E framework/indicator is not clear	Standardised M&E framework for all the agencies. Donors supported projects to follow the national M&E system.	Identify Indicators for M&E	Q3 of 2026
2	No uniform system, different system for different agencies and department, and fragmented data	Map stakeholders and MEL systems	Identify common data base/system, and harmonisation of data	Q4 of 2026
3	Inadequate Capacity (Expertise)	Capacity building	Identify capacity needs	Q3 of 2026

4	Lack of capacity in terms of evaluation	Extend evaluation through involvement of independent evaluators (EAB); strengthen technical capacity of the evaluators like CBS	Strengthen technical capacity of evaluators	Q3 of 2026
5	No feedback mechanism	Emphasis on impact evaluation through mid-term and annual review	Conduct annual and mid-term review and focus on impacts	
6	Coordination issues	Institutionalise M&E and strengthen coordination between central and local level.	Strengthen coordination between central and local level	Q3 of 2026
7	Weak Implementation CCVA/lack of advocacy/awareness	Ensure NAP captures differentiated climate change impacts. Sharing of knowledge and communication	Advocacy and awareness	Q3 of 2026
8	Cross cutting sectors like gender, climate and disaster	Clear delineation of responsibilities, capacity building	Clearly reflect in the M&E manual of role and responsibilities to fix accountability	Q2 & A3 of 2027
9	Clarity on implementation, setting indicators	Capacity development, sensitization on the guidelines	Capacity building and sensitization	Continual basis
10	Weak stakeholder consultations	Organize session to discuss coordination issues and come up with solutions	Rigorous stakeholder consultation on MEL system	Q1 of 2027
11	Operational issues	Capacity development	Rigorous capacity building for operational officials	Q3 of 2027

5. Wrap up and Next Steps

As two trainings, one online and one in-person training are scheduled between February and March 2026, the participants were asked if they would like any specific topics to be covered.

For the online training, the consultant suggested whether they would like to receive an overview and outcome of COP30 on adaptation, which the participants showed interest and its usefulness to understand the global perspective.

Capacity building on the MEL system for the NAP process was suggested, in which the participants expressed its usefulness to build capacity on the MEL system to enhance their understanding. The in-person meeting is tentatively scheduled on 26-27 February 2026.

Mr. Sonam Gyelpo from DECC expressed his appreciation to all participants and thanked them for their active engagement. He mentioned, DECC is looking forward to their support and cooperation to take the MEL system forward. He will be working closely with NAP GN to mobilise resources and hope to have a robust MEL system in place that avoid duplication of efforts, resources and also reduce reporting burden on reporting to various institutions and levels. He also urged the leadership of the OCASC on this agenda as they are the central coordinating agency and have the mandate and ability to bring sectors together.

Lastly, he thanked everyone for their patience for the late closure of the meeting and the meeting was adjourned.

Annexes:

Annex 1- List of Participants

Annex 2 - Validation Workshop Agenda

Annex 3 - Presentation on NAP and NAP Process in Bhutan

Annex 4 - Presentation on MEL System for NAP Process

Annex 5 - Presentation on Key Findings of the Assessment

Appendix C. Action Plan and Timeline Concept Note

Concept Note

Strengthening and development of a Monitoring, Evaluation and Learning (MEL) System for National Adaptation Plan (NAP) and NAP Process in Bhutan

1. Background

Bhutan developed its first National Adaptation Plan (NAP) in 2023 to address climate vulnerabilities across seven key sectors - water, agriculture, forest and biodiversity, human settlements, energy, health, and disaster risk reduction. The Monitoring, Evaluation and Learning (MEL) system was an important component of the NAP and NAP process to ensure effective implementation of the NAP and feed the learnings and experiences of the first NAP into the subsequent iteration of the NAP and NAP process.

A robust MEL system is important to ensure effective implementation of NAP and NAP process and fulfill reporting obligations under the Paris Agreement. An assessment was carried out to stocktake the existing MEL system for NAP and NAP process, identify gaps, barriers, and challenges, and to identify needs and priorities to strengthen the MEL system for NAP and NAP process in Bhutan. Guided by the National Environment Protection Act, 2007, the Climate Change Policy of the Kingdom of Bhutan 2020, and related documents, the MEL system for NAP and NAP process present clear institutional arrangements with clear roles and responsibilities of the various ministries and agencies, coordination mechanism, including line of reporting and reporting frequencies. The assessment however, presents many key operational challenges and constraints as the whole approach to implementation of NAP is integration of adaptation priorities in the five-year development plans and programmes of the line ministries, agencies and local governments. The lack of coordination mechanism for integration of adaptation priorities in the national, sectoral and local governments' five year development plans and programs, as well as lack of institutional linkages for reporting to the Department of Environment and Climate Change presents a major challenge. In addition, capacity constraints, lack of awareness, no comprehensive MEL systems, poor coordination on data collection and management, etc were presented as some of the major issues and challenges.

Given these constraints and challenges, the Department of Environment and Climate Change proposed to take a phased approach in strengthening a MEL system for NAP and NAP process in Bhutan.

It is proposed to develop a robust MEL system in one or two dzongkhags (districts) on a pilot basis. A robust comprehensive MEL system will be developed in the selected one or two dzongkhags taking into account all key elements of the MEL system including institutional arrangements, coordination mechanisms, integration entry points, baseline targets and indicators, data collection, sources, management, repository, reportings across seven NAP priority sectors. The system will be built on the existing system but with clear objectives and strategies to enable scale up at national level once pilot dzongkhag (district(s)) is fully in operation.

2. Objectives

The main objective is to develop a robust MEL system for NAP and NAP process building on the existing systems, while also aligning with the 13th Five Year Plans (2024-2029), Bhutan's 10X Economic Transformation Roadmap, Government performance and monitoring reforms led by the Office of the Cabinet Affairs and Strategic Coordination, and international reporting obligations under the Paris Agreement, SDGs, and Sendai Framework. This is to be piloted in one to two dzongkhags.

Specifically, the proposal aims to achieve the following objectives:

1. Strengthen strategic coordination mechanism and institutional arrangements for MEL governance;
2. Develop/strengthen a robust MEL system in one to two dzongkhags (districts) interoperable at a national level;
3. Strengthen data, information, knowledge management, and learning systems.
4. Strengthen institutional and technical capacity at national and local level for effective implementation of the MEL system and the NAP.
5. Establish a national resilience measurement and CCVA update system.

3. Proposed key Activities

To achieve the above objectives, the following broad priority activities are proposed.

1. Strengthening strategic coordination mechanism and governance for the MEL system.

- Establish a strategic coordination mechanism as well MEL technical working group (inclusive of dzongkhags) and develop clear terms of reference and guidelines.
- Operationalize and strengthen the Climate Change Coordination Committee (C4)
- Strengthen dzongkhag coordination committee building on the existing system.
- Stakeholder mapping and selection criteria for pilot dzongkhags

2. Development of a robust MEL system in one to two dzongkhags

- Map and assess existing MEL system through review, analysis and feasibility studies including current data collection, management, reporting system, and institutional arrangement at the local level and its linkages with sectoral ministries and agencies, stakeholder mapping.
- Develop a MEL system that comprises setting clear objectives, baseline data, indicators, data sources, collection, reporting, analysis, management, institutional arrangement, etc. Also consider the Belem Adaptation Indicators for alignment where relevant. All seven sectors in the NAP priorities should be considered in the MEL system. Cross cutting areas such as gender and social inclusion are to be considered.
- Develop a web-based MEL system in the pilot dzongkhags but it should be interoperable and scalable at national level.

- Stakeholder consultation and focus group discussions (FGDs) to validate the data, findings, and adaptation priorities particularly with local communities for institutional strengthening and capturing real-life experiences.
 - Explore climate data generation, monitoring using satellite and drone technologies such as specialized unmanned Aerial Vehicles (UAVs) equipped with high-resolution cameras and sensors (such as multispectral or LiDAR sensors) suitable for rugged terrain.
 - Conduct Climate Change Vulnerability Assessment to understand climate risk, vulnerability, and adaptation priorities in the pilot dzongkhas.
- 3. Strengthening institutional and technical capacity at the national and local level**
- Carry out training needs assessment to identify institutional and technical capacity gaps and needs.
 - Map out national experts to build on the pool of experts within the country.
 - Based on the training needs assessments and requirements, prepare a comprehensive plan to provide training, peer learning events, knowledge management, awareness building, etc.
 - Implement capacity building based on the need assessment and plan prepared.
 - Establish/build on existing systems a knowledge management, information sharing, learning platform.
 - The design of the MEL system should be co-creation with the dzongkhag to strengthen institutional and technical capacity of the dzongkhags.
- 4. Establish a national resilience measurement and CCVA update system.**
- Building on the CCVA developed in the preparation of the first NAP, update CCVA, build technical capacity at the national/local level and establish a system for regular update.

4. Implementation Approach

The Department of Environment and Climate Change as the national focal point to the UNFCCC will be the lead agency in implementing the project proposal. The Department will coordinate with all relevant agencies and some of key relevant agencies and their respective roles are listed in the table below.

The implementation of the proposal will be guided by the following guiding principles

- Build on existing national systems and institutional mandates.
- Avoid duplication through inter-agency coordination.
- Ensure interoperability with IFIMS, MRV, and OCASC monitoring systems.
- Promote decentralised participation and local government engagement.
- Ensure gender equality and social inclusion (GESI).
- Integrate learning and adaptive management into the MEL process.
- Strengthen evidence-based planning and decision-making.

Key Institutions and their key role:

Institution	Primary Role
-------------	--------------

Department of Environment and Climate Change (DECC)	Overall technical lead for MEL for NAP process
Office of Cabinet Affairs and Strategic Coordination (OCASC)	National planning and performance coordination
Ministry of Finance (MoF)	Budget integration and financing coordination
GovTech Agency	Technical support for system architecture and interoperability
National Center for Hydrology and Meteorology (NCHM)	Climate data and early warning systems
National Statistics Bureau (NSB)	Statistical standards and data quality
Royal University of Bhutan (RUB)	Research, learning, and capacity support
DLGDM/Local Governments	Local adaptation planning and reporting

5. Key Deliverables

By the end of the project, it is expected to deliver the following key outcomes:

1. Strengthened coordination and clear governance for MEL system in place
2. A robust, comprehensive MEL system is piloted in one to two dzongkhags and fully operational
3. Strengthened institutional and technical capacity of the pilot dzongkhags and institutions involved
4. Instituted a system for updating of CCVA and technical capacity strengthened.

6. Cost Estimates

The total estimated cost is around USD 235,000.00

The summary of the cost estimates is provided below:

Proposed Key Activities	Proposed Budget (In USD)
Strengthening strategic coordination and governance for MEL system	40,000.00
Development of a robust MEL system in one to two dzongkhags	100,000.00
Strengthening institutional and technical capacity at the national and local level	45,000.00
Establish a national resilience measurement and CCVA update system.	50,000.00

Total (USD)	235,000.00
--------------------	-------------------

6. Action Plan and Timeline

#	Key Activities	Year 1 (2026-2027)				Year 2 (2027-2028)			
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1.	Strengthening strategic coordination mechanism and governance for the MEL system.								
	Establish a strategic coordination mechanism as well MEL technical working group (inclusive of dzongkhags) and develop clear terms of reference and guidelines								
	Operationalize and strengthen the Climate Change Coordination Committee (C4)								
	Strengthen dzongkhag coordination committee building on the existing system								
	Stakeholder mapping and selection criteria for pilot dzongkhags								
2	Development of a robust MEL system in one to two dzongkhags								
	Mapping existing MEL system, stakeholders, feasibility study								
	Conduct CCVA in the pilot dzongkhags								
	Develop a robust MEL system in pilot dzongkhags								
	Operationalise the MEL system in pilot dzongkhags								
	Stakeholder consultations and engagement in the development of MEL system, capacity building, etc								

	Explore tools for climate data generations and monitoring								
3	Strengthening institutional and technical capacity at the national and local level								
	Carry out training needs assessment (institutional and technical capacity)								
	Prepare a comprehensive capacity building plan and map national experts.								
	Implement capacity building based on the plan								
	Establish/build on existing system a knowledge management and learning platform								
4	Establish a national resilience measurement and CCVA update system.								
	Update CCVA for all dzongkhags and establish a system for regular update								
	Develop training manual to guide the update of the CCVA								
	Conduct training to the national experts and institutionalize capacity building in the relevant institutions.								

6. Proposed Financing Sources

As there is limited fiscal space from the domestic resources, the total estimated cost of USD 235,000.00 is proposed to source from the development partners including multilateral funding agencies, bilateral and Philanthropies. Some of the key potential partners for possible support including grants, technical assistance, capacity building and co-financing are listed below. The list is not comprehensive and will explore other partners where possible for support.

Source	Potential Contribution
Government of Bhutan	Core staffing, coordination, office support
Green Climate Fund (GCF) Readiness	MEL system development and capacity building

GEF / LDCF	Climate adaptation monitoring systems
NAP Global Network	Technical assistance, capacity building, resilience assessment, knowledge, etc
UNDP / UNEP	Knowledge systems and resilience assessment
Development partners	Co-financing for local capacity building

