



2025

STRENGTHENING CLIMATE AND
ENVIRONMENTAL POLICY
INTEGRATION ACROSS THREE
TIERS OF GOVERNMENT

Vision

A world with scientific culture, safe nature, and equal progression of human beings.

Mission

To promote good governance, justice, and humanity.

Goals

Develop scientific culture through research, innovation, and policy reform.

Objectives

- To bring transformation through research and development (R&D), experimentation, and networking.
- To promote rational thinking and scientific temperament through policy discourse, capacity building evidence-based policy advocacy and awareness raising.

**STRENGTHENING CLIMATE
AND ENVIRONMENTAL POLICY
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OF GOVERNMENT**

REPORT, 2025

KATHMANDU, NEPAL

STRENGTHENING CLIMATE AND ENVIRONMENTAL POLICY INTEGRATION ACROSS THREE TIERS OF GOVERNMENT

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CHAPTER ONE

INTRODUCTION

1.1 Background

Nepal is internationally recognized for its exceptional ecological diversity, encompassing a wide range of ecosystems, climatic zones, and biological resources within a relatively small geographical area. Extending from the tropical lowlands of the Tarai to the alpine ecosystems of the Himalayan region, the country harbors significant biodiversity and provides critical ecosystem services that support livelihoods, economic development, and environmental sustainability. However, Nepal is also among the countries most vulnerable to the impacts of climate change and environmental degradation due to its fragile mountain ecosystems, high dependence on natural resources, and widespread socio-economic vulnerabilities.

Scientific evidence indicates that Nepal is experiencing increasing temperatures at a rate higher than the global average, particularly in high mountain regions. These climatic changes are manifested through shifting precipitation patterns, accelerated glacier retreat, glacial lake expansion, and an increased frequency and intensity of floods, landslides, droughts, forest fires, and other climate-induced disasters. Such impacts threaten food security, water resources, biodiversity, public health, infrastructure, and the livelihoods of millions of people, particularly poor, marginalized, and climate-sensitive communities. Simultaneously, environmental challenges such as deforestation, land degradation, habitat fragmentation, pollution, and unsustainable resource use continue to exert significant pressure on ecosystems and natural resources.

Against this backdrop, effective climate and environmental governance has emerged as a critical prerequisite for achieving sustainable development, climate resilience, environmental sustainability, and social equity in Nepal. Governance systems play a central role in translating policy commitments into practical actions, coordinating stakeholders across sectors and administrative levels, mobilizing resources, and ensuring accountability in environmental and climate-related decision-making. Strengthening governance mechanisms is therefore essential not only for addressing environmental challenges but also for advancing climate justice, poverty reduction, and inclusive development.

A major institutional transformation occurred with the promulgation of the Constitution of Nepal in 2015, which established a federal democratic governance system comprising three constitutionally mandated tiers of government: the federal government, seven provincial governments, and 753 local governments. This restructuring fundamentally altered the governance landscape by devolving significant powers, responsibilities, and decision-making authority to subnational levels. The federal system was envisioned to promote participatory governance, improve service delivery, strengthen local ownership, and facilitate context-specific planning and implementation of development interventions, including climate and environmental actions.

The federal governance framework presents substantial opportunities for localized and adaptive responses to climate change and environmental challenges. Provincial and local governments are strategically positioned to identify context-specific vulnerabilities, engage local stakeholders, integrate indigenous and traditional knowledge systems, and implement targeted adaptation and mitigation measures. Decentralized governance also provides a pathway for enhancing accountability, fostering community participation, and improving the responsiveness of public institutions to emerging environmental risks.

Despite these opportunities, the transition to federalism has also generated significant governance challenges that continue to affect the effectiveness of climate and environmental policy implementation. The distribution of constitutional powers among the three tiers of government has created overlapping jurisdictions and ambiguities in mandates related to environmental management, climate adaptation, natural resource governance, disaster risk reduction, and biodiversity conservation. In many cases, the institutional mechanisms required to facilitate coordination and collaboration among different levels of government remain weak.

Nepal has made substantial progress in establishing a comprehensive policy and regulatory framework to address climate change and environmental sustainability. Key national policy instruments include the Climate Change Policy (2019), National Environment Policy (2019), National Adaptation Plan (NAP) 2021–2050, Nationally Determined Contributions (NDCs) under the Paris Agreement, the Long-Term Strategy for Net-Zero Emissions, the National Biodiversity Strategy and Action Plan, the Disaster Risk Reduction and Management Act, and various sectoral policies related to forestry, agriculture, water resources, energy, and land use. These frameworks collectively seek to strengthen climate resilience, promote low-carbon and green development pathways, conserve biodiversity, enhance ecosystem services, and improve environmental governance across sectors.

Furthermore, Nepal has demonstrated a strong international commitment to global environmental and climate agendas through its engagement with the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement, the Convention on Biological Diversity (CBD), the Sendai Framework for Disaster Risk Reduction, and the Sustainable Development Goals (SDGs). These commitments require coordinated implementation efforts across all levels of government and sectors to achieve nationally determined targets and fulfill international obligations.

However, the effectiveness of these policy frameworks is often constrained by persistent implementation gaps. Institutional fragmentation, limited intergovernmental coordination, inadequate harmonization of policies and regulations, insufficient technical and human resource capacity, and disparities in financial resources among federal, provincial, and local governments continue to impede effective implementation. Moreover, climate and environmental concerns are frequently addressed through sector-specific approaches, resulting in fragmented planning processes and missed opportunities for integrated interventions.

Although the Constitution assigns substantial authority to provincial and local governments in areas such as environmental protection, natural resource management, watershed conservation, local infrastructure development, and disaster risk management, many subnational institutions continue to face challenges in operationalizing these responsibilities. Limited technical expertise, inadequate institutional arrangements, insufficient climate information systems, and constrained fiscal resources often hinder the integration of climate and environmental priorities into local development planning and budgeting processes.

Consequently, a significant gap remains between national policy commitments and local-level implementation. Translating national climate and environmental goals into effective provincial and local actions requires stronger vertical coordination among federal, provincial, and local governments, as well as enhanced horizontal coordination across sectors and institutions. Building coherent governance systems that facilitate policy alignment, information sharing, joint planning, resource mobilization, and collaborative implementation is therefore essential for achieving climate-resilient and environmentally sustainable development.

In this context, strengthening climate and environmental policy integration across Nepal's three tiers of government has become an urgent policy priority. Improved coherence among policies, institutions, and governance mechanisms can enhance implementation effectiveness, optimize resource utilization, reduce duplication of efforts, and support evidence-based decision-making. A coordinated and collaborative governance approach is critical for enabling Nepal to address complex climate and environmental challenges while simultaneously advancing sustainable development and building resilience.

Despite encouraging progress at the federal level in formulating climate and environmental policies, there is limited understanding of how effectively these agendas are being integrated and operationalized at provincial and local levels in Nepal's newly established federal system. The complexity introduced by decentralization, combined with the high stakes of climate vulnerability, calls for a systematic and comprehensive assessment of policy coherence and implementation dynamics.

This report provides a comprehensive analysis of Nepal's climate and environmental policy integration within the federal system. It examines existing gaps and proposes a strategic framework to strengthen coherent and collaborative governance across all three tiers of government, ensuring that climate action is inclusive, resilient, and effectively localized.

1.2 Objectives

1.2.1 Overall Objective

To assess the extent of policy coherence and institutional integration of climate and environmental policies across Nepal's three tiers of government, and to identify pathways for strengthened policy implementation.

1.2.2 Specific Objectives

1. **Policy Analysis and Mapping:** Develop an analytical framework to review and map climate and environmental policies, plans, and strategies across the federal, provincial, and local government.
2. **Mainstreaming Assessment:** Evaluate the extent to which climate and environmental priorities are integrated into planning, budgeting, and implementation processes at all three levels of government.
3. **Governance and Capacity Assessment:** Assess institutional capacities, coordination mechanisms, and the role of stakeholders in climate and environmental governance.
4. **Strategic Recommendations:** Formulate evidence-based recommendations to strengthen policy coherence, institutional collaboration, and the effective localization and implementation of climate and environmental actions.

CHAPTER TWO

METHODOLOGY

2.1 Methodological Approach

The study adopted a comprehensive mixed-methods approach that integrated qualitative and analytical research methods to assess the status, extent, and effectiveness of climate and environmental policy integration across Nepal's federal, provincial, and local governments. Recognizing that climate change and environmental governance are cross-cutting and multi-sectoral in nature, the study employed a combination of policy and legal reviews, institutional assessments, stakeholder consultations, key informant interviews, focus group discussions, and field-based analyses to generate evidence from multiple sources and perspectives.

The mixed-methods approach enabled the study to examine not only the existence of climate and environmental policies and legal frameworks but also their practical implementation, institutional arrangements, coordination mechanisms, and governance outcomes. By combining document-based analysis with stakeholder experiences and field-level evidence, the study provided a comprehensive understanding of how climate and environmental considerations have been integrated into development planning, policy implementation, and governance systems across Nepal's three tiers of government.

The methodology was designed to assess both vertical policy coherence examining the alignment of policies, plans, and institutional arrangements among federal, provincial, and local governments and horizontal policy coherence, which focused on integration and coordination across sectors and institutions

operating at the same level of government. Particular attention was given to identifying policy gaps, overlaps, inconsistencies, and opportunities for strengthening collaborative governance and institutional coordination.

The study further examined the adequacy of existing legal and policy frameworks, institutional mandates, coordination mechanisms, implementation capacities, financing arrangements, monitoring systems, and stakeholder engagement processes related to climate change and environmental management. Evidence generated through different methodological tools was triangulated to enhance the reliability, validity, and comprehensiveness of the findings.

A participatory approach was applied throughout the study to ensure the meaningful involvement of a broad range of stakeholders, including government officials, policymakers, development partners, academic and research institutions, civil society organizations, indigenous peoples' organizations, private sector representatives, women and youth groups, and local communities. This approach helped capture diverse perspectives and experiences regarding policy implementation, governance challenges, and opportunities for strengthening climate and environmental policy integration within Nepal's federal governance framework.

The overall methodology was organized into five sequential and interrelated stages. These stages included: (i) the development of a policy analysis framework, (ii) a comprehensive desk review and analysis of policies using the policy analysis framework, (iii) stakeholder consultations and field-based data collection through key informant interviews and focus group discussions, (iv) validation and refinement of findings through a national multi-stakeholder consultation workshop, and (v) synthesis and analysis of findings to assess policy coherence, integration, and governance effectiveness. Together, these stages provided a systematic and evidence-based foundation for evaluating climate and environmental policy integration and governance across Nepal's federal system, identifying practical recommendations to strengthen policy coherence, institutional collaboration, and implementation effectiveness.

2.2 Development of the Policy Analysis Framework

A comprehensive policy analysis framework was developed and applied to guide the assessment of climate and environmental governance across Nepal's federal, provincial, and local governments. The framework served as the principal analytical tool for systematically examining the extent to which climate change and environmental considerations have been integrated into policies, plans, legal instruments, institutional arrangements, and governance processes at different levels of government.

The development of the framework was informed by an extensive review of relevant literature, national policy documents, constitutional provisions, international frameworks, and established approaches to policy coherence and environmental governance assessment. It was designed to provide a structured and consistent basis for evaluating policy integration, institutional effectiveness, governance performance, and implementation arrangements across sectors and levels of government.

The framework established a set of analytical criteria and assessment dimensions for examining key aspects of climate and environmental governance. These included policy coherence and consistency; institutional mandates and responsibilities; intergovernmental relations and coordination mechanisms; stakeholder participation and inclusiveness; implementation capacity; financing arrangements; monitoring, reporting, and accountability systems; and the mainstreaming of climate and environmental considerations into development planning and decision-making processes.

A major focus of the framework was the assessment of both vertical and horizontal policy coherence. Vertical coherence referred to the alignment and consistency of climate and environmental policies, plans, and implementation mechanisms across federal, provincial, and local governments. Horizontal coherence examined the extent of integration and coordination among sectoral policies and institutions operating at the same level of government, including sectors such as forestry, agriculture, water resources, energy, infrastructure, urban development, biodiversity conservation, and disaster risk reduction.

The framework also facilitated a systematic assessment of the degree of alignment between climate and environmental policies and broader constitutional, legal, and development frameworks. Specifically, it enabled the analysis of how climate and environmental priorities were reflected in the Constitution of Nepal, national development plans, periodic plans, sectoral policies, legislative instruments, and

institutional mandates. Furthermore, the framework assessed the consistency of national and subnational policy instruments with Nepal's international commitments, including the Paris Agreement, the Sustainable Development Goals (SDGs), the Convention on Biological Diversity (CBD), the Sendai Framework for Disaster Risk Reduction, and other relevant multilateral environmental agreements.

In addition, the framework provided a basis for identifying policy gaps, overlaps, inconsistencies, and implementation challenges. It facilitated the examination of whether existing policies and institutions adequately supported integrated climate and environmental governance and whether appropriate mechanisms existed for coordination, collaboration, resource mobilization, implementation, monitoring, and accountability. The framework further enabled the identification of opportunities for strengthening policy integration, improving institutional effectiveness, and enhancing collaborative governance across Nepal's federal system.

To ensure its relevance, robustness, and practical applicability, the draft framework was refined and validated through a series of expert consultations and stakeholder engagements. These consultations involved policymakers, government officials, climate and environmental experts, academics, researchers, development practitioners, and representatives of relevant institutions. Feedback received during these consultations was incorporated into the final framework, thereby strengthening its analytical rigor and ensuring that it reflected both national priorities and ground-level governance realities.

The finalized policy analysis framework provided a common analytical foundation for all subsequent stages of the study, including document review, institutional assessment, stakeholder consultations, key informant interviews, focus group discussions, and validation workshops. It ensured consistency in data collection and analysis and contributed to a comprehensive assessment of climate and environmental policy integration, governance effectiveness, and institutional coherence across Nepal's three tiers of government.

2.3 Desk review

A comprehensive and systematic desk review was undertaken to establish the policy, legal, institutional, and governance landscape of climate change and environmental management in Nepal. The review served as the foundation for understanding how climate and environmental considerations have been incorporated into policies, plans, legal frameworks, institutional arrangements, and development processes across the

federal, provincial, and local levels of government. It also provided the basis for assessing the extent of policy coherence, integration, and alignment across different sectors and levels of government.

The desk review involved the collection, compilation, and analysis of a wide range of primary and secondary documents related to climate change, environmental protection, natural resource management, sustainable development, and federal governance. Particular attention was given to examining the evolution of climate and environmental governance following the promulgation of the Constitution of Nepal (2015) and the establishment of the federal governance system.

The review covered the following categories of documents:

- Constitutional provisions and legal frameworks, including constitutional mandates, federal laws, provincial legislation, local government acts, environmental regulations, and other legal instruments that define responsibilities and authorities related to climate change and environmental governance.
- Climate and environmental policies, strategies, frameworks, and action plans, including national climate change policies, NDCs, NAP, the Long-Term Strategy for Net-Zero Emissions, biodiversity strategies, forestry policies, environmental protection policies, disaster risk reduction frameworks, and other relevant policy instruments.
- National and provincial development plans, including periodic plans, sectoral development plans, provincial development strategies, and annual planning documents, to assess the extent to which climate and environmental priorities have been mainstreamed into broader development agendas.
- Sectoral policies, strategies, directives, and implementation guidelines related to key sectors such as forestry, agriculture, water resources, energy, infrastructure, urban development, tourism, disaster risk management, and land use planning, which have significant implications for climate resilience and environmental sustainability.
- Annual programs, budgets, and investment frameworks prepared by federal and provincial governments to assess the allocation of resources for climate and environmental priorities and the extent to which policy commitments have been translated into implementation actions.
- Institutional mandates, coordination mechanisms, and governance arrangements, including organizational structures, roles and responsibilities of government agencies, intergovernmental

coordination platforms, multi-stakeholder mechanisms, and institutional processes that support climate and environmental governance.

- Relevant national and international reports, studies, assessments, and research publications, including government reports, donor-funded studies, academic research, policy analyses, monitoring and evaluation reports, and international assessments related to climate change, environmental management, sustainable development, and governance.

The desk review was guided by the policy analysis framework developed for the study, which enabled a systematic examination of policy objectives, institutional mandates, implementation arrangements, coordination mechanisms, accountability provisions, and monitoring systems. The analysis focused on identifying areas of policy convergence and divergence, institutional overlaps and gaps, and opportunities for strengthening coherence between climate and environmental policies and broader development frameworks.

The review further assessed the degree of vertical integration among federal, provincial, and local policies and plans, as well as horizontal integration across sectors and institutions operating at the same level of government. Special attention was given to examining whether climate and environmental objectives were adequately reflected in sectoral policies, development plans, budgetary processes, and implementation mechanisms.

2.4 Field Visit

Field assessments were conducted in Madhesh and Lumbini Provinces to examine the implementation of climate change and environmental policies across different levels of government. The assessment adopted a participatory approach involving field visits, key informant interviews, focus group discussions, and consultations with representatives from provincial ministries, municipal governments, and other relevant stakeholders.

Municipal-level case studies were undertaken in Rapti Municipality and Janakpur Sub-Metropolitan City to document institutional arrangements, governance practices, policy implementation processes, coordination mechanisms, and local planning approaches related to climate change and environmental management.

The field assessment also reviewed the extent to which national and provincial policy provisions had been integrated into local development planning and implementation processes.

The information collected through these assessments was triangulated with findings from the desk review and policy analysis to validate the evidence, capture contextual realities, and strengthen the overall assessment of climate and environmental governance across Nepal's three tiers of government.

2.5 Stakeholder Consultations

A participatory consultation process was undertaken to capture diverse perspectives, experiences, and insights regarding climate and environmental policy implementation, coordination mechanisms, and governance challenges across Nepal's three tiers of government. The consultation process was designed to ensure the meaningful engagement of a broad range of stakeholders, including representatives from federal, provincial, and local governments, sectoral ministries, development partners, academic institutions, civil society organizations, community-based organizations, and subject-matter experts.

The consultations served as a platform to assess the effectiveness of existing policy and institutional arrangements, identify gaps and overlaps in mandates and responsibilities, and explore opportunities for strengthening policy coherence and collaborative governance. Particular attention was given to understanding the practical challenges faced by stakeholders in translating climate and environmental policies into action, including issues related to institutional capacity, resource allocation, intergovernmental coordination, information sharing, and monitoring and accountability systems.

A combination of consultation approaches, including stakeholder meetings, key informant interviews, focus group discussions, and validation workshops, was employed to gather qualitative evidence and stakeholder perspectives.

2.5.1 Key Informant Interviews

Key Informant Interviews (KIIs) were conducted with a purposively selected group of stakeholders possessing extensive knowledge and experience in climate change, environmental management, governance, and development planning. The respondents included policymakers, senior government

officials from the federal, provincial, and local governments, technical experts, sectoral planners, representatives of development partner organizations, academics, and development practitioners.

A semi-structured interview approach was employed to facilitate systematic yet flexible data collection. The interview guide focused on key thematic areas, including climate and environmental policy implementation, institutional mandates and responsibilities, intergovernmental coordination, policy coherence, governance mechanisms, financing arrangements, monitoring systems, and stakeholder engagement processes. The semi-structured format enabled respondents to share detailed insights based on their professional experiences while allowing the research team to explore emerging issues and context-specific concerns.

The KIIs generated in-depth qualitative information on the effectiveness of existing institutional arrangements and governance mechanisms for climate and environmental management across Nepal's three tiers of government. The interviews provided valuable insights into policy implementation experiences, coordination and collaboration practices, institutional strengths and weaknesses, and the challenges associated with integrating climate and environmental priorities into development planning and decision-making processes.

The discussions also helped identify governance bottlenecks, including overlapping institutional mandates, fragmented implementation responsibilities, limited technical and financial capacity, inadequate information-sharing mechanisms, and coordination challenges among different levels of government. In addition, respondents provided recommendations for strengthening policy coherence, improving institutional effectiveness, enhancing accountability mechanisms, and fostering collaborative governance. The findings from the KIIs complemented the evidence generated through document reviews and stakeholder consultations and contributed significantly to the overall assessment of climate and environmental governance in Nepal.

2.5.2 Focus Group Discussions

Focus Group Discussions (FGDs) were organized to capture the perspectives, experiences, and priorities of stakeholders directly involved in climate change adaptation, environmental management, natural

resource governance, and local development processes. Participants included representatives of local governments, community-based organizations, Indigenous Peoples' organizations, women-led organizations, youth groups, forest user groups, farmer groups, and civil society organizations.

The FGDs provided an interactive platform for participants to collectively reflect on the opportunities and challenges related to climate and environmental governance at the local level. Through facilitated discussions, participants shared their experiences regarding policy implementation, environmental conservation initiatives, climate adaptation practices, community participation, institutional support mechanisms, and service delivery processes.

Particular emphasis was placed on understanding how national and sub-national climate and environmental policies were translated into practice at the local level and how communities perceived their effectiveness and impacts. The discussion explored issues related to institutional capacity, access to technical and financial resources, the effectiveness of coordination among government agencies, the inclusiveness of decision-making processes, and the participation of local communities in environmental governance.

The FGDs also generated important insights into local priorities and challenges related to climate resilience, biodiversity conservation, ecosystem management, sustainable livelihoods, disaster risk reduction, and environmental sustainability. Special attention was given to ensuring that the voices of women, Indigenous Peoples, youth, and other traditionally underrepresented groups were adequately represented in the discussions.

The findings from the FGDs provided valuable ground-level evidence on the practical realities of policy implementation and governance. They helped validate and enrich the findings from the document review, Key Informant Interviews, and stakeholder consultations, thereby contributing to a comprehensive understanding of climate and environmental governance and policy integration across Nepal's federal system.

2.6 Data Analysis and Synthesis

2.6.1 Gap and SWOT Analysis

Information generated through the comprehensive document review, key informant interviews, stakeholder consultations, focus group discussions, and field assessments was systematically compiled,

organized, and synthesized using the policy analysis framework developed for the study. Data from multiple sources were triangulated to enhance the reliability and validity of the analysis and to provide a comprehensive understanding of climate and environmental governance across Nepal's three tiers of government.

A structured gap analysis was conducted to examine the extent to which existing policies, legal frameworks, institutional arrangements, governance mechanisms, implementation practices, and resource allocation were aligned with national priorities, constitutional mandates, and international climate and environmental commitments. The analysis focused on identifying institutional, policy, legal, financial, technical, and coordination gaps that could influence the effective implementation of climate change and environmental policies.

In addition, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was undertaken as an analytical tool to assess the overall governance landscape. The analysis examined the internal strengths and weaknesses of the existing governance system alongside external opportunities and emerging challenges that could affect policy integration, institutional effectiveness, and climate-resilient environmental governance. The SWOT analysis provided a structured basis for assessing the current governance context and informed the subsequent policy coherence assessment.

2.6.2 Policy Coherence and Governance Analysis

A comprehensive policy coherence and governance analysis was undertaken to assess the alignment and consistency of climate change and environmental policies, legal instruments, institutional arrangements, and governance mechanisms across Nepal's federal governance structure. The analysis applied the established policy analysis framework to evaluate the degree of coherence among constitutional provisions, national policies, provincial strategies, local government frameworks, sectoral policies, and international commitments.

The assessment examined vertical policy coherence by analyzing the consistency and alignment of policy objectives, institutional mandates, planning frameworks, and implementation responsibilities across the federal, provincial, and local governments. Horizontal coherence was also assessed by examining coordination and integration among ministries, departments, sectoral agencies, and other relevant institutions responsible for climate change and environmental management.

Furthermore, the analysis reviewed the consistency among policy objectives, legal provisions, institutional mandates, implementation arrangements, financing mechanisms, and monitoring systems. Particular attention was given to identifying overlapping institutional mandates, policy inconsistencies, implementation gaps, fragmented coordination mechanisms, and areas of institutional duplication. The analysis also explored opportunities for strengthening intergovernmental collaboration, improving cross-sectoral coordination, enhancing policy harmonization, and promoting integrated climate and environmental governance.

The synthesized evidence from the gap analysis, SWOT assessment, and policy coherence analysis formed the analytical foundation for the subsequent interpretation of the findings, the development of recommendations, and the formulation of strategic actions aimed at strengthening climate and environmental governance across Nepal's three tiers of government.

2.6.3 National Validation Workshop

A Multi-Stakeholder National Validation Workshop was organized to review, validate, and enrich the findings generated through the desk review, policy analysis, stakeholder consultations, and institutional assessments. The workshop brought together a diverse group of stakeholders, including federal parliamentarians; representatives from provincial and local governments; civil society organizations; academic and research institutions; Indigenous Peoples' organizations; private sector representatives; youth networks; women's groups; professional associations; and development partners engaged in climate change, environmental management, and sustainable development initiatives in Nepal.

The primary objective of the workshop was to create an inclusive platform for dialogue, knowledge exchange, and collective reflection on the current status of climate and environmental governance across Nepal's three tiers of government. The workshop provided participants with an opportunity to critically review the preliminary findings and assess their relevance, accuracy, and practical implications. Through plenary discussions, thematic sessions, and interactive group exercises, stakeholders shared their perspectives on policy implementation, institutional coordination mechanisms, governance challenges, and opportunities for strengthening policy coherence.

The workshop specifically focused on validating the identified gaps, overlaps, and inconsistencies within existing climate and environmental policies, legal frameworks, institutional arrangements, and implementation mechanisms. Participants examined the extent to which climate and environmental priorities were integrated into sectoral development policies and plans and assessed the effectiveness of existing coordination structures in facilitating collaboration among different levels of government and across sectors.

In addition, the workshop served as a forum for identifying key barriers that hinder effective policy implementation, including institutional fragmentation, inadequate technical and financial capacity, limited information sharing, weak monitoring systems, and challenges associated with intergovernmental coordination. Stakeholders also explored opportunities for enhancing vertical and horizontal policy integration, strengthening institutional collaboration, promoting stakeholder participation, and improving accountability mechanisms.

Special attention was given to ensuring that the voices and concerns of traditionally underrepresented groups, including Indigenous Peoples, women, youth, and local communities, were reflected in the discussions. This inclusive approach helped ensure that the findings and recommendations were grounded in diverse experiences and perspectives and reflected the realities of policy implementation at different levels of governance.

The feedback, comments, and recommendations generated during the workshop were systematically documented and incorporated into the final analysis and reporting process. The validation workshop not only strengthened the credibility and ownership of the study findings but also facilitated consensus-building among stakeholders on priority actions required to improve climate and environmental policy integration, enhance collaborative governance, and promote more effective and coordinated implementation across Nepal's federal governance system.

CHAPTER THREE

RESULT AND DISCUSSION

3.1 Policy Review and Analysis Framework

A comprehensive Policy Review and Analysis Framework was developed and applied as the principal analytical instrument for assessing the coherence, consistency, and alignment of climate change, biodiversity, forestry, and environmental policies across Nepal's three tiers of government. The framework provided a structured and systematic basis for reviewing constitutional provisions, policies, legislation, regulations, strategies, plans, institutional arrangements, financing mechanisms, and implementation systems to determine how effectively they supported climate-resilient and environmentally sustainable development. Table 3.1 presents the Policy Review and Analysis Framework adopted for this assessment.

The framework recognized the Constitution of Nepal as the supreme legal and policy instrument that establishes the country's governance architecture and provides the constitutional foundation for environmental protection, climate resilience, sustainable management of natural resources, biodiversity conservation, and citizens' environmental rights. Accordingly, all subsequent national, provincial, and local policies, legislation, sectoral strategies, periodic development plans, regulations, directives, and implementation programs were reviewed to assess the extent to which they operationalized constitutional mandates through appropriate legal, institutional, and governance arrangements.

The analysis covered the entire climate and environmental policy continuum, extending from constitutional provisions and policy formulation processes to legal and regulatory frameworks, institutional structures, implementation mechanisms, financing arrangements, monitoring systems, and future policy priorities. This comprehensive approach enabled an assessment of both the design and implementation dimensions of climate and environmental governance, providing insights into the strengths and limitations of the existing policy architecture.

A key feature of the framework was its assessment of policy coherence at both vertical and horizontal levels. Vertical coherence examined the alignment of climate and environmental policies among federal, provincial, and local governments, particularly in relation to constitutional distribution of powers and intergovernmental responsibilities.

Table 3.1: Climate change and environmental policy analysis framework

Analytical Dimension	Key Assessment Criteria
1. Constitutional Provisions	Assessment of constitutional mandates and provisions related to climate change, environmental protection, biodiversity conservation, sustainable natural resource management, disaster risk reduction, and environmental rights.
2. Policy Landscape	Review of the availability, scope, objectives, and adequacy of national climate change, forestry, biodiversity, and environmental policies, strategies, and sectoral frameworks.
3. Policy Formulation Process	Analysis of policy development processes, including evidence-based planning, stakeholder participation, consultation mechanisms, inclusiveness, transparency, and stakeholder engagement.
4. Legal and Regulatory Framework	Examination of laws, regulations, standards, guidelines, and institutional mandates supporting climate change mitigation and adaptation, biodiversity conservation, Disaster Risk Reduction (DRR), pollution control, and environmental management.
5. National and International Commitments	Assessment of the integration and implementation status of the Nationally Determined Contributions (NDCs), National Adaptation Plan (NAP), National Biodiversity Strategy and Action Plan (NBSAP), DRR strategies, pollution prevention initiatives, and other relevant international commitments.

6. Policy Mainstreaming	Evaluation of the extent to which climate change, biodiversity, and environmental priorities have been integrated into periodic development plans, sectoral policies, annual programs, fiscal policies, and public investment planning across all three tiers of government.
7. Climate and Environmental Financing Framework	Assessment of financing mechanisms, budget allocation, fiscal transfers, climate finance, resource mobilization, and financial instruments supporting the implementation of climate change, biodiversity, forestry, and environmental policies.
8. Institutional and Governance Framework	Analysis of institutional arrangements, governance mechanisms, roles and responsibilities, coordination systems, accountability frameworks, and implementation capacities across federal, provincial, and local governments.
9. Policy Implementation Performance	Review of policy implementation progress, institutional achievements, implementation challenges, measurable outcomes, effectiveness, and lessons learned from policy execution.
10. Gap Analysis	Identification of policy and implementation gaps related to governance, institutional capacity, financing, human resources, technology, information systems, monitoring, coordination, and investment.
11. Reform Priorities and Strategic Recommendations	Identification of policy reforms, institutional strengthening measures, financing priorities, governance improvements, and strategic actions required to enhance policy coherence, implementation effectiveness, and long-term climate and environmental resilience.

Horizontal coherence assessed the consistency and integration of policies across sectors such as climate change, forestry, biodiversity conservation, agriculture, water resources, disaster risk reduction, energy, land use, pollution control, and sustainable development. The analysis identified areas where policies were mutually reinforcing, as well as instances of fragmented mandates, overlapping responsibilities, inconsistent policy provisions, implementation gaps, and weak coordination mechanisms that constrained effective governance.

The framework also examined the extent to which climate change and environmental considerations had been mainstreamed into national development planning, sectoral policies, public investment programs, and fiscal planning processes. This assessment provided valuable insights into whether climate and environmental priorities had been systematically incorporated into broader socio-economic development strategies and government planning instruments across all levels of government.

Recognizing that effective policy implementation depends on adequate financial resources, the framework incorporated a comprehensive assessment of Nepal's climate and environmental financing architecture. The analysis reviewed financial policies, public budgeting systems, intergovernmental fiscal transfers, climate financing mechanisms, and resource mobilization instruments to evaluate whether existing financing arrangements adequately supported policy implementation. Particular attention was given to the alignment between policy priorities and financing mechanisms, including the accessibility and coordination of domestic public resources, international climate finance, development partner support, and emerging financing opportunities for climate adaptation, mitigation, biodiversity conservation, and environmental management.

Institutional and governance dimensions formed another important component of the framework. The assessment evaluated the effectiveness of governance structures, institutional mandates, coordination mechanisms, stakeholder participation, accountability systems, and monitoring arrangements responsible for implementing climate and environmental policies. The analysis further examined the roles and interactions of federal ministries, provincial governments, local governments, constitutional bodies, development partners, civil society organizations, academic institutions, and the private sector in promoting integrated and collaborative environmental governance.

The framework also facilitated a systematic identification of policy and institutional gaps, implementation constraints, capacity limitations, and opportunities for strengthening governance. Through a comprehensive gap analysis, it generated evidence on areas requiring legal reforms, institutional strengthening, improved policy integration, enhanced coordination mechanisms, increased financing, and stronger implementation capacity across all levels of government. These findings provided an analytical basis for identifying strategic priorities to improve climate and environmental governance in Nepal.

To ensure technical robustness and stakeholder ownership, the framework was refined and validated through a National Consultation Workshop involving representatives from federal ministries, provincial

and local governments, development partners, academic institutions, research organizations, civil society organizations, and subject-matter experts. Feedback received during the consultation strengthened the analytical criteria, improved the applicability of the framework across different governance levels, and enhanced its credibility as a comprehensive tool for policy assessment.

The framework further examined the vertical coherence of policies across the federal, provincial, and local levels, as well as the horizontal coherence among sectoral policies related to climate change, biodiversity conservation, forestry, agriculture, water resources, disaster risk reduction, energy, land use, and sustainable development. Particular attention was given to identifying policy complementarities, inconsistencies, overlaps, duplication of mandates, implementation gaps, and opportunities for strengthening intergovernmental coordination and policy integration.

In addition, the framework incorporated an assessment of Nepal's national climate and environmental financing architecture to evaluate whether existing financial policies, budgetary mechanisms, fiscal transfers, and resource mobilization instruments were adequate to support the effective implementation of climate change, biodiversity, forestry, and environmental policies. The assessment explored the alignment between policy priorities and financing mechanisms, including the availability, accessibility, and coordination of domestic and international climate finance.

The analytical framework was refined and validated through a National Consultation Workshop, which brought together representatives from federal ministries, provincial governments, local governments, development partners, academic institutions, civil society organizations, and subject-matter experts. The consultative process strengthened the analytical criteria, ensured broad stakeholder ownership, and enhanced the credibility and applicability of the framework for assessing policy coherence and governance effectiveness.

Overall, the finalized Policy Review and Analysis Framework presented in Table 2, served as the foundation for the subsequent assessment of policy coherence, institutional effectiveness, governance performance, implementation progress, financing systems, and policy gaps presented in this report. The framework enabled a comprehensive evaluation of Nepal's climate and environmental governance landscape and generated evidence-based findings that informed the recommendations for strengthening policy integration, intergovernmental coordination, institutional capacity, and climate-resilient environmental governance.

3.2 Policy and Institutional Framework

3.2.1 Constitutional policy provisions and governance structure

Policy Provisions

The Constitution of Nepal (2015) provides the overarching legal and institutional foundation for climate change, environmental protection, biodiversity conservation, disaster risk reduction, and sustainable natural resource management. As the supreme law of the country, it establishes Nepal as an independent, indivisible, sovereign, secular, inclusive, democratic, socialism-oriented, federal democratic republic and defines the constitutional framework for environmental governance under a federal system.

The promulgation of the Constitution in 2015 marked a significant transition from a unitary to a three-tier federal governance system, comprising the Federal Government, seven Provincial Governments, and 753 Local Governments (municipalities and rural municipalities). This restructuring fundamentally transformed the country's governance architecture by decentralizing political authority, administrative responsibilities, and development functions. In the context of climate change and environmental governance, federalism created new opportunities for decentralized, participatory, and context-specific planning, implementation, and monitoring of environmental programs. It also strengthened the constitutional mandate of provincial and local governments to address environmental challenges and manage natural resources in accordance with local ecological, geographical, socio-economic, and climatic conditions.

The constitutional review revealed that environmental sustainability and climate resilience are embedded within Nepal's constitutional framework through a combination of fundamental rights, directive principles, and the constitutional allocation of governmental powers. Notably, Article 30 guarantees every citizen the fundamental right to live in a clean and healthy environment, thereby recognizing environmental quality as a constitutional right closely linked to human health and well-being. This provision establishes a legal basis for environmental protection and reinforces the obligation of all levels of government to safeguard environmental quality and promote sustainable development.

Similarly, Article 51(g) outlines the State's directive principles and policies relating to the conservation and sustainable management of natural resources, environmental protection, biodiversity conservation, climate change mitigation and adaptation, pollution control, disaster risk reduction, and the effective implementation of international environmental commitments. These constitutional directives provide the strategic policy foundation for integrating climate resilience and environmental sustainability into national development planning and sectoral policies.

The Constitution further institutionalizes environmental governance through the distribution of legislative, executive, and concurrent powers among the three levels of government. Schedules 5, 6, 7, and 8 assign exclusive and concurrent responsibilities related to forests, biodiversity conservation, environmental management, water resources, land management, agriculture, disaster risk reduction, and climate change. The concurrent nature of several environmental functions recognizes that many environmental challenges transcend administrative boundaries and therefore require coordinated action across federal, provincial, and local governments.

The policy review demonstrated that the constitutional framework provides a comprehensive legal foundation for integrated climate and environmental governance and creates substantial opportunities for mainstreaming climate resilience and sustainable natural resource management into development planning across all levels of government. The constitutional recognition of local government authority is particularly significant, as it enables localized planning and implementation that are responsive to diverse ecological systems, climate vulnerabilities, and community priorities.

Despite these strong constitutional provisions, the analysis also identified important implementation challenges. The operationalization of constitutionally assigned responsibilities has remained uneven across the three tiers of government. While the Constitution establishes broad areas of jurisdiction, the practical delineation of roles, institutional responsibilities, and coordination mechanisms has not always been sufficiently clarified through subsequent legislation and policy instruments. This has resulted in overlapping mandates, fragmented institutional responsibilities, inconsistencies in policy implementation, and coordination challenges among federal, provincial, and local institutions. These governance gaps have, in several instances, constrained effective implementation of climate change, biodiversity, forestry, and environmental policies and reduced opportunities for integrated planning and collaborative action.

Overall, the constitutional analysis indicates that Nepal possesses a strong constitutional basis for climate-resilient and environmentally sustainable development. However, realizing the full potential of this constitutional framework will require strengthened intergovernmental coordination, clearer functional assignments, harmonized sectoral legislation, enhanced institutional capacities, and effective mechanisms for collaborative planning, implementation, and monitoring across all levels of government.

Governance structure-climate and environment mandates

The Constitution of Nepal establishes a three-tier federal governance system by clearly distributing legislative, executive, and administrative powers, responsibilities, and accountabilities among the Federal, Provincial, and Local Governments to ensure effective and efficient delivery of public services. The exclusive powers of the Federal, Provincial, and Local Governments are specified in Schedules 5, 6, and 8 of the Constitution, respectively. In addition, Schedule 7 defines the concurrent powers shared between the Federal and Provincial Governments, while Schedule 9 outlines the concurrent powers exercised jointly by the Federal, Provincial, and Local Governments. Table 3.2 below reveals the constitutional distribution of Environment and Natural Resource management responsibilities under Nepal's Federal System

Table 3.2: Constitutional distribution of Environment and Natural Resource management powers under Nepal's Federal System

Level of Government	Constitutional Schedule	Major Constitutional Responsibilities Related to Climate and Environmental Governance
Federal Government	Schedule 5 (Item 27)	Formulation of national policies and legislation on forests, environment and biodiversity; management of carbon services; international and transboundary environmental cooperation; management of national forests, protected areas and wetlands; implementation of Multilateral Environmental Agreements (MEAs).
Provincial Governments	Schedule 6 (Items 19 & 20)	Provincial management of forests; conservation of water resources; agriculture and livestock development; environmental management associated with industrialization, factories, and provincial transportation systems; implementation of provincial environmental programs.
Local Governments	Schedule 8 (Items 19, 20 & 21)	Management of drinking water and sanitation; small-scale renewable and alternative energy; local disaster risk management; watershed conservation; local forests, wetlands and wildlife conservation; management of local mines and minerals in accordance with prevailing laws.
Concurrent Powers (Federal and Provincial)	Schedule 7	Shared authority over disaster risk reduction and management, climate change adaptation and mitigation, biodiversity conservation, forestry, water resources, mineral resources, and inter-provincial environmental management.
Concurrent Powers (Federal, Provincial and Local)	Schedule 9	Shared responsibilities for disaster risk management, forest management, biodiversity conservation and benefit sharing, agriculture, energy, water resources, environmental management, and natural resource governance requiring coordinated action across all three levels of government.

This constitutional distribution of authority provides the legal foundation for collaborative governance in climate change, environmental protection, biodiversity conservation, forestry, disaster risk reduction, and natural resource management, while also necessitating strong intergovernmental coordination for effective policy implementation. The constitutional allocation of responsibilities demonstrates that climate change, biodiversity conservation, forestry, environmental protection, and natural resource management are shared governance functions requiring close coordination among the federal, provincial, and local governments.

While the Constitution provides exclusive powers to each level of government, many critical environmental functions fall under concurrent jurisdiction (Schedules 7 and 9), reflecting the cross-sectoral and multi-level nature of climate and environmental governance. Consequently, effective implementation depends on harmonized legislation, clearly defined institutional mandates, robust intergovernmental coordination mechanisms, and integrated planning and financing systems. The policy review, however, identified that despite the comprehensive constitutional framework, overlapping mandates, inconsistent interpretation of constitutional powers, and weak coordination mechanisms continue to constrain effective implementation of climate and environmental policies across Nepal's federal system.

3.2.2 Federal Climate and Environmental Policy Landscape

Nepal has made remarkable progress in establishing a comprehensive national policy and regulatory framework for climate change and environmental management. Over the past decade, the Government has formulated a wide range of policies, strategies, action plans, legal instruments, and implementation guidelines that collectively provide a strong foundation for climate-resilient and low-carbon development. These instruments cover key thematic areas, including climate adaptation, greenhouse gas mitigation, biodiversity conservation, forest management, environmental protection, climate finance, carbon markets, disaster risk reduction, gender and social inclusion, technology transfer, and climate-resilient planning and budgeting. Consequently, Nepal now possesses most of the essential policy and regulatory instruments required to guide climate action at the national and subnational levels.

This comprehensive policy landscape has created an enabling environment for development partners, international climate funds, private sector investors, and other stakeholders to support and invest in Nepal's climate and environmental priorities. Table 3.3 presents the major federal climate change and environmental policies, strategies, plans, and regulatory frameworks currently guiding climate and environmental governance in Nepal.

Table 3.3: Federal Climate Change and Environmental policy landscape

S. N.	Federal Climate and Environmental Policy Landscape	Description/Key Provisions
1	National Climate Change Policy, 2019	Establishes Nepal's overarching policy framework for climate change management through eight thematic areas (agriculture and food security, forests and biodiversity, water resources and energy, rural and urban settlements, industries and transport, public health, tourism and natural and cultural heritage, and disaster risk reduction) and four cross-cutting areas (gender and social inclusion, climate finance, capacity building and technology development, and research and knowledge management). It guides climate-resilient development planning and mainstreaming of climate actions across all sectors and levels of government.
2	Third Nationally Determined Contribution (NDC 3.0), 2025	Defines Nepal's enhanced commitments under the Paris Agreement, outlining both unconditional and conditional mitigation and adaptation targets. It identifies sector-specific actions for energy, transport, forests, agriculture, waste, industry, water resources, and resilient infrastructure, while emphasizing climate finance, technology transfer, capacity building, and international cooperation.
3	Carbon Trade Regulation, 2025	Provides the legal and institutional framework for participation in international and domestic carbon markets under Article 6 of the Paris Agreement. It establishes procedures for carbon project approval, measurement, reporting and verification (MRV), carbon credit issuance, benefit sharing, safeguards, and institutional responsibilities to ensure environmental integrity and transparency.
4	Environment Protection Act, 2019 and Environment Protection Rules, 2020	Establishes Nepal's principal legal framework for environmental governance, including Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE), Strategic Environmental Assessment (SEA), pollution prevention and control, environmental quality standards, waste management, environmental monitoring, compliance, and enforcement mechanisms.
5	National Parks and Wildlife Conservation Act and Regulations	Provides the legal basis for the conservation and management of protected areas, wildlife, and biodiversity. It regulates habitat protection, endangered species conservation, buffer zone management, wildlife crime control, ecotourism, and community participation in biodiversity conservation.

6	Forest Act, 2019 and Forest Regulations 2022	Governs sustainable forest management, conservation, restoration, utilization, and community forestry. It promotes ecosystem conservation, climate change mitigation through carbon sequestration, forest-based livelihoods, forest certification, and participation in REDD+ and other forest carbon initiatives.
7	National Adaptation Plan (NAP), 2021-2050	Provides Nepal's medium- and long-term strategy for reducing climate vulnerability and building resilient communities, ecosystems, and infrastructure. It identifies priority adaptation actions across key sectors and strengthens institutional coordination, climate information systems, and adaptation financing.
8	Long-Term Strategy for Net-Zero Greenhouse Gas Emissions, 2021	Presents Nepal's long-term low-emission development pathway aimed at achieving net-zero greenhouse gas emissions by 2045, five years ahead of the global 2050 aspiration. The strategy outlines sectoral decarbonization pathways, green energy transition, sustainable transport, resilient agriculture, forest conservation, and climate-resilient economic transformation.
9	Climate Finance Strategy and Implementation Plan, 2022	Establishes strategic approaches to mobilize, manage, track, and utilize climate finance from domestic and international sources. It supports implementation of the National Climate Change Policy and NDCs by strengthening institutional arrangements, climate budgeting, financial transparency, private sector engagement, and access to international climate funds.
10	Local Adaptation Plans of Action (LAPA) Framework, 2019	Guides local governments in integrating climate adaptation into local development planning and budgeting. It emphasizes community participation, vulnerability assessment, inclusive decision-making, and implementation of locally appropriate adaptation measures, particularly benefiting vulnerable communities.
11	NDC Implementation Plan, 2022	Operationalizes Nepal's NDC commitments by identifying sector-specific activities, implementation responsibilities, financing requirements, timelines, performance indicators, and monitoring mechanisms to facilitate coordinated implementation across federal, provincial, and local governments.

12	Unpacking the 80% Climate Finance to the Local Level, 2021	Provides operational guidance for implementing Nepal's commitment to channel at least 80% of available climate finance to local-level interventions. It clarifies financing modalities, institutional arrangements, budgeting procedures, monitoring systems, accountability mechanisms, and reporting requirements to ensure effective climate investments at the community level.
13	Vulnerability and Risk Assessment (VRA) and Identification of Adaptation Options, 2021	Provides standardized methodologies for assessing climate vulnerability, exposure, sensitivity, adaptive capacity, and climate risks across sectors and geographical regions. The framework supports evidence-based adaptation planning and prioritization of adaptation investments.
14	National Framework on Loss and Damage (L&D), 2021	Establishes a national framework for assessing, documenting, preventing, minimizing, and addressing climate-induced loss and damage arising from both extreme weather events and slow-onset climatic changes. It strengthens institutional coordination, data systems, financing, and support mechanisms for affected communities.
15	Gender and Climate Change Strategy and Action Plan, 2022	Integrates gender equality and social inclusion into climate policies, programmes, and institutions. It promotes women's leadership, equitable access to climate finance and technologies, gender-responsive planning and budgeting, capacity development, and inclusive climate governance.
16	Technology Needs Assessment (TNA) and Capacity Needs Assessment Reports, 2021	Identifies priority technologies and institutional capacity requirements needed to achieve Nepal's climate mitigation and adaptation objectives. The assessments support technology transfer, innovation, research, human resource development, and investment planning.
17	Climate Resilient Planning and Budgeting Guidelines, 2021	Provides guidance for integrating climate risk considerations into development planning, public investment, budgeting, project appraisal, and monitoring processes across all three tiers of government. It supports climate-responsive planning, climate budget tagging, and resilience-oriented public expenditure management.
18	The 16 th Period Plan (2024-028)	Nepal's periodic plan identifies climate-resilient and inclusive development as one of the country's key strategies for achieving sustainable development. Accordingly, biodiversity conservation, climate change, environmental sustainability, and the promotion of a green economy have been mainstreamed across various sectors, with these priorities reflected throughout Section 13 of the Plan.

3.2.3 Province climate and environmental policies

a. Lumbini Province

The Lumbini Province Environment Protection Act, 2020, the Provincial Environment Protection Regulations, 2021, the Provincial Forest Act, 2021, and the Provincial Forest Regulations, 2022 have been enacted and are under implementation. These legal instruments provide the framework for the sustainable management of provincial forest resources and the conservation of forests, flora, fauna, and biodiversity. They also support initiatives related to climate change adaptation and mitigation, as well as disaster risk management.

In the area of disaster risk reduction and management, the Lumbini Province Disaster Management Act, 2024, the Provincial Disaster Management Operational Directive, 2020, and the Provincial Disaster Risk Reduction Strategic Action Plan (2022–2030) serve as the principal policy and institutional frameworks for disaster risk reduction and disaster management in the province. Furthermore, the Forest Fire Prevention, Control, and Management Contingency Plan, 2024 provides strategic guidance for the prevention, preparedness, response, and management of forest fires across the province.

To realize its vision of sustainable development and prosperity, the Provincial Government has formulated the Second Periodic Plan (FY 2024/25–2028/29). The Plan adopts the long-term vision of "Prosperous Lumbini, Happy Citizens" and aims to build an advanced society founded on sustainable and inclusive economic development and social justice.

The Second Periodic Plan includes a dedicated chapter on the Forest and Environment Sector, which comprehensively addresses key priorities such as the promotion of a green economy, sustainable forest management, environmental protection, biodiversity conservation, watershed management, climate change adaptation and mitigation, and the management of human–wildlife conflict. The Plan outlines strategic interventions, policy measures, implementation approaches, and measurable targets for each of these priority areas.

The total estimated investment required to implement the Five-Year Plan is NPR 1.499 trillion (NPR 149,906 crore). Of this amount, the agriculture, forestry, and fisheries sector has been identified as a first-priority sector and allocated NPR 167.65 billion (NPR 16,765 crore), representing approximately 11.18% of the total planned investment. As of now there is no comprehensive provincial climate change policy. However, Province Forests and Environment Ministry is formulating Climate Change Strategic Plan for the province.

b. Madesh Province

The Madhesh Province Forest Act, 2020 (2077 BS) and the Madhesh Province Forest Regulations, 2024 (2081 BS) have been formulated and brought into implementation to ensure the sustainable management of national forests within the province, conserve biodiversity and watersheds, maintain ecosystem services, and contribute to the province's sustainable development and prosperity. These legal instruments provide the framework for the conservation, sustainable utilization, and management of forest resources while promoting environmental sustainability and climate resilience.

Similarly, the Madhesh Province Industrial Management Act, 2020 (2077 BS) has been enacted to regulate the establishment, operation, and management of industries within the province. The Act includes provisions for the classification of industries, identification of priority productive industries, promotion of green enterprises, and mandatory environmental assessments for industrial establishment and operation. These provisions aim to foster environmentally sustainable industrial development while minimizing adverse environmental impacts.

To translate the province's vision of sustainable development and prosperity into action, the Provincial Government has formulated and is implementing the Second Periodic Plan (FY 2024/25–2028/29). The Five-Year Plan embraces the national vision of "Prosperous Nepal, Happy Nepali" while adopting the provincial vision of "Self-Reliant and Prosperous Madhesh, Happy Madheshi People." The Plan aligns with Nepal's Long-Term National Vision 2100 (BS) and provides a strategic roadmap for the provincial government to achieve long-term development aspirations while mainstreaming and localizing the Sustainable Development Goals (SDGs).

The Plan establishes sector-specific goals, targets, and indicators aligned with its long-term vision. It recognizes the Chure (Siwalik) region as the foundation for water conservation and emphasizes the protection and conservation of this ecologically sensitive landscape by preventing environmentally harmful activities.

The Plan further prioritizes investment in land conservation, agriculture, and industrial development to generate local employment opportunities, while strengthening the capacity and skills of the workforce required to meet current and future labor market demands. In addition, it promotes private sector investment in industries that support the agricultural and tourism sectors, based on the province's comparative economic potential and by making effective use of the existing road transport network.

Madhesh Province has not yet developed an environment and climate change related policy and regulatory framework to mainstream such National policy. However, Madhesh Forests and Environment Ministry is formulating Provincial Climate Change Strategic Action Plan (CCSAP).

3.2.4 Local level Environmental and climate policies context

The assessment of local-level climate and environmental policies was limited due to time constraints and resource availability. Consequently, the analysis focused on selected case studies from Rapti Municipality (Dang District) and Janakpurdham Sub-metropolitan City (Dhanusha District) to provide indicative insights into the status of climate and environmental governance at the local level. Although these case studies cannot be generalized to all local governments in Nepal, they highlight several common governance and implementation challenges that are also reflected in stakeholder consultations and secondary literature.

The review indicates that climate and environmental governance remains relatively weak at the local level. Despite constitutional mandates and the legal authority provided under the Local Government Operation Act, 2017, many local governments have yet to establish dedicated organizational structures or technical units responsible for climate change and environmental management. In many municipalities, climate and environmental functions are integrated within broader sectoral divisions without clearly defined institutional responsibilities, dedicated human resources, or adequate financial allocations. As a result, climate and environmental issues often receive lower priority compared to other development sectors such as physical infrastructure, roads, drinking water, and urban development.

The analysis further revealed that climate change and environmental priorities are not consistently mainstreamed into local development policies, periodic plans, annual programmes, and budgeting processes. Although some municipalities have initiated climate-responsive planning practices, implementation remains limited due to insufficient technical capacity, inadequate financial resources, and weak institutional coordination. Environmental monitoring, pollution control, biodiversity conservation, ecosystem restoration, and climate adaptation interventions are often implemented on a project basis, largely supported by development partners rather than through institutionalized municipal programmes.

Solid waste management has emerged as one of the most pressing environmental challenges facing Nepal's urban municipalities. Metropolitan cities, including Kathmandu Metropolitan City, as well as many municipalities across the country, continue to face significant challenges in waste collection, segregation, recycling, treatment, and final disposal. Rapid urbanization, increasing waste generation, inadequate infrastructure, limited technical capacity, and weak enforcement of environmental regulations have collectively contributed to persistent waste management problems. These challenges have resulted in environmental pollution, public health risks, and increasing social conflicts associated with waste disposal sites.

Similarly, although Disaster Risk Reduction (DRR) is a core constitutional and statutory responsibility of local governments, implementation remains uneven across municipalities. Many local governments have established Disaster Management Committees and prepared disaster preparedness and response plans; however, institutional capacity, technical expertise, dedicated financial resources, risk information systems, and emergency response mechanisms remain inadequate. Consequently, disaster risk reduction efforts continue to focus primarily on emergency response rather than comprehensive risk reduction, preparedness, resilience building, and climate adaptation.

The review also found encouraging examples of local governments taking proactive measures to strengthen climate resilience. Several municipalities have prepared Local Adaptation Plans of Action (LAPAs), Integrated Urban Development Plans, Local Disaster and Climate Resilience Plans, and climate-responsive budgeting frameworks. These initiatives demonstrate growing awareness of climate risks and the willingness of local governments to integrate climate considerations into development planning. However, implementation remains highly dependent on technical guidance and financial support from the federal government, provincial governments, and development partners. Limited internal institutional capacity, inadequate technical expertise, and insufficient financial autonomy continue to constrain the effective implementation and sustainability of these initiatives.

Overall, the findings suggest that while Nepal's legal and policy framework provides local governments with substantial authority to lead climate and environmental governance, considerable implementation gaps remain. Strengthening local institutional structures, enhancing technical and financial capacity, establishing dedicated climate and environment units, mainstreaming climate change into local planning and budgeting, improving waste management systems, and strengthening disaster risk reduction capacities will be essential for enabling municipalities to effectively fulfill their constitutional responsibilities and contribute to Nepal's national climate and environmental commitments.

3.2.5 Institutional Framework

Nepal has established a multi-tiered institutional framework to coordinate climate change and environmental governance. At the federal level, the Ministry of Forests and Environment (MoFE) serves as the national focal ministry for the United Nations Framework Convention on Climate Change (UNFCCC) and is the lead government institution responsible for formulating climate change policies, coordinating implementation, and representing Nepal in international climate negotiations. The Ministry has taken a proactive role in addressing climate change through policy development, institutional strengthening, and coordination across sectors and levels of government.

Within MoFE, the Climate Change Management Division (CCMD) provides strategic leadership on climate policy, adaptation, mitigation, climate finance, and international climate commitments, while the REDD Implementation Centre (RIC) leads initiatives related to reducing emissions from deforestation and forest degradation, forest carbon management, and implementation of REDD+ programmes. Other federal ministries and their respective departments also play important roles in integrating climate change and environmental considerations into sectoral policies, plans, programmes, and regulatory frameworks.

The Environment Protection Act, 2019 (2076 BS) envisions the establishment of a National Environment and Climate Change Management Council, chaired by the Right Honourable Prime Minister, to provide high-level policy direction and strategic guidance on climate change and environmental management. Although this mechanism is envisaged in the legislation, its operationalization has remained limited. To strengthen inter-sectoral coordination, the Government has established an Inter-Ministerial Climate Change Coordination Committee (IMCCCC), which facilitates collaboration among ministries and government agencies responsible for implementing climate-related policies and programmes. Furthermore, Thematic Working Groups (TWGs) covering the major climate-sensitive sectors have been constituted to provide technical advice, undertake sectoral assessments, support policy formulation, and guide the preparation and implementation of climate-related plans and programmes.

At the provincial level, institutional arrangements remain uneven across provinces. While the Constitution assigns important environmental and climate-related responsibilities to provincial governments, dedicated institutional mechanisms have not yet been fully established in all provinces. In particular, the Provincial Environment and Climate Change Council, envisaged as high-level coordination mechanisms under the leadership of the Chief Minister, has yet to be established and operationalized in most provinces due to the absence of comprehensive provincial climate change and environmental policy and regulatory frameworks.

The Provincial Ministries of Forests and Environment serve as the lead agencies for climate change and environmental management within their respective provinces. Among the study provinces, Lumbini Province and Madhesh Province have established Provincial Climate Change Coordination Committees (PC4) under the leadership of the Secretaries of the Provincial Ministries of Forests and Environment. These committees are intended to improve coordination among provincial agencies and facilitate the implementation of climate-related policies and programs. However, their effectiveness is still evolving, and they have yet to function as robust cross-sectoral coordination mechanisms.

Overall, the study found that although Nepal has developed a relatively comprehensive institutional architecture at the federal level, significant gaps remain in institutionalizing climate change governance at the provincial and local level. High-level coordination bodies are either absent or not fully operational, climate responsibilities are often fragmented across sectors, and mechanisms for horizontal and vertical coordination remain weak. Consequently, climate change and environmental considerations have yet to be fully mainstreamed into provincial and local governance systems, sectoral planning processes, budgeting, and institutional decision-making. Strengthening provincial legal frameworks, operationalizing coordination mechanisms, clarifying institutional mandates, and enhancing technical and financial capacities will be essential for establishing an effective multi-level climate governance system in Nepal.

3.3 Gap Analysis

The review of constitutional provisions, policy and regulatory frameworks, institutional arrangements, and stakeholder consultations indicates that Nepal has established a relatively comprehensive governance framework for climate change, biodiversity conservation, environmental protection, and disaster risk reduction. However, the findings reveal that implementation across the federal, provincial, and local governments continues to face several structural, institutional, financial, and technical constraints. These challenges undermine policy coherence, intergovernmental coordination, resource mobilization, and the effective delivery of climate and environmental interventions.

3.3.1 Fragmentation of Policy and Institutional Mandates

Although Nepal has adopted a broad range of policies, strategies, plans, and legal instruments related to climate change, biodiversity, forestry, environment, agriculture, water resources, and disaster risk reduction, these frameworks remain fragmented across sectors. Ministries, departments, and implementing agencies generally operate within their sector-specific mandates, resulting in limited coordination and integration during policy formulation, planning, budgeting, and implementation.

The review further shows that sectoral strategies are not consistently aligned with national climate priorities, including the NDCs, NAP, Long-Term Strategy for Net-Zero Emissions, and the National Biodiversity Strategy and Action Plan (NBSAP). Similarly, provincial and local governments often prepare development plans and programmes independently, leading to duplication of activities, inconsistent implementation approaches, and inefficient utilization of financial and technical resources. These findings suggest that

stronger policy coherence and integrated planning mechanisms are essential to maximize synergies across climate, environment, biodiversity, and disaster risk management sectors.

3.3.2 Weak Vertical Coordination Across the Three Tiers of Government

Nepal's federal governance system assigns shared responsibilities for climate change and environmental management to the federal, provincial, and local governments. However, the assessment found that effective institutional mechanisms for coordinating these responsibilities remain inadequate. Formal platforms for regular policy dialogue, joint planning, coordinated implementation, information sharing, and performance monitoring among the three tiers of government are either weak or absent.

Consequently, federal policies and regulatory frameworks are not consistently translated into practical implementation guidelines for provincial and local governments. Variations in institutional arrangements, planning processes, and implementation capacities across subnational governments have resulted in uneven policy implementation and weak accountability. The absence of clearly defined coordination protocols further limits collaborative governance, particularly for cross-sectoral and cross-jurisdictional environmental and climate issues.

3.3.3 Limited Institutional and Technical Capacity

Institutional capacity remains one of the most significant implementation challenges, particularly at the provincial and local levels. The assessment revealed that many local governments continue to experience shortages of qualified technical personnel, institutional structures, operational guidelines, and technical tools required to undertake climate risk assessments, vulnerability mapping, environmental planning, greenhouse gas accounting, ecosystem restoration, project implementation, monitoring, and reporting.

Provincial governments also face capacity limitations as sectoral institutions continue to evolve following Nepal's transition to federalism. Limited technical expertise and institutional capacity have constrained the mainstreaming of climate change and environmental considerations into sectoral planning, evidence-based decision-making, and effective programme implementation. These gaps also reduce the ability of provincial and local governments to prepare technically sound investment proposals and mobilize climate finance.

3.3.4 Climate Finance and Investment Gaps

Key message: Investments for climate action dominated by external funding; a substantial investment gap exists.

The assessment identified inadequate and unpredictable financial resources as one of the most critical barriers to implementing Nepal's climate and environmental commitments. Although the Intergovernmental Fiscal Transfer System provides financial resources to provincial and local governments, dedicated allocations for climate change adaptation, mitigation, biodiversity conservation, environmental management, and disaster risk reduction remain insufficient to meet growing investment needs.

Furthermore, institutional capacity to access international climate finance mechanisms including the Green Climate Fund (GCF), Adaptation Fund, Global Environment Facility (GEF), and other multilateral financing windows remains limited, particularly at the subnational level. This has significantly constrained the implementation of climate-responsive development programmes.

National financing assessments illustrate the magnitude of the investment gap. Nepal estimates that implementation of its NDC-3.0 during 2025–2035 will require US\$ 73.74 billion for mitigation actions, of which only 15% is expected from domestic sources, leaving 85% dependent on external support. Likewise, the NAP and the Long-Term Strategy for Net-Zero Emissions estimate that adaptation measures alone will require approximately US\$47.4 billion between 2021 and 2050, while long-term mitigation actions are projected to require approximately US\$196.1 billion. Nearly all of these investments remain conditional upon international financial and technological support.

The review also indicates that actual climate finance mobilization has fallen significantly short of projected requirements. During 2017–2021, Nepal received only about 9% of the external climate finance committed by bilateral and multilateral development partners. Similar financing gaps are evident across priority sectors. The agriculture and food security sector projected an investment requirement of US\$11.2 billion, yet only US\$20.87 million was mobilized. Likewise, implementation of the NBSAP for 2014–2020 required approximately US\$673 million, but inadequate financial resources constrained effective implementation of biodiversity conservation, protected area management, forestry, agriculture, and livestock programmes.

Disaster risk management presents a similar picture. Nepal estimated a financing requirement of approximately US\$8.05 billion but secured commitments of only US\$250.67 million, while actual disbursement amounted to merely US\$12.98 million. These substantial financing gaps continue to limit investments in climate resilience, ecosystem restoration, resilient infrastructure, and community-based adaptation initiatives.

Climate-induced loss and damage further exacerbate these financial challenges. Current estimates indicate that climate-related impacts have already resulted in economic losses equivalent to approximately 1–2 percent of Nepal's Gross Domestic Product (GDP), with losses projected to increase to nearly 13 percent of GDP under an extreme warming scenario by 2100. These findings underscore the urgent need for enhanced domestic resource mobilization, innovative climate financing instruments, strengthened climate-responsive budgeting, and improved access to international climate finance.

Table 3.4 : Nepal's Climate and Environmental Investment Requirements and Financing Gap

NDC 3.0 budget requirement 2025-2035	US\$ 73.74 billion	Internal source: 15%. External source: 85%
NAP budget estimates 2021-2050	US\$ 47.4 billion	Government source: 3% External source: 97%.
Agricultural and food security fund requirement	US\$ 11.2 billion	Received US\$ 20.87M (1.7%)
Disaster Risk Management (DRM) fund requirement	US\$ 8.05 billion	US\$ 12.98 million received
NBSAP budget estimated for 2014-2020	US\$ 673 million	
Loss and Damage	1-2% of GDP loss till 2021 and will reach up 13% of the GDP loss in extreme warming scenario by 2100.	

3.3.5 Data, Information, and Knowledge Gaps

Key message: Existing information systems are fragmented across institutions, limiting evidence-based planning, coordinated implementation, monitoring, and reporting.

The assessment also identified significant gaps in climate and environmental information management. Nepal currently lacks an integrated national platform for generating, managing, and sharing climate, biodiversity, environmental, and disaster-related data among the three tiers of government. Existing information systems are fragmented across institutions, limiting evidence-based planning, coordinated implementation, monitoring, and reporting.

In addition, localized data, Indigenous knowledge systems, traditional resource management practices, and community-based adaptation experiences remain insufficiently documented and are rarely integrated into formal planning and policy processes. Weak monitoring and evaluation systems further constrain the measurement of policy effectiveness and climate outcomes. Strengthening integrated information systems, digital knowledge platforms, and evidence-based decision-making mechanisms will therefore be essential to support adaptive governance and improve the effectiveness of climate and environmental programmes across all levels of government.

3.4 Role of Stakeholders in Collaborative Governance

Climate change and environmental management are inherently cross-sectoral and multi-dimensional issues that require coordinated action from a broad range of stakeholders operating at different governance levels. The review indicates that no single institution possesses the mandate, resources, or technical capacity to effectively address the complex challenges associated with climate change, biodiversity conservation, environmental protection, and disaster risk reduction. Consequently, collaborative governance involving government institutions, civil society, the private sector, development partners, academia, Indigenous Peoples, local communities, and research organizations has become essential for achieving Nepal's climate and environmental objectives.

The Constitution of Nepal and subsequent policy and regulatory frameworks recognize the shared responsibilities of the federal, provincial, and local governments in environmental management and climate action. However, effective implementation also depends on the active engagement of non-state actors in policy formulation, knowledge generation, financing, technology transfer, capacity development, innovation, and community-based implementation. Stakeholder consultations conducted during this assessment further revealed that stronger partnerships, regular policy dialogue, coordinated planning, and institutionalized multi-stakeholder platforms are critical for improving policy coherence, strengthening accountability, and enhancing implementation effectiveness across the three tiers of government.

Development partners continue to play an important role by providing technical assistance, financial support, institutional strengthening, and knowledge exchange to support Nepal's climate commitments. Likewise, civil society organizations contribute significantly to policy advocacy, social accountability, public awareness, and community mobilization, while the private sector is increasingly recognized as an important partner in promoting green investment, climate-resilient infrastructure, renewable energy,

sustainable production systems, and technological innovation. Academic and research institutions provide the scientific evidence, policy analysis, and capacity development required to inform evidence-based decision-making and monitor climate and environmental outcomes.

The assessment therefore highlights that strengthening collaborative governance requires clearly defined stakeholder roles, effective coordination mechanisms, sustained partnerships, and inclusive participation throughout the policy cycle from planning and implementation to monitoring, evaluation, and adaptive learning. Table 3.5 reveals the strategic roles of stakeholders in climate and environmental collaborative governance system in Nepal.

Table 3.5: Roles of Stakeholders in Climate and Environmental Collaborative Governance

Stakeholder	Strategic Role
Federal Government	Provides national policy leadership; formulates laws, policies, standards, and strategies; mobilizes domestic and international climate finance; coordinates intergovernmental relations; and fulfills international environmental and climate commitments.
Provincial Governments	Contextualize–mainstream and operationalize national policies; coordinate sectoral programmes across provinces; strengthen institutional capacity; provide technical support to local governments; and monitor implementation.
Local Governments	Integrate climate and environmental priorities into local development planning; implement adaptation and mitigation programmes; deliver environmental services; engage communities; and monitor local outcomes.
Civil Society Organizations (CSOs)	Promote policy advocacy, public awareness, social accountability, community mobilization, independent monitoring, and technical support for local climate and environmental initiatives.
Private Sector	Invest in green technologies, renewable energy, climate-smart agriculture, sustainable infrastructure, environmental innovation, and corporate social responsibility (CSR) initiatives while creating green employment opportunities.
Development Partners	Provide financial assistance, technical cooperation, institutional capacity development, technology transfer, policy support, and facilitate knowledge sharing aligned with national priorities.

Academic and Research Institutions	Generate scientific evidence; undertake policy research, climate modelling, monitoring and evaluation; provide technical training; and support innovation and evidence-based policymaking.
Indigenous Peoples and Local Communities	Contribute Indigenous and traditional knowledge, community-based natural resource management practices, ecosystem stewardship, local adaptation measures, and participatory monitoring to strengthen climate resilience and sustainable environmental management.

The findings suggest that strengthening collaboration among these stakeholders through institutionalized coordination platforms, clearly defined roles and responsibilities, transparent information sharing, and joint monitoring mechanisms will be fundamental to improving climate governance and accelerating the implementation of Nepal's climate change and environmental commitments.

CHAPTER FOUR

CONCLUSION AND RECOMMENDATION

4.1 Conclusion

Climate change environmental degradation and Pollution are triple planetary crisis of the living planet have emerged as of the most pressing development challenges of the twenty-first century, affecting economic growth, social well-being, biodiversity conservation, ecosystem services, food security, water resources, disaster risk, and humanity. As one of the world's most climate-vulnerable mountainous countries, Nepal faces increasing exposure to climate-induced hazards, including floods, landslides, glacial lake outburst floods (GLOFs), droughts, forest fires, erratic precipitation, heat stress, and biodiversity loss. These impacts are becoming increasingly frequent and intense, threatening livelihoods, infrastructure, agricultural productivity, and the long-term sustainability of development gains. Addressing these challenges requires not only sound policies but also strong governance systems capable of integrating climate and environmental considerations into development planning and implementation across all levels of government.

The findings of this assessment demonstrate that Nepal has made remarkable progress in establishing a comprehensive constitutional, legal, policy, and institutional framework for climate change adaptation, mitigation, biodiversity conservation, environmental protection, and disaster risk reduction. The promulgation of the Constitution of Nepal (2015) fundamentally transformed environmental governance by institutionalizing federalism and devolving powers and responsibilities among the federal, provincial, and local governments. This constitutional restructuring provides an important opportunity to promote decentralized, participatory, and locally responsive climate and environmental governance while ensuring that national priorities are implemented in accordance with local needs and ecological conditions.

Over the past decade, the Government of Nepal has further strengthened its policy landscape through the adoption of numerous national policies, strategies, legal instruments, and international commitments. Key frameworks, including the National Climate Change Policy, NDCs, NAP, Long-Term Strategy for Net-Zero Greenhouse Gas Emissions, NBSAP, Environment Protection Act and Rules, Forest Act, Disaster Risk Reduction and Management Act, Local Government Operation Act, and various sectoral policies collectively provide a strong policy foundation for promoting climate-resilient, low-carbon, and environmentally sustainable development. These frameworks also demonstrate Nepal's commitment to implementing global agreements such as the Paris Agreement, the CBD, the United Nations Convention to Combat Desertification (UNCCD), the Sendai Framework for Disaster Risk Reduction, and the Sustainable Development Goals (SDGs).

The assessment further reveals that Nepal has established a broad institutional architecture for climate and environmental governance. Dedicated institutions within the Ministry of Agriculture, Forests and Environment, together with sectoral ministries, provincial governments, local governments, constitutional commissions, and specialized agencies, have gradually expanded their roles in addressing climate change and environmental management. Likewise, the increasing engagement of civil society organizations, development partners, academic institutions, research organizations, Indigenous Peoples, local communities, and the private sector reflects a growing recognition that climate action requires collaborative governance extending beyond government institutions alone.

Despite these significant achievements, the assessment concludes that the existence of comprehensive policies and institutional arrangements has not yet translated into equally effective implementation. One of the principal findings of this study is that implementation remains constrained by fragmented governance arrangements and weak policy coherence across sectors and levels of government. Climate change, biodiversity conservation, environmental management, agriculture, water resources, disaster risk reduction, energy, infrastructure, and land-use planning continue to be managed largely through sector-specific approaches, with limited institutional mechanisms for integrated planning and coordinated implementation. Consequently, policy overlaps, duplication of programmes, inconsistent priorities, and fragmented resource allocation continue to reduce implementation efficiency.

The transition to federal governance has created significant opportunities for localized environmental management; however, it has also introduced new coordination challenges. The assessment indicates that institutional mechanisms for vertical coordination among the federal, provincial, and local governments remain relatively weak. Although the Constitution provides concurrent powers and shared responsibilities, operational arrangements for joint planning, information sharing, financial coordination, monitoring, and accountability are still evolving. Federal policies and strategic frameworks are often not sufficiently translated into practical implementation guidelines for provincial and local governments, resulting in considerable variation in implementation capacity and policy effectiveness across jurisdictions.

Institutional capacity also remains one of the most significant constraints affecting climate and environmental governance. Many provincial and local governments continue to face shortages of qualified technical personnel, limited organizational capacity, inadequate technical guidelines, and insufficient access to climate information and analytical tools. These capacity gaps reduce the ability of subnational governments to undertake climate risk assessments, prepare evidence-based plans, implement adaptation and mitigation programmes, monitor environmental outcomes, and access international climate finance. Without sustained investments in institutional strengthening, human resource development, and technical support, decentralization alone cannot deliver the expected improvements in environmental governance.

The assessment further identifies climate finance as one of the most critical challenges facing Nepal. While the country has adopted ambitious climate policies and international commitments, available financial resources remain far below estimated investment requirements. Domestic public investment is insufficient to meet the scale of adaptation and mitigation needs, while access to international climate finance continues to be constrained by limited institutional readiness, inadequate project preparation capacity, and complex funding procedures. The substantial financing gaps identified across the Nationally Determined Contributions, National Adaptation Plan, biodiversity conservation programmes, disaster risk reduction, and climate-smart agriculture illustrate the urgent need for diversified financing mechanisms and strengthened climate-responsive public financial management. Mobilizing both domestic and international financial resources will therefore be fundamental to translating policy commitments into measurable action.

Another major finding concerns the fragmentation of climate and environmental information systems. Effective environmental governance depends upon reliable, timely, and accessible data to inform policy formulation, planning, implementation, monitoring, and evaluation. However, the assessment reveals that

climate, biodiversity, forestry, environmental quality, disaster risk, land-use, and socio-economic data remain dispersed across multiple institutions with limited interoperability. Similarly, Indigenous knowledge, local adaptation practices, and community-based resource management experiences remain insufficiently documented and are rarely integrated into formal policy processes. Strengthening integrated information systems and knowledge management platforms will therefore be essential for supporting evidence-based decision-making and adaptive governance.

The findings also emphasize that climate change and environmental governance are no longer solely environmental issues but are central to Nepal's broader socio-economic transformation. Climate change directly influences agricultural productivity, water security, public health, tourism, infrastructure resilience, energy production, and poverty reduction. Consequently, climate action must be mainstreamed across all sectors of government rather than being treated as an isolated environmental agenda. This requires stronger collaboration among ministries responsible for finance, planning, agriculture, forests, water resources, energy, infrastructure, urban development, disaster management, education, health, and local governance.

One of the most encouraging findings of this assessment is the increasing recognition of collaborative governance as a practical pathway for improving policy implementation. The active participation of provincial and local governments, civil society organizations, community forest user groups, Indigenous Peoples, women's organizations, youth networks, academic institutions, research organizations, development partners, and the private sector demonstrates Nepal's strong foundation for multi-stakeholder collaboration. Strengthening these partnerships can significantly enhance policy ownership, improve accountability, mobilize additional resources, encourage innovation, and facilitate knowledge sharing across institutions and communities.

Looking ahead, Nepal possesses considerable opportunities to strengthen climate and environmental governance through its federal governance system. Federalism provides an institutional platform for integrating national priorities with local realities, allowing adaptation and mitigation measures to respond to diverse ecological, geographical, and socio-economic contexts. Local governments, being closest to communities, are well positioned to identify local vulnerabilities, mobilize community participation, promote ecosystem-based adaptation, and implement context-specific climate solutions. Provincial governments can

serve as effective coordinating and technical support institutions, while the federal government provides strategic leadership, policy direction, regulatory oversight, and resource mobilization. Strengthening these complementary roles will be essential for improving governance effectiveness.

The transition toward collaborative and integrated environmental governance should therefore become a strategic national priority. Such a transition requires harmonized legal and policy frameworks, stronger intergovernmental coordination mechanisms, enhanced institutional capacity, sustainable financing systems, integrated information platforms, robust monitoring and evaluation mechanisms, and inclusive stakeholder participation. Equally important is the need to strengthen transparency, accountability, and evidence-based decision-making so that policies are continuously adapted in response to emerging climate risks and implementation experiences.

In conclusion, Nepal stands at a pivotal moment in its climate and environmental governance journey. The country has already established many of the constitutional, policy, and institutional foundations necessary for achieving climate-resilient and environmentally sustainable development. The challenge now lies in transforming these foundations into effective implementation through coordinated action across all three tiers of government and among all stakeholders. Success will depend not only on stronger institutions and increased financial investment but also on sustained political commitment, collaborative leadership, scientific innovation, and inclusive governance.

If Nepal successfully addresses the governance, institutional, financial, and technical challenges identified in this assessment, it will be well positioned to accelerate progress towards achieving its Nationally Determined Contributions, National Adaptation Plan, Long-Term Strategy for Net-Zero Emissions, biodiversity conservation targets, disaster risk reduction priorities, and the Sustainable Development Goals. More importantly, it will strengthen the resilience of its people, safeguard its unique ecosystems and natural resources, promote green economic transformation, and reinforce its international leadership as a country committed to sustainable and climate-resilient development.

4.2 Recommendations

4.2.1. Strengthen Intergovernmental Coordination and Collaborative Governance

Effective climate and environmental governance require strong coordination among the federal, provincial, and local governments. The Government of Nepal should institutionalize permanent intergovernmental coordination platforms at national, provincial, and local levels to facilitate joint planning, policy dialogue, information sharing, monitoring, and conflict resolution. Clear institutional mandates, standard operating procedures, and coordination protocols should be developed to improve vertical and horizontal collaboration across sectors and levels of government.

4.2.2. Harmonize Policy, Legal, and Regulatory Frameworks

Existing climate and environmental policies should be systematically reviewed and harmonized to eliminate overlaps, inconsistencies, and conflicting mandates among sectors. National policies, regulations, standards, and guidelines should be aligned with provincial legislation and local government frameworks to ensure policy coherence. Sectoral plans should also be better integrated with Nepal's NDCs, National Adaptation Plan, Long-Term Strategy for Net-Zero Emissions, biodiversity commitments, and disaster risk reduction strategies.

4.2.3. Strengthen Institutional and Human Resource Capacity

Institutional strengthening should become a long-term national priority. Provincial and local governments require adequate technical personnel, organizational structures, operational guidelines, and technical tools to effectively plan, implement, monitor, and evaluate climate and environmental programmes. Regular capacity development programmes should be established on climate risk assessment, climate-resilient planning, greenhouse gas accounting, ecosystem-based adaptation, biodiversity conservation, environmental monitoring, climate finance, and project management. Strengthening institutional learning networks and peer-to-peer knowledge exchange among governments will further enhance implementation capacity.

4.2.4 Mainstream Climate Change into Planning and Budgeting

Climate change and environmental sustainability should be systematically integrated into national, provincial, and local development planning and budgeting processes. Climate-responsive planning tools, climate budget tagging, environmental screening, and climate risk assessments should become mandatory components of development planning. Sectoral ministries and local governments should align annual and periodic plans with national climate and environmental priorities while promoting ecosystem-based adaptation and nature-based solutions.

4.2.5. Enhance Climate Finance and Resource Mobilization

Closing Nepal's climate financing gap requires diversified and innovative financing strategies. The Government should strengthen climate-responsive public financial management, increase domestic investment in climate and environmental programmes, and improve institutional capacity to access international climate finance mechanisms, including the Green Climate Fund, Adaptation Fund, Global Environment Facility, and Loss and Damage financing arrangements. Dedicated climate financing windows for provincial and local governments should be established alongside transparent accountability and monitoring mechanisms. Greater engagement of the private sector through green investment incentives, blended finance, public-private partnerships, carbon markets, and payment for ecosystem services should also be promoted.

4.2.6. Develop Integrated Climate Information and Knowledge Management Systems

An integrated national climate and environmental information management system should be established to support evidence-based decision-making across all levels of government. Standardized systems for data collection, monitoring, reporting, and information sharing should be developed to improve coordination among ministries, provincial governments, and local governments. Digital platforms should facilitate real-time access to climate, biodiversity, disaster, and environmental information while strengthening monitoring and evaluation of policy implementation.

4.2.7. Promote Inclusive and Participatory Climate Governance

Climate governance should be based on inclusive participation and collaborative partnerships. The Government should strengthen the engagement of civil society organizations, Indigenous Peoples, local

communities, women, youth, academia, research institutions, and the private sector throughout the policy cycle. Indigenous knowledge, local adaptation practices, and community-based natural resource management approaches should be systematically integrated into policy formulation, implementation, monitoring, and evaluation to enhance resilience and ensure equitable climate action.

4.2.8. Strengthen Monitoring, Evaluation, and Accountability Mechanisms

A comprehensive monitoring, reporting, and evaluation framework should be established to assess the implementation and effectiveness of climate and environmental policies across the three tiers of government. Clearly defined performance indicators, periodic progress reviews, independent evaluations, and digital reporting systems should be introduced to improve transparency and accountability. Results-based monitoring will facilitate adaptive management, strengthen institutional learning, and ensure that public investments generate measurable environmental and climate outcomes.

4.2.9. Foster Innovation, Research, and Technology Transfer

Research, innovation, and technology development should be prioritized to support climate-resilient development. Collaboration among government agencies, universities, research institutions, and development partners should be strengthened to generate scientific evidence, develop innovative technologies, improve climate modelling, and expand climate services. Investments in renewable energy, climate-smart agriculture, ecosystem restoration technologies, digital environmental monitoring, and early warning systems will contribute to long-term resilience and sustainable economic transformation.

4.2.10. Strengthen International Cooperation and Implementation of Global Commitments

Nepal should continue to strengthen its engagement with regional and international climate and environmental processes to mobilize financial resources, technology transfer, and technical expertise. Greater coordination is needed to ensure effective implementation of commitments under the Paris Agreement, the CBD, the UN Convention to Combat Desertification, the Sendai Framework for Disaster Risk Reduction, and the SDGs. Aligning national implementation with these global frameworks will enhance policy coherence, improve access to international support, and reinforce Nepal's leadership in climate and environmental governance.

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PHOTO GALLERY

