

Studies on Climate Governance Integrity

A Compendium



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Studies on Climate Governance Integrity A Compendium

Report : Studies on Climate Governance Integrity : A Compendium

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The Climate Governance Integrity Programme (CGIP), implemented by Transparency International, is designed to ensure that climate finance is governed with integrity, transparency, and accountability, so the most vulnerable communities can adapt to the climate crisis in 25+ countries around the world.

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FOREWORD

Transparency International Nepal (TI Nepal), established in 1996 is the national chapter of Transparency International, a leading civil society organization dedicated to advancing integrity, accountability, and good governance around the world. TI Nepal has been working in different sectors to increase public accountability, promote integrity and curbing corruption in all walks of life. Guided by the principle that transparency is fundamental to justice and sustainable development, TI Nepal has continually emphasized the need for equitable and transparent climate action—recognizing the deep and inseparable link between climate governance and anti-corruption efforts.

The escalating climate crisis is not only a global environmental emergency but also a critical test of governance systems. For countries like Nepal—highly vulnerable to the impacts of climate change and challenged by limited resources—the stakes are especially high. Ensuring transparency, accountability, and inclusive decision-making in climate action and policy framing is imperative. This compendium, developed under the Climate Governance Integrity (CGIP) Nepal initiative, reflects TI Nepal's enduring commitment to empowering citizens, promoting institutional accountability, and advancing systemic reform for better governance. This publication presents the consolidated findings of four in-depth studies that explore key dimensions of Nepal's climate governance landscape, including:

- Mapping Actions and Outcomes of Climate Finance Projects in Nepal,
- Climate Finance Management in Nepal,
- Conflicts of interest/Undue Influence in the energy sector,
- Conflict of interest in Natural Resources: Challenges for Climate Change Adaptation and Mitigation

These studies reveal structural barriers and integrity risks that hinder Nepal's capacity to effectively deliver on its climate commitments. They also offer actionable recommendations to improve climate governance—such as strengthening institutional capacity, enhancing transparency in budget tracking, fostering inclusive and participatory planning processes, and establishing robust oversight mechanisms at all levels of government for effective implementation and budget utilization.

This compendium is intended to inform and inspire action among a broad spectrum of stakeholders—policy makers, parliamentarians, government, development partners, civil society organizations, and community actors—who are working collectively to safeguard Nepal's climate future.

On behalf of Transparency International Nepal, I extend my sincere appreciation to the researchers, contributors, and the CGIP Nepal team for their contribution.

Madan Krishna Sharma
President
Transparency International (TI) Nepal
August 2025

Introduction to the Compendium

This compendium brings together four recent research works, complemented by sectoral updates and reflections on climate finance and governance in Nepal. It has been prepared under the broader framework of the Climate Governance Integrity Project (CGIP), an initiative led by Transparency International aimed at promoting accountability, transparency, and integrity in climate-related policy and funding mechanisms.

Purpose and Relevance

Climate change is not only an environmental issue—it is also a matter of governance. As Nepal intensifies its climate action commitments through national and international frameworks, the equitable and effective use of climate finance has become a critical concern. This compendium is a strategic contribution to evidence-based advocacy, offering insights into systemic gaps, institutional dynamics, and opportunities to ensure that climate finance genuinely serves vulnerable communities and ecosystems.

Content Overview

The compendium includes:

1. Climate Finance Management in Nepal: An Effectiveness and Transparency Perspective
2. Conflict of Interest in Natural Resources: Challenges for Climate Change Adaption and Mitigation
3. Conflict of Interest/Undue Influence in the Energy Sector.
4. Mapping Actions and Outcomes of Climate Finance Projects in Nepal

In addition to these research documents, the compendium features policy updates, expert commentaries, and real-time insights provided by practitioners actively engaged with local governments, civil society, and national-level stakeholders. These updates offer a practical lens on the evolving climate governance landscape in Nepal, capturing on-the-ground challenges and innovations.

Intended Use and Impact

This compendium is designed to serve as a policy advocacy tool for lawmakers, government officials, civil society actors, and development partners. It aims to:

- Inform and influence governance reforms in climate finance.
- Support the integration of integrity standards into planning, budgeting, and implementation cycles.
- Amplify voices from the field to strengthen inclusive and participatory climate governance.

By consolidating diverse but interconnected findings, this volume underscores the urgent need for a transparent, accountable, and people-centred approach to climate action in Nepal.

PART 1

Climate Finance Management in Nepal: An Effectiveness and Transparency Perspective

TABLE OF CONTENTS

Executive Summary	1
1. Introduction	2
2. Materials and methods	2
3. Results and Discussion	5
3.1 Status of climate finance	5
3.2 Effectiveness of climate funds	11
3.3 State of Climate Finance Transparency in Nepal	15
4. Conclusion and Recommendations	19
References	20

List of Tables

Table 1. Criteria for Climate Finance Transparency Assessment	4
Table 2. Scoring values for the CFTC	5
Table 3. Interpretation of the total scores obtained	9
Table 4. Financial need for climate change adaptation and mitigation in Nepal	12
Table 5. Score received by climate finance transparency criteria (CFTC)	16

List of Figures

Figure 1. Flow chart for the collection and review of literature	3
Figure 2. Total Funds received for dedicated climate projects in Nepal between 2008 to 2023 (Bottom observation assessed in this study)	6
Figure 3. Climate finance received from different sources in Nepal between 2011 and 2021(OXFAM, 2025)	6
Figure 4. Climate change budget in Nepal over the last seven years	7
Figure 5. Per cent of the climate-relevant budget (Highly relevant+ relevant) in 2021/2022 in different provinces compared to the federal average	8
Figure 6. Distribution of climate change projects in Nepal 2007-2023	12
Figure 7. The average score for different types of CA interventions for the Livelihood support. Ranks are based on the result of the end-line project survey	14
Figure 8. Climate change programs in the annual programs and plan of local governments synthesized from the discussion with eight local governments of Kathmandu Valley.....	15

PART 2

Conflict of Interest and Undue Influence Related to Climate Change on Natural Resources in Nepal

TABLE OF CONTENTS

Executive Summary	23
1. Introduction	24
2. Methodology	24
3. Nepal's Natural Resources	24
4. Trends and Impacts of Climate Change	25
5. Conflict of Interest	26
5.1 Corruption and Governance Issues	27
5.2 Sectoral Conflicts and Mismanagement of Resources	27
5.3 Conflict of Issues in Environmental Impact Assessment	29
5.4 Green Economy, Taxation and Fund Utilization Dilemmas	29
6. Climate Finance	30
7. Policy Challenges and Recommendations	31
8. Conclusion	32
References	32

List of Tables

Table 1. Imports of petroleum products in Nepal {All values are in thousand kiloliters except, for LPG which is in thousands of metric tons.}	28
Table 2. Proportion of Climate Change Budget in Annual Budget	31

List of Figures

Figure 1. Nepal Himalaya region shows major river basins and sub-river basins	25
Figure 2. Forest Cover in Nepal in 2020 (Source: ICIMOD, 2022)	25

PART 3

Conflict of Interest / Undue Influence in the Energy Sector

TABLE OF CONTENTS

Executive Summary	33
1. Introduction	34
Background	34
2. Objective of the Study.....	36
3. Scope of the Study	36
4. Methodology	36
5. Legal and Institutional Framework of Nepal's Energy Sector	37
5.1 Regulatory and Institutional Bodies	37
5.2 Core Legislation	38
6. Overview of Energy Context in Nepal	39
7. Conflict of Interest and Undue Influences in the Energy Sector in Nepal	45
7.1. Forms of Conflict of Interest and Undue Influences	45
7.2. Impacts and Consequences	47
8. Conclusion	48
9. Recommendations	49
References	51

Annex

Annex 1: Key Informant Interviews (KII) List	54
Annex 2: SDG 7 Target Relevant to Nepal.....	54
Abbreviations	54

List of Tables

Table 1: Petroleum products import data of 10 years (Nepal Oil Corporation).....	41
Table 2: Old and New Tax Rate of EVs in Nepal.....	46

List of Figures

Figure 1: Methodology of the Study.....	37
Figure 2: Overall energy consumption by fuel type.....	41
Figure 3: Sectoral energy consumption shares for 2079/80.....	42
Figure 4: Energy Consumption of transport sector.....	42
Figure 5: An EV charging station on the NEA premises in Ratna Park.....	43
Figure 6: EV charging station installed in the premises of Singha Durbar, Kathmandu	44
Figure 7: Households Using Types of Fuels for Cooking Purposes (NSO, 2023).....	44

PART 4

Mapping actions and outcomes of climate finance projects in Nepal

TABLE OF CONTENTS

Executive Summary	55
1. Introduction	56
1.1 Study Objective.....	56
1.2 Context and Rationale of the Study.....	56
2. Key Findings	60
2.1 BRCRN Project.....	60
2.2 Gandaki River Basin Project.....	61
2.3 Clean Cooking Solution Project.....	62
2.4 Forests for Prosperity Project.....	63
3. Conclusions and Recommendations.....	65
3.1 Conclusions	65
3.2 Recommendations.....	66
References	68

List of Figures

Figure 1. 26 River Systems covered by the BRCRN	60
Figure 2. Gandaki River Basin Project Area	61
Figure 3. Clean Cooking Solution Project Districts	63
Figure 4. FPP project area	64
Figure 5. Graphs showing the actual disbursement of the fund against the originally planned and revised disbursement for the projec	64

PART 1

Climate Finance Management in Nepal: An Effectiveness and Transparency Perspective

Executive Summary

Highlights:

- Nepal requires USD 121.14 billion by 2050 for climate actions, far exceeding current resources.
- Climate finance governance shows moderate transparency with weak fund absorption capacity.
- Mixed-methods study reveals gaps between top-down and bottom-up climate finance accounting.
- Weak fund absorption and governance hinder effective climate finance utilization.

Abstract

Nepal, highly vulnerable to climate change impacts, faces significant challenges in financing its climate adaptation and mitigation initiatives. This study examines Nepal's climate finance landscape, analyzing its effectiveness, transparency mechanisms, and implementation barriers from 2008 to 2023. Employing a mixed-methods approach, the research combined a systematic literature review, stakeholder interviews, workshop consultations, and case studies of climate projects. A Climate Finance Transparency Framework with 18 criteria was developed to assess transparency levels. The study reveals that Nepal received USD 5.71 billion in climate finance between 2011-2021 through various international sources, with 74 climate-dedicated projects securing USD 697.3 million during 2008-2023. Nepal's financial requirements for implementing its National Adaptation Plan (NAP) and Nationally Determined Contributions (NDC) amount to USD 121.14 billion by 2050, far exceeding current resources, despite establishing institutional frameworks like climate change budget coding and the Climate Change Financing Framework. The analysis identifies gaps in climate finance management, including weak institutional capacity, inadequate transparency mechanisms, and low fund absorption rates. While Nepal allocates approximately 5.3% of its national budget to climate initiatives, with higher proportions (22.6%) at the subnational level, this study highlights concerns regarding subjective coding practices and the need for standardized protocols. Key recommendations include strengthening monitoring and reporting systems, enhancing fund absorption capacity, and developing strategic approaches to access international climate funds.

Keywords: Climate Finance, Transparency, Effectiveness, Adaptation, Mitigation

1. Introduction

In the face of unprecedented global challenges posed by climate change, countries around the world are increasingly recognizing the need to take proactive measures to mitigate its impacts and adapt to the changing climate. Evidence has shown that Nepal, located in the heart of the Himalayas, has been highly affected by climate change (Shrestha et al., 2019). As a nation vulnerable to a multitude of climate-related risks, including glacial lake outburst floods, landslides, erratic monsoons, loss of agricultural production and biodiversity (Bocchiola et al., 2019; Dahal et al., 2016; Dhimal et al., 2021; Lamsal et al., 2018), Nepal has committed itself to addressing climate change by setting ambitious targets for reducing greenhouse gas emissions and enhancing resilience through the Second Nationally Determined contribution and for adaptation through National Adaptation Plan (GoN, 2021; MoFE, 2020). However, the translation of these commitments into meaningful action requires a complex interplay of financial resources, policy frameworks, and transparent management practices (WB & ADB, 2021).

Climate finance, a crucial component of the global response to climate change, plays a pivotal role in supporting Nepal's efforts to combat environmental threats and foster sustainable development (ADPC, 2021; NPC/UNDP/UNEP/CDDE, 2011). Effective and transparent management of climate finance is essential to ensure that the funds allocated to Nepal are used efficiently, equitably, and with the utmost transparency, thereby maximizing their impact on building resilience and promoting low-carbon development (Kouwenberg & Zheng, 2023; NPC, 2012; TI, 2018). Nine types of climate finance policies, including target lending, green bond policy, loan guarantee programmes, weather-indexed insurance, feed-in-tariffs, tax credits, national development banks, disclosure policies and national climate funds have been documented by Bhandary et al. (2021). After the Paris Agreement, in recent years climate finance research has been getting more attention (Kouwenberg & Zheng, 2023; Long et al., 2022).

This study aims to assess the management of climate finance in Nepal from a transparency and effectiveness perspective. This study analyzes the current state of climate finance management in Nepal and evaluates the effectiveness of climate finance utilization and its impact on climate adaptation and mitigation efforts in Nepal. It examines the financial mechanisms, policies, and practices employed to channel funds towards climate projects and evaluates their effectiveness.

2. Materials and methods

The research has employed a mixed-methods approach, combining literature review, consultations, and case study. First, the data collection through desk reviews, including analysis of journal articles, climate finance policies, project documents, and financial reports was done. In the process of conducting the literature review, a systematic approach was adopted. Initially, the search was conducted on the Web of Science and Scopus database using search strings such as 'climate finance', 'climate change funds', 'climate finance policy', 'transparency' and 'Nepal' which yielded 412 results. The same search strings were also used in Google Scholar and Google to include relevant reports and articles. In the overall search, 197 duplicates were found which were removed resulting in 215 data. Subsequently, we manually assessed the papers to select those that were most pertinent to our research topic, resulting in a total of 105 articles. Further, we refined the

list by filtering for articles specifically related to Nepal, resulting in a final selection of 72 articles. The systematic approach of the literature search and selection is given in Figure 1. Each of these articles was individually reviewed to facilitate the analysis.

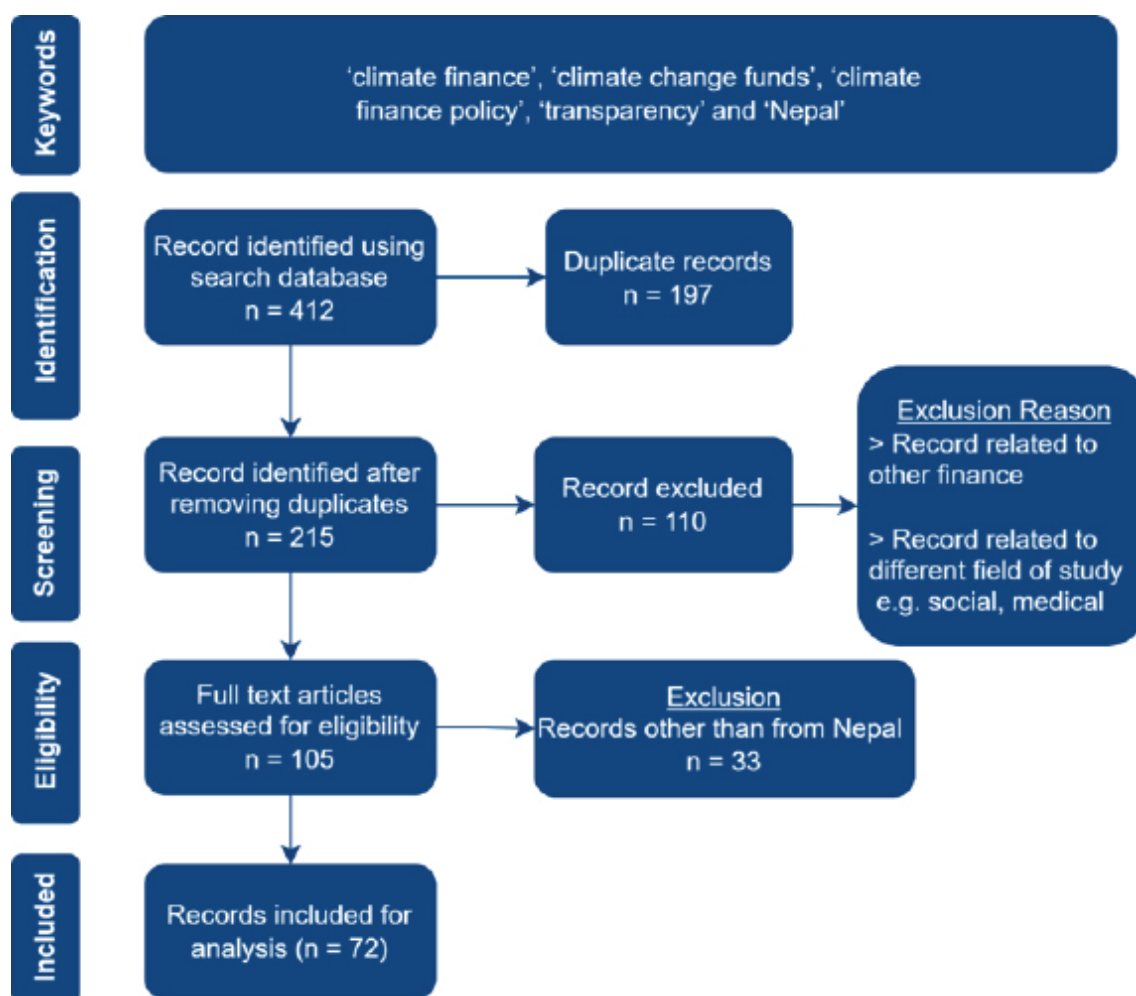


Figure 1. Flow chart for the collection and review of literature

Secondly, interviews with key stakeholders, including representatives from government, INGOs, UN agencies, multilateral banks, civil society organizations, and other development partners were done to collect the latest status of climate finance and transparency initiatives in Nepal. Third, a workshop was organized by Transparency International Nepal on December 4, 2023, on the 'Promotion of Transparency, Inclusiveness and Accountability on Climate-related works in Nepal' where the local government representatives and officials from different local governments (Palikas) of Kathmandu, Lalitpur and Bhaktapur districts were invited. Information on the ongoing climate actions at the local level was drawn from the discussion of the workshop.

Fourth, case studies of selected climate change mitigation and adaptation projects in Nepal were also done to evaluate their effectiveness. Two projects Hariyo Ban Program II (2017-2021) and Nepal Climate Change Support Programme (2013-2019) were reviewed. The end-line survey reports and project documents were reviewed and assessed. Adaptation interventions were categorized into human, natural resources, physical, social and financial. A Likert scale of 5 was

used to rank the interventions based on their effectiveness for climate response and livelihood support. The average score was generated to compare the interventions.

Fifth, for transparency assessment of climate finance a climate finance transparency criterion (CFTC) was developed. About 18 criteria based on the Enhanced Transparency Framework (UNFCCC, 2020) were developed (Table 1) which were then evaluated based on the existing status of transparency.

Table 1. Criteria for Climate Finance Transparency Assessment

SN	Climate Finance Transparency Criteria (CFTC)
1	GHG inventory- sources and sinks of emission
2	Information on Climate change impact and vulnerability
3	Emission projection and trajectories
4	Information on adaption needs and priorities
5	Indicator to track the progress of NAP
6	MEAL on Climate change adaptation and mitigation policies
7	Mitigation policies and measures
8	Indicator to track the progress of mitigation
9	Financial support needed
10	Financial support received from multilateral, bilateral, regional and other channels and mobilized
11	Financial support received from UNFCCC channels
12	Financial support mobilized from domestic sources
13	Technology development and transfer support needed and received
14	Technology development and transfer support received
15	Information on capacity building support needed
16	Information on capacity building support received
17	No complaints regarding climate finance-related programs at CIAA or court
18	No Cases of corruption in climate programs

The score for each criterion was provided based on the framework developed and the aggregate score was computed. The score interpretation was done to assess the level of transparency. The criteria and framework are given in Tables 2 and 3.

Table 2. Scoring values for the CFTC

CFT Framework	Score for Criteria
Meet the criteria completely	1
Moderately meet the criteria	0.5
Does not meet the Criteria	0
Doesn't meet the criteria and events impede transparency moderately	-0.5
Doesn't meet the criteria and events impede transparency adversely	-1

Table 3. Interpretation of the total scores obtained

Score	Interpretation
<3	Not transparent
3-7.2	Low Transparency
7.2-10.8	Moderate Transparency
10.8-14.4	High Transparency
14.4-18	Fully Transparent

3. Results and Discussion

3.1 Status of climate finance

The impact of climate change is evident in Nepal in different sectors and spheres. In response to this, the government of Nepal has been implementing climate change mitigation and adaptation actions (GoN, 2021, 2023; Government of Nepal, 2021; MoFE, 2021b). The Government of Nepal has been allocating programs and budgets at all three tiers of government from the federal to the local level (MoF, 2024). The budget allocated for the climate change sector has been tracked through the climate change budget code since 2013 (MoF, 2017; NPC, 2012).

Nepal started receiving international climate finance support as early as 1997 through adaptation programs funded by Germany (Dixit et al., 2016). Major sources of climate finance for Nepal are multilateral development banks like the World Bank, the Asian Development Bank, UN agencies, and bilateral donors (ADPC, 2023; PRC, 2021). Nepal is currently receiving climate funds mostly from the Least Developed Countries Fund (LDCF), Adaptation Fund (AF), Global Environmental Facility (GEF), and Green Climate Fund (GCF), which all serve as climate financing mechanisms under UNFCCC (OPM, 2022).

3.1.1 International climate finance flows

On evaluating climate finance from a project perspective between 2008 - and 2023, USD 697.3 million has been received for 74 climate-dedicated projects in Nepal (Figure 2). Till 2023, Nepal received a total of USD 87.8 million from GCF for three projects managed by AEPC, IUCN and FAO. Nepal has also been able to access USD 4.6 million from the GEF Trust Fund and USD 36.7 from the LDCF for nine climate change projects until 2023. The four projects accounting for a total finance of USD 3 million from GEF Trust Fund (for one project) and USD 9.1 million from LDCF (for 3 projects) have ready been completed and the rest of the finance has been approved for another five projects. A project on the adaptation to climate-induced threats to food production and food security in the Karnali Region of Nepal is being implemented by the UN World Food Programme. The fund for this project worth USD 9.5 million was accessed through the Adaptation Fund. Dedicated climate projects such as the NCCSP, EFLG, ASHA and AEPC funds have substantially contributed to climate finance in Nepal (MoFALD, 2018).

However, other studies have reported larger values. According to an OPM (2022), Nepal received about USD 4.416 billion in climate finance resources between 2012-2020, through various international, bilateral, and multilateral sources for climate change adaptation and mitigation. The OPM study makes an account of a top-down approach using the OECD database (Figure 2). The majority of the climate finance came from multilateral banks (58.8%) followed by OECD member countries (30.6%), UNFCCC mechanisms (7.3%) and other sources such as UN agencies, and

private donors (3.19%). Another study by OXFAM shows that Nepal received a total finance of USD 3.3 billion between 2013 and 2020 assessed using the same database of OECD (OXFAM, 2022). A recent study shows that from 2011 to 2021, Nepal received a cumulative \$5.71 billion in climate finance. Nearly, 70% of this funding came from multilateral sources, while bilateral sources provided over 30% (Figure 3). Philanthropic contributions and private sector foundations made up a minimal 0.1% share (OXFAM, 2025). However, between 1997 to 2014, the total amount committed by various donor agencies and funds towards climate finance for Nepal was USD 652.4 million (Dixit et al., 2016).

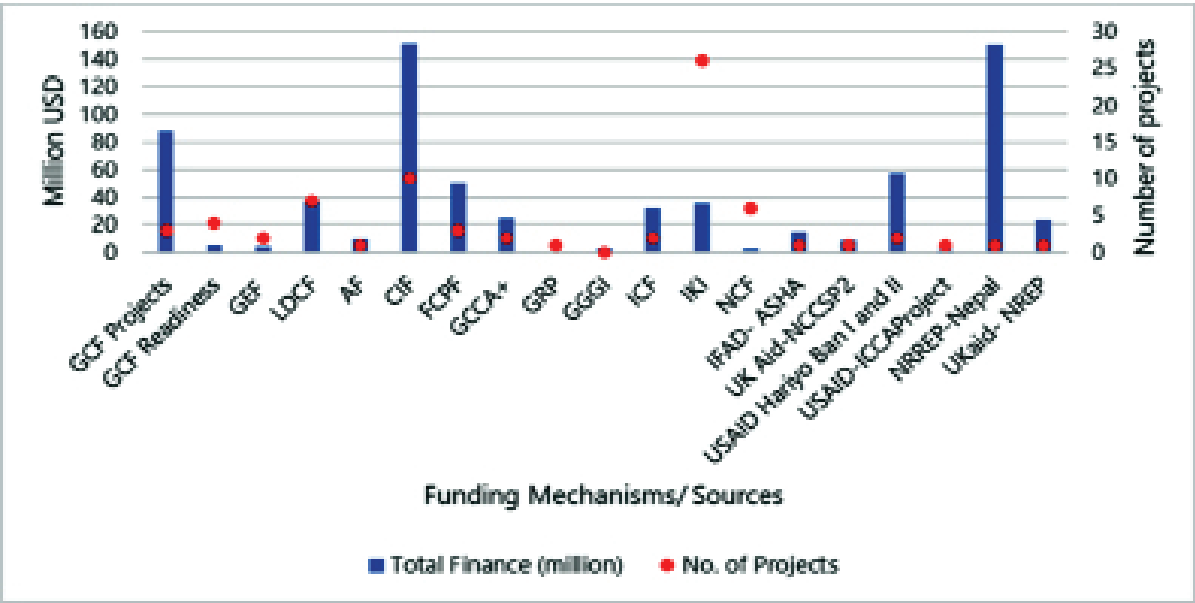


Figure 2. Total Funds received for dedicated climate projects in Nepal between 2008 to 2023 (Bottom observation assessed in this study)

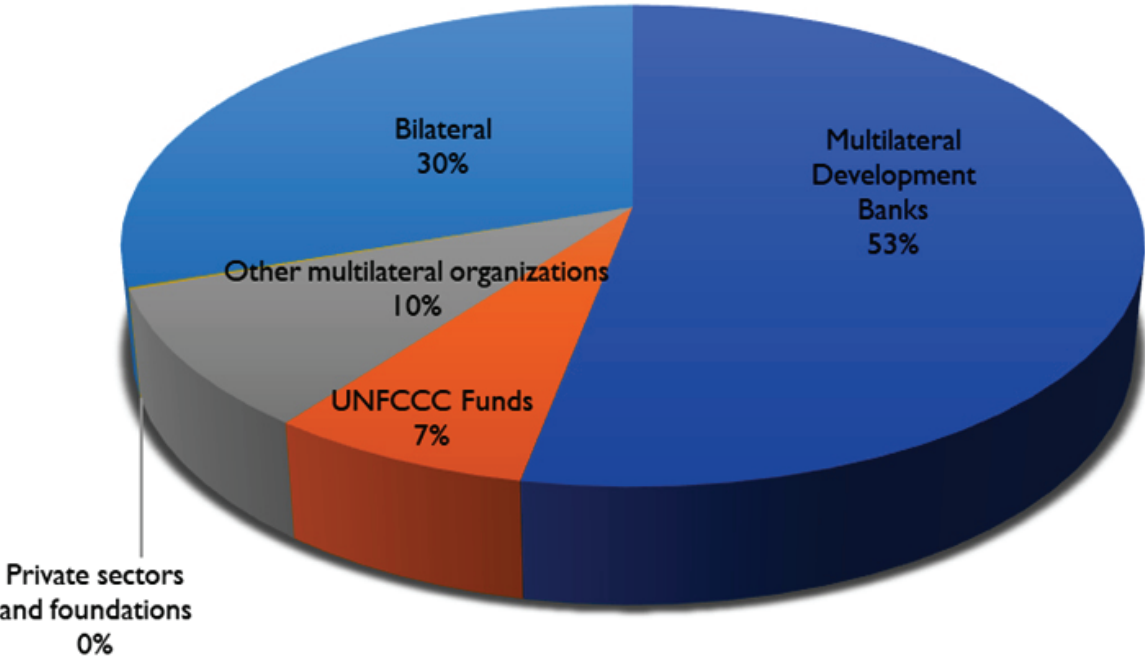


Figure 3. Climate finance received from different sources in Nepal between 2011 and 2021(OXFAM, 2025)

There are discrepancies in the estimates that are made by top-down and bottom-up approaches. Top-down estimates are higher compared to the bottom-up. Top-down accounting has a high chances of double counting. For instance, the same amount could be counted as bilateral assistance as well as a contribution to climate-dedicated funds such as GCF by a country. There is also evidence that the donors have often over-reported the climate finance they contributed to LDCs like Nepal (CARE, 2021; Mandal, 2021; Rai et al., 2020). The amount received by Nepal from international sources could be lower than what has been reported in the OECD databases which has been mostly considered in tracking the international climate finance in Nepal. This indicates the need for detailed assessments of the finance flow in Nepal that match the top-down and bottom-up estimates.

3.1.2 Climate finance from domestic sources

In 2022/2023, about 5.9% of the total budget in Nepal was highly climate-relevant while 28.08% of the budget is relevant to climate actions (Figure 4). The highly relevant climate change budget in 2022/23 has increased by 31.11% compared to 2017/18. In 2018, the highly relevant climate budget accounted for about 5% of the total national budget (MoFALD, 2018). The analysis of the climate budget over the last six years shows that the average climate change budget allocation for highly relevant, relevant and neutral is 5.3%, 28.1% and 66.5% respectively.

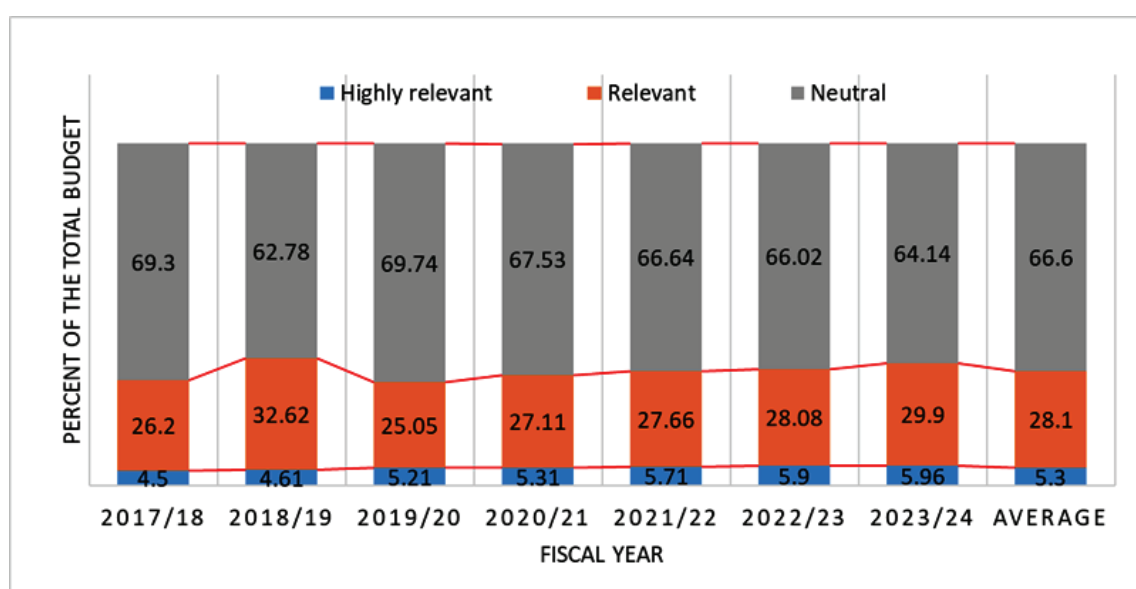


Figure 4. Climate change budget in Nepal over the last seven years

At the sub-national level, 51% of the total budget accounts for the climate-relevant budget (highly relevant + relevant) in the provinces in 2021/2022 (Figure 5). This is comparatively high compared to the federal average (33.3%). The average climate change budget for highly relevant climate action at the province level is 26.6% in 2021/2022. For the same year, the average climate change budget at the federal level was only 5.7%. Local governments have incorporated climate change into their local plans and budgets and they have also started to implement the climate budget coding of programs at the local level. However, in the absence of a distinction between climate change impacts and anthropogenic impacts, climate-related activities are not clearly defined.

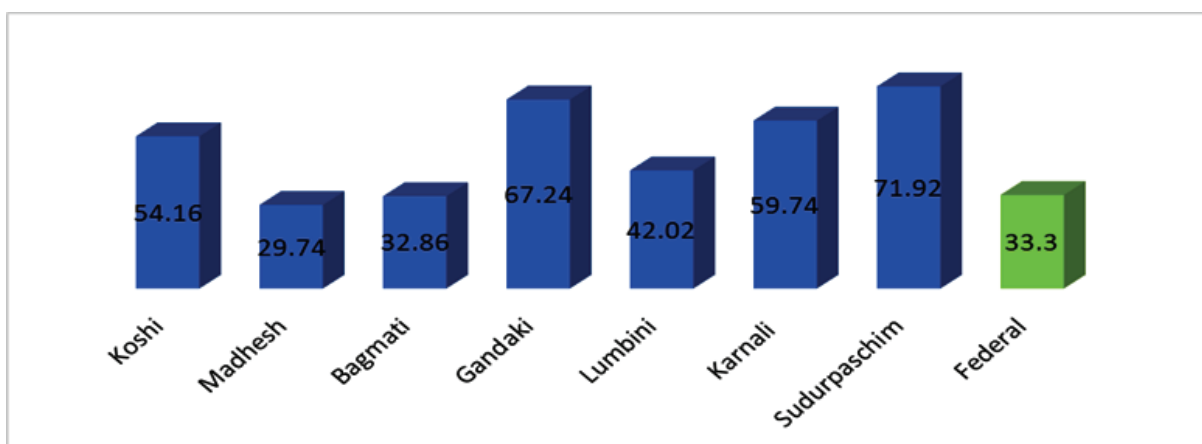


Figure 5. Per cent of the climate-relevant budget (Highly relevant+ relevant) in 2021/2022 in different provinces compared to the federal average.

The allocation of the budget shows that climate change finance has been increasing from domestic sources in recent years. In 2011, highly relevant budgeted expenditures represented around 1.8% of total Government Budgeted expenditures (CPEIR, 2011). District-level climate public expenditure and institutional review (dCPEIR) conducted in five districts in 2018 shows that climate budget expenditure accounted for 15.4% at the district level on average. This includes an expenditure of 12.7% on highly relevant climate activities and the rest of 2.6% on relevant climate actions (MoFALD, 2018). The government should make efforts to increase the funding from international mechanisms.

On analysing, the discrepancies in the percentage of the climate-relevant budget at the subnational level and federal level, it was found that many climate-neutral projects had been coded under the climate-relevant program at the province level. In absence of the clear and common guidelines for budget coding at all levels, the climate change budget coding process has become a subjective one and the relevancy of the program towards climate change depends upon how the coder has perceived climate change in different sectors (See Annex 1 for climate change budget coding guideline). Tackling this issue and maintaining consistency in coding procedures demands a common guideline for budget coding and capacity-building training for effective budget coding to the dedicated staff.

3.1.3 Financial need and gaps for climate actions in Nepal

The two important policies for planning climate change mitigation and adaptation in Nepal are the Nationally Determined Contribution (NDC 3.0) 2025 and the National Adaptation Plan (NAP) 2021. The total finance required to implement these policies is USD 121.14 billion (GoN, 2021, 2023) (Table 4).

Table 4. Financial need for climate change adaptation and mitigation in Nepal

Policies	Finance need (in billion USD)		
Adaptation and Mitigation Policy	Total Need	National	International
NAP (2021-2050)	47.4	1.5	45.9
NDC (2021-2030)	73.7	10.8	62.9
Total	121.1	12.3	108.8
Finance Source of NAP	Domestic sources and multilateral financial institutions, bilateral development cooperation agencies, the financial mechanism and funds under the UNFCCC, international private sector finance, and other sources of external finance coming from international organisations, foundations, climate-dedicated funds, and innovative sources		
Finance Source of NDC	Domestic sources and GCF, GEF, AF, LDCF, bilateral/multilateral agencies and development partners.		

The total estimated cost for implementing Nepal's National Adaptation Plan priority programs up to 2050 is \$47.4 billion. Nepal will contribute \$1.5 billion itself until 2050, while \$45.9 billion is required from external support to fully implement the NAP by 2050. The government needs around \$2.1 billion annually over the medium term to execute the NAP. The overall cost for Nepal to implement its public sector commitments under the Nationally Determined Contributions (NDC) is estimated to be around \$73.7 billion. As specified in Nepal's NDC 3.0, meeting the conditional greenhouse gas mitigation targets will require approximately \$108.8 billion. Additionally, around \$12.3 billion is needed to achieve the unconditional targets. Other commitments also require huge finance. According to the National Planning Commission, Nepal needs almost US \$20 billion from 2023-2025 and almost US \$30 billion from 2026-2030 to achieve its SDG targets by 2030 (NPC, 2018).

Our analysis shows that about USD 5.4 billion is required per year to implement NAP and NDC until 2030. After 2030 until 2050 about USD 1.32 billion per year is required for the implementation of NAP alone. These amounts are cumulative of both the national contribution committed and international finance to be secured. Nepal has committed to contribute USD 0.39 billion per year (USD 0.05 billion per year for NAP and USD 0.34 billion per year for NDC) from 2021 to 2030. After 2030 Nepal has committed to contribute 0.05 billion every year until 2050 for the implementation of NAP. If the provision of the climate change policy of Nepal 2019 is to be realized, every year USD 4.32 billion should be invested for adaptation (USD 1.68 billion/year) and mitigation (USD 2.64/year) at a local level from 2021 to 2030.

Considering the current budget size of Nepal (NPR 1.7 trillion) and exchange rate (USD 1 = NPR 131), Nepal requires 40.85% of the current budget every year for the implementation of NAP and NDC and has to allocate 2.95% of the current annual budget for climate change adaptation and mitigation every year from 2021-2030 as per the national commitment. The remaining 37.9% of the annual budget has to be sought from international sources. Nepal has already been allocating 5.3% of the annual budget as a highly relevant climate change budget. Therefore, Nepal's financial commitments (2.95% of the annual budget per year) can be possibly met. However, securing finance (37.9%) from international sources remains uncertain.

In 2018-2019, climate finance in Nepal was USD 878 million. The 2018-2019 investment level in Nepal in climate change mitigation and adaptation was USD 0.4 billion while the climate investment potential was estimated to be USD 3.8 billion indicating a huge gap in climate finance (ADB, 2023). This also means that the finance should increase manifold. An OPM study estimates that about 56.5 % of funding gaps exist to meet the climate commitments target (OPM, 2022). The government of Nepal has increased the proportion of climate-relevant budget allocations in its total budget from 10.34% in 2013-14 to 30.76% in 2017-18 (MoF, 2017; MoFALD, 2018). Of the climate budget, the highest share of 81% has been funded from domestic resources, followed by 15% from international loans and 4% from grants (ADB, 2023). This highlights that while Nepal has increased its domestic climate budgetary allocations, there is still a need to substantially enhance access to international climate financing to meet the huge costs of adaptation and mitigation. The significant increase in climate-related budget over these 5 years indicates Nepal's commitment and efforts to prioritize climate change through national budgetary planning and expenditures. However, grants and concessional climate finance which do not add to debt remain very low. Nepal thus needs to augment the mobilization of international climate funds to complement its domestic fiscal allocations for climate action.

According to the Government's plan, the NAP and NDC actions will be integrated into the fiscal budget as different projects, policies, or programs to be carried out during the coming decades. Adaptation and mitigation interventions are overlapping in the policies, and so are the costs of the interventions. If planned well, mitigation and adaptation actions can go together co-benefiting each other. This will help to reduce the cost.

3.1.4 Enabling environment for climate finance management in Nepal

Nepal has developed key policies and strategies aligned with international climate finance mechanisms including the Climate Change Policy 2019 (GoN, 2019b), Climate Change Financing Framework 2017 (MoF, 2017), National Framework on Local Adaptation Plans for Action, Action Plan for the implementation of the Nationally Determined Contribution (NDC 3.0) (MoFE, 2020) and National Adaptation Plan (NAP) (GoN, 2021). This enables Nepal to access global climate funds. To enable parliamentary oversight on climate finance, a practical guide for Members of Parliament (MPs) and parliamentary staff for scrutinising the funds identified in the annual government budget and during the various stages of budgeting including its development, approval, implementation and monitoring has been prepared with the support of UNDP (Legislative Parliament, 2017).

The Ministry of Finance (MoF) and the Ministry of Forests and Environment (MoFE) are the key government bodies responsible for coordinating climate change financing and projects. The Climate Finance Unit has been established in the MoF to strengthen the national capacity to manage climate financing and scale up the funding from GEF and GCF. MoF (International Economic Cooperation Coordination Division) is also the National Designated Authority (NDA) of the GCF. Other government institutions such as Alternative Energy Promotion Centre (AEPC) and Nepal Trust for Nature Conservation (NTNC) have been accredited to GCF as Direct access Accredited Entities (national implementing entities) with the mandate to promote alternative energy for climate change mitigation and to promote the climate resilient conservation approaches respectively Accredited Entities carry out a range of activities that usually include the development of funding

proposals and the management and monitoring of projects and programmes. Banks and financial institutions are also in the process of accreditation. This enables funds to flow directly to national institutions rather than via multilateral banks. However, the capacity to scale up Direct Access remains limited.

Nepal needs a comprehensive climate finance law and strengthening existing policies to address structural gaps for transparent, accountable, decentralized and resilient public climate financing. Context-specific policies across sectors, instruments, beneficiaries, and governance mechanisms are needed in Nepal to manage increasing and complex climate financing efficiently, accountably and impactfully. In formulating policies for mobilizing climate finance, Nepal needs to strike a balance between various aspects like - mobilization effectiveness, economic efficiency, environmental integrity and equity (Bhandary et al., 2021).

3.2 Effectiveness of climate funds

Nepal has been able to access over USD 4.416- 5.71 billion from major global climate funds like the Green Climate Fund, Global Environment Facility, Climate Investment Funds and Adaptation Fund as well as multilateral development banks and bilateral sources for climate mitigation and adaptation projects (OPM, 2025). However, the utilization rate of approved climate finance has remained around just 50-60% reflecting underlying challenges in fund absorption and implementation capacities within the country (ADB, 2023; OPM, 2022). The majority of the climate change projects implemented in Nepal are adaptation-focused. Out of the 74 projects analyzed in this study, 35.1% were adaptation-focused, while 31.1% were mitigation-focused and the rest (33.8%) had mixed (both) types of interventions (Figure 6a). However, the actual finance received for the adaptation and mitigation sector is difficult to disaggregate. This is mainly because most project reports lack mitigation and adaptation budget breakdowns affecting accurate calculations (Rai et al., 2020).

Nepal has prioritized climate adaptation investments given its high vulnerability, with historical estimates indicating that around 80% of its climate expenses in 2011 went to adaptation activities. Of this, 90% was allocated as capital expenditures for the creation of assets (NPC/UNDP/UNEP/CDDE, 2011; NPC, 2012). During 2009-2014, nearly 46% of the total climate finance received, approximately USD 538 million, supported climate adaptation (Dixit et al., 2016). This highlights that the government has been the major implementing body of adaptation projects funded by international climate finance historically, with a significant focus on capital investments in infrastructure, technologies, ecosystems etc. However, Nepal's rapidly increasing climate risks imply that the current levels of adaptation financing remain inadequate.

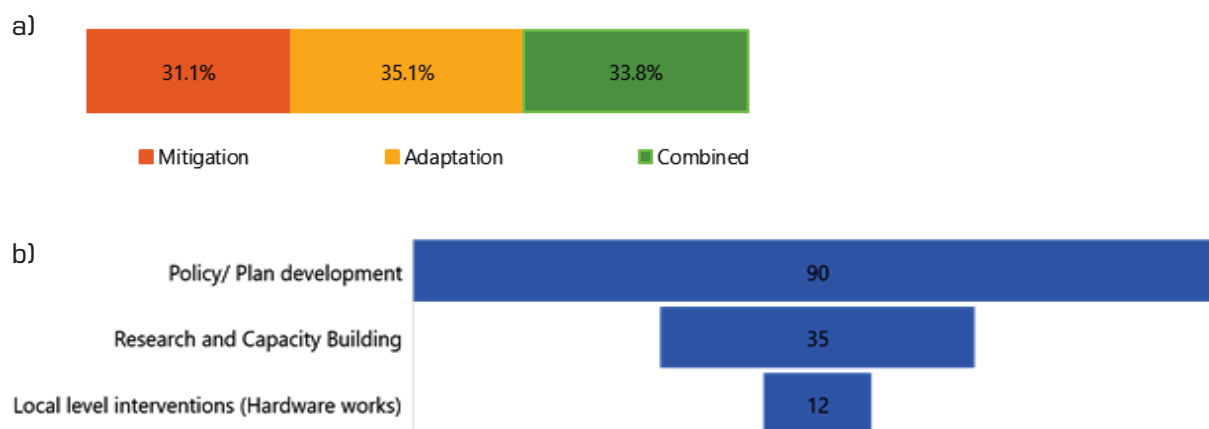


Figure 6. Distribution of climate change projects in Nepal 2007-2023 (n=74) (a), Progress of climate change actions in Nepal (Values are the average score out of 100 provided by the experts during consultations) (b)

Globally, between 2021 and 2022, 91% of public climate finance was invested in mitigation activities aimed at reducing greenhouse gas emissions. In comparison, the adaptation sector received only about 5% share of the total public climate finance in 2021/2022. The rest about 4% were invested in dual benefits (Buchne et al., 2023). Nepal also needs to increase its focus on climate change mitigation efforts in addition to adaptation. Areas of action should include maximizing benefits from international mechanisms such as the Clean Development Mechanism (CDM) and results-based payments for Reducing Emissions from Deforestation and Forest Degradation (REDD+) (Mahat et al., 2019). Scaling up mitigation activities related to reducing greenhouse gas emissions across sectors, along with effectively tapping into global carbon finance instruments like CDM and REDD+, can help Nepal contribute to global climate action. This can also provide additional resources to supplement domestic climate financing.

During the consultations, the progress of climate action in Nepal was also assessed. The actions considered for the assessment were i) policy/plan development, ii) research and capacity building, and local-level hardware interventions. The result shows that the major progress has been made in the policy and plan formulation (90%) followed by research and capacity building (35%), and the least progress on the local level interventions (12%) as shown in Figure 6b.

Nepal has developed several climate change-related plans at a local level including the Local Adaptation Plan of Action, the Local Disaster Risk Management Plan, Local Disaster and Climate Resilient Plan. The Economic Survey report shows that 241 Local Adaptation and Climate Resilient Development Plans are being implemented in Nepal (MoF, 2024). According to Mahat et al., (2019), of the 71 initiatives between 1997 and 2014, about 42% of the initiatives were related to capacity building and awareness raising. Training and workshops have been organized as part of the capacity-building initiatives. Policy formation has increased while capacity-building initiatives have decreased. This indicates that the climate initiatives in recent decades were more focused on policy formulation and institutional development, possibly due to the restructuring of the state (IIED, 2014). Around 15% of the total climate finance has focused on important policy and institutional development objectives which has enabled frameworks like the Climate Change Policy, Climate-Sensitive Budget Codes, and Municipal Adaptation Plans of Action. However, more

efforts are needed to build technical capacities at the provincial and local government levels to plan and manage climate funds.

The areas receiving the most climate finance allocation are clean energy projects focused on hydropower and solar power installation, climate-resilient agriculture initiatives, flood control and irrigation infrastructures, and community forest management. However, support for effectively managing loss and damage from unavoidable climate impacts has been inadequate. At the community level, ecosystem-based adaptation initiatives have provided some relief to vulnerable rural households through activities like restoring wetlands, forests, and water sources as well as building small infrastructures like flood shelters.

3.2.1 Mitigation Effectiveness

In climate mitigation, clean energy projects have increased energy access and installed renewable capacity, especially solar and hydropower. However, the pace and scale of renewable energy growth remain below potential. Low-carbon mobility initiatives like electric vehicles and mass transit are still nascent in cities like Kathmandu. Overall, emissions reductions from mitigation projects have likely been modest relative to the rapid growth in Nepal's emissions across sectors like transportation.

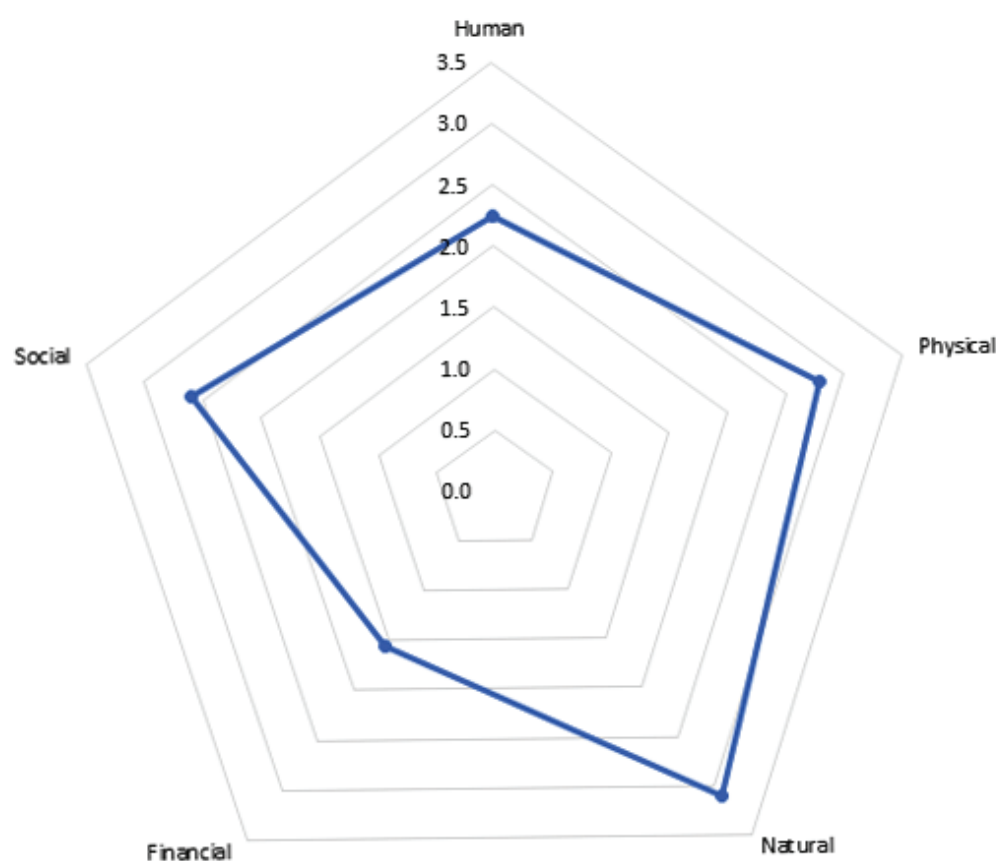
The GHG emissions over the last two decades (2000 and 2010) have increased sharply. The emission gap in 2010 was 0.028 Gigaton CO₂ equivalent in Nepal (MoFE/ GoN, 2021). This could be even higher in recent years. However, the good news is several climate change mitigation projects are being undertaken in Nepal that have high potential for climate change mitigation. For instance, the three GCF projects that are being undertaken from 2020-2027 will alone avoid 0.017 Gton CO₂ Ekv emissions. With the increasing scenario of forest cover area, Hydropower capacity, and Alternative Energy use such as ICS and Biogas, more emissions will likely be reduced. Yet, recent accounting of the mitigation potential of this sector is lacking.

3.2.2 Adaptation effectiveness

In climate adaptation, projects focused on ecosystem restoration, climate-smart agriculture, flood control infrastructure, irrigation management and drinking water supply have provided tangible benefits to vulnerable communities through increased water availability, reduced disaster risks and higher farm productivity. For example, the Adaptation Fund-supported flood warning systems installed in river basins have helped save lives and reduce losses by allowing early evacuations. However, there are gaps in sustained operations and maintenance of created assets.

The case study of the two climate change adaptation projects was conducted in this study. The interventions were categorized into Human, Natural Resources, Physical, Social and financial and a Likert scale of 5 was used to rank the interventions based on their effectiveness for climate response and livelihood support. The adaptation interventions received an average score of 2.45 (out of 5) meaning that the interventions are helping enhance adaptive capacity. Therefore, it can be concluded that ongoing adaptation interventions are effective for climate change response and livelihood support. The findings also indicate that the interventions made in the natural resources sector have a high potential for enhancing adaptive capacity (Figure 7). The adaptive capacity enhancement by intervention in different sectors follows the order Natural > Physical > Social > Human > Financial. Some examples of these interventions included in this study are

- **Human:** Training/ capacity building, awareness
- **Social:** Formation of institutions (formal, and informal to tackle and manage climate change issues)
- **Physical:** Infrastructure development and construction (irrigation canal, river training works)
- **Natural resources:** afforestation, construction of recharge/ stream pond
- **Financial:** Revolving funds, Grants support



*Figure 7. The average score for different types of L'A interventions for the Livelihood support.
Ranks are based on the result of the end-line project survey*

At the local level, nine programs have been repeatedly included in the climate change program by the local government of Nepal over the last three years (Figure 8). The conditional grants for energy and climate change from the federal government are timely completed. Other incomplete programs in a fiscal year are continued next year. In some cases, capital expenditure such as purchasing an ambulance was found to be linked with climate change programs. There is confusion on the separation between climate change impacts and human-induced impacts due to which effective climate change adaptation and mitigation planning has become difficult. More research and capacity building are required to improve this situation. Timely completion of the allocated programs and budget is vital to enhance the effectiveness of climate change programs.

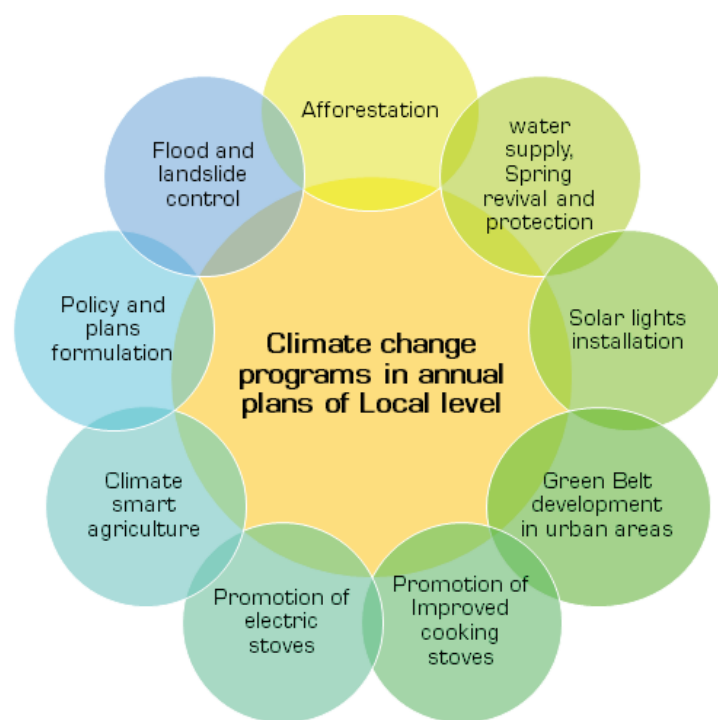


Figure 8. Climate change programs in the annual programs and plan of local governments synthesized from the discussion with eight local governments of Kathmandu Valley

Nepal has struggled to fully utilize the funds allocated to it under the System for Transparent Allocation of Resources (STAR) by the Global Environment Facility (GEF). As per available data, when Nepal was allocated US\$24.29 million by STAR under three areas: climate change, biodiversity and land degradation - it was only able to utilize 79% of the available resources, which amounts to US\$19.28 million. This indicates that Nepal was unable to spend 21% of the allocated STAR funds by GEF, highlighting challenges in absorptive capacity and execution of projects financed by international climate funds (Mahat et al., 2019).

The inability to fully utilize allocated resources prevents Nepal from maximizing the benefits of international climate support it receives. Enhancing absorptive capacities by addressing underlying barriers around institutional capabilities, human resources, policies and procedures could help Nepal improve its utilization rates and bridge the financing gap. A major barrier affecting project effectiveness is the lack of technical and institutional capacities at provincial and local government levels to sustainably implement climate actions on the ground. Community-level projects often face challenges of ownership and participation beyond the pilot stages. Monitoring, evaluation and learning systems are not adequate to provide feedback for course correction.

3.3 State of Climate Finance Transparency in Nepal

Transparency is important for building trust and accountability among nations regarding climate action and support. Regular, transparent reporting on emissions, policies, climate impacts, and finance flows enables effective tracking of collective progress and gaps. When climate actions are measured and results are public, it encourages countries to enhance their commitments to avoid lagging. Transparency allows civil society to hold governments accountable and understand where climate vulnerabilities lie. Transparency stimulates more ambitious climate action and empowers

broader constructive engagement in the global climate conversation. It is an essential foundation for making continued progress on climate change.

Transparency under the Paris Agreement refers to the reporting of information by a Party in its BTR (including information on the national GHG inventory, the accounting approach(es) selected and the indicators used for tracking progress and support provided and received) and the assessment of that information through a technical expert review and FMCP.

Based on the Enhanced Transparency Framework (ETF) based CFTC, the score was provided for each criterion (Table 5). A score value of 8 was received for the overall criteria. This indicates that the climate finance mechanism in Nepal is moderately Transparent.

Table 5. Score received by climate finance transparency criteria (CFTC)

SN	Climate Finance Transparency Criteria (CFTC)	Score	Remarks/ Reference
1	GHG inventory- sources and sinks of emission	1	Third National Communication Report, 2021
2	Information on Climate change impact and vulnerability	1	Synthesis of stocktaking report for National Adaptation Plan (NAP) formulation process in Nepal; Vulnerability and Risk Assessment and Identifying Adaptation Options
3	Emission projection and trajectories	0	
4	Information on adaption needs and priorities	1	NAP
5	Information on Indicators to track the progress of NAP	0	
6	MEAL on Climate change adaptation and mitigation policies	0	
7	Mitigation policies and measures	1	NDC, LTSNZE
8	Indicators to track the progress of mitigation	1	NDC Implementation Plan 2023
9	Financial support needed	1	NAP and NDC
10	Financial support received from multilateral, bilateral, regional and other channels and mobilized	0.5	Tracked using aid management information system but not for climate change https://amis.mof.gov.np/
11	Financial support received from UNFCCC channels	0	
12	Financial support mobilized from domestic sources	1	Climate change budget coding
13	Technology development and transfer support needed and received	0	
14	Technology development and transfer support received	0	
15	Information on capacity building support needed	0	
16	Information on capacity building support received	0	
17	No complaints regarding climate finance-related programs at CIAA or court	-0.5	complaints record received at CIAA
18	No Cases of corruption in climate programs	1	
Total Score		8	

Nepal has made some progress in improving transparency of its climate finance flows and utilization but significant gaps persist. As a climate-vulnerable LDC, Nepal has received funds from global climate funds like the Green Climate Fund, Global Environment Facility, Climate Investment Funds and Adaptation. It has also received bilateral climate finance from agencies like USAID, JICA, and DFID. However, a centralized public portal for providing real-time data on approved climate projects, committed funds, disbursements and expenditures is still lacking.

The Climate Change Financing Framework and Budget Code are in place to track and tag the allocation, progress and transparency of climate programs and projects. The climate change financing framework facilitates the integration of national policies and strategies relating to climate change finance in the budgeting process and helps the government channel all climate projects and streamline investments through the national system for a long-term scaled-up approach (MoF, 2017). Climate change budget codes have been introduced since 2013 to tag and track climatic expenditures across programs. But application is still limited to a few ministries and the tagging has been subjective.

Transparency has been the guiding principle of NAP and NDC. NAP aims to promote transparency, better decision making and enhanced implementation of NAP through multi-stakeholder engagement, coordination and cooperation (GoN, 2021). NAP has committed to transparently tracking adaptation finance received from various sources. A web-based tool will be developed and maintained to record the support obtained. The Ministry of Forests and Environment will establish a Climate Change Data Management, Monitoring and Reporting Center.

Nepal's Nationally Determined Contribution (NDC) aims to promote data-driven tracking of targets along with strengthening the data generation and validation systems. Best practices will be identified while also incorporating lessons learned from past monitoring, reporting and verification (MRV) approaches (MoFE, 2020).

Assessments show that Nepal's current Public Financial Management (PFM) system is inadequate to properly prioritize, manage and distribute climate finances at the local level. This makes tracking and reporting of climate change expenditures problematic at local bodies (MoFE, 2021a). Hence, information on the amount of climate funding allocated and utilized at local levels remains scarce. Many stakeholders at provincial and municipal levels are still unaware of climate change policies and funding provisions. The limitations in decentralized PFM and lack of awareness constrain efficient utilization and accountability of local climate budgets.

While Nepal has committed to contribute its resources and mainstream climate in fiscal budgeting, clear reporting on annual climate finance provided by domestic public funds remains inadequate. Gender-disaggregated data on climate funds allocation and beneficiaries also suffers gaps despite stated goals on gender-responsive approaches. Independent validation and audits of adaptation and mitigation expenditures do not regularly take place although civil society engagement has increased.

A study found that vulnerable farmer groups like women, ethnic minorities and poor farmers in Nepal were less likely to access climate finance subsidies compared to wealthier and non-minority farmers (Kafle et al., 2022) small-scale solar irrigation pumps (SIPs). Despite government agencies giving preference to women and minority farmers in selecting beneficiaries, an unrepresentative

applicant pool resulted in an inequitable distribution of subsidized climate finance. Social and institutional barriers prevented vulnerable farmer groups from even applying to the climate finance program, skewing the beneficiaries towards more privileged groups. This highlights that even when policies aim for equitable access to climate funds, marginalized communities can face constraints in availing of schemes due to lack of awareness, resource limitations, social discrimination and bureaucratic hurdles. Targeted outreach, simplified procedures, local language assistance and capacity support are essential to ensure climate finance reaches and benefits the most vulnerable communities as intended in Nepal.

At the project level, major multilateral climate funds like GCF and GEF have detailed templates for monitoring, reporting and evaluation which Nepal follows. However, synthesized national reports and ex-post impact evaluations for learning are limited. Sub-national and community-based climate initiatives particularly lack monitoring mechanisms. Public disclosure practices are weak with minimal information on project costs, completion status, and beneficiaries shared on government websites, although some project implementers voluntarily provide details.

In terms of governance, Nepal has formed high-level bodies like the Climate Change Council and Climate Change Management Committee for oversight and coordination across agencies. However, federalization has posed challenges for integrated transparency systems between national and sub-national levels which have varying capacities. Parliamentary oversight on the use of climate funds and results also remains minimal.

Nepal faces challenges in accurately and independently analyzing the adaptation finance and broader climate finance it receives due to a lack of transparency from donor countries and organizations. Many major donors are unwilling to make full project documents publicly available, which hinders efforts by Nepali stakeholders to evaluate if the climate finance aligned with national, regional and local needs and priorities (Rai et al., 2020). Specifically, there is very limited access to detailed project plans, budgets, and reporting for much of the climate finance Nepal receives. Researchers attempting to analyse and track adaptation spending flows face great difficulty in accessing complete project documentation. The scope and scale of this analysis are constrained by the sheer lack of transparency around climate projects, their financing, activities, and outcomes.

This pervasive issue prevents comprehensive assessment of whether pledged international climate finance reaches Nepal in sufficient volumes, whether project activities match with adaptation priorities identified by Nepali communities and experts, and whether this spending achieves meaningful impacts or suffers from inefficiency and mismanagement. With donors resistant to transparency, the Nepali government, civil society, academia and other domestic stakeholders cannot fully play their necessary oversight and accountability role around external climate financing. Achieving greater transparency from both international and domestic climate actors is crucial for ensuring adaptation finance effectiveness in Nepal.

Nepal has recognized gaps in climate finance transparency and made a start towards tracing flows through budget codes, expenditure reviews and some disclosure practices, considerable scope remains for improving data availability, reporting comprehensiveness, independent verification, monitoring effectiveness, participation and oversight across governance levels to build a clear, holistic climate finance transparency system.

4. Conclusion and Recommendations

The analysis of climate finance management in Nepal reveals significant disparities between top-down and bottom-up observations, highlighting the complexity of climate finance accounting due to the absence of a centralized climate support tracking system. While Nepal has demonstrated commitment to prioritizing climate change through national budgetary planning and expenditures, climate change budget and program tracking remains inadequately developed at the sub-national level. The country's national financial commitments outlined in the Nationally Determined Contributions (NDC) and National Adaptation Plan (NAP) appear achievable given current budget allocations for climate change initiatives; however, securing the targeted international funding remains uncertain. Current adaptation interventions have proven effective for climate change response and livelihood support, and mitigation actions are contributing to greenhouse gas emissions reduction, though emission accounting systems require strengthening. Transparency emerges as a crucial factor for building trust and accountability in climate action and support, with Nepal's climate finance mechanism demonstrating moderate transparency levels that are expected to improve through the implementation of the Capacity Building Initiative for Transparency (CBIT) project and the operationalization of NDC and NAP frameworks. Nevertheless, Nepal's capacity to efficiently utilize allocated climate funds remains constrained by complex procedural requirements, insufficient viable project proposals, procurement and expenditure delays, and inadequate accountability mechanisms. This study has made the following recommendations for strengthening climate finance transparency in Nepal.

- Detailed studies should be conducted to reconcile top-down and bottom-up climate finance accounting discrepancies
- The capacity of key institutions (MoF, NPC, MoFE) should be built and NAP progress indicators and GHG emission accounting systems should be developed role of the social welfare council should be strengthened to track the support and actions related to climate change invested from CSOs off-budget off treasury).
- Timely access to international climate funds should be ensured through targeted capacity building and prioritizing NAP/NDC sectors for proposal development
- 80% of international resources should be directed to local levels, procedures should be simplified, and mitigation-adaptation actions should be integrated for co-benefits
- Climate actions should be aligned with SDGs, disaster risk reduction for inclusive development
- Clear assessment mechanisms should be developed and advocacy for separate loss and damage financing in UNFCCC negotiations should be strengthened
- Policies and risk mitigation instruments should be created to catalyse investments in renewable energy and green infrastructure
- Agency capabilities in climate resilience planning should be enhanced and technology transfer needs should be identified
- Stakeholder capacity should be built, grassroots awareness should be increased, and monitoring of donor-funded projects should be strengthened

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PART 2

Conflict of Interest and Undue Influence Related to Climate Change on Natural Resources in Nepal

Executive Summary

Nepal is confronted by the overlapping challenges of climate change, economic vulnerability, and ineffective governance. The country has experienced faster-than-global warming—much faster than global trends—with up to 1.8°C increase in temperature in the long term projected. The shift, coupled with erratic rainfalls and extreme weather conditions, threatens the agriculture, water, and ecosystem sectors. Nepal remains economically dependent on remittances, has an enormous trade deficit, and wastes its forest cover even though it holds 45.31% of the country. Deficiencies of forests at 106 local levels further exacerbate spatial disparities. Hydropower potential rose to over 2,800 MW in the energy sector, but its expansion raises environmental and equity concerns. Over-reliance on imported fuel in transport highlights the necessity for sustainable alternatives.

Climate finance has been substantial, with \$1.92 billion being invested in 609 projects over 2013-2017. However, per a study, 59% of adaptation finance delivered did not hold up to reality, leading to concerns over transparency. Nepal's policy to allocate 80% of international climate funds to local governments remains plaguedly applied. Governance is still a long-standing issue, with 51.42% of complaints in FY 2079/80 against institutions at the local level.

Despite such strategic commitments like the Long-Term Strategy for Net-Zero Emissions and the NDC Implementation Plan, Nepal cannot operationalize climate targets. The LDC Graduation Smooth Transition Strategy lacks strong provisions on governance and anti-corruption reform. Increasing public debt—42.65% of GDP—exacerbates the issues, constraining fiscal space for climate action. Moreover, excessive dependence on international institutions in project implementation degrades local capacity building.

To address these cross-cutting challenges, Nepal must mainstream climate-resilient development, increase climate finance transparency, rethink natural resource royalty policy, and develop domestic capacity. People-focused, governance-oriented strategy will be critical to achieving sustainable and equitable adaptation gains under the climate regime.

1. Introduction

The report explores the complex link between climate change, natural resource management, and governance in Nepal. The country is experiencing rapid climate change, particularly at high elevations, resulting in glacial melting, altered precipitation, and increased natural disasters. These transformations have a direct impact on the availability and stability of crucial natural resources such as freshwater, forests, and land. At the same time, natural resource management is always marred with corruption and undue influence, particularly in water, forests, and energy. These managerial failures compromise the effectiveness of adaptation and mitigation strategies and can make an additional contribution to exacerbating the socio-economic impacts of climate change.

Mismanagement and corruption in natural resource governance, driven by conflicting interests among officials, businesses, and communities, worsen environmental degradation. Regulatory weaknesses enable unsustainable exploitation, harming biodiversity, water quality, and climate resilience. These challenges threaten local livelihoods and undermine climate initiatives. This report is intended to identify the root causes, trends, and implications of these governance challenges and recommend practical solutions to facilitate more transparent and more resilient natural resource management systems. By strengthening governance and aligning natural resource management with sustainability goals, Nepal can better protect its environment and enhance resilience to climate change.

2. Methodology

Detailed review of policy documents, implementation reports, and peer-reviewed literature on climate change adaptation and mitigation projects guided the research methodology. The literature review enabled gaps, inconsistencies, and potential areas of undue influence in policy and practice to be identified. Specific attention was given to planning and procedures for project implementation and planning, funding sources, institutional roles and responsibilities, and the extent and nature of stakeholder involvement. The research also examined complaints and reports by watchdog agencies such as the Commission for the Investigation of Abuse of Authority (CIAA) and identified trends in local governance arrangements. Where possible, examples at the national and sub-national levels have been incorporated to illustrate persistent issues and institutional challenges.

3. Nepal's Natural Resources

Nepal is endowed with a diverse range of natural resources that are the basis of its environmental and economic resilience. Its landscape ranges from the high Himalayas to the Terai low-lying plains, generating distinctive ecological niches that host a range of types of biodiversity and bases of resources. Nepal's water resources (Figure 1) are particularly precious with an estimated 83,000 MW hydropower potential but only a negligible portion developed. Approximately 45.31% of the country's territory is forested (Figure 2), and forests are important for maintaining the ecological balance and livelihood of rural people. Nepal's mineral resources, though underdeveloped, include limestone, quartz, and iron ore. But these natural resources are getting depleted progressively due to climate change, which is altering the trend of the availability of water, accelerating the melting of glaciers, impacting forest health, and triggering natural disasters. Politically and economically

driven unsustainable exploitation of resources also contributes to the complexity of resource conservation in the long run.

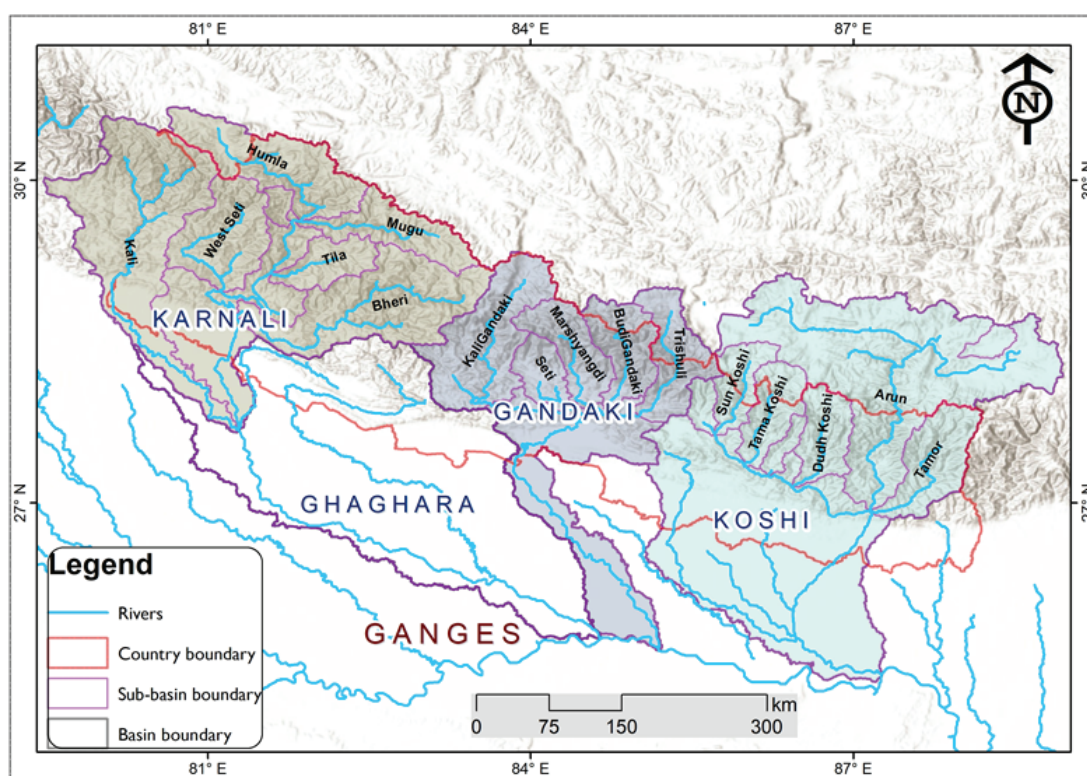


Figure 1. Nepal Himalaya region shows major river basins and sub-river basins.

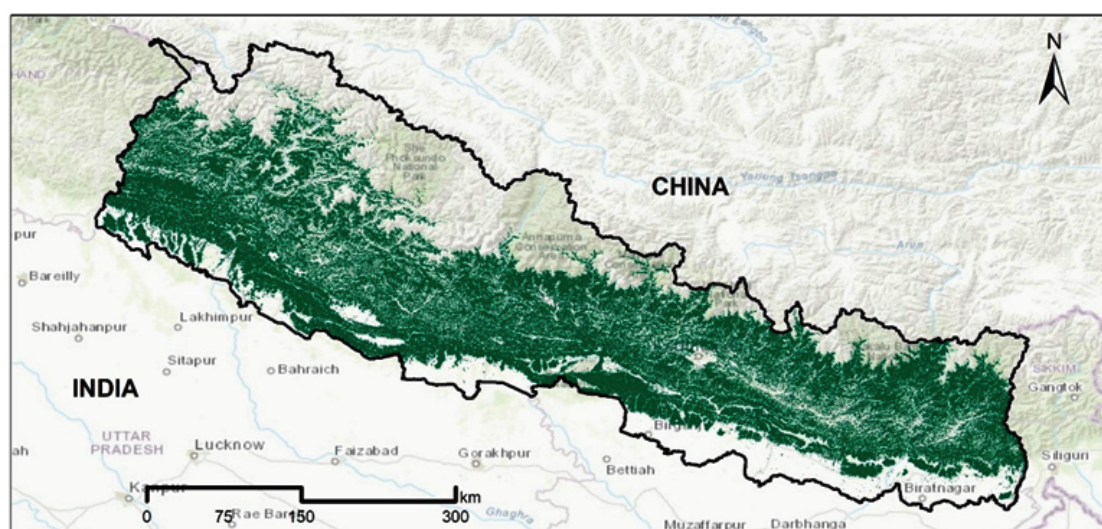


Figure 2. Forest Cover in Nepal in 2020 (Source: ICIMOD, 2022)

4. Trends and Impacts of Climate Change

Climate change is occurring at an alarming rate in Nepal, with temperatures recorded to be higher than the global average, particularly in the hill regions (DHM, 2017). Analysis of temperature data from 1971 to 2014 reveals that the annual maximum temperature in Nepal has been increasing at a rate of $0.056^{\circ}\text{C}/\text{year}$, while the minimum temperature has shown a smaller increase of $0.002^{\circ}\text{C}/\text{year}$ (DHM, 2017). Unlike temperature trends, precipitation patterns in Nepal are less

predictable and show high spatial variability, adding to the uncertainty. However, some notable trends have emerged. Western Nepal has experienced increased frequency and intensity of extreme precipitation events (Bohlinger & Sorteberg, 2018). There are also indications that wet areas are becoming wetter while dry areas are drier (Dahal et al., 2016). The Himalayan region has experienced increasing average annual precipitation at a rate of 6.5 mm/yr between 1982–2006 (Shrestha et al., 2012).

Future projections of climate indicate continued warming, along with more unpredictable and frequent patterns of rainfall (MoFE, 2019), that will have long-term effects on water supply, agriculture, and disaster risk. Mean annual temperature is expected to increase by 0.9–1.1°C in the medium-term (2016–2045) and 1.3–1.8°C in the long-term (2036–2065) compared to the 1986–2005 baseline (MoFE, 2019). Under the highest emissions pathway (RCP8.5), warming in Nepal could reach a staggering 5.0°C by the 2090s (MoFE, 2019). Maximum and minimum temperatures are projected to rise more than mean temperatures, with minimum temperatures in Nepal projected to rise by 5.0°C by the end of the 21st century under RCP8.5 (MoFE, 2019).

Projections for future precipitation in Nepal are less certain than temperature projections, but some general trends emerge. Average annual precipitation will likely increase by 2–6% in the medium term and 8–12% in the long term (MoFE, 2019). Seasonal changes in precipitation are projected, with increases likely in the monsoon, post-monsoon, and winter seasons but decreases in the pre-monsoon season (MoFE, 2019). The intensity of sub-daily extreme rainfall events is expected to increase with temperature, a finding supported by evidence from multiple regions of Asia (Westra et al., 2014). By the end of the century, precipitation could increase by 11–23% under RCP8.5 (MoFE, 2019).

Principal sectors that face threats from such changes are subsistence agriculture, which supports most of the country's population, and water supply for drinking and irrigation. The hydropower sector, another most important sectors in Nepal's development and energy independence, also faces threats from river flow and sedimentation changes. Research estimates Nepal's GDP loss at an estimated 7% by 2050 under high-emission scenarios unless adaptive interventions are effectively implemented. Even though Nepal has policy guidelines such as the National Adaptation Programme of Action (NAPA), Nationally Determined Contributions (NDCs), and National Adaptation Plan (NAP), they are not being fully implemented due to poor coordination, lack of resources, and institutional bifurcation.

5. Conflict of Interest

Conflict of interest in Nepalese natural resource management is prevalent in key sectors such as forests, energy, and tourism. In the forestry sector, while there is significant national forest cover, political and regional bias, together with inadequate regulation, have led to resource exploitation by commercial stakeholders at the expense of some local levels. Politically connected people acquiring contracts and licenses for hydropower development in the energy sector raise concerns about fairness, environmental protection, and sharing benefits. Similarly, in tourism, particularly in the mountains, royalty income distribution and utilization are not transparent, and mismanagement and minimal local benefit have been experienced. These clashes, triggered by conflicting interests

of political elites, private actors, and poor institutional regulation, inhibit sustainable management of resources and drain Nepal's efforts towards climate resilience and fair development.

5.1 Corruption and Governance Issues

Nepal is poorly ranked on global indicators such as the Corruption Perception Index. Corruption is particularly entrenched in local government, wherein weak monitoring and political patronage chains enable misuse of public money and procurement process manipulation. Data published by the CIAA reveals over half of the complaints filed under corruption from FY 2074/75 through to 2079/80 were against institutions at the local level. Such common governance issues include the misuse of forest and mining resources, tendering syndicates, and political interference in infrastructure and development projects. Not only do these issues weaken the delivery of basic services and infrastructure but also weaken public trust in governance institutions. Inadequate transparency and accountability in project implementation weaken attempts to increase climate resilience and may also deter international climate finance and technical assistance.

5.2 Sectoral Conflicts and Mismanagement of Resources

Nepal's major sectors—forest, energy, transport, and tourism—are confronted with unique governance and management challenges regarding resources that are exacerbated by climate change:

Forests: While people's forest user groups have been a model of participatory resource management, there are severe regional disparities in forest cover. Over 100 local levels, predominantly in Madhesh, Koshi, and Lumbini Provinces have allegedly no forested land, highlighting a critical imbalance in resource allocation. Forest-rich areas may benefit from royalties and conservation efforts, while forest-poor regions struggle with environmental degradation and limited economic opportunities. Ironically, with considerable forest cover, Nepal is a net importer of timber and wood products due to poor supply chain management and market regulation. While Nepal requires approximately 119 million cubic feet of wood annually (Kanel et al., 2012), the country's forests only produced about 14.35 million cubic feet in the last fiscal year, 2019/20 (MoFE, 2020), indicating a significant gap between supply and demand.

The Forest Policy of 2075 aims to achieve self-sufficiency in forest products and promote value-added exports. However, there is an increasing trend of fallen, dead-standing, degraded, and mature trees in forest areas. Due to the inability to meet domestic demand through internal production, customs department data shows imports of timber and wood products valued at 2.33 billion rupees in 2077/78, 7.99 billion rupees in 2078/79, and 6.40 billion rupees in 2079/80.

Energy: The hydropower sector has achieved an installed capacity of 3,060 MW, but is faulted in terms of environmental assessment processes, equitable benefit sharing, and infrastructure quality. Delayed transmission line development, along with ambiguous licensing and approval processes, limit the sector's potential. This data highlights the significant growth in power generation capacity, with contributions from both public and private sectors, as well as a steady increase in the number of electricity consumers, indicating expanding access to electrical services across the country. However, the electricity access in Koshi, Sudurpaschim, and Karnali provinces remains below the national average (MOEWRI). The rapid growth of hydropower projects also

underscores the need for careful environmental impact assessments and sustainable development practices to balance energy needs with ecological preservation.

Transportation and Fuel: The country's dependence on imported fossil fuels continues to increase, with policy incentives for electric vehicles yielding short-term tax revenue loss and deficiencies in charging station infrastructure. The country imported petroleum products worth Rs. 300.28 billion in the last fiscal year, 2022/23, and Rs. 322 billion in the fiscal year 2021/22. During the first 11 months of the fiscal year (2080/81), the country imported petroleum products worth a staggering Rs 300 billion, more than double its total exports. This highlights the significant dependence on foreign fuel sources and the resulting strain on the trade balance.

In addition to petroleum products, Nepal imported a substantial number of vehicles, totalling Rs 80.58 billion. This suggests a growing demand for personal and commercial transportation, further contributing to the reliance on imported fuel

Table 1. Imports of petroleum products in Nepal (All values are in thousand kiloliters except, for LPG which is in thousands of metric tons.)

Product	2077/78	2078/79	2079/80
Petrol	558	730	673
Diesel	1678	1728	1380
Kerosene	23	18	13
ATF	70	154	175
LPG	478	536	515

Source: Ministry of Industry, Commerce and Supplies, 2080

Tourism and Royalties: Nepal's tourism sector in the mountains earns substantial revenue from trekking and expedition permits. There are, however, inconsistencies in the sharing of mountain royalty revenues, with the issue of mismanagement and the absence of accountability in the uses of funds at the local level.

Tourism in Nepal saw a strong recovery in 2023, with international tourist arrivals rising by 65% compared to 2022, reaching 1,018,662 (excluding Indian tourists arriving by land). In the first quarter of 2024, arrivals further increased by 33.8% year-on-year. The average tourist stays slightly rose to 13.2 days in 2023, with daily expenditure increasing to USD 41.0. Tourism revenue grew by 45.6%, totalling NPR 68.7 billion, up from NPR 47.26 billion in 2022. Mountaineering activities also surged, with climbing teams rising by 15% and mountaineers by 11%, resulting in a 42% increase in mountaineering royalties, reaching NPR 999.3 million.

While Nepal's tourism and mountaineering sectors have shown strong growth—with increased arrivals, revenue, and royalties—the 61st Annual Report of the Auditor General (2081) highlights governance issues in royalty distribution. According to the Intergovernmental Fiscal Management Act 2074, mountaineering royalties should be shared among federal (50%), provincial (25%), and local (25%) governments via the Federal Divisible Fund. However, discrepancies have been reported, particularly in the role of the Nepal Mountaineering Association, which has retained 45% of royalties despite no legal provision. Additionally, Rs. 69.11 million in royalties from the

current fiscal year remain undistributed, potentially hindering local and provincial development. These issues underscore the need for a transparent and accountable system to manage the growing financial contributions from tourism and mountaineering.

5.3 Conflict of Issues in Environmental Impact Assessment

The Environmental Protection Rule (EPR)-2020 has provided a timeline for the approval period of the scoping document, Terms of Reference, Brief Environmental Studies, and Initial Environmental Examination report to be 15 days of report submission and approval of the EIA report to be 35 days of report submission. However, the 61st Annual Report of the Auditor General, 2081, reviews the Environmental Impact Assessment (EIA) process conducted by the Ministry of Forests and Environment. The audit reveals that EIA approvals take between 136 to 1,245 days. This includes 236 days for evidence collection, 1,010 days for resubmission after revision requests, and up to 267 days for secretary recommendations. The Auditor General identified several issues causing delays: incomplete documentation being recommended, late submission of revised reports, omission of public hearing feedback from affected local areas, and lack of precise data on forest area damage and tree felling. The report also notes that initiating contract management without EIA approval and delays in the approval process increase consultancy and construction time and costs.

According to the report by the Supreme Court of Nepal related to environmental-related judgements, several issues have been registered and need to be resolved by the Supreme Court. For example, most of the crusher industries in the Terai region (25 districts) had no regard for the environmental components and had been damaging forests, the biodiversity while also polluting the residential area around which they are operating. This issue was filed as writ by Adv. Narayan Devkota and the Court had to provide directive order to the responsible agencies of the government to form a policy for the prevention of such exploitation of resources and environment and work under the Public Trust Doctrine acting as a trustee and not the owner of natural resources to protect the environment and rights of its citizens. A yearly flood in the Khado River has been affecting people/families due to its unpredictability in recent times. A petition sought by the Amarnath Jha sought immediate measures of relief as well as long-term solutions from the government. Similarly, there is no effective law providing compensation for loss and damages caused by wild animals protected by the state as writ claimed by Bajudin Miya in the Koshi Tappu Reserve area and the Court had to issue directive orders to the Government to make laws and policies addressing the such problem as soon as possible.

5.4 Green Economy, Taxation and Fund Utilization Dilemmas

The concepts of 'Green Economy', 'Green Finance', and 'Green Funds' have gained prominence worldwide. Nepal has introduced a green tax starting in fiscal year 2024–25 as part of its commitment to promoting a green economy and reducing fossil fuel use. The tax includes 1 rupee per litre on petrol, hexane, and diesel; 0.5% on furnace and base oils; and 1% on lubricant and petroleum oils. Despite collecting green taxes through the Pollution Control Fund and annual vehicle-renewal charges, there is little clarity on how these funds are being utilized. In just two and a half months, Nepal Oil Corporation reported collecting 270 million NRS, mainly from diesel and petrol. However, the government has yet to establish a clear spending modality for the green

tax, raising concerns about whether the revenue will truly support environmental goals or be absorbed into general expenditure. The Ministry of Finance estimates annual collections from petroleum and coal taxes could reach 4–5 billion NRS, but the impact will depend on transparent and targeted fund allocation.

Nepal's Second Nationally Determined Contribution (NDC) sets ambitious goals for reducing fossil fuel dependency and emissions in the transport sector through electric vehicle (EV) adoption. By 2025, EVs are expected to comprise 25% of private and 20% of public passenger vehicle sales, with targets rising to 90% and 60% respectively by 2030—aiming for a 28% reduction in both fossil fuel use and emissions. While Nepal's liberal EV import tax policy has spurred adoption, with EVs now representing 65–70% of sales, it has also led to over Rs. 1 trillion in estimated revenue losses. These developments illustrate the unintended consequences of well-meaning environmental policies, especially in a country contributing only 0.04% to global emissions, primarily from biomass. Allegations of tax evasion by importers understating motor capacities have triggered investigations by customs authorities. This underscores the urgent need for stronger regulation, transparency, and a balanced tax policy to ensure both environmental and fiscal sustainability.

6. Climate Finance

Between 2013 and 2017, Nepal received around USD 1.92 billion for climate-related projects. This includes bilateral and multilateral financing for adaptation, mitigation, and resilience-building activities. Monitoring and reporting of climate finance have, however, been brought into question. A 2018 review indicated that nearly 59% of adaptation finance reported by the government either overestimated or did not track towards adaptation goals. While a national policy requires that 80% of the climate funds be channelled to the local levels, its enforcement remains skewed and is largely political. The growing reliance on international development agencies for funding to address climate change has also generated ownership and sustainability of funded initiative problems. Besides, Nepal's national debt, which is over 42% of GDP, constrains fiscal space for high-frequency public expenditure on climate adaptation and resilience.

Nepal has shown increasing financial commitment to climate change, with the proportion of the national budget allocated to climate-related programs rising from 5.21% in FY 2076/77 to 5.96% in FY 2080/81 (Table 2). Indirect benefits—funding broader sustainability initiatives—also grew significantly, reaching nearly 30%. This reflects a more integrated approach to climate challenges. The government has adopted key strategies like the Long-Term Strategy for Net-Zero Emissions and the NDC Implementation Plan, estimating a public sector financing need of USD 33 billion, of which only USD 3.4 billion is expected from domestic resources. Most mitigation and adaptation targets rely on international support. From 2013–2017, Nepal received USD 1.92 billion in climate finance, primarily from major multilateral donors. However, concerns have emerged about transparency—59% of reported adaptation finance was found to be overestimated, mainly in projects with limited relevance to actual climate adaptation (Rai et al., 2020). Despite a national policy mandating that 80% of climate funds reach local levels (MoFE, 2021), implementation remains inconsistent, with project-level allocations varying widely. At the same time, Nepal's mounting public debt, now 42.65% of GDP (approx. NPR 2,433 billion or USD 18.3 billion), poses significant challenges. Increasing debt service obligations are crowding

out climate investment, especially in critical areas like climate-smart agriculture and disaster resilience. This situation illustrates the “double burden” faced by vulnerable developing countries: balancing debt repayment with the urgent need for climate adaptation. High debt levels can also impair access to affordable climate finance, creating a cycle where fiscal instability and climate risk reinforce each other. Without improved transparency in fund use, stronger local implementation, and strategic debt management, Nepal’s ability to achieve its climate goals and ensure long-term sustainability remains at risk. A coherent approach that integrates climate policy, fiscal planning, and international cooperation is urgently needed.

Table 2. Proportion of Climate Change Budget in Annual Budget

Description	2076/77	2077/78	2078/79	2079/80	2080/81 *
Direct Benefit	5.21	5.31	5.71	5.90	5.96
Indirect Benefit	25.05	27.11	27.66	28.08	29.90

*Source: Ministry of Forest and Environment, 2080 (2023) (*Till Falgun, 2080)*

7. Policy Challenges and Recommendations

Nepal's existing policy frameworks are not well-equipped to address the nexus of climate change, natural resource management, and corruption. Some of the most urgent gaps include the lack of equitable royalty distribution mechanisms, improper integration of climate vulnerability into fiscal policy, and weak governance reform priorities in the LDC graduation strategy. To enhance climate resilience and resource management, the following policy reforms are recommended:

- Reform natural resource royalty-sharing systems to incorporate local climate vulnerability indices and disaster risk factors, ensuring equitable and climate-resilient resource distribution.
- Establish transparent, technology-based climate finance tracking and reporting systems to enhance accountability and public access to data.
- Strengthen the institutional capacity of environmental oversight agencies and anti-corruption bodies to ensure integrity in climate-related investments.
- Invest in local-level capacity development for effective planning, budgeting, and implementation of climate-resilient projects.
- Create cross-sectoral coordination platforms to align climate action with development and governance priorities.
- Promote inter-ministerial policy coherence to ensure unified efforts in climate adaptation and resilience building.
- Support indigenous knowledge systems and academic research to inform evidence-based climate policies and practices.
- Advance sustainable economic strategies that integrate climate resilience into national and local development planning.

8. Conclusion

Nepal's vision for a climate-resilient and sustainable future is significantly undermined by persistent governance problems, political interference, and conflicts of interest that undermine natural resource management. Despite progressive climate policy and increasing financial investments, implementation gaps, weak institutional oversight, and irregular fund allocation—particularly in sectors like forestry, energy, and tourism—continue to undermine transparency and equity. The lack of transparency in climate finance reporting and royalty allocation arrangements also increases the public's scepticism and reduces the effectiveness of adaptation programs.

With intensifying climate risks, Nepal needs to place institutional reform at the forefront and increase the planning, implementation, and monitoring capacity of the local governments for climate-resilient initiatives. Transparent, accountable governance, backed by robust anti-corruption measures and cross-sector coordination, needs to be the foundation of resource management. Redesign of royalty distribution mechanisms according to climate vulnerability, investment in research and indigenous knowledge, and inter-ministerial policy consistency are critical to building resilience.

By aligning its governance structures with environmental and social agendas, and by fostering inclusive, evidence-based decision-making, Nepal can break the cycle of undue influence and put itself on a more inclusive and climate-smart development path. A transparent, locally owned, and accountable system will not only lock in climate adaptation but also enhance Nepal's ability to mobilize and effectively utilize climate finance—toward the ultimate goal of the country's sustainable development aspirations.

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PART 3

Conflict of Interest/Undue Influence in the Energy Sector

Executive Summary

Nepal's energy sector is at a pivotal juncture as the country strives to transition toward a carbon-neutral future by 2045. Despite promising initiatives—such as the expansion of hydropower, promotion of electric vehicles (EVs), and plans for electric cooking—progress is hindered by structural governance issues, particularly conflict of interests (Cols) and undue influence across institutions.

While Nepal's share in global emissions is negligible, it remains disproportionately vulnerable to climate-induced disasters. The government has committed to net-zero targets, electric mobility, and renewable energy, supported by policy frameworks like the Second Nationally Determined Contribution (NDC), Energy Efficiency Strategy, and EV incentives. However, implementation is inconsistent and often contradictory. For example, government initiatives promoting EVs coexist with investments in petroleum products and development of pipeline infrastructure and erratic EV taxation policies.

The study identifies several critical governance challenges:

- Contradictory energy policies are driven by revenue motives or political alignments.
- Inconsistent EV taxation undermines the transition to clean mobility.
- Revolving door practices, where public officials have private interests in energy businesses.
- Political appointments in regulatory institutions.
- Favouritism in licensing and procurement, bypassing open competitive processes.
- Weak institutional frameworks to detect and prevent Cols.

These practices increase project costs, delay infrastructure development, and ultimately undermine public trust. They also displace communities and bypass environmental safeguards, as seen in controversial hydropower projects like Budhigandaki and Modi Khola.

To address these, the report has provided several recommendations:

- Stronger Cols legislation and mandatory disclosure systems.
- Policy coherence aligning all energy strategies with climate goals.
- Transparent procurement.
- Fair and inclusive EV taxation and subsidy structures.
- Curtailing the revolving door by introducing cooling-off periods for officials entering the private sector.

The report concludes that Nepal's clean energy ambitions will remain aspirational unless the governance architecture is reformed. Only through institutional integrity, citizen engagement, and climate-aligned policies can Nepal achieve a truly sustainable energy future.

1. Introduction

Background

Energy, though fundamentally a physical variable, plays a crucial role in almost every facet of the social world; economic growth, human well-being and environmental sustainability (AEPC, 2013). Global energy consumption, especially that from fossil fuels, has expanded dramatically as a result of economic expansion, degrading the environment through greenhouse gas (GHG) emissions (Bilgen, 2014). The consumption has increased not just due to increased industrial consumption but also due to energy consumption by the domestic or the residential sector (Kavgic, et al., 2010). The transportation sector alone is responsible for 26% of worldwide carbon emissions, and both the industrial and residential sectors are contributing to the increase (Chapman, 2007). Although fossil fuels are still widely used because they are economical and effective, cleaner alternatives such as electric vehicles (EVs) and renewable energy sources (solar, wind, and biomass) are gaining more attention (MacLean, Lave, & and Griffin, 2004).

Nepal's alternative energy transition, especially in the EVs sector, holds great promise for reducing emissions, improving air quality, and enhancing energy security. The EVs market in Nepal is expanding, albeit slowly. More than 20,000 electric vehicles, including cars, public vehicles, two-wheelers, and three-wheelers, were registered as of 2023. Furthermore, inadequate infrastructure impedes growth even more. Examples include a lack of charging stations in remote locations and inconsistent policy implementation between provinces. Without a well-thought-out, long-term plan and consistent financial and infrastructure assistance, Nepal risks in meeting its EVs and climate commitments.

Although the contribution to global climate change is only around 0.027% of total global emissions (MoPE, 2016), it is among the countries that are most vulnerable to climate change and its effects (IPCC, 2007) (WBG & ADB, 2021) (GoN, 2020). Such effects include severe water-induced disasters and extreme hydro-meteorological events, such as drought, floods, landslides, displacement of people, food shortages, and more. One of the highly vulnerable sectors is energy due to increasing risks of glacial lake outburst floods (GLOFs), floods, and landslides that are threatening infrastructure and communities (WBG, 2022) (MoFE, 2018). An example of a recent incident occurred in May 2025 when a glacial lake located at an altitude of 5,300 masl in Namkha Rural Municipality (Humla district) sank resulting in an avalanche. According to the chair of the municipality, this has caused a loss of about 50 million Nepalese rupees that included damage to 50 wooden bridges, 50-55 hectare land, 4 irrigation canals, a water supply system, 15kw small hydro (Gautam, 2025). Likewise, many hydropower projects have already been harmed by environmental events.

Climate change-induced disasters are expected to increase in the Asian region due to projected changes in the hydrological cycle and its effects are maximum in communities with low adaptive capacity (WBG & ADB, 2021). The country therefore aims for net-zero carbon emissions by 2045 through policies promoting electric vehicles, renewable energy, and total electrification, aligned with the Paris Agreement. However, Conflicts of interest (COIs) and undue influences from politics, business, and civil society, frequently impede climate policies and reforms. Addressing

these challenges through sustainable financing, strong governance, and COIs management is critical for Nepal's transition to a greener energy system.

Literature across jurisdictions indicates that COIs in the energy sector often stem from the entanglement of regulatory authorities with commercial interests, leading to regulatory capture (Dal Bo, 2006). In the fossil fuel industry in the United States, numerous studies have documented how close ties between policymakers and energy companies lead to policy decisions that favour incumbents over sustainable alternatives (Gilens & Page, 2014). Moreover, politicians, senior bureaucrats, and private firms often engage in overlapping roles, influencing project approvals, contract awards, and environmental clearances to benefit personal or political networks. Weak governance frameworks and overlapping mandates create gaps in accountability.

As an illustration, the case pipeline expansion agreement between India and Nepal was made for cross-border pipeline construction namely, Amlekhgunj (Bara)-Lothara (Chitwan) and Siliguri (India)-Charali (Jhapa) pipelines and one terminal in grant assistant. Additionally, they also have set the foundation for the Motihari-Amlekhgunj Oil Pipeline Phase 2 project. This discrepancy suggests potential conflicts of interest influenced by government revenue from fossil fuel import duties. Likewise, diverse institutions (e.g., ministries, investment boards, state-owned utilities) often compete rather than coordinate, making it easy for developers and political actors to influence decision-making processes behind closed doors. Likewise, political patronage and interferences undermine energy infrastructure projects in developing countries, leading to inefficiencies, cost overruns, and compromised development outcomes in Nepal. There are various examples, some of such cases are: the Upper Karnali and Arun III Hydropower Projects, Budhigandaki Hydropower Project, Jagdulla project.

Emerging sectors such as EVs are not immune to these dynamics. At the global level, EVs are promoted as a cleaner alternative, scholars warn that the sector's rapid growth has opened new avenues for undue influence, particularly in the allocation of subsidies, mineral extraction for batteries, and procurement contracts (Breetz, Mildenberger, & Stokes, 2018). Awarding of contracts in energy projects including EVs in Nepal is often tainted by favouritism, lack of competitive bidding, or pressure to allocate contracts to politically connected firms. In China, for example, Wang et al. (2020) analyze how state-firm linkages in the EVs sector have resulted in preferential treatment for certain manufacturers, undermining fair market competition (Wang, Zhang, Li, & Lu, 2020).

Globally, COIs in energy governance have undermined environmental reforms, as seen in cases from Latin America to South Asia (Dabacher, Stilwell, & McGee, 2019). Nepal's context mirrors these challenges, where political appointments, revolving door practices, and biased policy instruments compromise sustainability efforts (Onlinekhabar, 2020) (Fiscal Nepal, 2025). Theoretical frameworks on regulatory capture and elite bargaining explain how vested interests shape energy policy. Gaps in Nepal's literature include limited empirical studies on COIs at sub-sectoral levels (e.g., electric mobility, and hydropower licensing).

Systemic issues are highlighted by several well-known incidents, such as contentious electricity trade agreements and politically supported hydroelectric projects. The risk of corruption and inefficiency has been made worse by lax regulatory enforcement, a lack of transparency, and a

blurring of the boundaries between public and private interests. These problems threaten the industry's long-term viability and competitiveness in addition to undermining public trust.

2. Objective of the Study

The overall objective of the study is to understand the existing conflict of interest in policies related to the energy sector of Nepal. It aims to explore how undue influence affects decision-making processes and assess the robustness of institutional and policy mechanisms in addressing these challenges. The study is guided by the following specific objectives:

- i. To understand the present scenario of energy consumption and supply in Nepal;
- ii. To identify if any conflicts of interest exist while implementing the energy-related policy;
- iii. To reflect on existing Conflicts of Interest and undue influences and existing policies and strategies to mitigate such trends; and
- iv. To provide recommendations to the policymakers to strengthen rules or codes of conduct for promoting responsible and sustainable energy practices in Nepal.

3. Scope of the Study

- Review policies, laws, acts, regulations, strategies, and plans related to energy, especially alternative energy;
- Assess the latest energy consumption scenario in Nepal and compare between previous years
- Assess the current status of electric vehicles and usage of e-cooking in Nepal
- Analyze existing conflicts of interest and undue influences in the energy sectors and sub-sectors
- Interact with relevant stakeholders and personnel to understand the present status, issues, gaps and challenges in the energy sector
- Provide policy recommendations to improve efficacy and transparency.

4. Methodology

To achieve its objectives, the study applied a qualitative approach supported by documents such as literature reviews of energy-related international research papers; and national Policies, plans, Acts, rules, regulations, and more. As Nepal is a party to different multilateral and bilateral agreements related to climate and energy, international frameworks were also taken into consideration. Besides these, annual progress reports of relevant entities such as the Alternative Energy Promotion Centre (AEPC), Nepal Electricity Authority (NEA) or data from Nepal Oil Corporation were reviewed to know the present status of their projects and more. News articles from different portals were also accessed to understand the present situation of EVs and the contradiction of policy in the actual implementation phase.

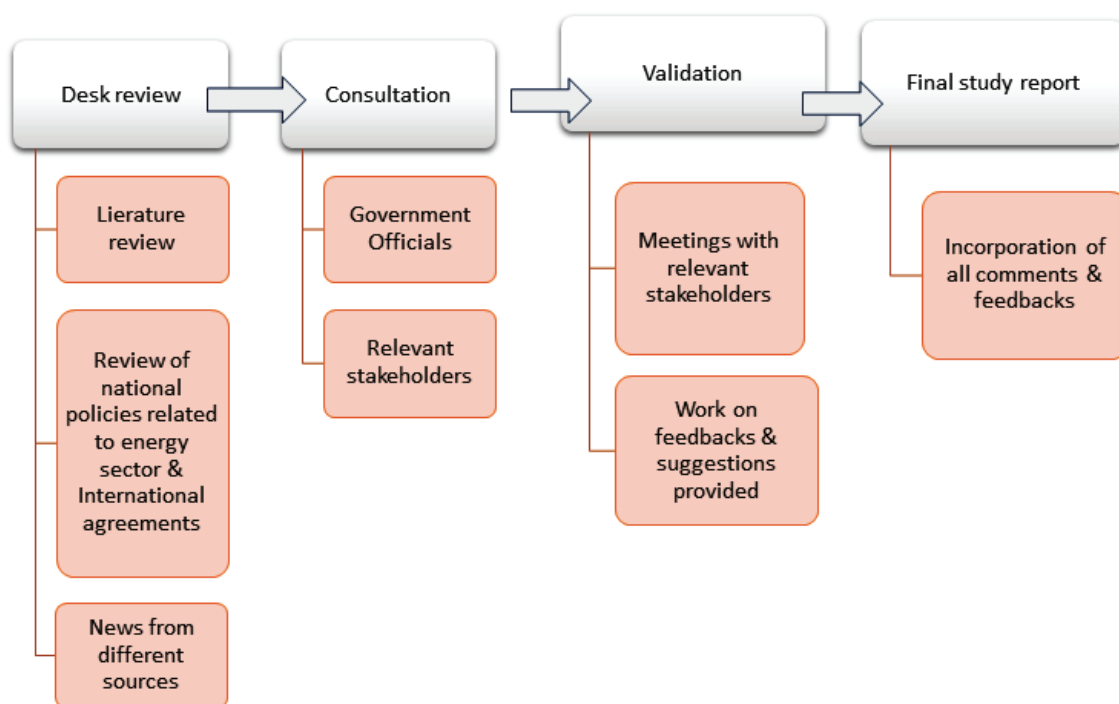


Figure 1: Methodology of the Study

Additionally, news articles published in national daily and online news portals were also reviewed which were based primarily on electric vehicles, their issues like taxation and more. Key informant interviews were conducted with government officials and representatives from INGOs (Annex 1). Information and suggestions were also drawn from a workshop organized by Transparency International Nepal (TIN) on 4th December 2023 and through a validation meeting on 15th January 2024. Additional comments were also received through consultation with Executive team members of Transparency International Nepal on 7th March 2024. Feedback and comments received from all these meetings were then incorporated into the report, finalized and submitted by 20th March 2024.

5. Legal and Institutional Framework of Nepal's Energy Sector

5.1 Regulatory and Institutional Bodies

Nepal's energy sector is governed by a mix of ministries, regulatory bodies, state-owned enterprises, and semi-autonomous institutions.

- i. Ministry of Energy, Water Resources and Irrigation (MoEWRI): Key policymaker, but often criticized for politicization and overlapping mandates.
- ii. Department of Electricity Development (DoED): Responsible for issuing licenses, but lacks enforcement powers and is susceptible to political influence.
- iii. Nepal Electricity Authority (NEA): The dominant state utility, often conflicted by its dual role as competitor and regulator in practice.
- iv. Electricity Regulatory Commission (ERC): Mandated to provide independent oversight but under-resourced and subject to political appointments.
- v. Commission for the Investigation of Abuse of Authority (CIAA): Anticorruption watchdog, reactive rather than preventive in addressing Col and undue influence.

5.2 Core Legislation

The Constitution of Nepal, 2015: Article 51 (f) 3 of the constitution of Nepal has mentioned “ensuring reliable and affordable energy supply and proper utilization of energy by generation and development of renewable energy for the fulfilment of citizen’s basic needs”. It has also provided a provision for energy promotion to all three tiers of the government.

Electricity Act (1992) – It is under revision to reflect modern energy dynamics. This Act provides the primary legal foundation for electricity generation, transmission, distribution, and trade. It enabled the participation of the private sector in electricity generation and licensing by the DoED. However, the Act lacks explicit provisions related to prevention of conflict of interest; disclosure requirements for public officials, and oversight mechanisms during licensing or project approvals.

Hydropower Development Policy (2001) – It guides large-scale hydropower development. This policy is based on the Electricity Act, of 1992. This policy provides guidelines for tariff structure, and appropriate technology selection and provides licensing and approval processes for hydropower projects. This policy emphasizes the involvement of the private sector in the development of hydropower projects. The involvement of the private sector is essential in bridging the gap of additional capital and expertise.

Renewable Energy Subsidy Policy (2016) – It supports household and community-level clean energy projects. It focuses on gradually replacing subsidies with credit in the long term. It envisions to achieve universal access to clean, reliable and affordable renewable energy solutions by 2030. To achieve this goal, it has adopted 4 different strategies to reduce dependence on traditional and imported energy by increasing access to renewable energy for improving the livelihoods of people and creating employment opportunities, especially in the rural areas.

National Energy Efficiency Strategy (2018): It was formulated to ensure access to affordable, reliable and sustainable energy as well as to promote sustainable production and usage. It aims to double the average annual energy efficiency rate from 0.8% to 1.68% by 2030 AD. The primary focus is on modern and improved energy sources, such as hydropower, solar, wind, coal, natural gas, LPG, and other petroleum products, except for biomass energy, also known as traditional energy.

Environment Protection Act (2019) and EIA Guidelines: Regulates Environmental Impact Assessments (EIAs) and mitigates social/environmental risks in energy projects. Compliance with EPA provisions is a prerequisite for obtaining project approval and financing from both national and international institutions.

Besides these policies, Energy Sector Vision, 2050 aims at reducing the dependency on petroleum products and increasing the use of hydropower as the main source to meet long-term energy demands. Also, White Paper 2075, Ministry of Electricity, Water Resources and Irrigation aims to increase the hydropower generation prepare the nation's transition to sustainable development, and increase per capita electricity consumption from 700 kWh to 1500 kWh in the next ten years. Furthermore, the 16th Periodic Plan targets to increase the per capita electricity consumption from 380 kWh to 700 kWh by FY 2028/29. While it seeks to achieve 100% electricity access across the country, it targets generating annual revenue by exporting 5,500MW.

In addition to energy sector policies, Nepal has also adopted specific policies and strategies aimed at promoting electric vehicles (EVs) as part of its broader commitment to decarbonizing the transport sector. These measures support the national goal of reducing greenhouse gas emissions and transitioning towards cleaner, more sustainable mobility systems.

Transport Management Act (1993): It includes EVs registration and subsidy in customs and excise duty. This Act is under revision and will be a critical enabler for a robust electric mobility ecosystem in Nepal, ensuring that EV-specific regulatory, safety, and operational provisions are well-integrated into the legal framework. Electric buses supported by the Electric Bus Program under Sajha Yatayat have been operating under permits issued by authorities empowered by this Act.

The Second Nationally Determined Contribution (NDC): It outlines targets for renewable energy expansion and EVs adoption. The key targets include increasing energy generation from approximately 1,400 MW to 15,000 MW, with 5-10% coming from mini and micro-hydropower, solar, wind, and bio-energy. It targeted 100% electrification is access to electricity by all the population and also targets 15% energy demand to be supplied from clean energy resources. There are targets also set by the NDC where it aims at 90% sales of EVs by 2030 and, the development of 200 km of electricity rail network to support mass transportation of goods. Also, the focus is on raising electric cookstove usage to 25% of households by 2025 in the residential sector, installing improved cookstoves in rural areas, and promoting household and institutional biogas plants (GoN, 2020).

The National Action Plan for Electric Mobility, 2018 which includes tax incentives and policy directives for EVs adoption. It serves as a strategic roadmap to accelerate the adoption of EVs and reduce greenhouse gas emissions in Nepal's transport sector. This initiative aligns with Nepal's commitments under its Nationally Determined Contributions (NDCs) to the Paris Agreement.

Budget Speech: The last budget speech stated that the adoption of clean and affordable technologies such as biogas, biodiesel, ethanol, solar energy, electric stoves, and improved stoves will be encouraged. Also, the expansion of charging stations and facilitation of private sector financing to promote the use of electric vehicles is said to be done. This year's budget speech mentioned the new section 11(3Ra) which has added to provide full income tax exemption for the first five years to industries engaged in the production, manufacturing, or assembly of electric vehicle charging machines from the start of their operations. Import of necessary machinery for establishing industries that manufacture and assemble electric vehicle charging stations will charge only 1% of customs others will be exempted.

6. Overview of Energy Context in Nepal

The energy industry in Nepal is at a crossroads, balancing the legacy issues of reliance on fossil fuels and infrastructure gaps with the goal of a sustainable energy future. Significant strides have been achieved in the nation's efforts to increase access to electricity and scale up renewable energy, especially hydropower. Nonetheless, a sizable portion of the country's energy consumption is still derived from imported fossil fuels, such as liquefied petroleum gas (LPG), and conventional biomass.

I. Energy Supply Scenario

Hydropower: Nepal's electricity supply is predominantly sourced from hydropower, accounting for approximately 98% of domestic electricity generation. As of mid-2024, the country had an installed capacity of around 2,877 MW, with an ambitious target of reaching 10,000 MW by 2030 (NEA, 2024). Independent Power Producers (IPPs) contribute over 60% of the current generation capacity. In addition to hydropower, Nepal has begun to harness solar and wind energy at a small scale, supported by programs from AEPC.

As per the Hydropower Development Policy (2001), hydropower generation has not yet been fully utilized as a renewable energy source, despite its plenty of potential. So, it is expected to increase this rate as the government has the target of 100% electrification by 2050 which also addresses achieving Sustainable Development Goal 7 (Annex 2). The national electrification status shows that 99% of the population has access to electricity and it is still in progress (NEA, 2024). In addition to hydropower, Nepal has begun to harness solar and wind energy at a small scale, supported by programs from the Alternative Energy Promotion Centre (AEPC). As of 2022, solar PV installations accounted for less than 1% of the total energy mix but are growing rapidly in both urban and rural electrification initiatives. Apart from the NEA, the Independent Power Producers (IPP) also plays a significant role in electricity generation in Nepal (WECS, 2024).

Fossil fuel: Despite progress in clean energy, Nepal remains highly dependent on imported fossil fuels, particularly petroleum products imports which are increasing by 15.2% annually (WECS, 2023). However, the latest report on the energy sector has stated that the import of petroleum products in FY 2079/80 has decreased after reaching the peak in FY 2078/79 (WECS, 2024). However, in the first seven months of FY 2080/81, Nepal imported petroleum products worth Rs 104.76 billion from the Birgunj border which has increased by 840 million compared to the same period of the previous fiscal year (Republica, 2025). LPG is the dominant cooking fuel in urban Nepal, replacing traditional biomass in many areas. The number of LPG consumers reached 44.3% as per the Energy Sector Report, 2024 (WECS, 2024) which is rising as shown by NOC data below (Table 1). Reliance on imported LPG raises concerns about energy security and subsidies.

The table below clearly shows the gradual increase in the petroleum products (in kilolitres except LPG in metric tons) import particularly petrol, diesel and LPG in the 10 years (NOC, 2022). This shows that there is still the demand for fossil fuels which undoubtedly contradicts the government's policy of net-zero emission by 2045, five years earlier than the global target.

Table 1: Petroleum products import data for 10 years (Nepal Oil Corporation)

Fiscal Year	Petrol (KL)	Diesel (KL)	Kerosene (KL)	Aviation Turbine Fuel (KL)	Light Diesel (KL)	Furnace (KL)	LPG (Metric Tonnes)	Mineral Turpentine (KL)
2021/22	736276	1723557	17340	157128	-	0	536028	0
2020/21	591700	1696202	23584	72264	0	0	477752	0
2019/20	512128	1473536	18924	137424	0	0	449063	0
2018/19	566827	1714917	25004	200108	0	0	429609	0
2017/18	488675	1588869	22337	197220	0	0	370560	0
2016/17	407270	1319873	19607	164836	0	36	312928	0
2015/16	240386	785685	14194	83819	0	77	214194	0
2014/15	287473	921714	19653	141404	0	883	258299	0
2013/14	253381	808567	18409	125678	0	2172	232660	0
2012/13	223087	721203	24065	115896	260	2456	207038	0

II. Overall Energy Consumption Sccario

In Nepal, the latest report (for FY 2079/80) on energy shows that the consumption has totalled 532.42 PJ which was 640 PJ in the last fiscal year (WECS, 2024). Traditional energy sources (fuelwood, agricultural residue & animal waste) still dominate the total energy consumption by 63.87%. Nepal is predominantly dependent on commercial energy (25.80%) such as petroleum products, coal, and biogas after traditional sources of energy. While the usage of renewable energy seems to contribute less share overall renewable energy including hydropower is on the rise and that is 10.33% which was 7.48% as per last year's report (Figure 2).

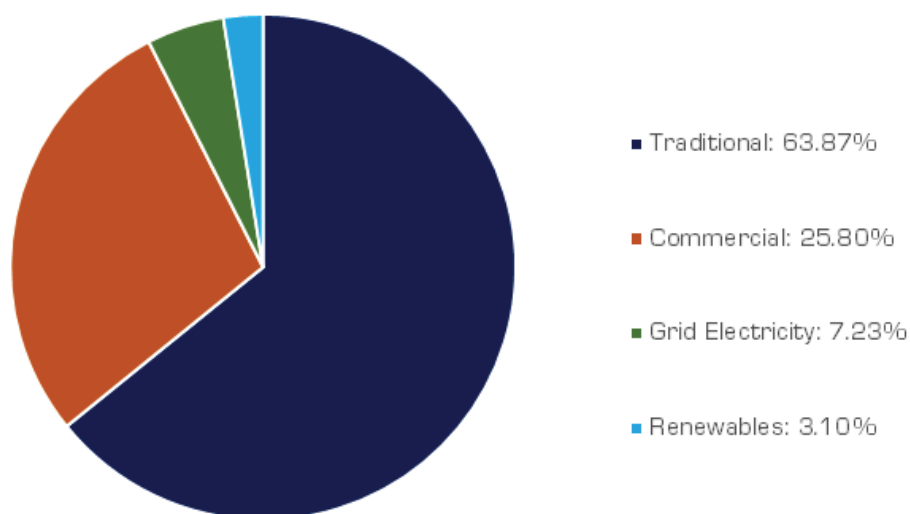


Figure 2: Overall energy consumption by fuel type

III. Sectoral Energy Consumption Trend

In terms of sectoral consumption of energy, the largest percentage of energy is consumed by the residential sector (60.75%) followed by industrial (20.91%) and transportation (10.43%) (Figure 3). Although more than 60% of the population is engaged in agricultural activities, they do not practice energy-intensive activities so the requirement of energy is less than expected. The transportation sector is largely reliant on fossil fuels and now the government has promoted Electric Vehicles (EVs) to decrease the dependency on fossil fuels (WECS, 2024).

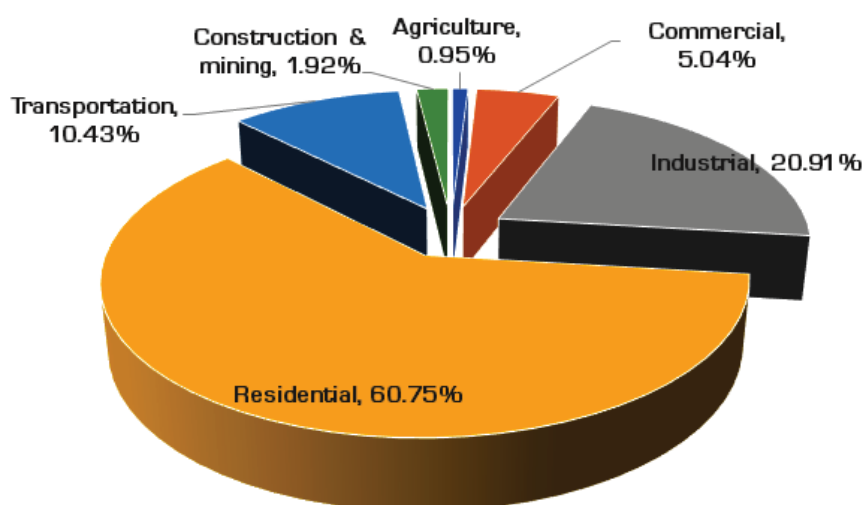


Figure 3: Sectoral energy consumption shares for 2079/80

Transportation sector:

As Nepal navigates a critical juncture in its transition toward a low-carbon energy future, electrical cooking appliances and electric vehicles (EVs) are emerging as a strategic pillar in achieving its ambitious climate and energy goals—including net-zero emissions by 2045. Figure 4 illustrates the energy consumption of the transportation sector in Nepal, totalling 55.55 PJ. Still, diesel is the dominant energy source, accounting for 54.85% of the total consumption. While petrol follows with 33.95%, and Aviation Turbine Fuel (ATF) contributes 11.14%, minor contributions come from electricity (0.05%) and LPG (0.0043%).

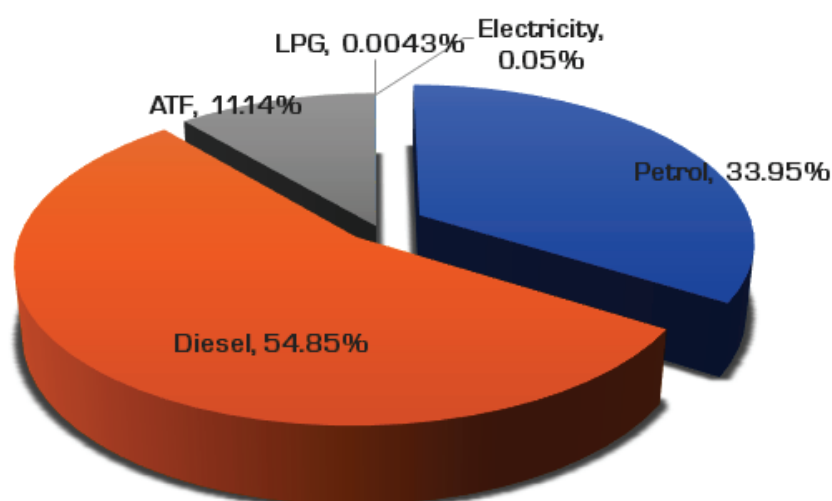


Figure 4: Energy Consumption of transport sector

Electric Vehicles (EVs):

Nepal has committed to achieving net-zero emissions by 2045, primarily through the expansion of hydropower, adoption of electric vehicles (EVs), and investment in renewable energy sources (GoN, 2020). The Second NDC aims to increase EVs share to 25% of all private vehicle sales by 2025 and 90% of sales of EVs by 2030. This requires infrastructure development to support EVs such as parking stations, charging stations and more. As of early 2025, the NEA has

installed 62 fast-charging stations across Nepal, 51 of them are already in operation generating revenues of over Rs 100,000 daily (KC, 2024) (Bhattarai, 2025). These stations are strategically located along major highways, bus parks, and urban centres in all seven provinces. Additionally, NEA plans to add 500 more charging stations built along key routes (including the East-West Highway, Madan Bhandari Highway, and the Mid-Hill Highway) nationwide through a public-private partnership (Bhattarai, 2025).

Besides NEA, different motor companies like Tata Motors and BYD have also set up charging stations in different areas. Additionally, many independent commercial charging stations are now operational in various places. USAID's Urja Nepal program has inaugurated 23 new EV charging stations across seven locations in Bagmati Province. MAW Vridhhi has established over 100 EV charging stations across Nepal. Their network includes CCS2-type DC fast chargers with capacities of 40kW and 60kW, extending to remote regions such as Mustang, Doti, Surkhet, Tikapur, and Dadeldhura. Companies like Yatri, E.Stop, BYD, CG Motors, and TheeGo have installed charging stations, often in collaboration with hotels and service centers (Shrestha, 2023). Currently, there are 750 charging stations and 238 are under construction and still, it's a long way. The operational charging stations have a total electricity consumption capacity of 78.8 MWs. The government has mandated that all new and existing fuel stations install EV charging points (Republica, 2025).



Figure 5: An EV charging station on the NEA premises in Ratna Park. Photo: Diwash Ghimire



Figure 6: EV charging station installed in the premises of Singha Durbar, Kathmandu.
Photo: Rastriya Samachar Samiti

Besides charging stations, limited parking spaces are also a significant challenge for EVs. There were instances where a couple of Sajha buses (EVs) were stranded in different places inside Kathmandu Valley due to inadequate parking spaces. Similarly, cases were also recorded in Lumbini Province where EVs received from the Asian Development Bank were stranded and unused for around 2 years due to legal hurdles such as acquiring the operation permit and also due to lack of operation modality (Republica, 2023).

Different types of fuel used for cooking purposes in the residential sector:

Among the largest energy consumers, the residential sector consumes largely traditional energy such as firewood, cow dung, leaves, etc. Traditional sources are followed by LPG usage which accounts for 44% of households using it as a cooking fuel where use of electricity is less than 1% (NSO, 2023). The Nepal Planning Commission developed a roadmap to achieve SDGs where one of the targets is to limit the usage of LPG to less than 40% and promote electric cooking (100%) by 2030.

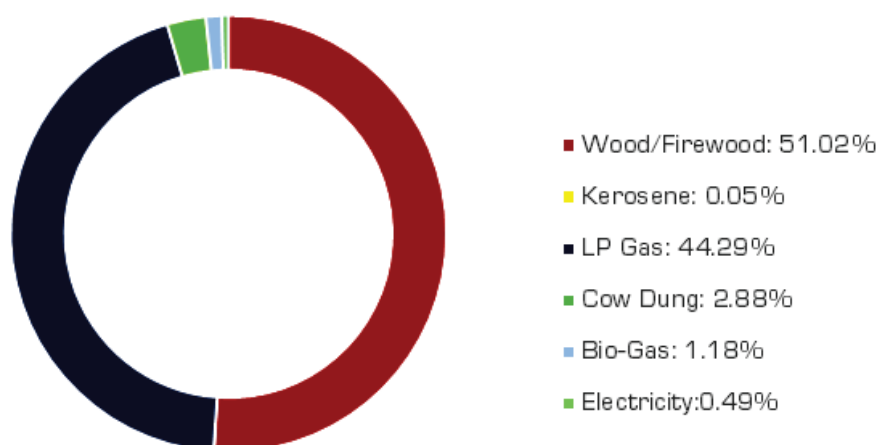


Figure 7: Households Using Types of Fuels for Cooking Purposes (NSO, 2023)

IV. Other Alternative Energy Sources

On 17th January, 2024 cabinet meeting passed the policy to allow the production and use of green hydrogen which is considered to be the cleanest energy source and an alternative to conventional sources that aid in reducing climate change impact (Republica, 2024). Even global leaders have agreed on its potential to be used in place of fossil fuels and has already been in use in heavy industries across the globe.

Additionally, Nepal will have at least 10,000 MWs of hydropower by 2030, with a need of about 7,000 MWs, according to reports from governmental and commercial groups. By 2040, the overall capacity is anticipated to reach 39,000 MWs. Therefore, excess hydropower might be used to create green hydrogen at a competitive cost. By 2050, it's predicted that the price per kg of green hydrogen produced will be less than \$1. Though Nepal may not be able to introduce green hydrogen in every sector immediately, it requires careful examination of the early adoption of green hydrogen. Nevertheless, when infrastructure and technology advance, Nepal may eventually want to explore the use of green hydrogen in the transportation industry (Niraj KC, 2023).

7. Conflict of Interest and Undue Influences in the Energy Sector in Nepal

Conflict of interest is a persistent and poorly regulated issue in Nepal's energy sector which frequently arises. Also, undue influence by political elites, powerful business groups, and foreign actors affects everything from licensing decisions to large-scale energy trade agreements. Fairness, accountability, and the public interest are all compromised by this kind of influence, which frequently arises through unofficial networks and non-transparent processes.

7.1. Forms of Conflict of Interest and Undue Influences

These are some of the Cols/undue influences that existed in the energy sectors that affect transitioning to a greener approach or meeting net-zero carbon emissions:

i. **Contradictory policies:** They play a significant role in generating Cols in the energy sectors. Different energy policies encourage to adoption of greener approaches and discourage the usage of fossil fuels but political interferences or decisions made by bureaucracy are contradicted on many occasions. Such as the government has signed an agreement with India to start two multi-billion new petroleum pipelines by this fiscal year. An agreement between India and Nepal was made last year for cross-border pipeline construction namely, Amlekhgunj (Bara)-Lothara (Chitwan) and Siliguri (India)-Charali (Jhapa) pipelines and one terminal in grant assistant. Additionally, they also have set the foundation for the Motihari-Amlekhgunj Oil Pipeline Phase 2 project. This discrepancy suggests potential conflicts of interest influenced by government revenue from fossil fuel import duties.

ii. **Inconsistent taxation policies in EVs:** Also, recent government decisions to increase taxes on electric automobiles while reducing taxes on larger vehicles have undermined the decarbonization objectives. For example, taxes on EVs between 100 and 200 kilowatts have been reduced, while taxes on smaller EVs have been increased. Also, the government plans to install and expand charging stations to promote EVs, and simultaneous initiatives to start new petroleum pipelines raise concerns about conflicting priorities. Such actions hinder the transition to renewable energy and disregard environmental laws and sustainability goals.

Table 2: Old and New Tax Rate of EVs in Nepal

EV Capacity	Customs duty 2022/23 (%)	Customs duty- 2023/24 (%)	Excise duty 2022/23 (%)	Excise duty 2023/24 (%)
50 KW	10	10	0	0
50 – 100 KW	10	15	0	10
100 – 200 KW	30	20	30	20
200-300 KW	45	40	45	45
300 KW and above	60	60-80	60	60

Source: Electric Vehicles Tax in Nepal 2023, Department of Transport Management

Cars falling into such category will now be subject to a 10% excise charge and 15% customs tax. These automobiles were exempt from excise duty in the past. Businesses claim that 100-kilowatt capacity automobiles would cost 20 to 22 per cent more due to the higher tax rate. This clearly shows how the government has effectively prevented the population from converting to renewable energy at a time when Nepal is expected to have an excess of electricity year-round by raising the levy on entry-level battery-powered cars. These tax rates will be continued for the current fiscal year too.

iii. Revolving door practices: Some of the elected business individuals serving as policymakers at all levels of government—federal, provincial, and local—have backgrounds in industries such as hydropower investment and construction. People from such nexus have been successful in winning the elections and representing various positions (Rudra Pangen, 2017). This has raised concerns about biased decision-making favouring economic interests over environmental, social, and cultural considerations during policy formulation. Example: The current Energy Minister has been a hydropower entrepreneur and his involvement in the private energy sector has a significant conflict of interest. He is putting pressure on regulatory agencies and parliamentary committees to amend the law to permit the sale of 50% of the shares of hydropower projects during the so-called "lock-in period," which prohibits the sale of promoter shares (Kumar, 2025).

iv. Political patronage: Nepal's energy sector has long been subject to political interference. Energy projects are frequently used as tools for patronage and political bargaining, with parties vying for control over lucrative licensing, procurement, and appointment decisions. The recent appointment of NEA head, Mr. Hitendra Dev Shakya is considered one of the examples of such interference. There were similar kinds of appointments in the past as well where one of the board of directors of Himalaya Urja Bikas Company Limited was appointed as a member of NEA. He was also associated with Shine Technocrats Limited and Professional Engineers Builders which have worked as consultants in various energy projects. Mr. Arjun Bahadur Karki, a former secretary and a former managing director of the authority then stated that such appointments are not appropriate as the authority is required to make various policy decisions about private projects and sign power purchase agreements with them (Onlinekhabar, 2020).

v. Influence of Business Groups and Developers: Non-competitive bidding was seen recently for the Jagdulla project where out of 5 bidders, one was selected based on favouritism. However, the bidding process had to be cancelled due to escalated controversy claiming that to resolve

the Jagdulla project bidding procedure, a meeting of contractors at the Energy Ministry was arranged, and money was purportedly transferred. While CIAA officials are investigating claims, the stakeholders of the energy sector are demanding transparency and accountability, pointing out that such disputes damage public institutions' reputations and thwart Nepal's plans for hydropower (Fiscal Nepal, 2025).

Also, such influences were seen during the dispute over Dedicated and Trunk Line charges where NEA issued a notice to the concerned industries/business groups to settle 6.5 billion outstanding electricity bill. Prime Minister KP Sharma Oli directed to resumption of power supply to industries and the decision faced a backlash (Nepal Energy Forum, 2024).

Conflict in Licensing decisions: Allegations of partiality, political meddling, and corporate lobbying have plagued licensing and regulatory decisions in Nepal's energy industry, which includes hydropower, fossil fuels, and EVs. These practices harm transparency, reduce trust in the system, and prevent honest and capable developers from getting a fair chance to contribute to Nepal's energy development. For example, in 2017, the Nepalese government awarded the contract for the 1,200 MW project to China's Gezhouba Group Corporation without conducting a competitive bidding process, raising concerns about transparency and fairness (Kathmandu Post, 2023). Parliamentary committees and other critics stated that this decision lacked enough monitoring and was in violation of the nation's Public Procurement Act. Later, a new government cancelled the agreement, but the talks about the project started again. This case shows why it is important to have clear, open, and fair rules when giving licenses in the energy sector. The dispute over the Budhigandaki Hydropower Project is a clear example of how licensing decisions in Nepal's energy sector can be affected by conflicts of interest and unfair influence (Republica, 2022).

Although conflicts in licensing decisions of the EVs sector are less documented, cases were there in the media where it was claimed that charging infrastructure contracts were awarded without open tenders to politically linked firms. Similar is the case for EVs where politicians and their families invest in EV dealerships, leading to biased policy decisions (e.g., sudden tax breaks on EV imports). Even the government's tax exemptions and subsidies for EVs disproportionately benefit large business houses (e.g., Agni Group, CG Motors) that have strong political connections, while smaller importers struggle (Thapa, 2025).

vi. Institutional Gaps Enabling Cols: Nepal's anti-corruption framework, led by CIAA, does not adequately address conflict of interest in preventive terms. While the CIAA can prosecute abuse of authority, there is no robust preventive mechanism requiring disclosure and independent audits of decisions in the energy sector. Moreover, Public Procurement Regulations provide only limited safeguards. Conflict of interest is vaguely defined, and enforcement is weak. Oversight institutions lack the capacity and political independence to scrutinize high-level actors.

7.2 Impacts and Consequences

Serious repercussions occur when Cols and undue influences are allowed to persist in Nepal's energy industry. They cause economic loss such as smaller or more feasible ventures are frequently displaced by politically supported ones. Additionally, when there are delays in the implementation of the project due to non-transparent procurement and politically influenced approvals, it raises the average project cost in any key infrastructure project including the energy sector (WBG, 2019).

Needless to say, the independence and credibility of regulatory and policymaking institutions are weakened when they are captured. Their function is undermined when judgments are delayed or changed as a result of political pressure.

Such a situation creates an atmosphere of uncertainty and deters long-term investment. Example: The Budhigandaki Hydropower Project was a victim of a policy inconsistency. The project was awarded multiple times to politically connected firms, leading to prolonged disputes and lack of progress. Meanwhile, thousands of residents continue to face uncertainty regarding compensation and resettlement (Kathmandu Post, 2023) (Bhusal, 2021).

Such projects which are moved forward through political influences often neglect environmental and social safeguards. For example, there was a report that Modi Khola hydropower projects were not abiding by Environmental Impact Assessment (EIA) compliance (Kathmandu Post, 2019). Local communities are frequently left out of the decision-making process, and their concerns about displacement, livelihood loss, or ecological damage are sidelined. There are other instances where the decision was in favour of the economic aspect jeopardizing the social and ecological well-being. One of the main effects of such projects is the displacement or forced relocation of towns for the development of hydropower, as well as the influence on forests, agricultural practices, and wildlife habitats. As an illustration, the Kulekhani hydropower project resulted in the displacement of 3,000 people from 450 houses. It is estimated that the Budhigandaki hydroelectric project will physically and economically uproot 45,611 people (Republica, 2024).

Ultimately, the most detrimental effect due to Cols/undue influences is the decline in public trust in government agencies. When choices are perceived as being made more for political or private gain than for the general good, public participation decreases and mistrust of state-led development initiatives increases. The social compact between the state and its people is also compromised, as is democratic accountability.

8. Conclusion

Nepal stands at a critical juncture in its energy transition journey. While commendable strides have been made toward embracing renewable energy and low-carbon technologies, the persistent presence of conflicts of interest, policy incoherence, and undue political and business influence pose serious risks to the country's sustainable development trajectory. The discrepancy between climate commitments—such as the Nationally Determined Contributions (NDCs)—and practices like the continued import of fossil fuels, favouritism in power sector deals, and insufficient support for electric public transportation, undermines both credibility and progress.

To reconcile these contradictions and unlock the full potential of clean energy pathways, Nepal must urgently institutionalize transparency, ensure clear regulatory mandates, and realign sectoral policies with national and international commitments. The absence of concessions for electric public transport in recent fiscal policies, along with contradictory infrastructure projects like petroleum pipelines, illustrates a misalignment that can derail long-term goals. Immediate action is needed to promote coherent, forward-looking planning and to correct the systemic inertia that enables unsustainable practices to persist.

Additionally, capacity building across all levels of government—paired with strengthened coordination among agencies and development partners—is essential to create a responsive and resilient energy governance framework. A focus on decentralization, inclusive policymaking, and robust accountability mechanisms will help mitigate vested interests and foster a level playing field for green innovation and investment.

Ultimately, Nepal's path to a sustainable, carbon-neutral future hinges on its ability to eliminate governance loopholes, prioritize renewable energy investments, and champion evidence-based policymaking. With clear guidelines, decisive political will, and collaborative action, the country can transition from an energy system dominated by fossil fuel dependence and political favouritism to one rooted in sustainability, equity, and resilience.

9. Recommendations

To address the structural and systemic problems of conflict of interest and undue influence in Nepal's energy industry, a series of actionable recommendations are put out based on the study's findings. These suggestions are meant for decision-makers, oversight organizations, development partners, and members of civil society who are engaged in the pursuit of open and responsible energy governance.

i. Enact Strong Conflict of Interest Legislation

- Develop and enforce clear CoIs regulations, particularly for public office holders involved in policymaking, regulation, and procurement.
- Require mandatory asset disclosures and declarations of interest for ministers, regulators, and energy sector executives.

ii. Ensure Policy Coherence in Energy Planning

- Align all energy-related policies (hydropower, fossil fuels, electric mobility) with Nepal's Net-Zero commitment by 2045.
- Establish robust coordination and communication between relevant ministries like MoF, MOEWRI and MOFE to identify the loopholes and work together in achieving the same goal.
- Re-evaluate petroleum pipeline projects and fossil fuel incentives that contradict the goals of decarbonization.
- Vigorous advocacy at the Federal level to prioritize national priority based on the commitment made.

iii. Reform Political Appointment and Procurement Processes

- Institute merit-based and transparent appointments in key institutions like NEA and energy regulatory bodies.
- Mandate competitive and open procurement processes for licensing, infrastructure development, and power purchase agreements.

iv. Strengthen Oversight and Regulatory Bodies

- Enhance the independence, capacity, and authority of oversight institutions such as the CIAA, Public Procurement Monitoring Office, and Parliamentary Committees.
- Establish a dedicated energy sector audit unit under the Office of the Auditor General to track and evaluate high-risk projects.

v. Increase Transparency and Public Participation

- Make all project-related data (PPAs, EIA reports, procurement details) publicly accessible to allow citizen oversight.
- Mandate community consultations and free, prior, and informed consent (FPIC) for all large-scale energy projects.

vi. Introduce Environmental and Social Accountability Measures

- Enforce Environmental Impact Assessment (EIA) compliance with independent third-party audits.
- Strengthen compensation and resettlement mechanisms to protect communities displaced by energy projects.

vii. Revisit EVs Taxation and Incentives

- Create a coherent EVs policy framework that prioritizes smaller, affordable EVs and charging infrastructure over conflicting fossil fuel investments.
- Ensure that tax exemptions and subsidies are equitably distributed and not skewed toward politically connected business houses.

viii. Combat the "Revolving Door" Phenomenon

- Introduce a mandatory cooling-off period (e.g., 2–3 years) before former public officials can join private firms involved in energy projects they once regulated.
- Prohibit sitting ministers and lawmakers from holding active shares or management roles in energy firms.

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Annex

Annex 1: Key Informant Interviews (KII) List

Mr. Gopal Prasad Sigdel	Secretary at Ministry of Energy, Water Resources & Irrigation
Dr. Maheshwor Shrestha	Joint Secretary at Water & Energy Commission Secretariat (WECS)
Dr. Anusuya Joshi	Senior Environmental and Social Safeguard Expert-AEPC
Mr. Mukti Bikram Chhetri	Green Climate Fund Readiness Project Manager at Alternative Energy Promotion Center
Mr. Manjeet Dhakal	Advisor to the Least Developed Countries (LDCs) Chair at the UNFCCC

Annex 2: SDG 7 Target Relevant to Nepal

Target	Description
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services.
7.2	Increase substantially the share of renewable energy in the global energy mix.
7.3	Double the global rate of improvement in energy efficiency by 2030.
7. A	Enhance international cooperation to facilitate access to clean energy research and technologies.
7. B	Expand infrastructure and upgrade technology for supplying modern and sustainable energy services in developing countries.

Abbreviations

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Center
CC	Climate Change
CIAA	Commission for the Investigation of Abuse of Authority
ColS	Conflict of Interests
EIA	Environmental Impact Assessment
EVs	Electrical Vehicles
GCF	Green Climate Fund
GHGs	Greenhouse gases
GLOFs	Glacial Lake Outburst Floods
GoN	Government of Nepal
IEE	Initial Environmental Examination
IPCC	Intergovernmental Panel on Climate Change
Masl	Meters Above Sea Level
MoEWRI	Ministry of Energy, Water Resources & Irrigation
MoF	Ministry of Finance
MoFE	Ministry of Forests and Environment
NEA	Nepal Electricity Authority
NPC	National Planning Commission
NSO	National Statistics Office
RETs	Renewable Energy Technologies
SDG	Sustainable Development Goal
UNFCCC	the United Nations Framework Convention on Climate Change
WBG	the World Bank Group
WECS	Water & Energy Commission Secretariate

PART 4

Mapping actions and outcomes of climate finance projects in Nepal

Executive Summary

Effective climate governance requires principles like transparency, participation, and accountability. Transparency can be achieved through open data portals; participation involves inclusive decision-making; accountability relies on ethical oversight mechanisms. Nepal began receiving climate finance in 1997, starting with German adaptation initiatives. By 2014, Nepal had secured USD 652.4 million in climate finance from donors. Future climate finance is projected to play a major role in Nepal's development, potentially unlocking billions for climate initiatives.

Through its Climate Governance Integrity Programme, Transparency International assessed four major climate finance projects in Nepal, initiated since 2020, to ensure transparency, accountability, and effective management of funds. The first project; Building a Resilient Churia Region, is the first GCF project of Nepal and has been running for over four years and covers 26 river systems across Koshi, Madhesh, and Bagmati Provinces, with a budget of US\$47.3 million, largely funded by a GCF grant. The second project; Improving Climate Resilience in the Gandaki River Basin, spans 16 districts in Bagmati, Gandaki, and Lumbini Provinces, with a budget of US\$32.7 million, also primarily funded by a GCF grant. The third project; Clean Cooking Solutions (CCS), focuses on promoting efficient and climate-friendly cooking methods across 150 local governments in 22 Terai districts and has a budget of US\$49.15 million, jointly funded by GCF and other co-financing sources. The fourth initiative; the Forests for Prosperity Project, funded by the World Bank with US\$24 million (a mix of soft loan and grant), operates in 50 municipalities in Madhesh and Lumbini Provinces and supports forest-based small and medium enterprises through loans facilitated by the Agricultural Development Bank. These projects reflect Nepal's collaborative efforts with international partners to address climate resilience while promoting transparency in climate finance governance.

Conclusions

The four climate finance projects in Nepal emphasize transparency and accountability through stakeholder consultations and the development of safeguards like Stakeholder Engagement Plans, Gender Action Plans, and Grievance Redress Mechanisms. While there is no evidence of compromised integrity or accountability, the implementation delays reveal inefficiencies in utilizing funds and achieving project outcomes within the expected timelines.

Recommendations

- Strengthen Nepal's capacities for designing and implementing climate finance projects efficiently and transparently.
- Ensure realistic goals and comprehensive analyses during project design phases.
- Reduce delays caused by frequent turnover of government staff and maintain consistent personnel throughout project lifespans.
- Address field-level delays by ensuring adequate staffing and accountability at all project levels.
- Introduce incentive packages for government staff to improve project execution timelines.
- Allocate distinct budgets for the implementation of safeguard tools such as ESMPs, SEPs, and GAPs to ensure their effectiveness.

1. Introduction

1.1 Study Objective

This document serves as a comprehensive summary (Compendium) of the research, Mapping Actions and Outcomes of the Climate Finance Projects in Nepal conducted in 2024 encapsulating the key findings and insights derived from the study. The primary objective of the research was to assess the implementation status and governance aspects including transparency, accountability, and integrity of four climate finance projects currently active in Nepal. The study also evaluates environmental and social safeguards in project design and execution. The projects reviewed include:

- a) **GCF Project (FP118):** Building a Resilient Churia Region in Nepal (BRCRN).
- b) **GCF Project (FP131):** Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin, Nepal.
- c) **GCF Project (FP172):** Mitigating GHG emission through modern, efficient and climate friendly clean cooking solutions (CCS).
- d) **World Bank supported project (P170798):** Forests for Prosperity Project

1.2 Context and Rationale of the Study

1.2.1 Climate Change as an Existential Threat

Human activities, particularly the emission of greenhouse gases, have unequivocally caused global warming. Between 2011 and 2020, global surface temperatures increased by 1.1°C above the 1850–1900 average, far exceeding the pace of natural climate variability. The continued rise in greenhouse gas (GHG) emissions is driven by unsustainable energy use, land-use change, consumption patterns, and production systems that vary significantly across regions, countries, and social groups (IPCC, 2023a)¹. The IPCC Sixth Assessment Synthesis Report (2023c)² consolidates current knowledge on climate change, drawing from thousands of peer-reviewed sources to document its widespread effects and propose mitigation and adaptation strategies.

The World Meteorological Organization (WMO) Global Annual to Decadal Climate Update (2025–2029)³ indicates that global temperatures are likely to remain at or near unprecedented levels over the next five years, heightening climate-related risks and their effects on societies, economies, and sustainable development. The report estimates that the average global near-surface temperature for each year from 2025 to 2029 will be between 1.2°C and 1.9°C above the baseline average from 1850 to 1900. There is an 80% probability that at least one year in this period will surpass the current record high of 2024, and an 86% chance that one year will exceed 1.5°C above pre-industrial levels. Additionally, the likelihood of the five-year average temperature exceeding 1.5°C has risen to 70%, compared to 47% in the previous year's report and 32% in the 2023 assessment. Each incremental increase in temperature contributes to more severe heatwaves, extreme rainfall, intense droughts, and accelerated melting of ice sheets and glaciers, along with rising sea levels and ocean warming.

¹. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf

². https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf

³. https://wmo.int/sites/default/files/2025-05/WMO_GADCU_2025-2029_Final.pdf

Last year, 2024, marked the hottest year on record, with the globally averaged near-surface temperature estimated to be $1.55\text{ }^{\circ}\text{C} \pm 0.13\text{ }^{\circ}\text{C}$ above the baseline established between 1850 and 1900. Throughout 2024, near-surface temperatures exceeded the long-term average across nearly all land areas, with particularly significant warm anomalies observed in the tropics, North America, North Africa, Europe, and certain regions of Asia.

1.2.2 Climate change governance

Climate change is fundamentally a governance challenge. It requires the coordination of policy, finance, institutions, and civil society to deliver effective responses. Climate change governance refers to how institutions and stakeholders organize themselves to design, implement, and monitor climate-related policies and practices (World Bank, 2019). Effective governance for climate action depends on:

- Political will and institutional coordination at national and local levels.
- Clear legal and policy frameworks, including climate strategies and action plans.
- Adequate financing tools and accountability mechanisms.
- Inclusive decision-making and multi-sectoral participation.

According to the World Bank (2022)⁴, climate governance is an extension of good governance principles, built upon:

- a) Transparency: Ensuring public access to climate-related information via open data, budget transparency portals, and disclosure systems.
- b) Participation: Enabling inclusive decision-making through public consultations and citizen engagement.
- c) Accountability: Creating oversight mechanisms such as audits, ombuds institutions, and grievance redress systems.

1.2.3 Climate finance

The United Nations Framework Convention on Climate Change (UNFCCC) aims to stabilize GHG concentrations to prevent dangerous anthropogenic interference with the climate system. The Paris Agreement (2015)⁵ reinforced the need for stronger, more ambitious global climate action, with climate finance, international cooperation, and technology identified as key enablers.

Climate finance refers to funding from public, private, national, and international sources allocated to support mitigation and adaptation efforts. Given unequal responsibility and capability across countries, climate finance mechanisms strive to support the most vulnerable nations and communities. Key characteristics of climate finance:

- Mitigation focus: Investments in low-carbon technologies, energy transitions, and sustainable land use.
- Adaptation focus: Funding for resilience-building and risk reduction in the face of climate impacts.

⁴ <https://documents1.worldbank.org/curated/en/099830011172291748/pdf/P172569009a5a4066087c90ec13941fcd07.pdf>

⁵ https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

- Diverse mechanisms: Funding flows through multilateral (e.g., GEF, GCF), bilateral, national, and regional channels.
- Challenges in tracking: A lack of standardized definitions and accounting rules hinders comprehensive tracking of climate finance flows.

In 2022, global climate finance flows reached an annual average of \$803 billion (UNFCCC, 2022)⁶, nearly double the decade-earlier figures (Climate Policy Initiative, 2022).⁷

However, A pivotal climate finance report, published in March 2025 by the Climate Vulnerable Forum (CVF) in collaboration with Henley & Partners⁸, underscores the shortcomings in funding essential climate initiatives and examines how investment migration could provide crucial resources for enhancing climate resilience in the world's most vulnerable nations. Small island states and other at-risk countries face significant challenges in securing the billions necessary for climate adaptation. Despite confronting dire threats such as eroding coastlines, saltwater contamination of freshwater sources, and various socio-economic issues, these nations struggle to obtain adequate financial support from the global community, leaving them ill-equipped to combat the escalating climate crisis. The CVF, which comprises 70 climate-vulnerable countries representing 1.75 billion people—approximately 20% of the global population—contributes only 6% of global emissions yet endures the harshest consequences of climate change. By 2030, these nations will need around USD 500 billion annually to support climate action, development, and environmental conservation, emphasizing the pressing demand for more accessible and equitable climate financing.

1.2.4 Climate Finance in Nepal

Since 1997, Nepal has been receiving climate finance from multilateral and bilateral sources, starting with Germany's adaptation programs. Between 1997 and 2014, development partners committed USD 652.4 million for climate finance projects.⁹ The Ministry of Finance promotes transparency and accountability by publishing annual reports detailing development cooperation received by Nepal.

Between 2011 and 2021, Nepal received \$5.71 billion in climate finance, with nearly 70% originating from multilateral sources and over 30% from bilateral finance, while philanthropic and private sector contributions accounted for a mere 0.1% (Oxfam in Nepal, 2025)¹⁰. Among the multilateral sources, 53% came from Multilateral Development Banks (MDBs) such as the World Bank, Asian Development Bank (ADB), and Asian Infrastructure Investment Bank (AIIB), primarily through non-concessional loans. In contrast, 7% was derived from UNFCCC funds, including the Global Environmental Facility (GEF), Green Climate Fund (GCF), and Adaptation Fund, which offered higher-quality grants. The bilateral contributions were mainly from OECD-DAC countries, with nine nations providing over 90% of the total, led by the United Kingdom, Norway, and Germany.

⁶ https://unfccc.int/sites/default/files/resource/UNFCCC_BA6_Summary_Web_Final.pdf

⁷ <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/10/CPI-2022-IMPACT-REPORT.pdf>

⁸ https://cdn.henleyglobal.com/storage/app/media/Climate_Finance_Report_25_Digital_Final.pdf?_gl=1*1np3i2k*_gcl_au*MTlyMDgyOTIzMy4xNzUwODYzMDYx

⁹ https://isetnepal.org.np/wp-content/uploads/2019/04/Climate-Finance-Fund-flow_Oxfam-Report_4-May-2016.pdf

¹⁰ <https://nepal.oxfam.org/latest/publications/unpacking-climate-finance-nepal>

It is expected that most of the future development assistance for Nepal will be channeled through climate finance initiatives, given the country's significant potential to attract billions of dollars for climate-related projects. As Nepal prepares to transition from a Least Developed Country (LDC) to a developing country status in November 2026, the current support from developed nations is likely to diminish. Consequently, while climate finance may become a primary source of assistance, the grant component of this support could be substantially reduced, potentially necessitating a shift towards loans to meet Nepal's development needs.

Nepal's Third Nationally Determined Contribution (NDC 3.0)¹¹, submitted to the UNFCCC in May 2025, outlines the country's updated climate goals through 2035 under the Paris Agreement. It aims to reduce greenhouse gas emissions by 17.1% by 2030 and 26.8% by 2035 compared to business-as-usual levels, with over 96% of the targets are conditional on international support. Key priorities include expanding renewable energy capacity, electrifying transport and industries, promoting clean cooking technologies, improving power system efficiency, and maintaining 46% forest cover, 60% of which will be sustainably managed by 2035. The NDC also emphasizes adaptation by strengthening local climate plans, sustainable agriculture, and wetland restoration. Nepal estimates a total investment need of around USD 73.7 billion, mostly from external sources, and aligns its goals with a national target of net-zero emissions by 2045.

Climate finance in Nepal has evolved gradually, adapting to the changing needs over time. To effectively tackle the increasing demands of climate action, it is essential for this financing to expand in both scale and diversity. Each source of climate finance brings unique advantages, necessitating an assessment that goes beyond mere quantity to include its overall impact and sustainability. A more strategic approach is required to navigate the climate challenges ahead, one that comprehensively considers the available funding landscape. This strategy should aim to address existing gaps, meet pressing challenges, and capitalize on opportunities for sustainable development.

1.2.5 Climate Governance Integrity Program

Transparency International's Climate Governance Integrity Programme works to combat corruption and enhance transparency, accountability, and integrity in climate finance. It ensures that the significant funds allocated for climate initiatives, such as renewable energy and sustainable forest management, are managed effectively and free from corruption.¹²

1.2.6 Research Methodology and Its Limitations

The research utilized a combination of qualitative and quantitative methods, focusing on desk reviews and key informant interviews. Governance was assessed using three major characteristics of good governance: accountability, transparency, and inclusivity. However, due to time and resource constraints, the study faced limitations, such as the absence of field visits. The delayed implementation of projects further restricted access to field-level data on outcomes and outputs.

¹¹ <https://unfccc.int/sites/default/files/2025-05/Nepal%20NDC3.pdf>

¹² <https://www.transparency.org/en/projects/climate-governance-integrity-programme>

2.1 BRCRN Project

- The Building a Resilient Churia Region in Nepal (BRCRN) project, initiated on May 12, 2020, is a seven-year collaboration between the FAO and Nepal's Ministry of Forests and Environment, supported by the Green Climate Fund (GCF). With a budget of USD 47.3 million, including USD 39.3 million from GCF, it aims to benefit 3.2 million people, emphasizing gender and marginalized representation. Targeting 26 river systems across three provinces (Figure 1), the project aims to prevent 11.5 million tons of CO₂ emissions while enhancing climate resilience and strengthening climate resilience implementing sustainable natural resource management practices, improving institutional frameworks, and building local capacity and awareness.

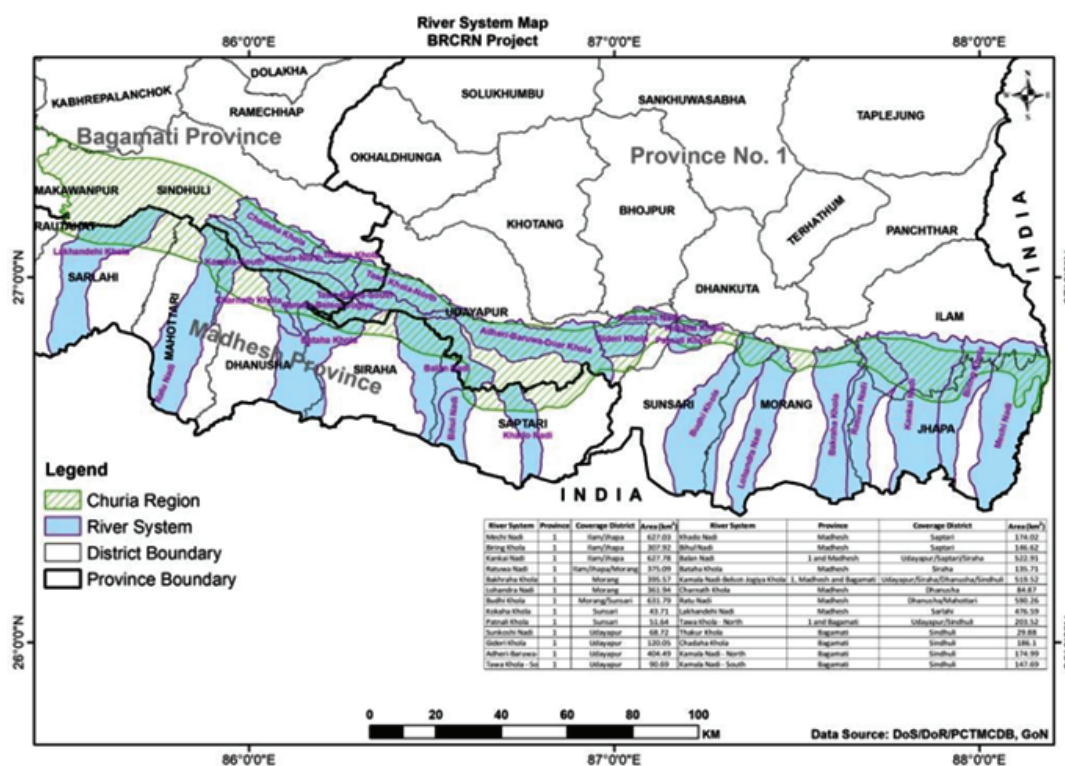


Figure 1. 26 River Systems covered by the BRCRN

- The 2023 annual performance report submitted to the GCF in August 2024 indicates that the project is facing implementation delays primarily due to challenges in recruitment and high turnover rates in government-deputed positions within both the Project Management Unit (PMU) and Provincial Project Management Units (PPMUs). Notably, the National Project Director (NPD) position remained vacant for five months during 2023. A significant issue has arisen from the project's formulation during a transitional phase of Nepal's decentralization, which left the roles of provincial governments undefined. The Local Government Operation Act (2017) allows local governments to oversee natural resources, yet the project design only involves relevant provincial ministries through the Provincial Project Coordination Committee (PPCC) while channeling all project funds and technical support through the PPMUs under the federal ministry (MOFE). Consequently, the

provincial forest ministry, responsible for managing forests, was not included in the project delivery framework, leading to a limited acknowledgment of the roles of Division Forest Offices (DFOs), Soil and Watershed Management Offices (SWMOs), and other provincial stakeholders in the Funding Proposal (FP). This proposal primarily emphasizes community-based organizations (CBOs) for project interventions. A more balanced approach that incorporates both provincial offices and CBOs would enhance the project's sustainability and effectiveness.

- The report shows that only USD 7,933,098.00 has been disbursed to the Accredited Agency (FAO) from the GCF until the end of 2023 out of the total grants of USD 39,299,905.00 for the project.

2.2 Gandaki River Basin Project

- The initiative "Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin" marks the second project in Nepal funded by the Green Climate Fund (GCF). This collaborative effort involves the International Union for Conservation of Nature (IUCN) as the GCF's Accredited Entity and the Ministry of Forests and Environment (MoFE) of Nepal, with a focus on bolstering resilience in the Gandaki river basin. Launched on November 3, 2021, the project is scheduled to span seven years, concluding on November 2, 2028, and has a total budget of USD 32.7 million, which includes a GCF grant of USD 27.4 million alongside co-financing of USD 5.3 million, representing 16.2% of the overall funding. The initiative aims to support around 1.9 million individuals, directly impacting 198,016 households, while also targeting a reduction of 847.3k CO₂e emissions. The project encompasses 16 districts across the Bagmati, Gandaki, and Lumbini Provinces (Figure 2), striving to enhance the resilience of communities and ecosystems vulnerable to climate change in the region.

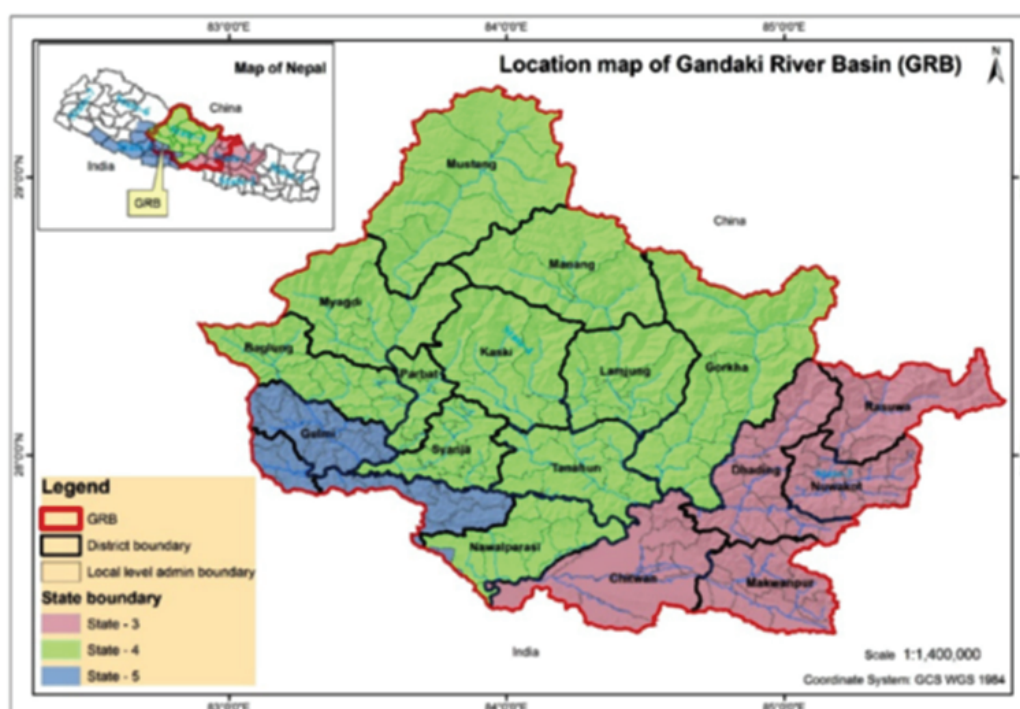


Figure 2. Gandaki River Basin Project Area

- The 2023 annual performance report of the project submitted to the GCF in October 2024¹³ indicates that the execution of field activities encountered considerable obstacles due to delays in completing study reports and the recruitment of personnel, which disrupted the project schedule and led to frequent rescheduling. To mitigate these challenges, a flexible planning strategy was implemented, interim site identification reports were created, the recruitment process was accelerated, and collaboration with local stakeholders was enhanced. Key insights gained from this experience highlight the necessity of adaptability in planning, the critical role of a robust management information system (MIS), and the importance of effective local coordination to reduce delays. Furthermore, the high turnover of government staff resulted in continuity challenges and knowledge gaps, which were addressed through timely project briefings for newly assigned personnel and improved engagement with government entities. These experiences emphasized the need for consistent communication with government officials and the establishment of a comprehensive MIS to sustain project progress, with the project team already initiating the process to develop the MIS.
- The report shows that only USD 2,908,095.00 out of the total grants of USD 27,404,139.00 has been disbursed to the AE (IUCN) until the end of 2023.

2.3 Clean Cooking Solution Project

- The project aimed at reducing greenhouse gas emissions through the implementation of modern, efficient, and environmentally friendly clean cooking solutions (CCS) represents the third initiative in the country funded by the Green Climate Fund (GCF) and marks the first endeavour developed and executed by one of the GCF Accredited Entities of Nepal, the Alternative Energy Promotion Centre (AEPC). This initiative is being carried out across 22 Terai districts of six provinces of the country (Figure 3) and is designed to benefit approximately one million households, impacting over 4.8 million individuals, with more than half of the beneficiaries being women. The project, which has a total value of \$49,151,817, received approval on October 7, 2021, and commenced on December 13, 2022, with an expected completion date of December 12, 2027. The anticipated mitigation impact over its lifetime is estimated at 6,513,629 tCO₂eq. The primary aim of the project is to advance Clean Cooking Solutions by enhancing the deployment of clean cooking technologies through increased investment and market development. This initiative includes the installation of 500,000 Electric Stoves, 490,000 Tier 3+ Improved Cookstoves (ICS), and 10,000 biogas plants.

¹³ <https://www.greenclimate.fund/sites/default/files/document/fp131-annual-performance-report-cy2023.pdf>

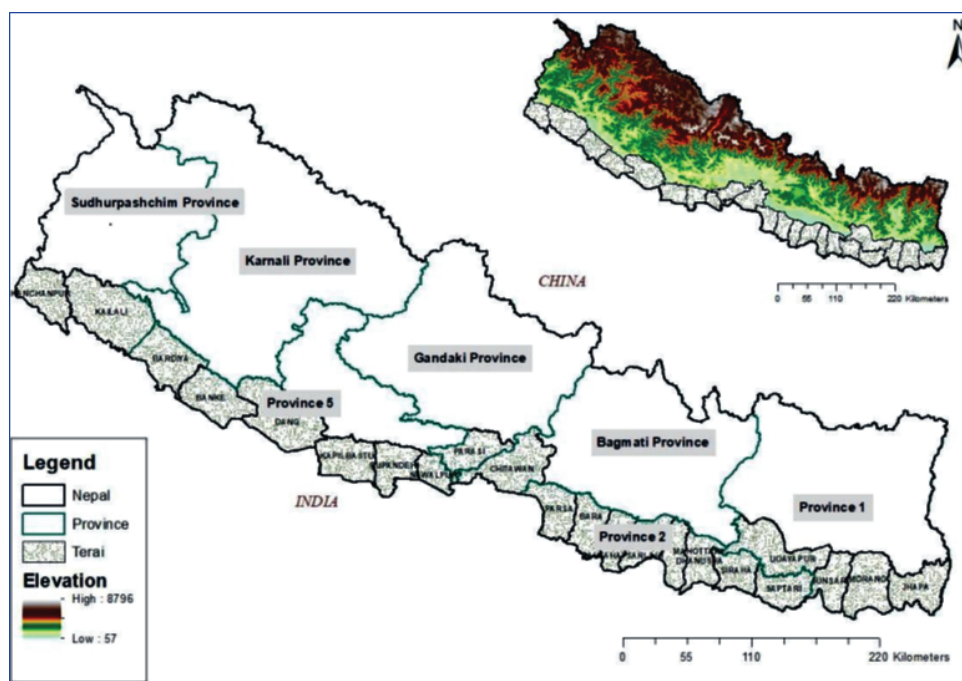
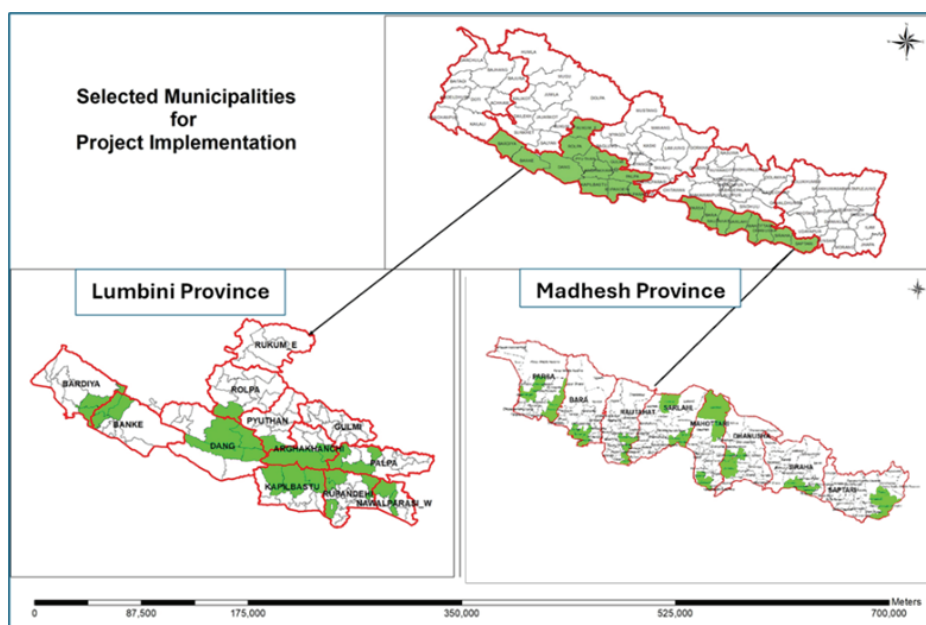


Figure 3. Clean Cooking Solution Project Districts.

- The project is currently in its initial phase, with field-level implementation yet to commence. A Project Operational Manual has been created, and most preparatory tasks are nearing completion. The project is now focused on selecting Project Municipality and identifying service providers and vendors for CCS instruments. As the first Annual Performance Report has not been released, detailed information regarding the implementation status and progress remains unavailable at this time.

2.4 Forests for Prosperity Project

- The Forests for Prosperity Project (FPP) is a significant initiative supported by the World Bank under the Forest Investment Program of the Climate Investment Funds. On March 19, 2021, the Government of Nepal and the World Bank signed the agreement for a total of \$24 million, which comprises \$6.1 million in grants and \$17.9 million in concessional loans. This project marks the first World Bank-supported investment in Nepal's forest sector in over 15 years and represents the third phase of collaborative efforts between the World Bank and the Nepalese government to enhance forest landscapes. The FPP is designed to complement the Emission Reduction Program currently underway in 13 districts of the Terai Arc Landscape, which is part of the World Bank's Forest Carbon Partnership Facility and the pioneering results-based initiative under the REDD+ framework. The project is set to run for five years, with an active implementation status and a total cost of \$24 million, which is expected to benefit approximately 110,000 individuals in targeted forest areas and surrounding communities. The project is being implemented in 50 Palikas (Municipalities) of Madhesh and Lumbini Provinces (Figure 4).



- The project aims to improve sustainable forest management, enhance economic benefits, and promote climate resilience in selected municipalities of Madhesh and Lumbini Provinces. With four key components, the project focuses on policy support, community-based forest management, development of forest enterprises, and robust project governance. It seeks to transform Nepal's forest sector through economic and environmental advancements, benefiting forest-dependent communities and reducing greenhouse gas emissions.
- Implementation of the project has progressed in the last two years especially grant components of the project until the end of 2024. The latest Annual Progress Report of the Project, 2024 shows that 71.08 % of the initial grants amount (USD 6.1 million) has been disbursed, while only 2.17% of the loan parts (USD 17.9 million) has been disbursed. Additional grants of USD 12 million will be disbursed in fiscal year 2025/2026. Figure 5 shows the disbursement status of the project until the end of 2024.

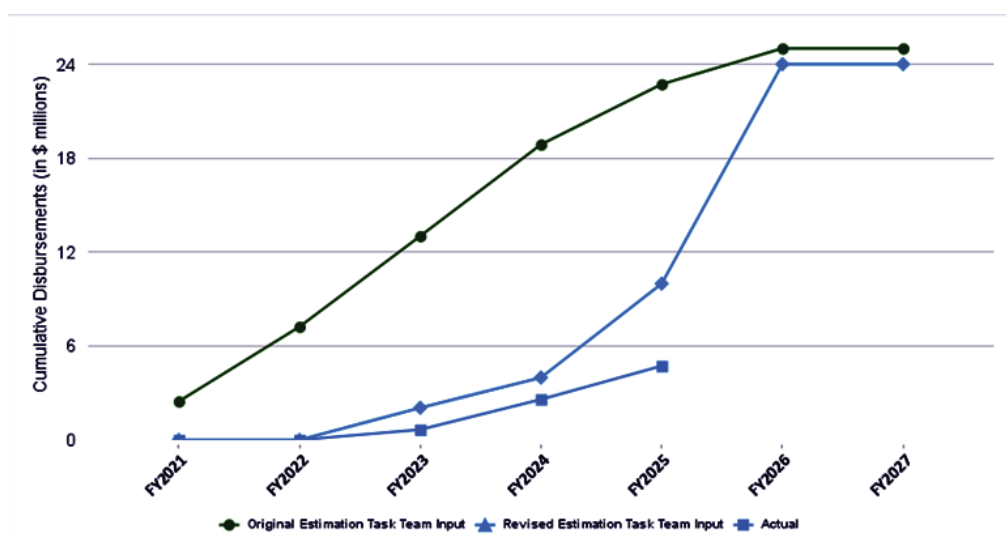


Figure 5. Graphs showing the actual disbursement of the fund against the originally planned and revised disbursement for the projec. (Source: Annual Progress Report of the Project, 2024)

3. Conclusions and Recommendations

3.1 Conclusions

The first GCF project- Building Resilient Churia Region in Nepal is under implementation for more than four years (including the two years of preparation) in the 26 river systems of Koshi, Madhesh and Bagmati Provinces. The total budget of the project is 47.3 million USD, out of which 39.3 million is GCF grant and the remaining 8 million is covered from different sources as cofinancing.

Details of the financial progress of the project are not publicly available. The project website (<https://www.greenclimate.fund/project/fp118>) provides the disbursed money from the GCF to the accredited entity (FAO) for project implementation. The website shows that a total of 36% of the GCF grant has been disbursed to the FAO for project implementation as of 12 Sept 2024 (The website was last accessed on 30 September 2024). This is not however the actual amount disbursed/spent by the FAO for field implementation of the project activities, which is far less than the disbursed amount from GCF to the FAO.

The second GCF project- Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin, Nepal is under implementation in the Gandaki river basin covering 16 districts of Bagmati, Gandaki and Lumbini Provinces for about three years. The total budget of the project is 32.7 million USD, out of which 27.4 million is GCF grant and remaining 5.3 million is covered from different sources as cofinancing.

Details of the financial progress of the project are not publicly available. The project website (<https://www.greenclimate.fund/project/fp131>) provides the disbursed money from the GCF to the accredited entity (IUCN) for project implementation. The website shows that a total of 11% of the GCF grant has been disbursed to the IUCN for project implementation as of 15 Dec 2021 (The website was accessed on 30 September 2024). This is, however, not the actual amount disbursed/spent by the IUCN for field implementation of the project activities.

Similarly, the third GCF project- Mitigating GHG emission through modern, efficient and climate friendly clean cooking solutions (CCS) is under implementation for about two years in the 150 local governments of the 22 Terai districts of six provinces of the country. This is the first GCF project developed and is being implemented through the 1st Accredited Entity of the country- Alternative Energy Promotion Center (AEPC). The total budget of the project is 49.15 million USD, out of which GCF grant is 21.13 million and remaining 28.02 million is covered from different sources as cofinancing.

Details of the financial progress of the project are not publicly available. The project website (<https://www.greenclimate.fund/project/fp172>) provides the disbursed money from the GCF to the accredited entity (AEPC) for project implementation. The website shows that a total of 14% of the GCF grant has been disbursed to the AEPC for project implementation as of 24 Jan 2024 (The website was accessed last on 30 September 2024). This is not, however, the actual amount disbursed/spent by the AEPC for field implementation of the project activities.

The fourth climate finance project chosen for this study is a World Bank funded project- Forests for Prosperity Project, which is being implemented in the 50 Municipalities of Madhesh and Lumbini Provinces (25 in each province). This project is a little bit different than the other three

projects. The total project cost of 24 million USD is covered by grant as well as the soft loan from the World Bank. Out of the total project budget, 17.9 million is covered from the long-term soft loan and the remaining 6.1 million is in the form of grant from the World Bank. The loan part of the project is to provide loans for the forest based small and medium industries through the Agriculture Development Bank Limited (ADBL) Nepal. The project has been under implementation for about four years. But only less than 15% of the fund has been disbursed until July 2024 and the outcomes of the field level activities have not yet been visible.

All the four projects described above were developed transparently and are being implemented transparently. Stakeholder mapping was conducted and several consultations at different levels (federal, provincial and local) as required were organized during the project design phase. Environmental and Social risks of the proposed project activities were identified, and different safeguards tools have been developed to address identified risks, which provide mitigation measures of the potential negative impacts. Stakeholder Engagement Plans, Gender Action Plans as well as Grievance Redress Mechanisms developed for the projects also reflect the transparency of the projects.

Regarding the Accountability and Integrity of the project governance, from this very brief and limited study nothing was found that suggests there was no accountability and integrity in the overall project governance. Accountability and integrity of the GCF funded projects are mostly ensured in principle through the robust accreditation process of the Accredited Entity through which the projects are governed and managed. Similarly, accountability and integrity of the World Bank funded projects are ensured in principle through the World Bank's due diligence procedures and policies, Environmental and Social Standards and fiduciary policies. Furthermore, the World Bank is also accredited Entity of various international funds including GCF and GEF which also ensures the accountability and integrity of the World Bank funded projects. However, from this study it is found that implementation of all projects has been delayed significantly.

It is clear from this study that funds provided by the GCF and the World Bank for the project implementation will not be spent, and the expected outputs and outcomes will not be achieved by the present project completion dates. In this situation, there are two options, one the project will be extended for couples of years, and another the project is terminated, and unspent money will be frozen (returned to the fund). Both options are not good for the country (first option can be considered, OK??). There are many reasons for the delay in implementation of the projects. However, Sometimes the missed deadlines and targets (of the project activities) may be due to the lack of accountability and integrity. The FAO, IUCN, AEPC as the Accredited Entities responsible for the project governance and management as well as the Ministry of Forests and Environment and AEPC as the Executing Agencies should take responsibility for the delay and must take the necessary steps to resolve the issues so that the projects are implemented timely manner and expected outputs and outcomes are achieved within the present project completion dates.

3.2 Recommendations

- As discussed, Nepal has tremendous opportunities for accessing climate finance funds from development partners and international organizations such as GCF. For this however, Nepal needs to enhance its capacity to develop high quality climate finance projects and

implement them in transparent and timely manner with high integrity and accountability. From this very brief study, it is found that Nepal does not have the capacity to implement large climate finance project in time. Therefore, Nepal should enhance its capacity for project governance, management and implementation.

- From the BRCRN project study, it seems that there were some issues that were not considered properly when the project was conceptualized and designed. Many experts do have a view that the project had been conceptualized and designed with unrealistic ambitions.
- Frequent transfer of government staff responsible for the project oversight and coordination is one of the major reasons for the delay of project implementation. Therefore, the government should ensure that project staff are able to work for entire project periods and they should be given full authority to manage the projects.
- The Annual Performance Report of the BRCRN mentioned that field level activities were not implemented on time because there were not sufficient staff in the field offices. Therefore, it should be ensured that adequate qualified full-time staff are there in the offices at all levels. For this, not only the government but also the Accredited Entity responsible for the project management should also be made accountable.
- It is widely accepted within the experts, development partners and even in the government institutions that there is not any incentive for the government staff working on the projects. Therefore, for timely implementation of the project, there should be a good package of incentives for the staff.
- In most cases, there is no separate budget for implementation of ESMF, ESMP, SEP and GAP. The project and government staff say it is included in the program budget. The program budget itself is not adequate as budget allocation is normally done on an ad hoc basis without detail analysis of various factors when the project is designed. In this context, it is impossible to implement ESMPs, SEPs, GAPs and other safeguards tools without having separate budget allocations. Therefore, a separate budget allocation for implementation of the different safeguards tools is absolutely necessary.

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About the Climate Governance Integrity Project (CGIP) Nepal

Overview

The Climate Governance Integrity Project (CGIP) Nepal is a flagship initiative implemented by Transparency International Nepal (TINepal) under the global Climate Governance Integrity Programme, led by Transparency International Secretariat, Berlin.

Context & Rationale

Climate finance—through adaptation and mitigation initiatives—is a growing funding stream crucial for countries like Nepal. However, it often faces governance challenges such as fund diversion and weak implementation oversight. In Nepal, majority of climate finance fails to reach its target sector, instead being diverted to general infrastructure and non-climate priorities. This leakage undermines both effectiveness and public trust in climate programs.

CGIP Nepal is committed to Enhance transparency in the flow of climate finance from international pledges to local implementation, Improve accountability, focusing on governance standards in policy development, budgeting, and utilization of funds and Strengthen civil society participation, empowering communities to oversee and report on climate projects. Together, these efforts aim to institutionalize corruption prevention across the lifecycle of climate finance in Nepal.

Overall Goal of the Project

To enhance transparency, inclusivity and accountability of climate policy and governance frameworks so that climate efforts are shielded from corruption, and reach the groups most vulnerable to climate change.

Strategic Goal

- To make policy-making processes for climate action more transparent, accountable and inclusive.
- To improve accountability, integrity, and oversight of climate action globally, and locally.
- To improve justice outcomes for victims of environmental crimes and corruption.

National Objectives

- Information and data reaches policymakers and citizens.
- To engage stakeholders in the climate agenda.
- To sensitize and redress climate problems of the people.

Key Activities

- Conduct research and advocacy on climate change.
- Raise awareness through traditional and new media for climate integrity initiatives.
- Build capacity of government and stakeholders on climate change accountability issues.
- Educate youth to expand their knowledge on climate crimes.
- Promote integrity pledges in governmental and private funding on climate agenda.
- Engage the community to watch on clean energy, green spaces, climate disaster preparedness.
- Promote social accountability tools at the local governmental level for environmental protection, land use, etc.
- Mapping climate project actions and outcomes at the national and local level.
- Report/stories on climate loss and damage, disaster preparedness etc.
- Mobile ALAC for redressing environment and climate complaints of indigenous people, victims, and vulnerable women.
- National and sub national/international experience sharing of Nepal's NDCs, NAPA, and COP outcomes.



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NEPAL**

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