

Adopting a Low-Emission and Climate-Resilient Development Pathway in Nepal

National efforts in financing climate
action

Surendra Kumar Uprety and Raju Pandit Chhetri

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April 2024

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Cite as: Uprety, S. K. and Chhetri, R. P. (2024) *Adopting a low-emission and climate-resilient development pathway in Nepal: national efforts in financing climate action*. Prakriti Resources Centre. Part of the Finance Working Group: Designing a Robust New Collective Quantified Goal on Climate Finance series.



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About the Finance Working Group

The Finance Working Group (FWG) is an open partnership bringing together a range of expert perspectives from the global North and South on the progress made toward financing climate action, co-chaired by Charlene Watson of ODI and Raju Pandit Chhetri of Prakriti Resources Centre. The FWG aims to support the official UNFCCC processes as they relate to finance and is organised around two complementary themes: the provision of support to developing countries to mitigate and adapt to climate change and the consistency of finance flows with low-emission, climate-resilient development, as outlined in Article 2.1(c) of the Paris Agreement.

Acknowledgements

The authors would like to sincerely thank Charlene Watson for her strategic guidance and content inputs to the case study. Similarly, also appreciate the thorough review conducted by Ram Prasad Dhital and inputs provided by Sneha Rai into the document.



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Acronyms

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
BAU	Business As Usual
BFI	Banks and Financial Institutions
CCBC	Climate Change Budget Code (2013)
CCFF	Climate Change Financing Framework (2017)
EEC	Energy Efficiency Centre
ESRM	Environment and Social Risk Management
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
FWG	Finance Working Group
FY	Fiscal Year
GDP	Gross Domestic Product
GFT	Green Finance Taxonomy
GHG	Greenhouse Gas
GoN	Government of Nepal
GRID	Green, Resilient and Inclusive Development
LDC	Least Developed Country
LTS	Long-Term Strategy
MoF	Ministry of Finance
MoFE	Ministry of Forests and Environment
MTEF	Medium-Term Expenditure Framework
MW	Megawatts



Adopting a low-emission and climate-resilient development pathway in Nepal: National efforts in financing climate action

NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NEA	Nepal Electricity Authority
NCCP	National Climate Change Policy
NDC	Nationally Determined Contributions
NPC	National Planning Commission
NPR	Nepalese Rupee
NRB	Nepal Rastra Bank
SDGs	Sustainable Development Goals
SOE	State Owned Enterprise
UNFCCC	UN Framework Convention on Climate Change






+ Executive Summary



1. Nepal has long been facing twin challenges of slow developmental growth with extreme vulnerability to natural disasters and climate change, impacting approximately 80% of its population. This vulnerability exposes people to various hazards, including severe heat strain, floods, air pollution, dry spells, droughts, forest fires, heatwaves, flash floods and disease outbreaks. The risk is particularly acute for impoverished communities, especially those in remote areas reliant on subsistence agriculture, who bear the highest levels of susceptibility. In response to these challenges, Nepal has integrated climate finance into its development planning through various policies, legislation and regulatory frameworks across all developmental financing activities. These efforts prioritise fostering low-carbon, climate-resilient development pathways, recognising the critical role of both domestic and international finance in achieving green, resilient and inclusive development (GRID) goals.
2. The country has made significant strides in integrating climate finance into its development policy and planning, aligning with international agreements since joining the UN Framework Convention on Climate Change (UNFCCC) in 1992 and implementing initiatives such as the National Adaptation Plan (NAP), National Adaptation Programme of Action (NAPA) and its Nationally Determined Contributions (NDC). These include another more than 18 climate-related policies and legal provisions to support low-carbon, climate-resilient development pathways. On the fiscal front, Nepal has prioritised climate considerations in government spending since fiscal year (FY) 2013/14, embedding climate financing into annual budgets. Green finance taxonomy (GFT) guidelines, with strategies on environment and social risk management (ESRM) for banks and financial institutions, aim to align finance flows with low greenhouse gas emissions and climate-resilient development. Against this background, the present study aims to assess Nepal's progress on financing climate action based on the Whitley Framework (Whitley et al., 2018), with special focus on Article 9 of the Paris Agreement, which calls for developed countries to provide and mobilise finance for developing countries in their mitigation and adaptation efforts, as well as Article 2, paragraph 1 (c) of the Paris Agreement, which establishes the collective goal of making finance flows consistent with pathways toward low greenhouse gas emissions and climate-resilient development.
3. In order to support Nepal's climate goals, financing requirements seem substantial, with estimates varying considerably. These requirements exceed Nepal's current implementation capacity, the capabilities of the financial sector and available international development assistance, presenting significant challenges despite optimistic projections. Nepal has secured grants and concessional loans from bilateral and multilateral partners. However, the increasing debt service ratio places a severe limitation on international assistance for climate finance; for example, the country had to allocate 44.16% of total foreign assistance (22.65% of capital expenditure) for the fiscal year 2022/23 to pay the principal and interest of foreign loans. Over the past five years (FY 2018/19 to 2022/23), an average of 27.64% of foreign assistance has been used to settle foreign debts, amounting to 15.61% of the country's capital expenditure.



4. The country's climate ambitions are supported by effectively directing finance flows towards climate-resilient actions through the implementation of key government tools to shift and mobilise finance by enabling policy parameters; that is, financial policy regulation, fiscal policy levers, public finance and information instruments. On the financial policy and regulation front, Nepal Rastra Bank (NRB, Nepal's central bank) has advanced its initiatives in implementing GFT with ESRM for banks and financial institutions. These initiatives aim to support activities such as the issuance of green bonds, climate risk reporting and addressing capital requirements within the financial sector. The regulation of the GFT across these financial sectors is to ensure a structured approach to incorporating environmental considerations. This, in turn, fosters private sector engagement in climate actions, as financial institutions and markets are encouraged to align their operations with green finance principles. NRB has also supported priority sector lending, especially in renewable energy and sustainable agriculture. Interest subsidies and concessions for lending that supports the climate are vital advances in financial policy, along with regulation tools for climate finance that encompass lending requirements for banks and financial institutions, including environmental and climate compliance. However, implementation of GFT and ESRM has yet to take place and remains a challenge given the experience where non-compliance and the payment of penalty has been found to be better accepted by investors rather than implementing the policies.
5. Within fiscal policy levers, the Government of Nepal (GoN) has implemented policies to encourage climate-friendly practices through tax incentives and regulations. For example, home appliances and electrical items that consume electricity are subject to a reduced tax rate of 5%, while materials and equipment recommended for alternative energy use, like solar panels and hydropower equipment, enjoy an even lower tax rate of 1%. To discourage fossil fuel vehicle use, higher taxes are imposed on such vehicles, while electric vehicles are taxed at a lower rate. Subsidies for petroleum-based fuels have been eliminated and taxes on petroleum products increased to adjust for the price gap with India. The government also prioritises purchasing electric vehicles for public institutions, promoting environmentally friendly transport. In agriculture, an insurance programme covers various crops and livestock against losses from natural disasters and other risks, with an 80% subsidy provided for insurance fees.
6. Nepal has made significant progress in integrating climate change into public financial management with the introduction of the Climate Change Budget Code (CCBC) in 2013, following recommendations from the Climate Public Expenditure and Institutional Review (CPEIR) of 2011, and the Climate Change Financing Framework (CCFF) in 2017, to mainstream climate change into planning and budgeting at all government levels. These initiatives aim to strengthen the mainstreaming of climate change systematically by mobilising, managing and targeting finance for climate action. Climate expenditure mainly comprises government programmes included in annual budgets, with international climate finance also flowing through government structures; however, donors have committed significant funds for adaptation and mitigation activities. Recently, development partners have pledged more than \$7.4 billion for Nepal's GRID initiatives, prioritising climate



resilience. Other agencies align their assistance with low greenhouse gas emissions and climate-resilient development goals.

7. Nepal has prioritised climate considerations in government spending since FY 2013/14, stemming from the introduction of the CCBC in 2013. The government also developed the CCFF to incorporate climate change considerations into planning and budgeting at all government levels, enhancing transparency and accountability, while attracting international collaboration and investment embedded in annual budgets, reflecting a holistic approach to sustainable development. Meanwhile, the government has proposed several programmes in its annual budgets – but the implementation or realisation of these programmes has been poor. Despite the provision of climate-relevant budgets in fiscal documents and their parliamentary endorsement, audits of the programmes and their corresponding budgets for a climate perspective reveal severe setbacks.
8. Regarding information instruments for climate finance, private sector innovations in green infrastructure, such as carbon-negative concrete and urban planning innovations like green walls and roofs, are transforming the construction sector, emphasising environmentally conscious techniques and materials. These efforts align with the Sustainable Development Goals (SDGs), aiming to create urban spaces that enhance well-being while reducing environmental impact. Also, the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) has taken steps to adopt energy-efficient technologies, transitioning industries from coal and thermal energy to efficient renewable sources.
9. Despite having various policy frameworks in place, effective implementation of climate action in Nepal encounters substantial challenges rooted in coordination gaps, technical capacity limitations and insufficient financial resources. However, climate financing presents a huge opportunity as it helps finance in renewable energy, supports budgetary aspiration, promotes sustainable agriculture, facilitates the transfer of climate-resilient and clean technology, fosters international cooperation, and contributes to global effort to combat climate change.
10. Nepal urgently requires increased domestic resources and greater financial assistance to achieve its SDGs. As a least developed country (LDC) with limited loan capacity, climate financing for Nepal should primarily be in the form of grants and highly concessional loans to avoid exacerbating debt burdens. Likewise, effective implementation of GFT and ESRM is crucial to promote green finance in the private sector, while integrating climate risk assessment into Nepal's financial system is imperative. Clear assignment of responsibilities related to climate change is essential, empowering local governments for integrated climate action. Mechanisms to monitor progress and enhance public disclosure of climate-related information are vital for strengthening Nepal's climate resilience and sustainable development initiatives. Collaboration across sectors and government levels is also necessary, supported by the development of typologies for sector-specific climate activities and integration into procurement frameworks.



+ 1. Introduction



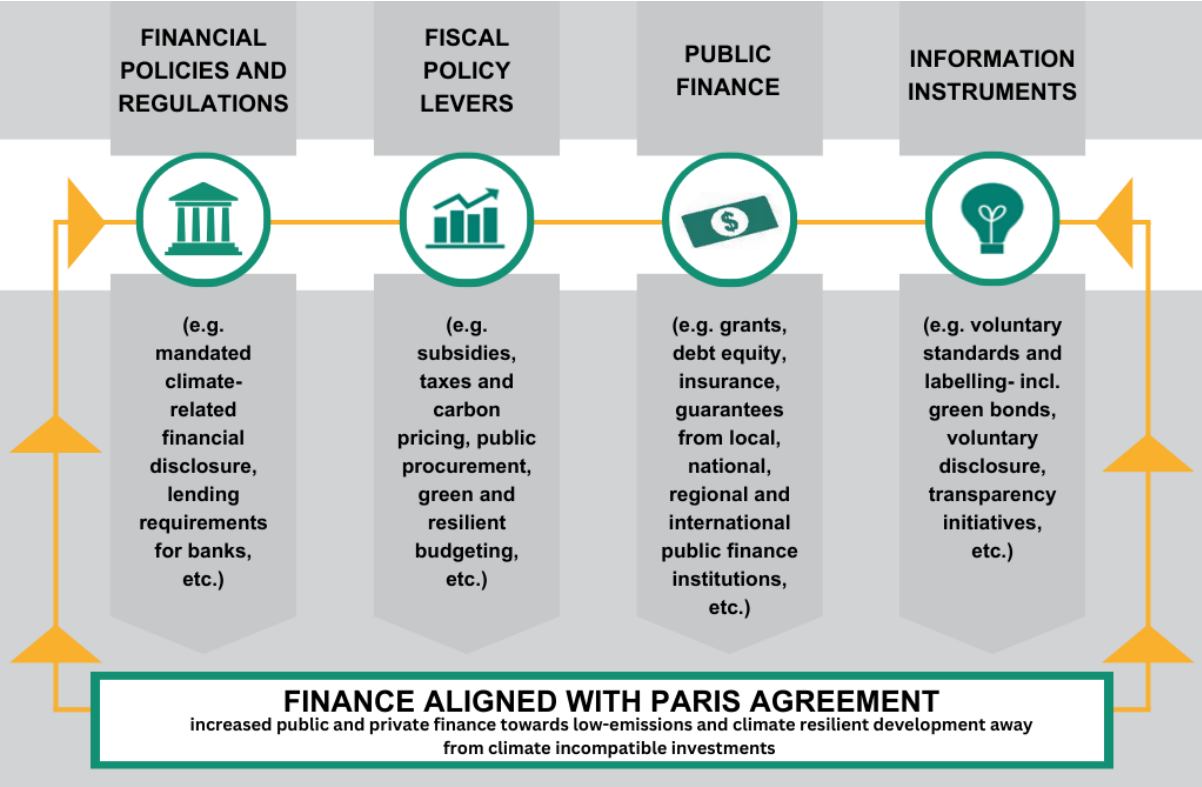
Nepal has long been grappling with two severe challenges in its development efforts: a fragile pace of development, symptomatic of its chronic developmental stasis, reflected in its decades-long low growth trajectory and the state's sluggish spending capacity (NEA, 2023); and the country's extreme vulnerability to natural disasters and climate change, which bring extreme climate-related risks. Fragile topography and ecosystems, extremely changeable hydrology caused by the monsoon, unplanned settlement, and non-resilient infrastructure all contribute to Nepal's climate vulnerabilities (World Bank, 2022). Around 80% of its population face exposure to natural and climate-induced hazards, severe heat strain, floods and air pollution (MoHA, 2018). Incidences of dry spells, droughts, forest fires, heatwaves, flash floods and disease outbreaks are increasing, along with slow-onset risks. Poor communities are more susceptible in this regard, particularly those residing in remote areas and dependent on subsistence agriculture – who are at the highest risk (World Bank, 2022). As a result, Nepal ranks as one of the most affected countries in the world on the Climate Risk Index (Eckstein et al., 2021).

Nepal became a party to the UN Framework Convention on Climate Change (UNFCCC) in 1992 and signed and endorsed the Paris Agreement in 2015. The country has formulated several climate policies, along with legal and legislative provisions, and has embraced the Nationally Determined Contributions (NDC) and National Adaptation Plan (NAP) of the multilateral climate change process. These initiatives, alongside many others in Nepal, focus on fostering low-carbon and climate-resilient development pathways. The implementation of these climate plans and policies requires adequate financing. Nepal's vulnerability paradox demands the effective implementation of government tools to shift and mobilise finance, such that climate vulnerability does not threaten other economic and development objectives of the country. Both domestic and international finance play roles in achieving Nepal's established priorities for green, resilient and inclusive development. To do this, Government of Nepal (GoN) policies and those of development partners must address the existing institutional barriers in financing climate action, and must encourage and enhance the engagement of the private sector to address the adversities induced by climate change.

Against such a backdrop, this paper assesses Nepal's progress on financing climate action. In doing so, it considers climate finance through Article 9 of the Paris Agreement, which calls for developed countries to provide and mobilise finance for developing countries in their mitigation and adaptation efforts, as well as Article 2, paragraph 1(c) of the Paris Agreement, which establishes the collective goal of making finance flows consistent with pathways towards low greenhouse gas emissions and climate-resilient development. The paper first provides a brief description of existing policy and legislative provisions to address climate change in Nepal (Section 2), before outlining the government policy levers that Nepal has put in place to influence spending decisions

towards climate action (Section 3). This analysis is based on a framework of government tools, namely: financial policies and regulations (for example, climate-related financial disclosure, lending requirements for banks and financial institutions); fiscal policy levers (for example, subsidies, taxes and carbon pricing, public procurement, green and resilient budgeting); public finance instruments (for example, grants, debt, equity, insurance, guarantees from local, national, regional and international public finance institutions); and information instruments (for example, transparency initiatives, voluntary standards and labelling, green bond guidelines, voluntary disclosure). Section 4 outlines Nepal’s challenges and opportunities for financing climate action, while Section 5 concludes with some recommendations.

Figure 1 Government tools to shift and mobilise finance



Source: Adapted from Whitley et al., 2018



+ 2. Current status of climate action

in Nepal




2.1. Climate policy in Nepal

Nepal's share of global greenhouse gas (GHG) emissions compared to that of the major developed countries is minuscule, just 0.056%. Yet it is highly vulnerable to climate change and changes in temperature and precipitation are occurring faster than the global average (ADPC, 2023). It is crucial to implement assertive climate actions through policy interventions and programmes in order to effectively mitigate the escalating risks posed by climate change.

While describing the policy and legislative initiatives of the state on climate actions, the **Constitution of Nepal 2015** stands as a foundation in ensuring environmental rights for citizens. It guarantees every individual the right to reside in a clean and healthy environment, entitling them to seek compensation for harm arising from environmental issues. The constitutional emphasis extends to policies governing the preservation of natural resources and the decentralisation of disaster management responsibilities to local governments.

Nepal's **25-Year Long-Term Vision for Prosperity and Happiness**, developed by the National Planning Commission (NPC) in 2019 in its 'Fifteen Plan' (2019/20 to 2023/24) (GoN, 2019e), places a significant emphasis on climate change adaptation and sustainable use of national resources within the framework of the 'Healthy and Balanced Ecology' goal of the happiness pillar. Here, focusing on climate change adaptation and sustainable utilisation of national resources are pivotal targets (World Bank, 2022). The government has also aligned its policies and programmes towards 'greening the economy' through annual programmes, periodic plans and long-term strategies, such as Sustainable Development Goals (SDGs) and Envisioning Nepal 2030 – Nepal's long-term development strategy. This will serve as a guideline for Nepal's graduation from least developed country (LDC) status by 2022 (which is now rescheduled for this graduation on 24 November 2026), achieving the SDGs in the post-Millennium Development Goals era and becoming a middle-income country by 2030. The country's **Sustainable Development Goals: Status and Roadmap 2016–30**, formulated by the NPC in 2017, includes actions to enhance resilience and adaptability in the face of climate-related hazards and natural disasters.

Moreover, Nepal underscores a low-carbon and climate-resilient approach to development in key policy and legal documents, including the **National Policy for**



Disaster Risk Reduction (NPDRR) 2018, the Environment Protection Act (EPA) 2019 and its National Climate Change Policy (NCCP) 2019. The EPA specifically focuses on ‘climate change management’, outlining legal mandates for addressing climate-related risks, mitigation and carbon trading. The NCCP aims to promote a green economy by developing policies and guidelines for critical sectors, while emphasising gender equity, social inclusion, awareness, research and climate finance. To support the implementation of these policies, Nepal has prepared **Provincial Climate Change Action Plans** and comprehensive planning guidelines. Its **Gender, Equity, and Social Inclusion Strategy and Action Plan on Climate Change (2020–30)** delineate sectoral strategies to enhance the access of women and vulnerable/marginalised groups to resources and decision-making processes in climate action, building adaptive capacity to climate impacts.

Since 2010, the Government of Nepal has engaged in adaptation planning and implementation, specifically with the development of a **National Adaptation Programme of Action (NAPA)** in 2010, **Local Adaptation Plans of Action (LAPA)** in 2012, the **NCCP** in 2019 and its **NAP** for 2021–2050, which outlines comprehensive programmes until 2050 to enhance adaptive capacity and resilience. Quantitative targets to address the adverse impacts of climate change have been set across these adaptation initiatives. In December 2020, Nepal submitted its second **NDC** and outlined more specific targets for the year 2030, extended its coverage across various sectors, and introduced a net-zero emission objective (GoN, 2020). The 2021 **Long-term Strategy (LTS)** further heightened Nepal’s climate ambition with a 2045 net-zero mitigation target.

Climate action has been further supported by a **Climate Resilience Framework** in 2011; a **Disaster Risk Reduction and Management Act** in 2017; the **Local Government Operationalization Act** of 2017; the **Local Adaptation Plans for Action framework** in 2019; a **National Framework for Local Adaptation Plans for Action** in 2019; the **Local Level Development Planning Guideline** of 2021; the **National Adaptation Plan Summary for Policy Makers** 2021; and the **Disaster Risk Reduction National Strategic Plan of Action** 2018–30.

2.2. Institutional arrangements and stakeholders

The Government of Nepal has established an institutional arrangement that integrates the federal, provincial and local levels in order to ensure the effective implementation of climate-resilient actions and engage stakeholders comprehensively across all three tiers of governmental bodies. This approach aims to create a cohesive and coordinated framework for climate-related initiatives, fostering collaboration and synergy among different levels of government. At the top of this framework is the Environmental Protection and Climate Change Management Council, led by the Prime Minister, which functions as the apex body for providing overarching guidance and leadership on climate change initiatives. At the federal level, the Ministry of Forest and Environment (MoFE) takes the lead in spearheading climate change efforts, while at the provincial level, the Ministry of

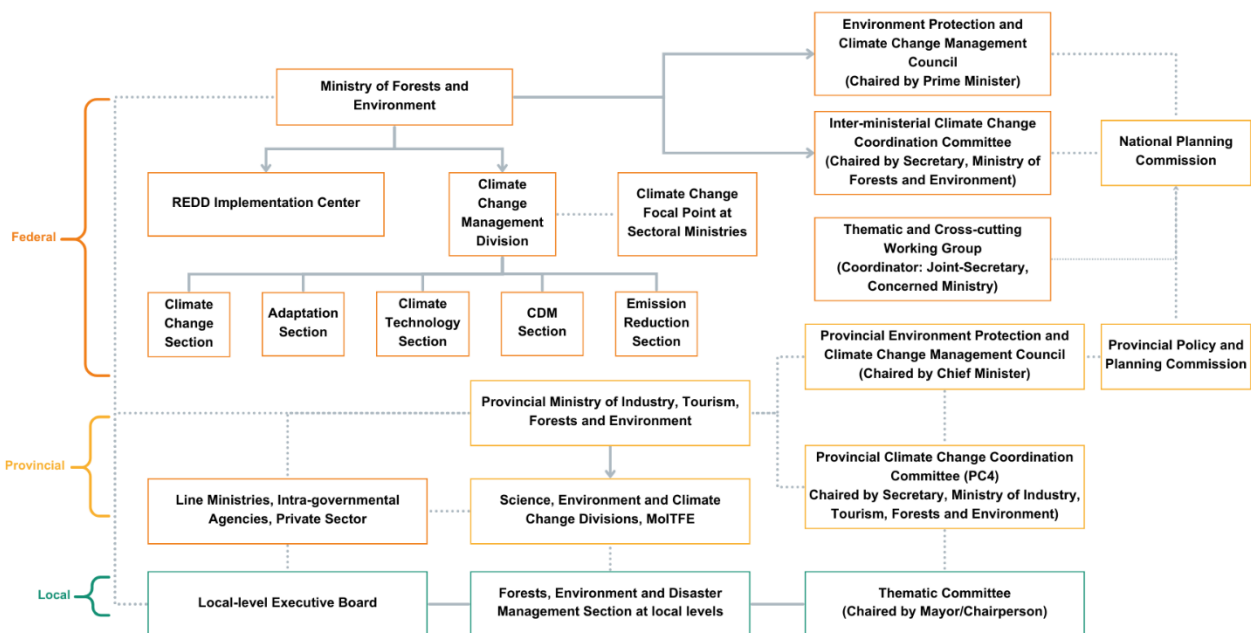


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Industry, Tourism, Forest and Environment (MoITFE) assumes a pivotal role (see Figure 2).


The government has also instituted the Inter-Ministerial Climate Change Coordination Committee (IMCCCC) at the federal level and the Provincial Climate Change Coordination Committee (PCCCC) at the provincial level. These bodies seek to facilitate effective cross-sectoral coordination at all governmental levels. Furthermore, the NDC implementation plan introduces the High-Level Climate Change Steering Committee. This committee, chaired by the Minister for Forest and Environment, boasts the participation of secretaries from relevant sectoral ministries. It serves as a platform for providing the political leadership and commitment necessary for the successful implementation of the NDC, emphasising a collective and coordinated approach towards climate action.

Figure 2 Institutional arrangements for climate change in Nepal



Source: Adapted from World Bank, 2022

Also, implementing the country's Climate Finance Strategy and National Capacity on Climate Finance Management under the 'NDC implementation plan' involves establishing and operationalising a climate information system, incorporating climate change-related education into all secondary schools, and mobilising 2,000 climate change adaptation resource persons at the local level (GoN, 2022). Additionally, it aims to enhance the Climate-Sensitive Disease Surveillance System by integrating climate and weather information into existing surveillance systems. The plan also intends to integrate a climate risk assessment mechanism into the Water, Sanitation and Hygiene (WASH) programme planning and implementation cycle by 2025 (GoN, 2020).



Despite the efforts mentioned above, significant capacity gaps persist, particularly within subnational governments and notably at the local level. Coordination across different sectors and government tiers is inadequate due to unclear delineation of responsibilities among the three layers of government. Only a handful of ministries have comprehensively incorporated climate change considerations into their sectoral plans, policies, legal frameworks, budgets and institutional structures. Furthermore, the absence of a robust climate information system exacerbates these challenges, leaving planning without a solid foundation. Similarly, the institutionalisation of engaging key stakeholders – such as the private sector, civil society organisations, think tanks and the media – in climate planning is lacking within climate finance initiatives. This challenge is exacerbated by a widespread lack of awareness and information sharing regarding climate-related issues, resulting in insufficient pressure for targeted climate oversight.



+ 3. Efforts towards financing climate

action in Nepal



3.1. Financing needs in Nepal


The finance needed to support Nepal's climate goals is substantial, but a precise estimation of that figure is lacking. According to Government of Nepal estimates, the country needs about \$77 billion to implement adaptation, mitigation and sustainable development targets by 2030 (NRB, 2024). Meanwhile, other estimates claim the funding required is nearly \$50 billion for its NAP until 2050, almost \$200 billion for its Long-Term Strategy (LTS) and \$36 billion for its NDC until 2030 (World Bank, 2022). The (GoN 2021) estimates that according to the NAP, nearly \$48 billion is needed to implement 64 climate change adaptation programmes until 2050, almost \$25 billion is required to achieve NDC conditional mitigation activity-based targets, and \$3.4 billion is needed to achieve NDC unconditional targets (MoFE, 2021). Then \$20 billion is required for 2023–25 and \$30 billion for 2026–30 if the country is to achieve its SDG targets by 2030 (NPC, 2018), which is equivalent to 3.38 times the national budget of FY 2021/22 (\$14.2 billion in corresponding exchange rate) of the same fiscal year. These initial assessments significantly surpass the country's capacity for implementation, the financial sector's capabilities, and the international development and climate finance available, even when these are conceived in an optimistic vein.

Nepal has secured grants and concessional loans from bilateral and multilateral partners (see Section 3.3). The increasing debt service ratio, however, places severe limits on international assistance for climate finance. Nepal was due to allocate 44.16% of total foreign assistance for the fiscal year 2022/23 to pay the principal and interest on foreign loans. This amount is equivalent to 22.65% of the capital expenditure for the same fiscal year. Applying this figure to the last five-year average (FY 2018/19 to 2022/23), 27.64% of foreign assistance must be earmarked for settling foreign debts, equivalent to 15.61% of the country's capital expenditure (see Annex I).

On the other hand, rising climate impacts in Nepal are estimated to generate a 1.5–2% loss in Nepal's current gross domestic product (GDP) per year (MoSTE, 2014) and a 2.2% loss in GDP by 2050 (World Bank, 2021). The economic cost of climate vulnerability in the agricultural sector in 2020 was estimated at 1.5–2% of GDP according to the Climate Country Development Report (World Bank, 2022).

Box 1 Nepal's sectoral ambitions in its updated NDC

Nepal's updated NDC commits the country to increase clean energy production capacity to 15,000 megawatts (MW) by 2030, with 5–10% of this capacity expected to be generated from mini- and micro-hydropower plants, solar panels, wind power and bioenergy. The



goal is to ensure that 15% of total energy demand is met through clean energy sources (GoN, 2022). Of this target, 5,000 MW is set as an unconditional goal, while the remaining 10,000 MW depends on funding from the international community (GoN, 2020). The total investment on hydropower generation required by the Nepal Electricity Authority (NEA) and the private sector in line with the 'business as usual' (BAU) scenario is about \$9.1 billion from 2022 through 2040, with this needing to be doubled to meet the target. From 2012 to 2021, the average annual investment (public and private) made in hydropower generation was \$424 million (World Bank, 2022). From 2022 to 2040, the average annual investment in line with the BAU forecast would rise slightly to \$482 million, which also needs to be doubled in the BAU scenario. In such a context, both public and private financing must increase twofold to achieve the target.

In a move to greening the economy, Nepal's NDC aims to boost the adoption of electric vehicles, with a target figure of 25% for all passenger vehicles (including two-wheelers) by 2025. By 2030, the plan is to increase this to 90% for private passenger vehicles (including two-wheelers) and 60% for all four-wheeler public passenger vehicles. Additionally, there is a plan to establish a 200-kilometre electric rail network to support public transport and the efficient movement of goods by 2030. Against the figure of 25% electric vehicles by 2025, an insignificant percentage of electric vehicles are currently on the roads, which renders it unlikely that the target will be met. Regarding the 200-kilometre electric railway, even the preliminary works have not yet been completed.

The NDC also includes objectives related to clean cooking technology; it intends to install 500,000 clean cookstoves and an additional 200,000 household biogas plants by 2025. By 2030, the NDC envisions that electric stoves will be the primary cooking method in 25% of households. This target may be achieved as some 204,393 electric stoves were imported in FY 2022/23 alone (MoF, 2023), maintaining an approximate annual growth of 30%. In FY 2021/22, more than 143,000 cookstoves were imported.

Additionally, the NDC has promoted climate-smart agriculture (CSA) practices in both crop and livestock systems in the agricultural sector. However, this target may be hard to achieve as the progress recorded is insignificant, keeping in view the dismal performance of the Prime Minister Agricultural Modernization Program (which is facilitating CSA) (NPC, 2022) and Nepal's sluggish growth of less than 3% in agriculture for the fiscal year 19964/65 – 2022/23. The NDC aimed to ensure that 45% of the country's land would be covered by forests by 2030. To achieve this, an implementation plan was formulated outlining specific activities in different sectors, with roles to be played by various ministerial departments along with procedures for reporting and ensuring transparency (GoN, 2022). Nepal's progress towards meeting this target looks considerable, as approximately 44.74% of its land was covered by forests in 2020, along with an additional 4.38% of other wooded land coverage on private land (together amounting to 11% more than the world average).

Adaptation targets related to water supply have also been set by Nepal – to increase people's access to basic water supply from 88% to 99% and improved (safe) water supply, increasing it from 20% to 40%. Additionally, there is a plan to establish a multi-hazard




monitoring and early-warning system to cover all the provinces by 2030. The NAP encompasses 64 priority programmes designed for the short term (to be achieved by 2025), medium term (by 2030) and long term (by 2050). Likewise, the LTS for addressing climate change elevates Nepal's commitment to net-zero GHG emissions by 2045, which is five years earlier than the original timeline outlined in its NDC.

3.2. Financial policy and regulation

While dealing with financial policy and regulation, the Nepal Rastra Bank (NRB) has been working to support the country's climate ambitions by implementing a green finance taxonomy (GFT) for the financial sector in a draft form, as well as environmental and social risk management (ESRM) for banks and financial institutions (BFIs), which is the main regulating directive for banks and financial institutions to identify, assess and categorise environmental and social risks associated with their clients and the projects banks and financial institutions lent. NRB is also focusing on priority sector lending, especially in renewable energy and sustainable agriculture, interest subsidies and concessions for lending that supports the climate.

Nepal's GFT classifies economic activities into 'green', 'amber' or 'red' categories. The taxonomy is designed to boost domestic green finance by encouraging the development of green bonds, promoting climate risk reporting and addressing capital requirements within the financial sector. Acting as a practical tool, the taxonomy aids financial institutions in making informed decisions about green finance activities. The entities falling under the regulatory purview of GFT encompass commercial banks, development banks, finance companies and microfinance institutions regulated by NRB; the insurance market regulated by the Nepal Insurance Authority, which includes life insurance, non-life insurance, reinsurance and microinsurance; and the capital market regulated by the Securities Board of Nepal, which involves merchant banks. While adherence is voluntary, financial sector actors aspiring to invest in green activities are expected to comply with global best practices, using evidence to justify their investments. This involves adherence to, verification of, tracking and reporting on taxonomy-aligned investments using simplified financial and non-financial disclosure templates. The monetary policy of FY 2023/24 is expected to implement the GFT as early as possible.

The taxonomy envisages that financial sector actors will play a crucial role in mitigating economic risks, attracting green investments and creating green jobs through its implementation. They are expected to lead in achieving national climate targets, promoting sustainability and preventing pollution. The emphasis is on developing skills to formulate credible net-zero, green, resilient and inclusive investment plans to avoid 'greenwashing'. Collaboration with the public sector and regulators is encouraged to introduce innovative green financing instruments, while stakeholders are expected to raise awareness and build capacity for effective implementation. Compliance with the taxonomy, verification, advising clients and progress monitoring towards sustainability



goals are expected from the guidelines. Corrective measures for non-compliant activities and additional actions for transitional ones are also emphasised, aiming for an ultimate 'green or transformative' status.

NRB has also amended the unified directives requiring banks and financial institutions to report on the climate exposure of borrowers. As per the guideline, every credit amounting to more than 10 million Nepalese rupees (NPR) that flows to a private sector project should contain an environmental impact assessment (EIA), with mitigation plans that are subject to NRB and the relevant authorities' audit.

It is worth mentioning here that there is significant scope to expand the use of green loans and green guarantees in Nepal, if banks and financial institutions adopt the Green Loan Principles outlined by the International Capital Market Association (UNDP, 2021). Some commercial banks, for example, NMB Bank (formerly Nepal Merchant Banking and Finance Limited) have already taken steps in this direction by issuing an energy bond (*Urja Rinpatra*) to provide funding for projects in areas such as solar energy, biogas, clean cookstoves and improved water mills. They have also introduced specialised green financial products, such as green fixed deposits: fixed deposit accounts provided by banks or financial institutions that are designated for financing environmentally friendly or sustainable projects. The funds generated through green lending by banks and even microfinance institutions are directed toward other sectors such as electric mobility, municipal solid waste management and development of environment-friendly buildings. Nepal Infrastructure Bank Limited (NIFRA) also issued bonds of this kind to provide long-term financing for green infrastructure, while the Agricultural Development Bank (ADB) has issued an 'agri-bond' to promote green lending in agriculture sector. Likewise, Global IME Bank Limited has borrowed \$56 million from the International Finance Corporation (IFC) to enhance access to finance for smaller businesses in Nepal, including those owned by women, and to promote climate-friendly projects. This investment aims to enhance competitiveness in the small and medium enterprise (SME) finance market, facilitate financial inclusion, generate employment opportunities and contribute to the achievement of the nation's climate objectives.

Nepalese banks and financial institutions also offer concessional interest rates to finance electric vehicles, including reduced down payment options. To align with the state's climate goals, the government, through NRB's policy initiatives, prioritises the agriculture and renewable energy sectors. The government facilitates this by providing loans at concessional interest rates. Specifically, a 5% interest rate subsidy is extended to farmers and producers through the NRB in support of credit disbursement by BFIs for agriculture lending, which constitutes more than 8.5% of the total lending portfolio of these institutions. Additionally, concessional interest rates (BFIs' base rate plus a maximum of 2% interest) are offered for various clean energy projects, including hydropower, solar panel installations, biogas initiatives and improved water mills.

Similarly, Elevate Energy Pvt. Ltd. and Apollo Energy Pvt. Ltd., both subsidiaries of the Golyan Group, have entered into grant agreements with the US International Development Finance Corporation (DFC) to conduct detailed studies on two peaking hydroelectric



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projects located in Mugu district: Upper Mugu Karnali (306 MW) and Namlan Khola (135 MW). These projects are anticipated to address the country's peak-hour energy demand shortfall and contribute to a reduction in energy imports. Notably, a \$10 million grant provided by a development finance institution to a private company in Nepal marks a significant milestone and is the first of its kind.¹

Despite these efforts, the mobilisation of private finance towards green lending is impeded by several additional challenges. These involve, first, a scarcity of robust mechanisms to assess localised climate risk and vulnerability data pertinent to particular investments, creating uncertainty for potential investors. Additionally, the absence of tailored sector-specific policies and institutional frameworks poses hurdles for private sector engagement, as it diminishes clarity and guidance on how to navigate climate-related challenges within each sector. Moreover, the current landscape lacks adequate financial incentives to incentivise private investment in resilience and adaptation initiatives, thereby failing to address the inherent risks and elevated costs associated with such endeavours. As a result, these barriers collectively constrain the mobilisation of the private capital necessary to build climate resilience and promote adaptation measures.

3.3. Fiscal policy levers


The strategic use of tax, subsidies, carbon pricing, public procurement guidelines and public budgets as fiscal policy levers, especially in least developed countries like Nepal, can be instrumental for a country's low-carbon, climate-resilient trajectory.

In recent years, the Government of Nepal has implemented policies aimed at providing substantial tax incentives for climate action. Tax incentives (5%) have been extended to home appliances and other electrical items that consume electricity. Specifically, materials and equipment recommended by the Alternative Energy Promotion Centre (AEPCC),² such as solar panels, batteries and tools for hydropower generation, are subject to only a 1% tax rate.

As part of measures to discourage the use of fossil fuel-operated vehicles to transport goods and passengers, the government imposes a higher tax rate of up to 10% under the road repair and maintenance category, while electric vehicles are taxed at a lower rate of 5%. In support of eco-friendly transport, the government imposes an emission tax, with electric vehicles exempt from this levy. Subsidies previously granted to petroleum-based fuels have been eliminated and since 2021/22, there has been a tax increase on petroleum products to discourage their use and adjust the price gap between Nepal and India.

¹ See: www.linkedin.com/feed/update/urn:li:activity:7011553040117755904/

² AEPCC is a government institution founded on 3 November 1996, under the Ministry of Science and Technology. The primary objective of the centre is to foster the development of renewable and alternative energy technologies in Nepal. Presently, it is functioning under the Ministry of Energy, Water Resources and Irrigation.



As part of green procurement practices, the government has enacted a policy to purchase electric vehicles for government and other public institutions, contributing to a sustainable and environmentally friendly approach to public transport.

Within the agricultural sector, the government has introduced an agriculture insurance programme. This initiative aims to offer insurance cover for diverse agricultural activities, including farming cereal crops, livestock, poultry, fish, vegetables, fruits, etc. The insurance provides compensation for potential losses incurred in crops and livestock due to various factors such as droughts, floods, rain, storms, insect infestations, diseases, accidents, fire, earthquakes, landslides, etc. Notably, the government provides an 80% subsidy on insurance fees for this coverage.

Additionally, Nepal can enhance its climate initiatives by utilising carbon credits through the Forest Carbon Partnership Facility's (FCPF) Emission Reduction Program (Forest Carbon Partnership Facility, n.d.). By participating, Nepal can utilise its forests for sustainable practices, generating credits for global emission reduction targets and funding sustainable development projects. It also fosters international collaboration, providing access to funding and expertise for efforts towards resilience. Leveraging the Program showcases Nepal's commitment to global climate action, establishing leadership in sustainable forest management. This enhances Nepal's reputation, attracting investment and support for climate mitigation and biodiversity conservation.

In addition to this, AEPC holds eight clean development mechanism projects and 39 programmes of activities generating around 5.96 million certified emission reduction units, earning carbon revenue of around \$32.4 million from household biogas, improved water mill projects and micro-hydro projects by registering renewable energy as carbon projects in the UNFCCC (AEPC, 2023). Some part of the generated revenue is expected to be utilised for the repair and maintenance of the plant and for subsidising new installations.

3.4. Public finance

The Government of Nepal has taken significant steps towards integrating climate change into public financial management. Stemming from the 2011 Climate Public Expenditure and Institutional Review (CPEIR) recommendations, the Climate Change Budget Code (CCBC) was introduced in 2013 to monitor climate change-related expenditure at the national level. In 2017, the government formulated a Climate Change Financing Framework (CCFF) to mainstream climate change in planning and budgeting at all government levels, facilitating reporting and verification of climate change financing for enhanced accountability. As part of this reform, the CCBC was incorporated into the Medium-Term Expenditure Framework (MTEF). This served to help the government to direct climate projects and streamline investments through the national system, fostering a long-term and scaled-up approach. Over time, this initiative is expected to systematically strengthen climate change mainstreaming into planning and budgeting by mobilising, managing and targeting finance for climate action.



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While dealing with the allocation of climate expenditure, the most significant part comprises the government's climate-related programme included in annual budgets. International climate finance also flows through government budgetary structures. Climate finance and development support aligns with Nepal's top priorities for development cooperation, as established in its GRID Strategic Action Plan and its International Development Cooperation Policy (IDCP), which designates disaster management and climate change issues as the top priorities in development cooperation by all development partners and funding mechanisms (MoF, 2019). The ongoing development of the GRID Strategic Action Plan has played a crucial role in prioritising, facilitating and harmonising investments and policy actions related to climate resilience and environmentally sustainable paths (World Bank, 2022).

Data available during 2013–17 shows that donors committed \$640 million for adaptation-related activities and \$563 million for mitigation (Rai et al, 2020). At present, Nepal is receiving climate funding from several international sources such as the Adaptation Fund (AF), Global Environmental Facility (GEF) and Green Climate Fund (GCF), all functioning under the UNFCCC. However, the World Bank and the Asian Development Bank (ADB) are the two primary donors for Nepal's climate finance projects. Besides, the country is now able to claim substantial amounts as receipts from the carbon trade. Recently, Nepal's development partners (ADB, Australia, the European Union, Finland, France, Germany, the International Monetary Fund (IMF), Norway, the Republic of Korea, Switzerland, the United Kingdom, the United Nations, the United States and the World Bank) have come on board with Nepal's GRID approach. They have set aside more than \$7.4 billion from existing portfolios and forthcoming projects in the next three to five years to support this agenda (World Bank, 2021) through the government's annual budgets.

Nepal's climate finance practice blends top-down guidelines under a 'whole of government' approach, attached to a high-level strategic resource envelope, with bottom-up approaches to prioritise allocations through the budget cycles at various levels of government, starting with the federal level to the provinces and local governments. Recognising that people on the ground need finance to respond to climate change, Nepal has committed to channel at least 80% of its climate funds to the local level (GoN, 2021). This establishes a connection between policy decisions, budget allocations and expenditure tracking in a more structured manner, providing specific steps to integrate climate finance into public financial management systems for effective climate funding.

Nepal's current practice addresses three primary policy challenges related to climate finance. First, it establishes tools to ensure that funds are targeted effectively to reach the most vulnerable local population groups, aligning with the climate change policy's priority (that is, directing 80% of the climate budget allocation to the local level). Second, it enhances climate finance readiness by strengthening existing public financial management structures and managing external climate funds through country systems. Third, it improves the effectiveness of existing climate finance by reforming planning and budgeting guidelines and other tools to facilitate more informed decision-making.



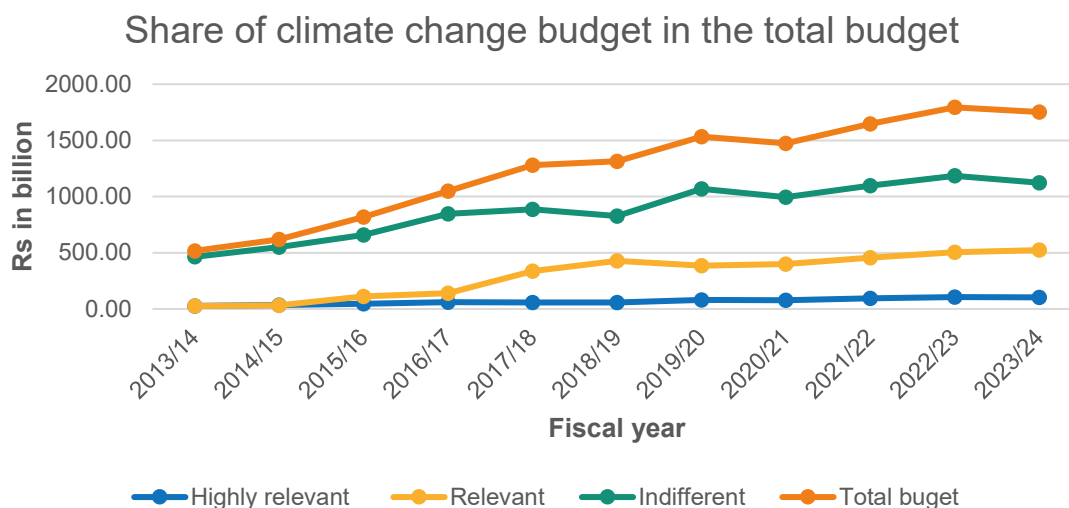
3.4.1. Budgetary finance in climate actions at the federal level

Before 2013, Nepal accessed international support for climate adaptation and mitigation activities as a self-standing initiative. However, since FY 2013/14, the government has incorporated the climate code into its annual budget. Every budget item is coded as highly climate relevant, relevant or climate indifferent. Direct benefits pertain to a climate budget that directly (highly relevant) and significantly contributes to addressing climate change impacts in the country. In contrast, indirect benefits involve a climate budget that provides relevant support to climate issues, but does so indirectly.

In FY 2013/14, the government allocated 5.36% of its budget as highly climate relevant, which has followed an average increment of 5.42% annually for the last 11 years, and 4.98% of its budget as relevant, implying an average annual growth of 21.25% for the same period (see Figure 3 and Annex II).

Despite an increase in federal funding for climate-related activities, the resources available are still insufficient. The government has made provision for the Environment Protection Fund (EPF) and Disaster Funds. In that regard, the Disaster Risk Reduction National Strategic Plan of Action (2018–2030) calls for the allocation of at least 5% of the annual budget of every public institution to reduce the risk of disasters. However, these mechanisms are relatively new and require better understanding and operationalisation by key stakeholders if they are to mature to a sustainable level.

Figure 3 Share of climate change budget in the total budget at the federal level



Source: Budget document of the respective fiscal year, Ministry of Finance

3.4.2. Budgetary finance in climate actions at the provincial level

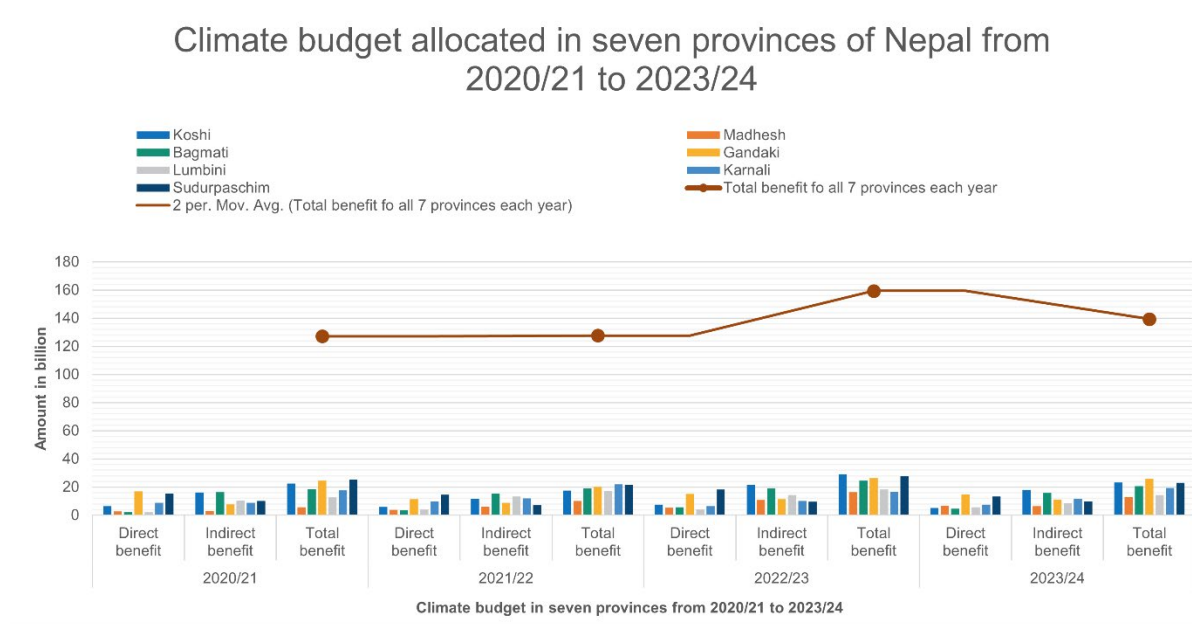
Since the fiscal year 2020/21, climate budget allocations have been made across all seven provinces of Nepal, delivering both direct and indirect benefits to climate-related initiatives.



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A graphical representation spanning four years from 2020/21 indicates an overall increase in benefits by the year 2022/23. However, there is a noticeable decline in 2023/24, although benefits remain higher than the levels observed in 2020/21 and 2021/22 (see Figure 4 and Annex III). The total climate budget in most provinces remains below NPR 30 billion.

Figure 4 Climate budget allocated in seven provinces of Nepal



Source: Budget Speeches of Provincial Governments (FY 2020/21 – 2023/24)

However, despite the Local Government Operationalization Act 2017, which mandates the transfer of environmental management responsibilities to local governments, authority in sector policies is retained at the national level. Meanwhile, coordinating environmental and climate actions between the national, provincial and local governments has been less than harmonious at the inter-ministerial and local levels. The weak technical capacities of these agencies have impeded their ability to perform their climate/environmental management responsibilities effectively and adequately. The Constitution has devolved Disaster Risk Management (DRM) responsibilities (environmental management, pollution control and climate actions) to provincial and locally elected bodies, but they are under severe capacity constraints. Therefore, strengthening local governments' capacity to implement climate actions is urgently needed. As local governments are relatively newly formed entities, the federalisation of the DRM agenda needs to enable communities to enhance resilience through capacity building of local governments (World Bank, 2022).



3.5. Information instruments

Information instruments are expected to have a significant impact on behaviour, primarily by raising awareness of climate-resilient activities across the subsectors of the economy. The information tools encompass certification and labelling, transparency initiatives, corporate strategies, awareness campaigns, statistical services, scenario analysis and stress testing, standards, plans and strategies, as well as disclosure requirements.

In a move towards greening the economy, the top body of Nepali private sector – the Federation of the Nepalese Chambers of Commerce and Industry (FNCCI) – established the Energy Efficiency Centre (EEC) to facilitate Nepali industry and enterprises to adopt energy-efficient technologies, processes and practices. The centre is dedicated to creating, managing and investing in trustworthy energy to enhance competitiveness, with the primary objective to lead and coordinate national efforts to improve energy efficiency and reduce energy waste, particularly by transitioning industries from coal and thermal energy to efficient renewable energy sources. The EEC focuses on conducting energy-efficient activities, with the primary goal of raising awareness in the market on sustainable ways of using energy, ultimately contributing to sustainable economic growth. The centre's programmes include technical services, information dissemination, publications and special policy studies. Additionally, the EEC provides information and energy-efficient technologies to various industries, including the metals, cement, brick, hotels, pulp and paper, dairy, and soap industries, among others.

In a concerted effort to steer Nepali industry toward embracing green growth, the FNCCI has established a Green Growth Advisory Service. This service aims to actively promote environmentally sustainable practices, thereby fostering economic growth. The advisory service takes the initiative in assisting the development of strategies and action plans to promote a green economy.

Green infrastructure technologies from the private sector are revolutionising the construction sector by incorporating sustainable building techniques and materials. Construction projects are now adopting environmentally conscious practices, with an increasing emphasis on cutting-edge materials such as carbon-negative concrete. This innovative concrete not only serves its structural purpose, but also absorbs more carbon dioxide during its manufacture than it generates.

Furthermore, in recent years, urban planning – including the construction of buildings by the private sector – has started to incorporate elements like green walls and roofs to mitigate the impact of urban heat islands and enhance energy efficiency. By prioritising the construction of more liveable and environmentally friendly urban areas, these technologies contribute to the achievement of the SDG for sustainable cities and communities. The overarching aim is to create urban spaces that not only promote well-being, but also significantly reduce environmental impact.




+ 4. Challenges and opportunities

4.1. Challenges

While Nepal has established a strong policy foundation, there are considerable challenges when it comes to effectively putting these policies into practice. These challenges primarily stem from existing shortcomings in coordination, technical capabilities and financial resources. For example:

- i. Coordination across various sectors and government levels in Nepal falls short due to a lack of clear delineation of responsibilities among the three layers of government. The mechanisms for coordination at the local level are notably weak.
- ii. Engaging important stakeholders, such as the private sector, civil society organisations, think tanks and the media, in climate planning is not institutionalised. This challenge is compounded by a general lack of awareness and information sharing on climate-related issues, which leads to a lack of pressure for specific climate oversight.
- iii. Available domestic and international finance for climate action remains grossly insufficient to fulfil Nepal's Paris Agreement commitments. Incentivising private sector and other stakeholders' investment is a big challenge, due mainly to the absence of country rating (an evaluation of a country's creditworthiness or investment risk) and weak governance.
- iv. Several barriers hinder the mobilisation of private finance for resilience and adaptation efforts. These barriers include the absence of localised climate risk and vulnerability data for specific investments, a lack of sector-specific policies and institutional structures to facilitate private sector participation, and inadequate financial incentives to address risks and higher costs.
- v. Substantial capacity gaps within and outside the government are an issue in comprehending and meeting national commitments. Few ministries have started integrating climate change considerations into their sectoral plans, policies, legal frameworks, budgets and institutional structures. There is a glaring absence of a robust climate information system, which leaves planning without a solid foundation and compounds these issues.
- vi. Crucial data related to natural resources, the environment, hydro-metrological information, climate adaptation and mitigation lies scattered across different agencies and government levels, making it difficult to access and utilise effectively. Additionally, the process of tagging budget allocations for climate-related initiatives has been delayed and provides descriptive categorisation rather than a



prioritisation based on climate impact. Nor does the tagging system indicate whether an activity aligns with climate objectives.


- vii. Although the MTEF guidelines call for planning based on national climate targets, information systems do not adequately document how and whether activities contribute to these targets. There is also an absence of post-implementation reviews of projects to assess their climate outcomes.
- viii. Climate action at the subnational level remains severely limited. While provincial governments have initiated the development of climate strategies and action plans in line with national policies, there is a lack of clear criteria for screening and prioritising climate-related projects within annual budgets.
- ix. Although climate targets directly affect state-owned enterprises (SOEs), there is limited evidence of climate action by these entities. Integration of climate and disaster risk considerations into the business and service delivery of SOEs has not yet occurred at the operational level. For example, NEA is a key entity responsible for the NDC related to de-carbonisation, energy generation and improving grid efficiency. However, there is little evidence of the agency taking a prominent role in carrying out these goals. Similarly, public utilities like the National Telecommunications Corporation and Nepal Water Supply Corporation should play specific roles in enhancing adaptation and resilience, but they are not included in national policy documents. Additionally, there is no sign of concrete plans or strategies for putting the NDC or NAP into action within any of the SOEs (World Bank, 2022). The lack of clear mandates and assignments for SOEs in line with the NDC and NAP is a significant obstacle.
- x. Procurement laws and regulations do not provide guidance or options for adapting to and promoting climate-friendly services. Current procurement policies prioritise the lowest market price, discouraging the government, SOEs or contractors from focusing on quality-enhancing measures such as sustainability or resilience. Green product catalogues, green marketplaces, eco-labels and other recognised standards are not currently incorporated.
- xi. The GFT and ESRM provide a framework to assess and manage environmental and social risks in lending/investments, but one cannot ignore the failure to implement the guidelines for loans that amount to more than NPR10 million (excluding the exemptions made in the guidelines), as both the lender and borrower (the private sector) are reluctant, except in the cases of hydropower, cement and large infrastructure projects. The costs increase due environmental assessments and mitigation programmes, and those claimed by procedural complexities, are the main reasons behind the non-compliance with the guidelines.



4.2. Opportunities

Financing transformative climate actions is greatly facilitated by the government's tools to promote green development policies, which are crucial to achieve the climate ambitions of least developed countries like Nepal and to support the poorest people who are most affected by climate change. Promoting financing in climate actions helps 'leapfrog' the growth of these countries and fosters green development – one of the aspirations of the Sustainable Development Goals. Opportunities include the following:

- i. The introduction of GFT and ESRM as financial policy regulation instruments has created an opportunity to extend investments in renewable energy, since this sector enjoys concessional interest and priority sector lending along with various tax concessions through fiscal policy measures. As a result, the generation of renewable energy offers dual advantages: first, it reduces a country's reliance on fossil fuels, lowers greenhouse gas emissions, improves overall air quality and contributes to global climate goals; and second, it contributes to green growth, which is vital to sustainable development. Also, the provision of concessional interest rates for electric vehicle loans and the government's green procurement practices have created an opportunity for the widespread adoption of electric vehicles and the development of a pollution-free transport system. These initiatives align with Nepal's climate ambitions.
- ii. The NRB's policy of a minimum 15% of its lending portfolio going to the agriculture and livestock sectors as priority sector lending has opened opportunities for these sectors' growth. Additionally, the government's subsidy in agriculture insurance programmes, along with the subsidy on interest for agriculture and livestock sector lending, provide a promising outlook for the development of these sectors.
- iii. Nepal's GFT is expected to boost domestic green finance by encouraging the development of green bonds, which are increasingly being used in Nepalese financial and non-financial institutions to increase green financing activities such as in hydropower, solar energy, biogas, clean cookstoves and improved water mills. It is also envisaged that the GFT will attract international green investment, create green jobs and support financial institutions to make informed decisions on more green finance activities.
- iv. Implementation of GFT and fiscal incentives have opened avenues for international finance and assistance from both government and private sources. These resources are being directed towards climate-resilient development programmes, supporting efforts to mitigate the impacts of climate change and promote sustainable development.
- v. The provision of tax incentives to home appliances and other electrical items that consume electricity has created an opportunity to utilise electricity from renewable sources. This has significantly reduced reliance on conventional and fossil fuels



(firewood, petrol, diesel, liquefied petroleum gas etc.), thereby improving public health and the environment.

- vi. Innovations within the private sector, spurred by the government's tools to promote green development policies – particularly in green infrastructure like carbon-negative concrete and advances in urban planning such as green walls and roofs – are revolutionising the construction industry. These innovations prioritise environmentally friendly techniques and materials, significantly contributing to the achievement of the SDGs set by the government for 2030.
- vii. Nepal can further advance its climate-related initiatives by expanding the use of carbon credits. The country can utilise its forests for sustainable practices, generating credits for global emissions reduction targets and funding sustainable development projects. The use of carbon credits also fosters international collaboration, providing access to funding and expertise for resilience efforts. Leveraging the programme showcases Nepal's commitment to global climate action, establishing leadership in sustainable forest management. This enhances Nepal's reputation, attracting investment and support for climate mitigation and biodiversity conservation. In addition, Nepal can benefit from exporting surplus electricity to India, which replaces the use of fossil fuel and can claim carbon credits.




+ 5. Conclusion and recommendations



Nepal has made significant efforts towards a low-emission, climate-resilient development pathway. As part of these efforts, it has put in place several government tools that encourage the flow of finance to climate actions. To continue to work towards its commitments, this paper provides the following recommendations:

- i. There is a vital need for more domestic resources and enhanced financial assistance from developed countries and international organisations to significantly increase financial support to Nepal to achieve its Sustainable Development Goals. Establishing a dedicated fund for climate finance could promote the government's climate ambition. Some of the funds – like the Renewable Energy Fund, the Town Development Fund and the Hydroelectricity Development Fund – could be merged and made a basket or dedicated fund for activities related to climate actions. Additionally, Nepal, as an LDC, lacks the capacity to take on loans or pay back debt. Therefore, it is essential that climate finance for LDCs primarily takes the form of grants and soft and highly concessional loans, rather than conventional schemes for borrowing, to avoid increasing debt their burden. This support should be predictable, consistent and scaled up to meet the increasing needs for climate adaptation and mitigation.
- ii. An effective implementation of GFT and ESRM is needed to encourage green finance from within the private sector. This involves continuous refinement of the regulatory framework related to green finance and equipping regulators and market participants with the expertise needed. Furthermore, efforts should be directed towards strengthening the overall business environment, with particular focus on attracting foreign direct investment for long-term financing.
- iii. It is essential to incorporate climate risk assessment into the nation's financial system and broader economy. This requires enhancing the capabilities of supervisory authorities and financial institutions to evaluate climate risks, including both physical and transition-related risks. Encouraging the domestic insurance sector to adopt risk-based pricing for premiums could also be useful.
- iv. Nepal can further advance its climate-related initiatives by expanding the use of carbon credits through emissions trading programmes and facilities. It needs skills development to enable it to explore this direction.
- v. There is a critical need to clearly define and assign functional responsibilities and mandates related to climate change to stakeholders, including sectoral ministries, subnational governments, SOEs, the private sector and civil society organisations.



This clarity should extend to local governments, empowering them for integrated climate action that includes environmental and disaster risk management.

- vi. To enhance collaboration across sectors and government levels, existing coordination mechanisms should be activated and missing legal mandates should be established. Enhancing local ownership and engagement in this context is an important component to effectively address climate adversities. Encouraging local ownership and involvement of communities and local governments in climate finance projects ensures they are tailored to the specific needs and circumstances of the LDC concerned.
- vii. Integrating climate action into existing plans, such as the national development plan, sectoral plans, MTEF, project portfolios and annual budgets, necessitates the development of the requisite mechanisms and information systems. Here, both short-term and long-term strategies become essential. In the short term, a specific plan for capacity building in the climate domain across all government levels should be created. In the long term, revisions to the Civil Service Act to include climate-specific positions could be explored.
- viii. The CCBC process should undergo a thorough review, while a typology for sector-specific climate change-related activities should be developed. This will support a more robust budget tagging process, which can be extended to the provincial and local levels through implementation of the CCFF.
- ix. Establishing an integrated national system for climate and disaster management information is crucial, as is integrating climate considerations into the procurement framework.
- x. To monitor progress toward climate goals, an integrated system should be established to track achievements towards targets set under the NDC and NAP that need and can be bolstered by improved data generation and validation for all government levels.
- xi. Last, enhancing public disclosure and dissemination of climate-related information in a user-friendly and integrated manner is vital. This can be institutionalised through mechanisms like a citizen climate budget, parliamentary oversight and a public audit system. Developing a classification system for green investments in the private sector's financial and real sectors can further strengthen Nepal's climate resilience and sustainable development initiatives.

Though Nepal is taking initiatives towards low-emission and climate-resilient development, these are only small steps. The government will need better preparation and strengthened capacity to implement its current policies and plans. Nepal has tried to articulate and implement Article 2, paragraph 1(c) of the Paris Agreement, but raising its



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ambitions will be difficult given current capacity levels and the financing it receives and mobilises for climate action.



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Annex I Foreign assistance, capital expenditure and debt service

FY	Total foreign assistance	Grants	Debt service			Capital expenditure	Debt service as % of total foreign assistance	Debt service as % of capital expenditure
			Principal	Interest	Total			
2018/19	94,400.80	2,289.87	20,038.90	4,505.10	24,544.00	241,562.50	26.00	10.16
2019/20	162,607.30	23,215.70	23,560.00	5,238.00	28,798.00	189,084.70	17.71	15.23
2020/21	130,867.20	36,480.90	23,269.00	6,275.00	29,544.00	228,361.00	22.58	12.94
2021/22	133,083.40	24,149.00	29,416.00	7,541.00	36,957.00	216,213.10	27.77	17.09
2022/23	119,860.00	23,120.00	42,517.50	10,415.00	52,932.50	233,695.00	44.16	22.65
Average							27.64	15.61

Source: Economic Survey, Ministry of Finance, 2023; figures in million Nepali rupees (Note: \$1 = NPR130 approx.)

Annex II Share of climate change budget in the total budget at federal level

Fiscal Year	Total budget	Highly relevant	%	Relevant	%	Indifferent	%
2013/14	517.24	27.75	5.36	25.73	4.98	463.76	89.66
2014/15	618.10	34.98	5.66	31.37	5.07	551.75	89.27
2015/16	819.47	46.37	5.66	112.98	13.79	660.12	80.55
2016/17	1,048.92	61.85	5.90	139.76	13.32	847.31	80.78



Adopting a low-emission and climate-resilient development pathway in Nepal: National efforts in financing climate action

2017/18	1,278.99	57.73	4.52	335.63	26.24	885.64	69.25
2018/19	1,315.16	58.00	4.41	429.00	32.62	828.16	62.97
2019/20	1,532.97	79.84	5.21	384.04	25.05	1,069.09	69.74
2020/21	1,474.65	79.09	5.36	399.74	27.11	995.81	67.53
2021/22	1,647.58	94.02	5.71	455.68	27.66	1,097.88	66.64
2022/23	1,793.84	105.85	5.90	503.64	28.08	1,184.35	66.02
2023/24	1,751.31	104.39	5.96	523.59	29.90	1,123.33	64.14

Source: Budget document of the respective fiscal year, Ministry of Finance; figures in billion Nepali rupees

Annex III Share of climate change budget in the total budget at provincial level

FY	Provinces	Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudurpaschim
2020/21	Direct benefit	6.46	2.78	2.23	16.92	2.19	8.75	15.38
	Indirect benefit	16.11	2.95	16.33	7.68	10.50	8.89	9.99
	Total benefit	22.57	5.73	18.56	24.59	12.69	17.64	25.37
2021/22	Direct benefit	5.95	3.85	3.53	11.35	4.06	9.92	14.56
	Indirect benefit	11.64	6.20	15.44	8.86	13.15	11.91	7.26
	Total benefit	17.59	10.05	18.97	20.21	17.21	21.83	21.82
2022/23	Direct benefit	7.50	5.48	5.69	15.05	4.09	6.41	18.29
	Indirect benefit	21.59	10.98	18.94	11.44	14.24	10.17	9.52
	Total benefit	29.09	16.46	24.63	26.49	18.33	16.58	27.81
2023/24	Direct benefit	5.19	6.67	4.70	14.94	5.71	7.56	13.20
	Indirect benefit	18.06	6.33	15.93	11.04	8.53	11.75	9.79
	Total benefit	23.25	13.00	20.63	25.98	14.24	19.31	22.99

Source: Budget Speeches of Provincial Governments (FY 2020/21 – 2023/24)

