# Climate Financing and its Integration to National Planning and Budgetary Process

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# 1: Introduction and Background

Nepal is a country highly susceptible to the impacts of climate change, primarily due to its distinctive geographical and environmental characteristics. Almost every year, Nepal experiences a range of climate-induced disasters, including glacier melt from the Himalayas, glacial lake outburst floods (GLOFs), landslides, earthquakes, tsunamis, and abrupt temperature rises that can result in drought conditions. Nepal ranked 9th most vulnerable country to the impact of climate change despite contributing only 0.056 percent of global Greenhouse Gas (GHG) emissions (GERMANWATCH, 2021). So, it's important to underscore the importance of both national and international efforts to address these impacts through adaptive measures, the integration of climate considerations under different policies and plans and accessing climate finance to support these initiatives.

Climate finance involves the collection of funds from various sources, including governments, international organizations, private sector entities, and individuals. These funds can come from public sources (e.g., government budgets) and private sources (e.g., investments, philanthropic donations, carbon markets, and climate-related financial instruments). Besides, Global Climate Finance plays a crucial role in addressing the challenges posed by climate change. It involves the allocation of financial resources to support both adaptation and mitigation efforts. The efforts calculated from the climate funds update will help to find the gaps to work closely and dedicatedly towards climate change.

## 1.1 Relevant UNFCCC agreements

Nepal is a Least Developed Country (LDC) and is particularly vulnerable to the impacts of climate change. The UNFCCC agreements provide Nepal with access to international support, including financial and technological support, to help it address climate change. The following agreements, given below, will be discussed under this section:

### 1.1.1 The Cancun Adaptation Framework (CAF)

The Cancun Adaptation Framework (CAF) is a comprehensive framework for international cooperation on adaptation to climate change. It was adopted by the United Nations Framework Convention on Climate Change (UNFCCC) in 2010. The CAF provides guidance on how to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change.

Nepal has developed several policies and programs to implement the CAF, including:

- National Adaptation Plan (NAP), which identifies key vulnerabilities and adaptation priorities.
- Local Adaptation Plan of Action (LAPA), which develops and implements adaptation measures at the local level.
- Climate Change Policy 2019, which provides a comprehensive framework for addressing climate change in Nepal.

### 1.1.2 Paris Agreement

Nepal ratified the Paris Agreement in 2016. In 2020, Nepal submitted its updated Nationally Determined Contribution (NDC), which outlines its commitments to reduce greenhouse gas emissions and adapt to climate change. Under its NDC, Nepal has committed to:

- Reduce greenhouse gas emissions by 23% by 2030 compared to a business-as-usual scenario.
- Increase the share of renewable energy in its total energy mix to 15% by 2030.
- Plant 50 million trees by 2025.
- Develop a National Adaptation Plan to strengthen resilience to climate change.

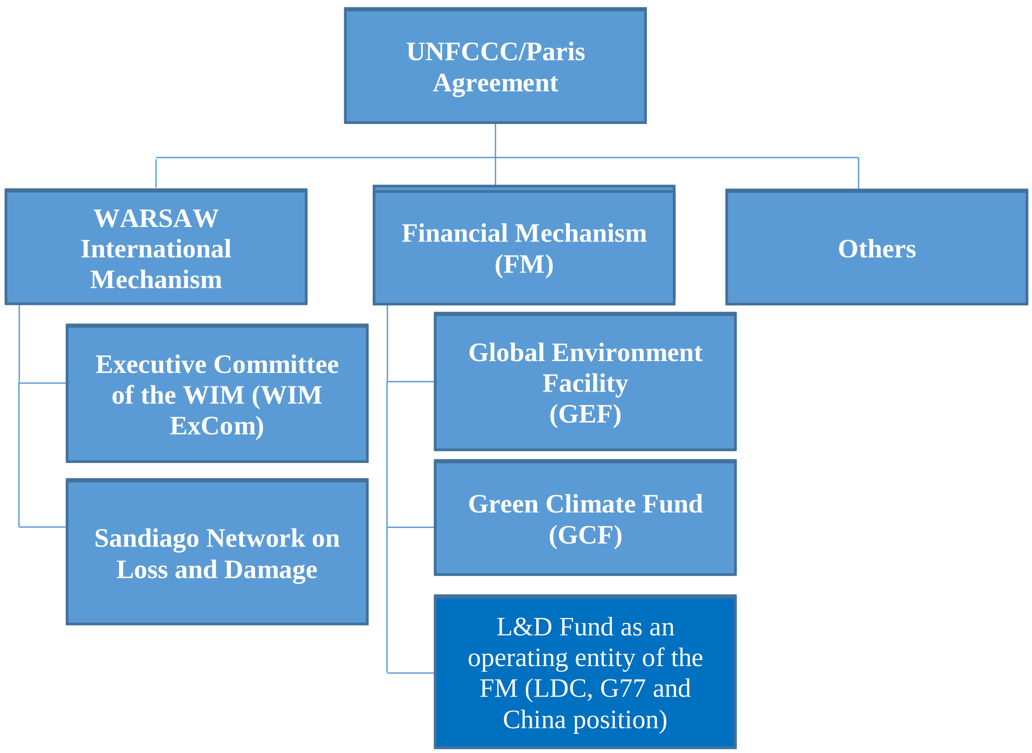



*Figure 1.1: The UNFCCC/Paris Agreement*

Nepal is making progress in implementing its NDC and the Paris Agreement. For example, Nepal has increased its renewable energy capacity and is working to implement its National Adaptation Plan. However, Nepal faces several challenges, including:

- Lack of adequate financial resources.
- Limited technical capacity.
- Weak institutional coordination.
- Lack of public awareness and engagement.

### 1.1.3 Glasgow Climate Pact

The Glasgow Climate Pact, which was agreed upon at the 2021 United Nations Climate Change Conference (COP26), is a significant step forward in the global effort to address climate change.

However, the country needs to do more to meet its climate targets and reduce its vulnerability to climate change. The pact includes several provisions that are relevant to Nepal, such as:

- **A commitment to limit global warming to 1.5 degrees Celsius above pre-industrial levels:** This is a critical target for Nepal, as it would help to minimize the impacts of climate change on the country's glaciers, water resources, and agriculture.
- **Increased financial support for developing countries:** The pact calls for developed countries to provide increased financial support to developing countries to help them mitigate and adapt to climate change. This is important for Nepal, as the country needs significant financial resources to invest in clean energy, climate-resilient infrastructure, and agricultural adaptation measures.
- **A commitment to phase out coal power:** The pact calls for countries to phase out coal power and other fossil fuels, which are the primary cause of climate change. This is important for Nepal, as the country is currently reliant on fossil fuels for most of its electricity generation.

# 2. Current Climate Finance Opportunities

## 2.1 Existing Opportunities

### 2.1.1 GCF

The project funding scheme of GCF seeks to promote a paradigm shift to low-emission and climate-resilient development considering the needs of nations that are particularly vulnerable to climate change impacts. It aims to deliver equal amounts of funding to mitigation and adaptation. The GCF implements projects through partnerships with Accredited Entities.

Developing countries nominate National Designated Authorities (NDAs) or focal points to act as the point of communication with the GCF. Accredited Entities develop funding proposals, in close consultation with NDAs or focal points. However, small-scale projects may also be submitted under the Simplified Approval Process (SAP).

*GCF Project Investment Criteria*

GCF project investment criteria associate six major components (Fig. 2.1). It assesses whether the project can contribute to meeting GCF's objectives and follows its mission. Likewise, GCF intends to have a paradigm shift from traditional on-off project activities towards low carbon and climate-resilient development pathways. GCF project investment criteria also include the possibility of the inclusion of environmental and social safeguards as well as gender equality in its projects.

From the perspective of the climate financing, GCF aims to support the projects that have the potential of meeting the financial needs of the recipient country in making while making the investment. Even if the big proportion of the investment may go from GCF, it intends to have country ownership and make it harmonized with country's policies, climate strategies, and institutions. At the core of GCF projects, its concern is the cost-effectiveness and private sector funding mobilization.

**Fig. 2.1: Major components of GCF investment criteria**

| | |
|---|---|
| Impact potential | • Can the project contribute to GCF's objectives and result areas? |
| Paradigm shift potential | • Can the project catalyze impact beyond a one-off project?<br>• To what extent will it remove barriers to the engagement of the private sector, and bring about systemic change towards low carbon and climate-resilient development pathways? |
| Sustainable development potential | • Does the project have wider benefits and priorities?<br>• Are environmental and social safeguards and gender equality an integral part of the project? |
| Needs of the recipient | • Does the project provide financing needs to the beneficiary country and population?<br>• Is there an absence of alternative sources of financing? |
| Country ownership | • Is there beneficiary country ownership, and capacity to implement a funded project in alignment with the country's policies, climate strategies, and institutions? |
| Efficiency and effectiveness | • Do the project foster cost-effectiveness and private sector funding mobilization? |

Source: GCF.

*Private sector facility (GCF-PSF)*

It aims to de-risk the movement of global capital to address climate challenges in developing countries and has a special focus on Least Developed Countries (LDCs), Small Island Developing States (SIDS), and African states. It can provide expertise to help in assessing the potential climate benefits of project ideas. Furthermore, private sector facility is not only strategic but flexible also. Furthermore, it offers long-term funding through various instruments and can structure accordingly

### 2.1.2 Adaptation Fund

Local and regional governments can access the Fund only through accredited entities (National Implementing Entities (NIEs), Regional Implementing Entities (RIEs) or Multilateral Implementing Entities (MIEs).

Implementing Entities are eligible for grants (Readiness Grants, and Innovation Grants) and can submit a concept or project proposals. Proposals are accepted three times a year: twice before the biannual Adaptation Fund Board meetings and one during an intersessional review cycle. Information regarding the availability of funding can be accessed at: https://www.adaptation-fund.org/apply-funding/project-funding/

### 2.1.3 Global Environment Facility (GEF)

The GEF is a unique partnership of 18 agencies — including United Nations agencies, multilateral development banks, national entities and international NGOs — working with 183 countries to address the world's most challenging environmental issues. Established on the eve of the 1992 Rio Earth Summit, is a catalyst for action on the environment and climate change. Through its strategic investments, the GEF works with partners to tackle the planet's biggest environmental issues.

The GEF has a large network of civil society organizations, works closely with the private sector around the world, and receives continuous inputs from an independent evaluation office and a world-class scientific panel. It is a financial mechanism for five major international environmental conventions: the Minamata Convention on Mercury, the Stockholm Convention on Persistent Organic Pollutants (POPs), the United Nations Convention on Biological Diversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC). GEF is also an innovator and catalyst that supports multi-stakeholder alliances to preserve threatened ecosystems on land and in the oceans, build greener cities, boost food security and promote clean energy for a more prosperous, climate-resilient world; leveraging $5.2 in additional financing for every $1 invested.

The GEF Trust Fund was established to help tackle our planet's most pressing environmental problems. Funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.

### 2.1.4 Least Developed Countries Fund (LDCF)

Least Developed Countries Fund (LDCF) was established to support a work programme to assist Least Developed Country Parties (LDCs) carry out, inter alia, the preparation and implementation of national adaptation programmes of action (NAPAs).

The Global Environment Facility (GEF), as an operating entity of the Financial Mechanism of the Convention, has been entrusted to operate this Fund through decision 27/CP.7.

The 21$^{st}$ Conference of the Parties (COP-21), at its eleventh session, agreed on provisions to operationalize the LDCF to support the implementation of NAPAs, providing guidance with regards to priority areas, and provisions on full-cost funding and a co-financing scale (Decision 3/CP.11).
COP 21 encouraged additional voluntary financial contributions to provide support for the national adaptation plan process through contributions to the LDCF and the Special Climate Change Fund (SCCF).

### 2.1.5 Forest Carbon Partnership Facility - Readiness Fund (FCPF-RF)

The Forest Carbon Partnership Facility (FCPF) is a global partnership of governments, businesses, civil society, and indigenous people focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests, and the enhancement of forest carbon stocks in developing countries and activities commonly referred to as REDD+.

The FCPF works with 47 developing countries across Africa, Asia, and Latin America and the Caribbean, along with 17 donors that have made contributions and commitments totalling $1.3 billion. The FCPF supports REDD+ efforts through its Readiness and Carbon Funds.

i. The FCPF Readiness Fund helps countries set up the building blocks to implement REDD+. This includes designing national REDD+ strategies, developing reference emission levels, designing measurement, reporting, and verification systems and setting up national REDD+ management arrangements, including proper environmental and social safeguards. Current funding totals to $400 million.
ii. The FCPF Carbon Fund pilots results-based payments to countries that have advanced through REDD+ readiness and implementation and have achieved verifiable emission reductions in their forest and broader land-use sectors. Current funding totals $900 million.

### 2.1.6 Bilateral/Multilateral Windows (Jal Jungal (USAID); EU, UKAid; DFAT, JICA, KOICA etc.) and GRID (WB)

***Jal Jungal (USAID):*** The five-year Jal Jangal (Freshwater and Forests) activity focuses on improving the health of ecosystems and biological diversity, environmental and social safeguards, climate resilience and addressing environmental crime in Nepal. The Activity works with the Government of Nepal (GON), community groups, civil society, and private sector actors, and aligns with GON's vision of "Conservation of biodiversity for sound and resilient ecosystems and national prosperity."

***EU:*** EU is investing in a climate-friendly future and making polluters pay. It has the following funding schemes for climate change. It Has three different funding schemes on climate change: Innovation Fund, Modernization Fund, and LIFE Climate Change Mitigation and Adaptation Fund.

***Innovation Fund:*** The Innovation Fund is the EU fund for climate policy, with a focus on energy and industry. It aims to bring to the market solutions to de-carbonize European industry and support its transition to climate neutrality while fostering its competitiveness. The Innovation Fund is one of the world's largest funding programmes for the demonstration of innovative low-carbon technologies.

In 2023, the revision of the EU Emissions Trading System's Directive strengthened the Innovation Fund as follows:

The overall size of the Innovation Fund has been increased from 450 million ETS allowances to approximately 530 million ETS allowances. Furthermore, its scope has also changed with the new sectors introduced, maritime, aviation. Along with the introduction of medium-scale projects, application of the Do Not Significant Harm (DNSH) principle is in place from 2025 that has stronger reference to multiple environmental impacts

The introduction of new financial instruments of Competitive Bidding has given stronger attention to geographical balance, including through technical assistance to Member States with low effective participation.

The **Modernization Fund** is for low-income new EU member states.

**The LIFE programme 2021-2027** is divided into four sub-programmes: "Nature and biodiversity", "Circular economy and quality of life", "Climate change mitigation and adaptation" and "Clean energy transition".

It contributes to the transformation of the Union into a climate-neutral and resilient society, by supporting the implementation of the EU's climate policy as part of the Green Deal for Europe and preparing the EU for the climate challenges in the coming years and decades.

In supporting a climate neutral and resilient society, the LIFE Climate Change Mitigation and Adaptation sub-programme manages about € 905 million to develop and implement innovative ways to respond to climate challenges. Its specific objectives are (EU Climate Action portal):

- to develop, demonstrate and promote innovative techniques, methods and approaches for reaching the objectives of Union legislation and policy on climate action and to contribute to the knowledge base and to the application of best practices;
- to support the development, implementation, monitoring and enforcement of relevant Union legislation and policy on climate action, including by improving governance at all levels, in particular through enhancing capacities of public and private actors and the involvement of civil society; and
- To catalyze the large-scale deployment of successful technical and policy-related solutions for implementing relevant Union legislation and policy on climate action by replicating results, integrating related objectives into other policies and into public and private sector practices, mobilizing investment and improving access to finance.

The sub-programme Climate Change Mitigation and Adaptation may cover activities related to energy efficiency and renewable energy. So far they are not covered by the Clean Energy Transition sub-programme.

**Three priority areas**

LIFE Climate Change Mitigation and Adaptation supports public authorities, non-governmental organizations and private actors, especially small and medium-sized enterprises, in contributing to the shift towards a sustainable, energy-efficient, renewable energy-based, climate-neutral and resilient economy, thereby contributing to sustainable development. The programme focuses on:

- Climate change mitigation for reducing greenhouse gas emissions.
- Climate change adaptation for increasing resilience to climate change.
- Climate change governance and information for increasing awareness, cooperation and dissemination on climate change mitigation.

**UKAid;**

The UK has announced major new support of up to £274 million at COP26 in Glasgow to strengthen the resilience of vulnerable communities, economies and the environment against the impacts of climate change, and promote low carbon growth across the Indo-Pacific (GOV.UK, 2021).

Climate Action for a Resilient Asia (CARA) is a 7-year programme to deliver projects in areas known to strengthen climate resilience. This includes funding projects that mobilize climate finance, strengthen water security, conserve ecosystems and biodiversity, and help vulnerable communities lead local adaptation efforts.

Partnering with governments, regional institutions, cities, local communities and the private sector, this new regional programme will promote nature-based solutions, better climate change policy and planning, enhance weather and climate forecasting services, and support urban resilience.

The programme aims to support up to 14.4 million people to better adapt to climate change, generate approximately £1.4 billion of public and private finance for climate resilience, and protect to up £130 million worth of natural ecosystem and biodiversity.

**DFAT (Department of Foreign Affair and Trade, Government of Australia):**
Australia has an ambitious 2030 target to reduce greenhouse gas emissions by 43 per cent below 2005 levels. The Government's investments will mean 82 per cent of Australia's energy supply will be from renewables by the end of the decade, putting us on track to achieve our net zero emissions by 2050.

Australia is committed to contributing to the US$100 billion annual collective global goal for climate finance, mobilized from all sources, to support climate adaptation and mitigation objectives of developing countries. The Australian government is on track to meet its commitment to provide $2 billion in climate finance over 2020-21 to 2024-25, which includes $700 million to build climate change and disaster resilience in the Pacific.

Australia's climate related development assistance recognizes the relationship between climate change and environmental issues, including biodiversity loss. As such, Australia is working to protect biodiversity to support livelihoods and build resilience to climate change, and is investing in nature-based solutions, including supporting practical action to restore and account for 'blue carbon' ecosystems.

Climate impacts on water threaten the health, prosperity and stability of our societies. Australia's water investments in the Indo-Pacific focus on improving and making climate resilient water, sanitation and hygiene (WASH) services, and water resource management and infrastructure.

The Government is providing financial and technical assistance to countries in our region to build more climate resilient food systems and is partnering with trusted humanitarian organizations to deliver food and nutrition assistance to those affected by increased food insecurity.

In recognition of the need to mobilize finance from all sources to support climate adaptation and mitigation efforts in developing countries, the Australian government is partnering with the multilateral development banks and the private sector, including through the Australian Climate Finance Partnership.

Women, people living with a disability and indigenous peoples are most vulnerable to the impacts of climate change. In delivering our climate related development assistance Australia seeks to actively engage the agency, knowledge and experience of these groups (DFAT, 2023).

**JICA/Nepal**

JICA/Nepal had two major interventions in the climate change/environmental management initiatives in Nepal. One project was on the Introduction of Clean Energy by Solar Electricity Generation System (Grant Aid Project). In January 2008, Japan established the Cool Earth Partnership for the developing countries aiming to achieve greenhouse gas (GHG) emission reductions and economic growth as well as working to contribute for climate stability. A new grant aid scheme named ‘Program Grant Aid for Environment and Climate Change’ was launched in 2008 as a component of this package to support developing countries that are willing to contribute to climate stability but facing shortages in implementing capacity as well as funds. In accordance with the policy of the Japanese Government, JICA decided to promote clean energy, including renewable energy, to be promoted as a ‘co-benefit’ cooperation case and utilize Japanese advanced technology including technology of the private sectors (JICA Activities in Nepal, online portal).

In this regard, a solar photovoltaic system of around 350 KW was installed at Dhobighat. The electricity generated from this system was utilized by Kathmandu Upatyaka Khane Pani Limited (KUKL) for water pumping and the remaining electricity connected to the national grid. This project expected to demonstrate the performance of photovoltaics (PV) system as a source of energy to mitigate the shortage of electricity supply. The objective of the project was to promote clean energy utilization and achieve emissions reductions by installing the photovoltaic system to be connected to the national grid.

In another initiative, JICA/Nepal has been supporting the Centre for Energy Environment Nepal (CEEN) for the use of Bio-briquette (Beehive or Honeycomb briquettes and charcoal pellets) as an alternative source of energy for firewood and kerosene in Dakshinkali village of Kathmandu valley. Bio-briquette is regarded as one of the alternative fuels with high potential and is made from a charcoal of ‘non-woody biomass or waste biomass’ using agro-forest wastes such as Eupatorium Adenophorum (Banmara), Mugwort (Tite pati), Lantana Camara (Dhurmre phool) and different agricultural residues. The objective of the project is to promote the use of bio-briquette to village and urban areas by developing and promoting better combustion devices. The counterpart in this initiative is Centre for Energy and Environment Nepal (CEEN). The three-year project launched in 2009 has lasting impact in reducing firewood and kerosene consumption for household kitchen activities

**KOICA/Nepal**

he Korea International Cooperation Agency (KOICA) and the Global Green Growth Institute (GGGI) signed an agreement for implementation of the project “Building Climate Resilience and Reintegrating Economically Displaced Workers Through Climate Smart Agriculture in the Terai Flood Plain, Nepal” in June 29, 2022. The project has a budget of $5.99 million and implemented for July 1, 2022 – December 31, 2025.

The project aims to support widespread adoption of climate smart agriculture to reduce vulnerability and improve food and job security, especially for women, youth and returned migrant workers in the Terai Flood Plain region. The project will have the key components: improve emergency management in the agriculture sector to protect lives and livelihoods; strengthen climate resilient agriculture planning and implementation; and build and finance climate smart agriculture businesses for job creation and long-term resilient green growth (Global Green Growth Institute, online portal).

In total, the project expects to provide direct benefits to an estimated 7,800 people and 112 Micro and Small agribusinesses, and indirectly benefit the total population of Dhanusha and Mahottari districts (430,000 people). The project aligns with a number of the Government of Nepal’s key guiding policy documents, including the Disaster Risk and Management Act, 2017, Gender and Social Inclusion Strategy Framework, 2016, Agriculture Development Strategy, 2015 and Foreign Employment Act, 2007.

The project has been implemented by Global Green Growth Institute (GGGI) and Good Neighbours International Nepal, a Korean NGO, in close consultation with KOICA and the Ministry of Land Management, Agriculture and Cooperative, Madhesh Province. Furthermore, the project has developed a partnership with the local governments, Agriculture Knowledge Centers, Ministry of Industries, Tourism and Forest, and Ministry of Internal Affair and Communication in the Madhesh Province and other key governmental and international organizations (Ibid).

This project strengthens the partnership between KOICA and GGGI since signing the bilateral Memorandum of Understanding on Green Growth Cooperation on June 8, 2018. With this project in Nepal, GGGI and KOICA are pleased to bring their respective expertise and support for promotion of green growth with climate financing.

**GRID (WB):**

In September 2021, the World Bank joined hands with the government of Nepal and development partners to endorse the landmark 'Kathmandu Declaration' for a strategic action plan for green, resilient, and inclusive development (GRID) of Nepal to systematically address the impacts of COVID-19 and the country's structural challenges.

The GRID approach involves a fundamental shift in managing risk and development: from a reactive response to a deliberate and proactive recovery strategy for long-term green growth, climate action, and sustainable and inclusive development for all. To support GRID, Nepal's Development partners have identified up to $4.2 billion in potential future support, in addition to the $3.2 billion in previously committed resources.

### 2.1.7 Financial Assistance from Existing Sources

The following table presents the climate change from the existing sources during the last five years. Further, the figures are not directly additive for a single year as they are the composite ones for various years. GCF has established itself as the biggest donor to climate change financing followed by the European Union (Table 2.1).

**Table 2.1: Climate financial aid from various donors during the last 5 years (in mil US$)**

| Donors | Approved | Released | Remarks |
|---|---|---|---|
| GCF | 2948.8 | 501.1 (release initiated) | Latest agreement |
| AF | | 9.52716 | For a single project on Food Security in Karnali |

| | | | |
|---|---|---|---|
| GEF | 14.597248 | 23.48 | Works in co-financing |
| LDCF | 7 | | GEF LDCF co-financing |
| FCPF-RF | 45 | Release initiated | 600 mil result-based financing possible beyond 2025 |
| USAID | 30.3--35.3 | Getting released | Cost-Plus-Fixed-Fee model, 5-year project from 2021 |
| UKAid | 5.271849 | 5.271849 | Nepal Climate Change Support Programme |
| EU | 16.5 mil Euro | 16.5 mil Euro | In collaboration with DFID for NCCSP |
| JICA | 10 bil JPY | 10 bil JPY | Loan assistance, 40 years for repayment at 0.01% interest |
| KOICA | 5.99 | 5.99 | Climate-Smart Agriculture in the Terai Flood Plain (GGGI) |
| GRID (WB) | 100 | Getting released | development policy credit to GRID projects in Nepal |

*Source*: Author's compilation from multiple sources.

These existing measures are below the requirement of the country's target of net Zero Emissions by 2045; therefore, additional measures deem necessary to meet the same. In order to achieve Net Zero Emissions (NZE) by 2045, the financial requirements at 2000 price level are as presented in Table 2.2.

**Table 2.2: Financial requirements With Existing Measures (WEM) and With Additional Measures (WAM) for meeting NZE target**

| Period | WEM (Bil. US$) | WAM (Bil. US$) |
|---|---|---|
| 2021 -- 2030 | 42.8 | 46.4 |
| 2031 -- 2040 | 34.4 | 53.4 |
| 2040 -- 2050 | 56.2 | 96.3 |

*Source:* GON (2021).

These estimations include energy, transport, cooking fuels, AFOLU (Agriculture, Forestry, Other Land Use measures), and waste activities. Demand-side investment, transformative investments, and non-energy sector investment, such as forestry, are all included; however, production costs of green hydrogen are excluded. The additional resources needed during this decade of 2020s is quite narrow; however, it swells up in progressive order over the upcoming decades.

Various studies show that Nepal would require more than USD 272 million per year during 2026- 30 (NPC, 2018). However, there is no formally institutionalized method in place to calculate and establish the total, exact funding required to address climate change actions in the country. The practice of estimating loss and damage must be included as part of the planning and budgeting cycle at all three tiers of the government.

### 2.1.8 Additional Efforts Necessary for Enhancing the Aid Flows

Nepal possesses potential for acquiring additional resources from two funding institutions among those providing support now; this includes the Adaptation Fund and UNFCCC's Performance-based Climate Financing to Developing countries. Agricultural Development Bank is the potential national institution to implement projects on climate resilient agriculture. The proposed areas for additional efforts are:

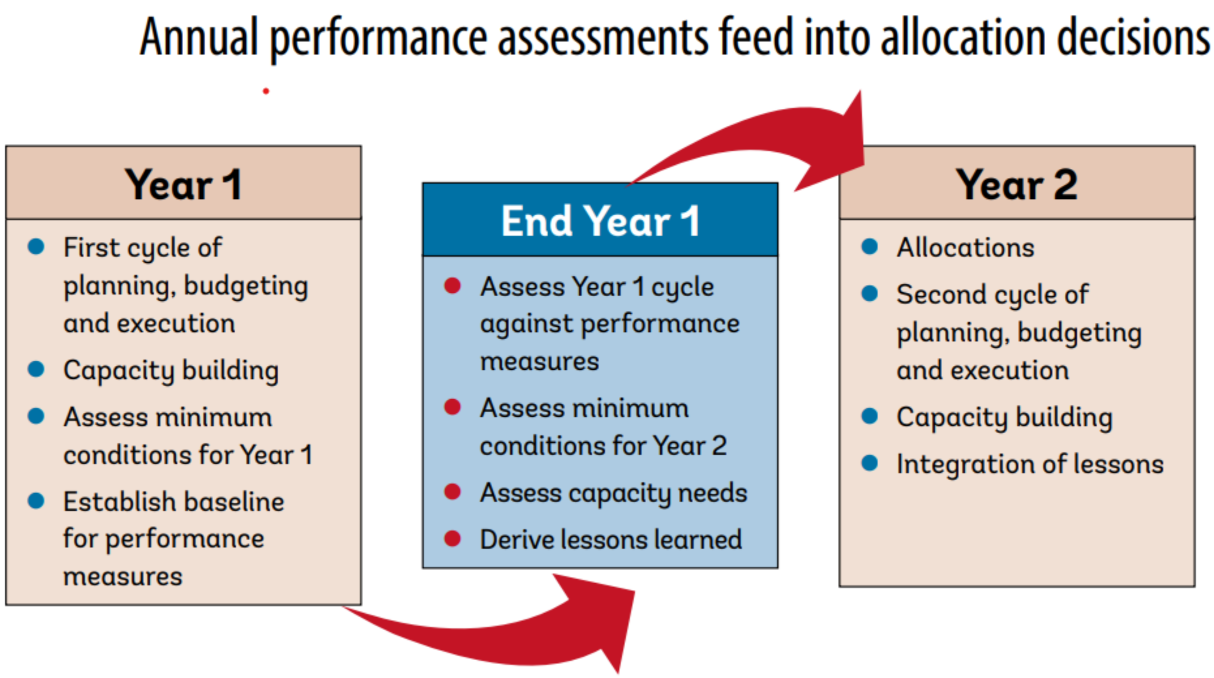
Strengthening resilience of vulnerable communities to increased impacts of climate change
Building adaptive capacities of communities, livelihoods and ecological security
Building adaptive capacities of small inland fishermen community for climate resilience and livelihood security
Climate smart actions and strategies in Himalayan region for sustainable livelihoods of agriculture-dependent hill communities
Climate proofing of watershed development
Enhancing adaptive capacity and increasing resilience of small and marginal farmers

**UNFCCC's Performance-based Climate Financing to Developing countries**

It is a financial top-up to cover the additional costs over inter-governmental fiscal transfer for making investments climate resilient. Their technical features include a set of minimum conditions, performance measures and a menu of eligible investments. More specifically, 3 – 10 minimum conditions basically the absorptive capacity, good governance and climate adaptation need to have been confirmed.

In Nepal, UNCDF LoCAL is collaborating with the UNDP–UN Poverty-Environment Initiative (PEI) in local mainstreaming and capacity building, The partnership is embedded within the Local Governance Sustainable Development Programme II supported by the European Union and the Swiss Agency for Development and Cooperation, and the Local Governance and Community Development Programme II.

**Fig.2.2: Performance monitoring mechanism developed by UNFCCC**




Altogether 14 countries from Asia pacific, and Africa are under experiment of this model. The countries include Bangladesh, Benin, Bhutan, Cambodia, Gambia, Ghana, Lao, Lesotho, Mali, Mozambique, Nepal, Niger, Tanzania, Tuvalu.

### 2.1.9 Domestic Sources (public and private)

The desirable role of the public and private sectors in financing mitigation and adaptation investments is context specific. The role of public and private sector financing varies across countries depending on country-specific characteristics and the local economic and institutional context. Blending public and private sector finance is useful to de-risk these investments for private sector capital in general, for example, first-loss investments or performance guarantees (IMF, 2022). The solutions are for producing innovative products that are possible through two different routes: one with junior/equity route going to the public sector and the other through the major route going to the private sector. The public sector can help internalize the social benefits of climate investment that needs to avoid or minimize the moral hazard and potentially large contingent liabilities associated with taking on first losses. Strong state capacity and legal frameworks, together with mechanisms to monitor investment projects are helpful to ensure that de-risking does not lead to fiscal losses. This is particularly true in the case of smaller low-income countries (LICs) that have generally weaker state capacity (Ibid).

Equity stakes allow the public sector to share in the upside and the private sector to leverage private capital in the largest way. This would be particularly helpful given that most of the developing countries already have too much debt. There are widespread coordination failures associated with multiple complex systems from the part of the private sector, especially in LICs.

Public investment in infrastructure could support the integration of new technologies, including in electricity grids, charging stations, public transport, broadband, and urban planning, as in many countries utilities are mostly public-sector owned, emphasizing the importance of public investment in low-carbon infrastructure (Ibid).

## 2.2 Potential Opportunities

### 2.2.1 French Development Agency (AFD)

AFD has the provision of "non-sovereign" loans for local authorities, public institutions. It has grants to finance actions in the social sector (health, education), rural and urban development initiatives, and infrastructure projects.

It has fund for Technical Expertise and Experience Transfers (FEXTE). Particularly for developing countries it has funds for technical-cooperation programmes and project-preparation studies.

Other climate change financing schemes of AFD are as follows:

*ADAPT'ACTION*

This funding scheme aims to bring about climate projects that can be financed by AFD and International Climate Finance. Priority focus on Africa, the Least Developed Countries (LDCs), and Small Island Developing States (SIDS).

*Project preparation funds*

To finance feasibility studies and technical assistance in order to prepare future investment projects.

*ARE Scale-up facility*

This is a facility financed by the European Commission and replenished by the AFD Group to support the following two activities:

i. Promotes the integration of renewable energies into power grids,
ii. Prepare the implementation of rural electrification programs based on renewable sources, and guarantee private investments in the sector.

### 2.2.2 IMF Resilience and Sustainability Facility (RSF)

The RSF was created under the Resilience and Sustainability Trust (RST) to provide policy support and affordable longer-term financing to strengthen members' resilience and sustainability, and contribute to prospective balance of payments stability.

The Resilience and Sustainability Facility (RSF) complements the existing IMF lending toolkit by helping low-income and vulnerable middle-income countries address longer-term challenges, including those related to climate change and pandemic preparedness.

Initial focus areas of RSF is to provide supports for addressing climate change and enhancing pandemic preparedness given their global public goods nature; other challenges could be added over time.

Low-income and vulnerable-middle income countries with per capita GNI below 10 times the 2021 IDA operational cut off, including small states – about three quarters of the IMF's membership – are eligible for RSF financing.

The overall cumulative access cap for eligible members under the RSF is set at the lower of 150 percent of quota or SDR 1 billion, whichever is smaller. The starting point of access determination is an access norm of 75 percent of quota.

### 2.2.3 World Bank Group/IFC

The World Bank Group delivered a record $31.7 billion in fiscal year 2022 (FY22) to climate vulnerable countries which is a 19% increase from the $26.6 billion all-time high in financing reached in the previous fiscal year.

This exceeds the target set in the Group's Climate Change Action Plan for 2021-2025 to deploy an average of 35% of the institution's financing in support of climate action.

IBRD and IDA together delivered $26.2 billion in FY22 in climate finance. Nearly half of that—$12.9 billion—specifically supported investments in adaptation and resilience.

### 2.2.4 Asian Development Bank (ADB)

fund for climate financing focuses urban areas because of the challenging pollution problem in major Asian cities. ADB has established Urban Financing Partnership Facility.

*Urban Financing Partnership Facility (UFPF)*

It provides co-financing and technical assistance for urban environment infrastructure that benefits the poor. Comprises four funds:

*ASEAN Australia Smart Cities Trust Fund*

This fund is for building liveable cities that are green, competitive, inclusive, and resilient. Supports project preparation and implementation, financing and associated capacity development.)

*Urban Climate Change Resilience Trust Fund (UCCRTF)*

This support is for building resilience to the effects of climate variability and climate change in medium-sized cities in Asia, developing knowledge, capacity building, and networking components

*Urban Environmental Infrastructure Fund (UEIF)*

This is a grant fund for technical assistance and environmental pro-poor investments that supports co-financing.

*Cities Development Initiative for Asia (CDIA)*
This supports bankable infrastructure projects, linking them with funding sources, prefeasibility studies, feasibility studies, project preparation technical assistance to water supply, drainage, and sanitation.

### 2.2.5 Asian Infrastructure Investment Bank (AIIB)

AIIB invests in infrastructure and other productive sectors such as energy, transport, information and communications technology, water and urban development. Its

Financial operations include both sovereign-backed financing (loans, guarantees), and non-sovereign-backed financing. AIIN has Project Preparation Special Fund (PPSF) which is a Multi-donor facility with the primary purpose of supporting eligible AIIB members (especially low-income members) to prepare bankable infrastructure projects that AIIB may finance, the amount of the grants is USD 1 to 5 million. It supports especially during preparation and early implementation phase of the project.

### 2.2.6 Climate Investment Fund (CIF)

Generally local government stakeholders are not directly eligible for support by the CIFs and need to cooperate with national government ministries. It has three major sources of finance:

*Clean Technology Fund (CTF)*

It provides resources to scale up low carbon technologies. Approximately, 75% of CTF resources are approved for implementation in renewable energy, energy efficiency, and clean transport.

*Pilot Program for Climate Resilience (PPCR)*

This scheme supports developing countries and regions in building their adaptation and resilience to the impacts of climate change.

*Scaling Up Renewable Energy Program in Low Income Countries (SREP)*

It supports scaled-up deployment of renewable energy solutions like solar, geothermal, and biomass to increase energy access in LICs.

### 2.2.7 Global Infrastructure Facility (GIF)

GIF provides end-to-end advisory services to Multilateral Development Bank (MDB) partners and client governments; both funding and hands-on technical expertise. Furthermore, it provides the comprehensive design, appraisal, structuring, and transaction support needed to bring well-structured, bankable, sustainable infrastructure programmes and projects to market that attract private investment.

Its support is implemented in partnership with the client government's MDB of choice and offers a suite of advisory services ranging from USD 50,000 to USD 5 million. Followings are the grants available in GIF:
Readiness assessments (USD 50,000 to USD 75,000 grant)
Designation activities (USD 300,000 to USD 500,000 grant), and
- Preparation and structuring activities (USD 1 million to USD 5 million grant/flexibly reimbursable).

### 2.2.8 Loss and Damage Fund (future instrument)

The 27th UN Climate Conference (COP27) concluded with the ground-breaking agreement to establish a new loss and damage (L&D) fund. This significant development aims to enable vulnerable countries to respond to and recover from climate impacts.

A transitional committee is operational to shape the fund. The committee is providing recommendations on its institutional arrangements, elements of the funding arrangements, sources of finance, and ensuring coordination and complementarity with existing arrangements for loss and damage. Within this process, two pivotal questions have surfaced (SEI, 2023):

(i) How can the fund learn from existing funds and enable comprehensive responses to loss and damage?

(ii) How can the fund best serve the needs and priorities of vulnerable and marginalized communities facing losses and damages?

The final outreach of the fund is yet to materialize.

# 3. Integration of Climate Finance and Budgeting in National Planning and Budgetary Processes

The Constitution of Nepal explicitly outlines the balance between environment and development as stated in Article 30 of the constitution. State policies on environmental protection are focused in Article 51 of the constitution (GON, 2072).

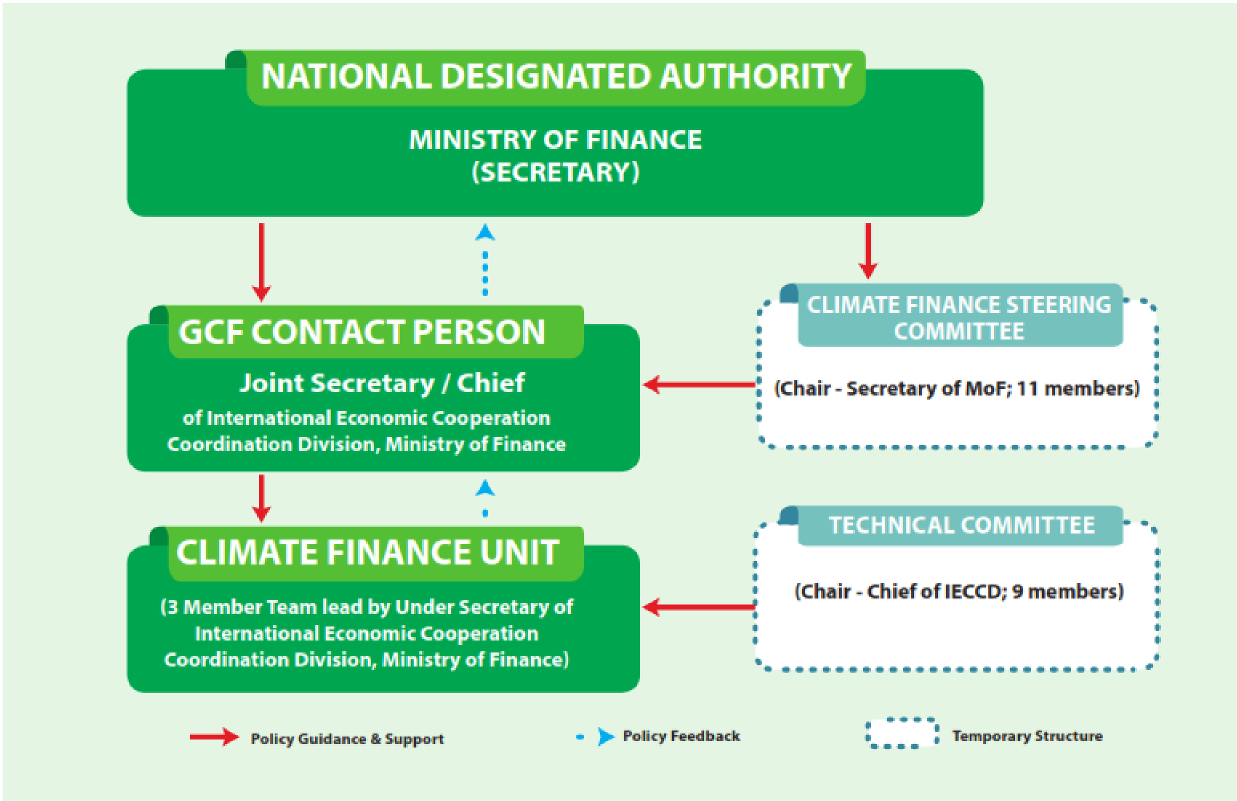
International Development Cooperation Policy (IDCP) 2019 of the Government of Nepal has strengthened Nepal's commitment to climate change issues (https://www.mof.gov.np); furthermore, the National Climate Change Policy 2019 focuses on the implementation strategies.

Nationally Determined Contributions (NDC) 2020 and Long-term strategy for Net Zero Emissions (NZE) 2021, and National Adaptation Plan (NAP) 2021 have followed Nepal's target to net zero greenhouse gas emissions by 2045 that Nepal made a commitment in the 26$^{th}$ Conference of Parties (COP26) in Glasgow. Nepal's commitments is aligned with the Paris Agreement in reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.

## 3.1 National Designated Authority

National Designated Authority (NDA) in the Ministry of Finance works as a government institution serving as the interface between the government and the Green Climate Fund. It provides a broad strategic oversight of the GCF's activities in Nepal and communicates the country's priorities for financing low-emission and climate-resilient development. Secretary in the Ministry of Finance is the National Designated Authority (NDA) in Nepal (Fig. 3.1).

**Fig. 3.1: NDA and GCF Focal Unit in the Ministry of Finance**




*Source*: MoF (2017a).

Figure 3.1 shows that Joint Secretary in the International Economic Co-operation and Coordination Division (IECCD) is the GCF contact person in the ministry who is supported by Climate Finance Unit led by an under-secretary in IECCD. Furthermore, the structure has considered two temporary committees – Climate Finance Steering Committee and Technical Committee.

## 3.2 Climate Finance Unit

The Climate Finance Unit is within the MoF to oversee the matters related to climate finance in the country. Its primary role is to oversee day-to-day engagement to access, manage, and mobilize climate change finance from domestic and external sources and coordinate targeting climate finance. With the increasing need for adaptation and low carbon development pathways, CFU is to help, coordinate and facilitate relevant stakeholders in fostering effective climate financing in the country. The CFU comprises a small team of staff of IECCD and Budget & Program Division (BPD). The Unit works under the strategic guidance and supervision of the Joint Secretary and Chief of the IECCD with support from the Joint Secretary and Chief of the BPD. Apart from overseeing engagement with GCF and other international climate financing sources, the CFU plays a pivotal role to strengthen mainstreaming climate change into planning and budgeting process across sectors and enhance cross sectoral linkages among climate relevant ministries through the provisions such as Inter-Ministerial Coordination Committee (IMCC) of the Climate Change Financing Framework (CCFF). These efforts help mobilize available climate finances more effectively and equitably in targeting the poor and vulnerable (MoF, 2017b).

## 3.3 Climate Finance Steering Committee

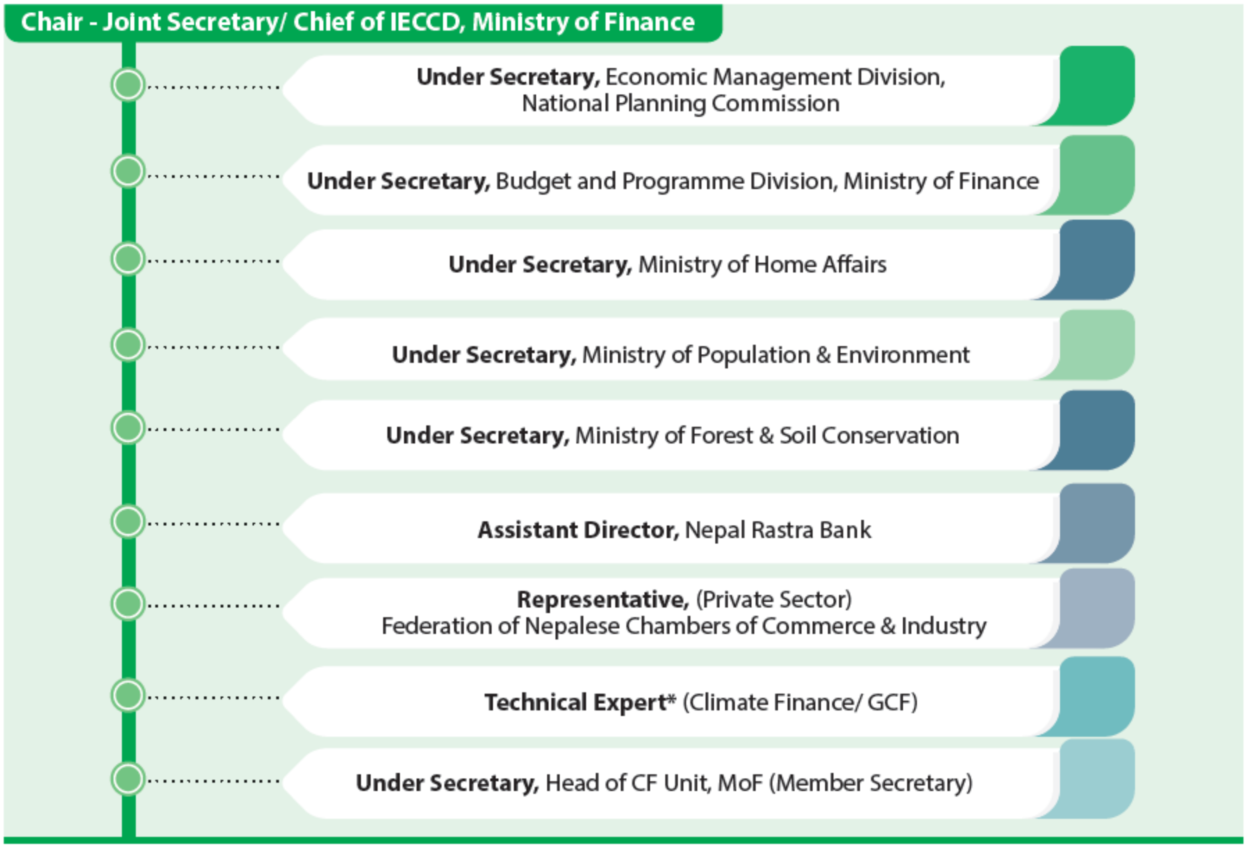
Ministry of Finance (MoF) has a Climate Finance Steering Committee chaired by the secretary of the ministry. The committee consists of maximum 11 members. The committee is to strengthen high-level coordination and decision-making on climate finance in the country and set national priorities. It also acts as the national advisory mechanism for Green Climate Fund (GCF) and other Multilateral Environment Funds. Furthermore, the committee makes strategic decisions and provides operational and financial oversight and political guidance to the country's GCF unit. Furthermore, it includes reviewing and approving unit's work plans, and mobilizing critical finance to implement innovative solutions to challenges faced in the sub-national climate finance.

## 3.4 Climate Finance Technical Committee

This committee is in operation to help NDA for the issuance of the *'Expression of Interest', 'No Objection' and 'Nomination letter'*. Whilst the Climate Finance Steering Committee is primarily responsible for policy guidance and coordination support, the Technical Committee provides technical and advisory support to the NDA and the Climate Finance Unit (CFU).

The composition of technical committee is as follows:

**Figure 3.2: Composition of Climate Change Technical Committee**



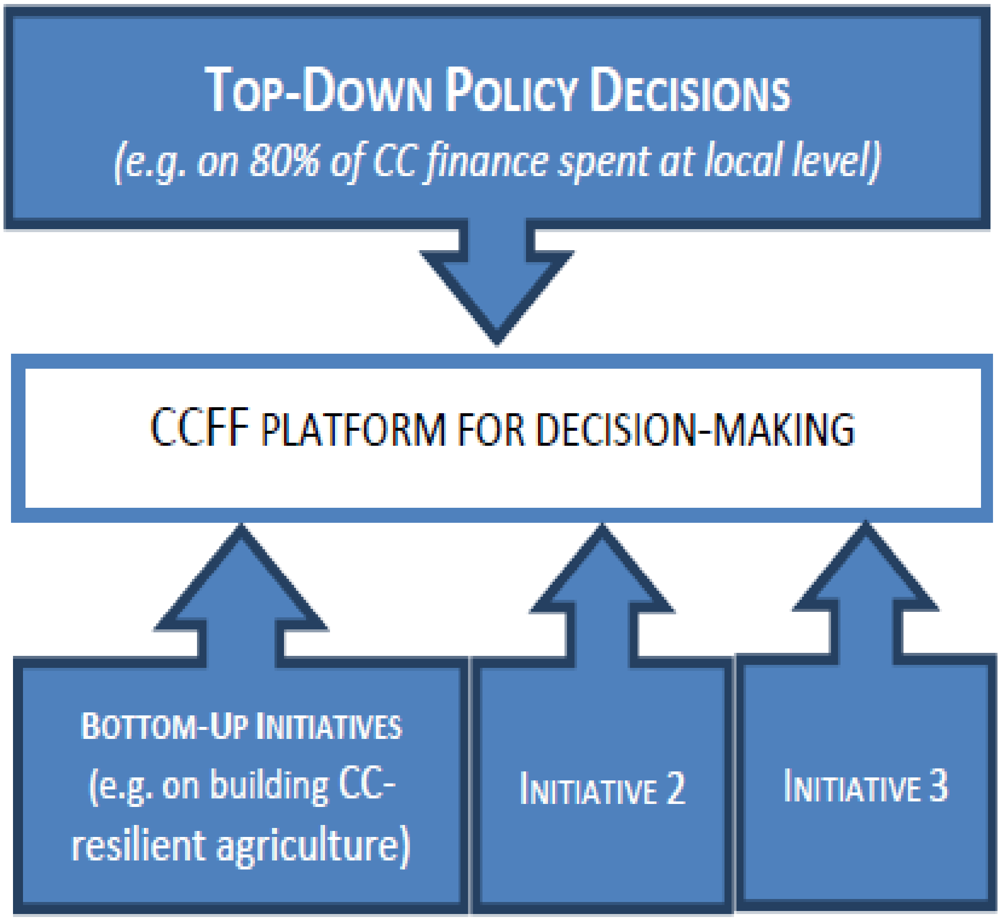

*Source*: MoF (2017a).

The Technical Committee also makes provision for inclusion of additional technical expertise as needed.

## 3.5 Top-down and Bottom-up Approaches and Initiatives

Nepal's climate change financing framework envisages a platform that associates both top-down decision making process and bottom-up initiatives for climate change interventions. Overall, approximately 80 percent of the climate change budget is spent at the local level; major chunk of these initiatives is in the agricultural sector particularly for building climate resilient agriculture (Fig. 3.3).

**Fig. 3.3: Decision making process and initiatives in climate change financing**

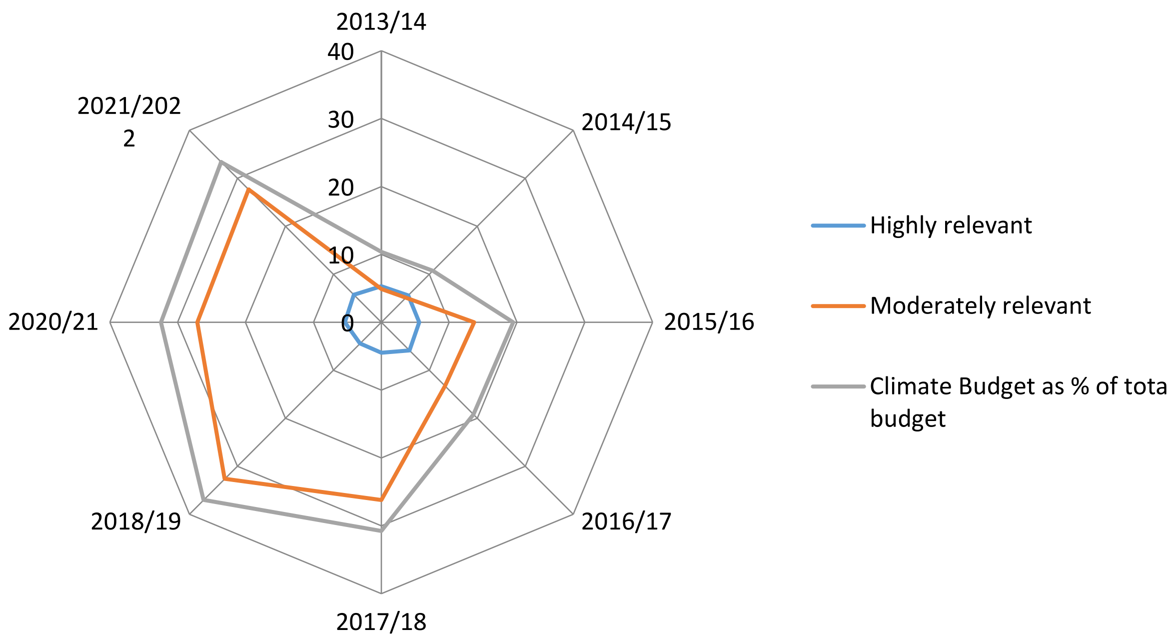



### 3.6 National Climate Financing Framework in Annual Budget

Successful implementation of climate finance policy requires climate finance strategy and action plan, climate fiscal reform, and climate inclusive planning process. In annual budget, the initiation of formulating climate responsive budget structure was in FY 2012/13.

Overall climate change expenditure of the government has been broadly classified into highly relevant (if more than 50 percent of the target area population are benefitted with that particular expenditure) and moderately relevant (if 20-50 percent of the population are benefitted) categories. The total climate change expenditure of the national government is growing over the years, from approximately 10 percent to 33 percent of the national government's annual expenditure (Fig. 3.4).

## Fig. 3.4: Relevance of climate change budget in different fiscal years (in %)




*Data source:* Budget Speeches, various issues, MoF.

Although public annual budget share for highly-relevant initiatives has grown from about five percent of the total budget to 28 percent during 2013/14 to 2021/22. Further initiatives deem necessary in making the climate change budget highly relevant to the welfare of low-income farmers and others who draw their livelihood from green sectors. Some initiatives follow from the 16th plan basically for the wider use of electric vehicles and conversion of petroleum vehicles into electric vehicles. Furthermore, the plan also aims in reducing the climate induced disasters significantly and promote green economic activities (16th Plan Concept Paper, p. 7, NPC).

### 3.7 Climate Change Revenues

Nepal does not have pollution tax as such; however, it collects different taxes from pollution and climate change activities. They include vehicle tax, taxes on use of infrastructure, road construction and maintenance duty, road maintenance and improvement duty, and infrastructure tax. Revenues from these taxes accounted 1.86 to nearly 4 percent of the total tax revenue of the government during 2010/11 – 2019/20. Likewise, their contribution to total revenue of the government has also swelled from 1.33 to 3.3 percent of the total revenue of the government during this period.

Although Nepal does not have an exclusive carbon tax, some tax and non-tax revenues as well as revenue from carbon trade constitute the objective of introducing carbon tax. The traditional vehicle tax, infrastructure tax, road maintenance tax, and others have undergone with provincial and local governments' jurisdiction in Nepal's federal public financial structure.

Similar is the case of royalties, fees, fines and forfeitures. The change in the structure of the revenue composition from these sources is not likely to occur in near future.

Non-tax revenues collected from different green sectors that include: Royalty from forest Royalty from water resources, Royalty from trekking, Royalty from tourism service, Forest royalty collection, Mines royalty collection, Water and other natural resources royalty collection, Mountaineering royalty collection, Trekking royalty collection, Tourism service fees/royalty collection, Fee on private water supply, Fee for use of water for irrigation, Charges for consumption of electricity, and Pollution control fee.

## 3.8 Potential Improvement in PFM System

### 3.8.1 UN Approach

United Nations itself has developed public financial management system for the climate change expenditure. It has three major principles

**Principle 1: Build on a country's own systems and practices**

This approach supports PFM Reform embodied in three components with the following characteristics:

1) a country-led agenda;

2) a donor coordinated programme of support;

3) a shared information pool on PFM.

These are closely aligned with the Paris Declaration on Aid Effectiveness; the Accra Agenda for Action; the Busan Partnership Agreement, and the Addis Ababa Action Agenda.

**Principle 2: Ensure flexibility and align reform measures with the budget cycle**

This has three major building blocks:

i. Macro fiscal framework, Medium-term sector plans pre-budget documents
ii. Medium-term and annual budget preparation
iii. Macro-fiscal framework, Medium-term sector plans pre-budget documents

Each of these blocks is characterized by a set of activities that are mainly for strengthening medium-term expenditure and review plans as elaborated below:

**1 MACRO-FISCAL FRAMEWORK MEDIUM-TERM SECTOR PLANS PRE-BUDGET DOCUMENTS**

A.1 Macroeconomic forecasts and sensitivity analysis
A.2 MTFF. fiscal forecasts, fiscal risks (including external funding)
A.3 Allocation of intergovernmental fiscal transfers
A.4 Pre-budget documents (Budget Strategy Paper, Sectoral medium-term strategic plans)

**2 MEDIUM-TERM AND ANNUAL BUDGET PREPARATION**

B.1 Medium-term expenditure ceilings approved by Cabinet
B.2 Budget circular issued to MDAs with guidance on budget preparation
B.3 Prioritization of new policy proposals and initiatives
B.4 Public Investment appraisal, project costing and CBA
B.5 Capturing expenditure through IFMIS. Climate Budget Tagging
B.6 Performance information produced and published
B.7 MDA budget submissions to MoF

**3 MACRO-FISCAL FRAMEWORK MEDIUM-TERM SECTOR PLANS PRE-BUDGET DOCUMENTS**

C.1 Budget hearings and negotiations
C.2 Cabinet endorsement. Submission to legislature
C.3 Legislative scrutiny
C.4 Annual Budget Law. Citizen's climate budget
C.5 Publicity, Transparency and Accountability

**Principle 3: Clearly define roles, responsibilities and coordination mechanism**

Amongst the state actors, the key stakeholders for effective PFM implementation include Ministry of Finance (Departments: Budget, Macroeconomic, Planning), Ministry of Planning, the Climate Change Policy Bodies (CCPBs). Likewise, other stakeholders are Ministries, Departments and Agencies (MDAs) (including State-Owned Enterprises) and Investment Agencies,

Coordination mechanisms amongst the executive will promote cohesiveness and facilitate the implementation of the climate change integration agenda.

### 3.8.2 Multilateral Financial Institution (MFI) approach

MFI recommend the following framework of integration through MTEF. The three stages for an MTEF as set out in the 2013 World Bank study are as follows:

Medium-Term Fiscal Framework (MTFF):

This encompasses the top-down view of the aggregate resource envelope and the allocation of resources across spending agencies.

Medium-Term Budgetary Framework (MTBF):

In addition to the features of an MTFF, an MTBF includes both the bottom-up determination of resource needs of spending agencies and the reconciliation of these with the resource envelope.

Medium-Term Performance Framework (MTPF):

Starting from an MTBF, an MTPF completes the shift in focus from inputs to outputs, emphasizing the measurement and evaluation of performance.

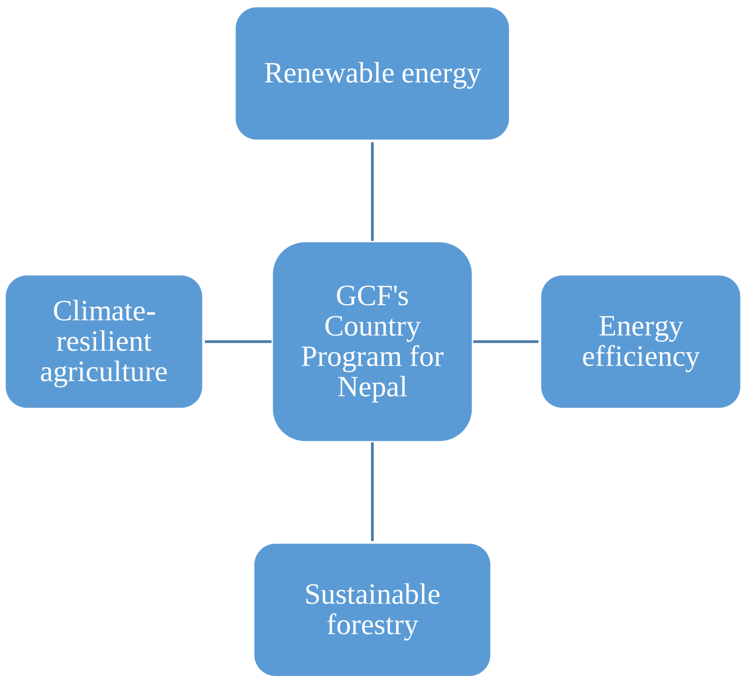
The UN and MFI institutional approach of PFM might be insightful for the improvement of country-specific PFM system.

# 4. Private Sector Finance in GCF Country Program Implementation

The Green Climate Fund (GCF) is a global climate finance fund that provides grants, loans, and equity to developing countries for climate change mitigation and adaptation projects. The GCF recognizes the importance of private sector engagement in addressing climate change and has committed to supporting the development of a private sector-led climate finance market in Nepal.

The GCF's Country Program for Nepal identifies several investment opportunities for the private sector. These opportunities include:

*Figure 4.1: Investment opportunity for the private sector*




Source: (GCF, 2023)

To support private sector engagement in climate finance, the GCF has developed several programs and initiatives, including:

- Private sector led proposal development workshops: These workshops provide training on how to develop proposals for climate finance projects.
- Public Finance Management Training Centre (PFMTC): The PFMTC provides training on public finance management for government officials and other stakeholders, including private sector companies.

The GCF is also working with several partners to develop innovative modalities for private sector investment in climate change projects. These modalities could include:

- Public-private partnerships (PPPs)
- Civil society organizations (CSOs)

- Payment for ecosystem services (PES)
- Nature for debt swaps

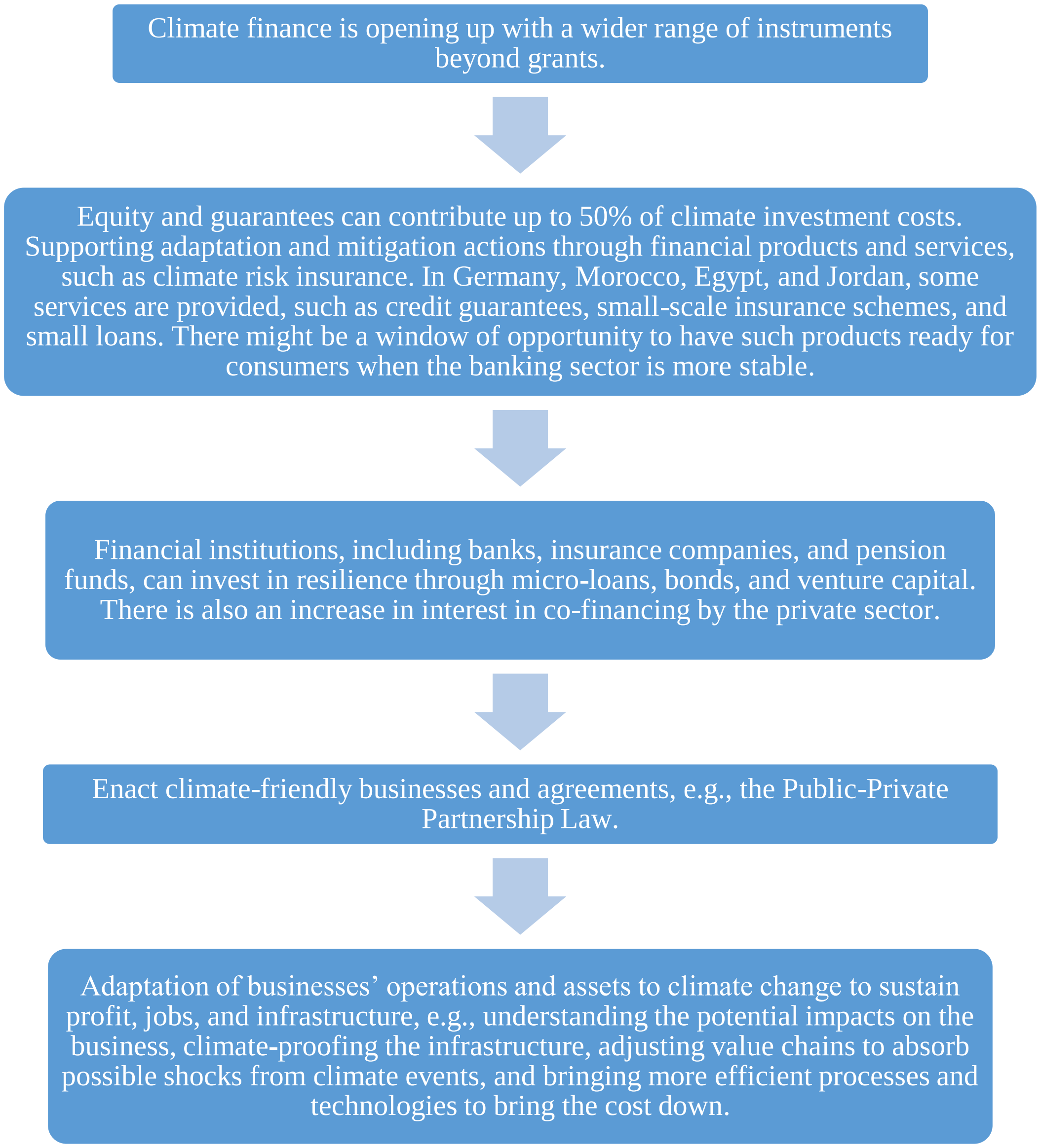
The GCF believes that private sector finance can play a significant role in addressing the impacts of climate change in Nepal. By working with the private sector, the GCF can help accelerate Nepal's transition to a low-carbon, climate-resilient economy.

Here are some examples of how the GCF is supporting private sector engagement in climate finance in Nepal:

- The GCF has approved several projects in Nepal that are being implemented by private sector companies. These projects include a project to develop a renewable energy microgrid in a remote village, a project to improve the energy efficiency of a cement factory, and a project to reforest a degraded watershed.
- The GCF is working with the Government of Nepal to develop a green bond market. A green bond is a type of bond that is used to finance climate change mitigation and adaptation projects.
- The GCF is providing funding to the PFMTC to develop and deliver training on private sector finance.

The GCF is committed to supporting the development of a private sector-led climate finance market in Nepal. By working with the private sector, the GCF can help to address the impacts of climate change and build a more sustainable future for Nepal.

*Figure 4.2: Entry points for the Private Sector to engage in climate action.*




## 4.1 Role of Awareness and Capacity Building Program

The Green Climate Fund (GCF) has recognized the importance of private sector engagement in addressing climate change. In its Country Program for Nepal, the GCF has committed to supporting the development of a private sector-led climate finance market in Nepal. One of the key challenges to private sector engagement in climate finance is a lack of awareness and capacity among potential investors. To address this challenge, the GCF has supported the development of an awareness and capacity-building program in Nepal.

The program includes three main components:

- Climate Finance Training Curriculum: This curriculum provides training on a range of topics related to climate finance, including climate change, project development, and financing.
- Public Finance Management Training Centre: This centre provides training on public finance management for government officials and other stakeholders.

- Private sector led proposal development workshops: These workshops provide training on how to develop proposals for climate finance projects.

### 4.1.1 Climate Finance Training Curriculum

The Climate Finance Training Curriculum is a comprehensive program that covers a wide range of topics related to climate finance. The curriculum is designed to provide participants with the knowledge and skills they need to develop and implement climate finance projects.

The curriculum includes modules on the following topics:

- Introduction to climate change
- Climate finance concepts and principles
- Project development
- Financing mechanisms
- Risk management
- Monitoring and evaluation

The curriculum is delivered in a variety of formats, including online courses, workshops, and one-on-one coaching. The curriculum is also available in Nepali.

Here are some specific ways in which the Climate Finance Training Curriculum can play "The Role of Awareness and Capacity Building Program" for Private Sector Finance in GCF Country Program Implementation in Nepal:

- Provide private sector companies with the knowledge and skills they need to identify, develop, and implement climate finance projects. The curriculum can cover a wide range of topics, such as climate change mitigation and adaptation strategies, project finance, risk management, and environmental and social safeguards.

- Help private sector companies understand the GCF's funding mechanisms and application process. The curriculum can provide an overview of the GCF's different funding windows, eligibility criteria, and application requirements.

- Build the capacity of private sector companies to develop high-quality proposals for climate finance projects. The curriculum can include practical exercises and case studies to help participants develop project proposals that are aligned with the GCF's investment criteria.

- Raise awareness of the potential benefits of climate finance for private sector companies. The curriculum can highlight the financial and reputational benefits of investing in climate change mitigation and adaptation projects.

- Promote collaboration between the public and private sectors on climate finance. The curriculum can encourage participants to network with government officials, other private sector companies, and civil society organizations.

Here are some specific examples of how the Climate Finance Training Curriculum can be used to build capacity for private sector engagement in climate finance:

- Develop a module on climate finance for private sector companies that are new to this area. This module can provide an overview of the basics of climate finance, including the different types of climate finance products and services available.

- Host a workshop on climate finance proposal development for experienced private sector companies. This workshop can provide practical guidance on how to develop a successful GCF proposal.
- Create a peer-to-peer learning network for private sector companies working on climate finance projects. This network can provide a platform for companies to share experiences, best practices, and challenges.
- Develop a case study database of successful climate finance projects implemented by private sector companies in Nepal. This database can be used to showcase the potential benefits of climate finance for private sector companies.
- Translate the Climate Finance Training Curriculum into Nepali to make it more accessible to a wider audience. This will help to ensure that all Nepali private sector companies can learn about climate finance and develop the skills they need to access and utilize climate finance.

Overall, the Climate Finance Training Curriculum can be a valuable tool for building capacity for private sector engagement in climate finance. By providing private sector companies with the knowledge and skills they need to identify, develop, and implement climate finance projects, the curriculum can help accelerate Nepal's transition to a low-carbon, climate-resilient economy.

### 4.1.2 Public Finance Management Training Centre (PFMTC)

The Public Finance Management Training Centre (PFMTC) of Nepal is a centre of excellence for public finance management (PFM) in Nepal. It was established in 2008 under the Ministry of Finance (MoF) and has been providing training to government officials, academics, and professionals on various aspects of PFM.

At the core of the PFMTC's mission lies a steadfast dedication to enhancing the capacity of Nepal's public sector institutions. Through a comprehensive suite of training programs, the centre equips government officials, academics, and professionals with the knowledge and skills necessary to manage public finances effectively and responsibly.

Delving deeper into specialized areas of PFM, the PFMTC offers specialized courses that cater to the evolving needs of Nepal's financial landscape. Public-private partnerships, gender budgeting, and climate finance are just a few of the specialized topics that participants can explore, gaining valuable insights into these increasingly crucial areas of financial management.

Recognizing the diversity of Nepal's financial landscape, the PFMTC can go beyond standardized training programs to offer tailor-made courses designed to address the specific needs of individual government agencies and organizations. This personalized approach can ensure that participants receive targeted instruction tailored to their unique challenges and objectives, maximizing the impact of the training.

Delivered in a variety of formats, including online courses, workshops, and one-on-one coaching, the PFMTC's Awareness and Capacity Building Program must ensure that participants have access to the training they need in a format that suits their learning styles and preferences.

The program's availability in Nepali further breaks down barriers to access, ensuring that individuals from all corners of Nepal can benefit from the PFMTC's expertise, fostering inclusivity, and empowering a wider range of stakeholders to contribute to the country's financial management.

- **Vision:** To manage public finance efficiently, increase the capacity of the employees working in revenue and financial administration, and help in institutional strengthening.
- **Goals:** To enhance professional efficiency and institutional capacity in the field of public finance management through training, seminars, consultations, interactions, and research.

**Objective:** The objective of the session is to:

- Conduct training to make the employees working in the field of public finance efficient and skilled.
- Conduct interactive seminars and workshops on current issues related to public finance.
- Conduct studies and research in the field of public finance.

**Strategic Objectives:**

- To enhance professional skills for the employees working in the field of public finance through in-service, specialized, and short-term training.
- To develop as a knowledge centre providing study, research, and consulting services in the field of public finance.
- To develop the centre as a documentation centre for collecting and keeping important records related to public finance.
- To increase the effectiveness of the training program through competent, trained, and motivated trainers.

**The Public Finance Management Training Centre-Nepal (PFMTC)** can play a significant role in promoting private sector engagement in climate finance through its Awareness and Capacity Building Program. The PFMTC can specifically contribute to this effort by:

**a. Raising awareness of climate finance among private sector companies:**

- Organize workshops and seminars on climate finance specifically for private sector companies. These events can provide an overview of climate finance, discuss the GCF's financing mechanisms, and highlight investment opportunities in Nepal.
- Develop and disseminate informational materials on climate finance for private sector companies. This could include brochures, online resources, and case studies of successful climate finance projects in Nepal.
- Engage with private sector associations and chambers of commerce to promote awareness of climate finance opportunities. This will help reach a wider audience of potential investors.

**b. Building the capacity of private sector companies to develop proposals for climate finance projects:**

- Offer training workshops on proposal development specifically tailored to climate finance projects. These workshops can cover topics such as project identification, project design, financial analysis, risk assessment, and proposal writing.
- Provide one-on-one coaching and mentoring to private sector companies in the process of developing proposals for climate finance projects. This personalized support can help address specific challenges and improve the quality of proposals.
- Develop a resource library of proposal templates, guidelines, and best practices for climate finance projects. This will provide private sector companies with easy access to the information they need to develop strong proposals.

**c. Facilitating collaboration between the public and private sectors:**

- Organize networking events and forums that bring together government officials, private sector companies, and other stakeholders involved in climate finance.

- Serve as a knowledge hub for climate finance, providing information and support to both the public and private sectors. This will help to ensure that all parties involved have access to the resources they need to advance climate finance in Nepal.

**d. Tailoring its services to the specific needs of the private sector:**

- Conduct surveys and assessments to understand the specific needs and challenges of Nepali private sector in accessing climate finance. This will help the PFMTC to develop targeted training and support programs.
- Partner with local private sector organizations to deliver training and services in Nepal and in convenient locations. This will make the PFMTC's offerings more accessible to a wider range of private sector companies.
- Develop a pipeline of potential climate finance projects from the Nepali private sector. This will help to ensure that there is a steady flow of high-quality projects that can be supported through the GCF and other climate finance mechanisms.

By implementing these strategies, the PFMTC can play a crucial role in enhancing private sector engagement in climate finance in Nepal, contributing to the country's efforts to address climate change and build a more sustainable future.

### 4.1.3 Private sector-led proposal development workshop

Private sector led proposal development workshops are designed to provide training on how to develop proposals for climate finance projects. The workshops cover topics such as project identification, project design, financial analysis, and risk assessment.

**Objectives:** The objectives of private sector led proposal development workshops are to:

- Build the capacity of private sector companies to develop proposals for climate finance projects.
- Enhance the capacity to improve the access to GCF aligning with the NDCs.
- Enhance approval of more proposals submitted to the GCF.
- Improved quality of proposals submitted to the GCF.

The target audience for private sector led proposal development workshops includes:

- Private sector especially green entrepreneurs
- Youth sectoral experts and ventures dedicated to proposal development workshop.
- Government officials who have and/or willing to contribute in access to climate finance from international sources.

### Delivery of private sector led proposal development workshops.

Private sector led proposal development workshops are delivered by experienced climate finance experts. The workshops are also open to a wide range of participants, including private sector companies, civil society organizations, and government officials.

**Outcomes of Private sector led proposal development workshops.**

The outcomes of private sector led proposal development workshops include:

- Increased knowledge base of access mechanism and scope of climate finance for the private sectors
- Improved capacity of private sector companies to develop proposals for climate finance projects.
- Increased number of proposals submitted to the GCF.

- Improved quality of proposals submitted to the GCF.

**Recommendations for private sector led proposal development workshops.**

The recommendations for private sector led proposal development workshops include:

- Continue to offer workshops on a regular basis.
- Make workshops more accessible to private sector companies.
- Develop tailored workshops for specific sectors.
- Track the impact of workshops on the number and quality of proposals submitted to the GCF.

## 4.2 Investment Opportunities in the Private Sector

Adoption of the robust and transparent public-private-partnership (PPP) model is applied, through which the GCF or other grant-funded projects would be implemented that would facilitate the proper utilization of funds. In that perspective, apart from international findings, the Subnational Climate Fund (SCF), mobilized from the GCF, offers loans between $5M and $75M at an 8% interest rate directly channelled to municipalities as well as industries or direct projects such as agriculture, infrastructure projects, wastewater, or energy. The fund will invest 49% of the project's cost, and 51% will be provided by the business in the form of capital or input support, e.g., enhanced land provided by the targeted municipality.

### 4.2.1 Direct Financing

GCF has a Private Sector Facility (PSF), with the primary mission of engaging both the local and global private sectors to support climate change mitigation and adaptation projects in developing countries. GCF-PSF will have the opportunity to:

i. **Aims to de-risk the movement of global capital to address climate challenges in developing countries.**

- This means that the goal is to make it easier and less risky for private investors to invest in climate projects in developing countries. This can be done by providing guarantees, insurance, and other forms of risk mitigation.
- It can also be done by helping to develop and implement clear and transparent regulatory frameworks for climate investment.

ii. **Have a special focus on LDCs, Small Island Developing States, and African states.**

- These countries are particularly vulnerable to the impacts of climate change, but they also have significant potential for renewable energy development and other climate mitigation and adaptation projects.
- By providing targeted support to these countries, climate finance can help reduce their vulnerability and build their resilience to climate change.

iii. **Can provide expertise to help in assessing the potential climate benefits of project ideas.**

- Climate finance institutions can provide technical assistance to developing countries to help them identify and develop climate-friendly projects.
- They can also help to assess the potential climate benefits of project ideas, such as the reduction in greenhouse gas emissions or the increase in climate resilience.

iv. **Provide a range of instruments for long-term funding that can be structured in a concessional way.**

- Climate finance institutions can offer a variety of long-term financing instruments, such as loans, grants, and guarantees.

- They can also structure financing concessionally, meaning that the terms are more favourable to the borrower, such as lower interest rates or longer repayment periods.
- This makes it easier for developing countries to access the financing they need to invest in climate projects.

v. **Strategic and flexible guidelines**

- Climate finance institutions can provide strategic advice to developing countries on how to best mobilize and deploy climate finance.
- They can also be flexible in their approach to financing, adapting their instruments and terms to the specific needs of each project.

In summary, climate finance institutions play a vital role in de-risking and mobilizing expertise, long-term funding, and strategic advice.

### 4.2.2 Co-financing opportunities

There are various co-financing opportunities available for Nepal to explore the diverse challenges the country faces due to climate change. These co-financing alternatives can assist the country in effectively addressing these challenges and promoting sustainable development. Nepal can investigate co-financing options from *different Multilateral Development Banks (MDBs), bilateral donors like the US, Japan, and the UK, and other countries starting projects in least-developed countries like Nepal.* Please see the detail opportunities in the table 1 below. It can also investigate how the GCF, and other multilateral funds can be integrated with the Sustainable Development Program, the role of the private sector in raising CF and Priority Sector, and finally, the NDA Secretariat's MRV and oversight mechanism.

*Table 4.1: Mode of MDB-labelled climate funds for the countries, 2022 (US$ million)*

| | **For Low income and middle-income economies** (US$ million) | | **For High income economies** (US$ million) | | **Total** (US$ million) | |
|---|---|---|---|---|---|---|
| **MDB** | **Private** | **Public** | **Private** | **Public** | **Private** | **Public** |
| AfDB | 777 | 2874 | | | 777 | 2874 |
| ADB | 547 | 6560 | 1 | 2 | 548 | 6562 |
| AIIB | 648 | 1664 | 80 | | 728 | 1664 |
| CEB | | 295 | | 618 | | |
| EBRD | 2707 | 1581 | 2363 | 106 | 5070 | 1687 |
| EIB | 1440 | 2724 | 15605 | 17307 | 17045 | 20031 |
| IDBG | 1014 | 4664 | 57 | 1231 | 1071 | 5895 |
| IsDB | | 1050 | | | 0 | 1050 |
| NDB | | 466 | | | 0 | 466 |
| WBG | 4894 | 26773 | 678 | 741 | 5572 | 27514 |
| Total | 12027 | 48651 | 18784 | 20005 | 30811 | 68656 |

Source: (European Investment Bank, 2023)

The status of funding shows that ADB, EBRD, and IDBG have been mobilizing more climate-specific funds for private sector led climate action in low- and middle-income countries. Nepal should take that as a guideline to create an enabling environment for private sector engagement in NDC project implementation.

Since, due to its poor economic ability, sovereign guarantees from Nepal have been declined, in that case, a third party or SDR of the World Bank could be considered.

**Table 4.1: Climate co-finance flows by MDB and by source, 2020 (in US$ million)**

| | AfDB | ADB | AIIB | CEB | EBRD | EIB | IDBG | IsDB | NDB | WBG | Total Climate Co-finance | Adjustment for multiple MDB financing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Public direct mobilization** | 2 | 122 | 80 | | | 49 | 145 | | | 6639 | 7037 | 7037 |
| **Public co-finance** | | | | | | | | | | | | |
| **Other MDBs** | 1307 | 934 | 1985 | | 1736 | 1260 | 484 | 181 | | 875 | 8762 | 8762 |
| **IDFC members** | 421 | 476 | 260 | | 100 | 729 | 304 | | | 200 | 2490 | 2061 |
| **Other International Public** | 865 | 153 | 17 | | 15 | 139 | 27 | 1091 | | 1077 | 3384 | 2808 |
| **Other Domestic Public** | 539 | 6175 | 1087 | 234 | 348 | 2374 | 320 | | 1032 | 352 | 12461 | 10452 |
| **Total Private mobilization** | | | | | | | | | | | | |
| **Private direct mobilization** | | 187 | | | 257 | 58 | 1321 | | | 2654 | 4477 | 4477 |
| **Private indirect mobilization** | 854 | 325 | 450 | | 2316 | 5080 | 1639 | | 1082 | 4189 | 15935 | 12456 |
| **Total** | 3988 | 8372 | 3879 | 234 | 4772 | 9689 | 4240 | 1272 | 2114 | 15986 | 54546 | 48053 |

Source: (European Investment Bank, 2023)

For any capital-intensive climate adaptation and mitigation project, especially renewable energy generation related investments, multilateral implementing entities are emphasizing co-finance from other financing entities. Evidence shows that private climate investments were relatively lower due to the existing subsidies for electricity and a lack of incentives and an enabling environment, including the policy framework to push renewable energy forward. However, "commercial Bank Audi had made USD240 million available to the green market over the past 5 years and partnered with the EBRD for the Green Economy Financing Facility (GEFF), and the Central Bank for other programs (LEPAP, LEEREFF). There were also international investors, developers, looking for yield that Lebanon offered through its resource endowment (wind, sun), and thus had opportunities for good returns on investments."[1]

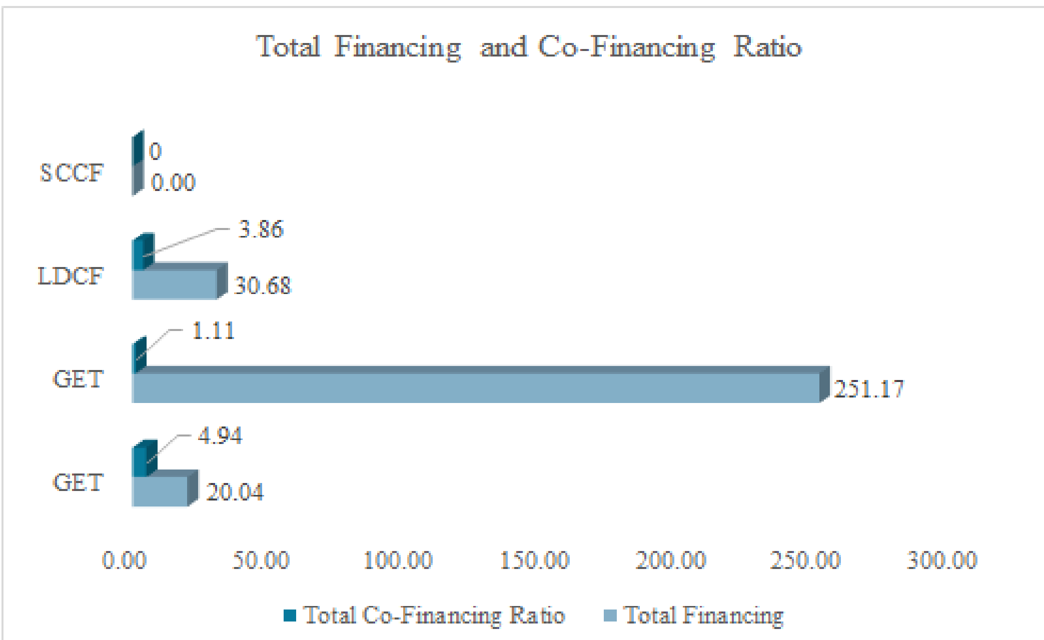
### 4.2.3 Suggested modalities for innovative private Sector investment through co-financing

As discussed, there are potential sources (which are discussed in the onward section) that can be used effectively by Nepal as per suggested modalities for innovative private sector investment (PPP, CSO, PES, Nature for Debt Swap, etc.).

#### Sectoral Investment (Multilateral and Bilateral)

In the below figure 4, it is seen that the number of projects under the Least Developed Countries Fund (LDCF) in Nepal has only 4 active projects. These projects are worth approximately 30.68 million dollars, and the co-financing ratio is 3.86, which is the second highest (GEF, 2022). So, Nepal can easily use the financing ratio to ensure that all the relevant stakeholders have a substantial financial stake in projects supported by the LDCF.

*Figure 4.3: Active Project Portfolio*




**Source:** (GEF, 2022).

In Nepal, ADB's funding collaborators allow the GoN to collaborate with affiliated entities, multilateral financial organizations, and commercial enterprises to contribute to the funding of ADB projects. The co-financing comes from sovereign grant co-financing and non-sovereign co-financing to implement projects. Detail amount and type are shown in the picture below:

[1] First National Private Sector Dialogue on Climate Finance: Assembling the Pieces of the Climate Finance Puzzle, arranged jointly by Lebanon Ministry of Environment, South Centre and GCF on March 24, 2022

*Table 4.2: Investment projects Co-financed for Nepal*

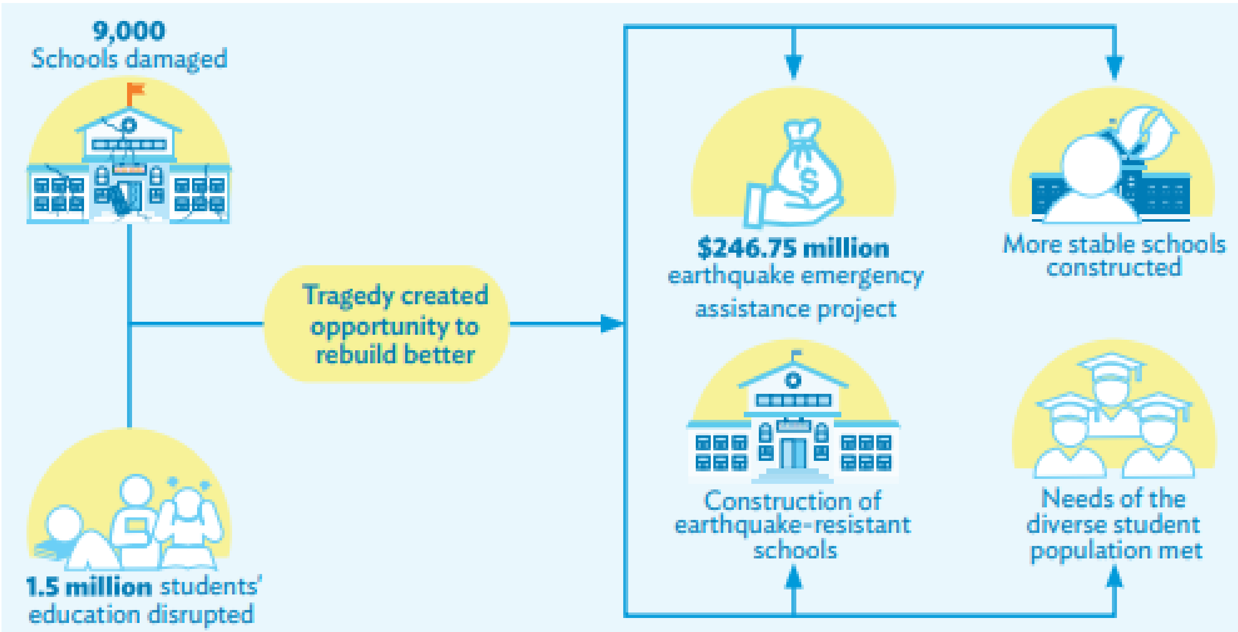
| Investment projects Co-financed for Nepal | | | |
|---|---|---|---|
| 1 January 2018 - 31 December 2022 | | | |
| Project | ADB Amount ($ million) | Co-financing Amount ($ million) | Type of Co-financing |
| Prevention and Control of COVID-19 through WASH and Health Initiatives in Secondary and Small Towns | | 5 | G[2] |
| South Asia Sub regional Economic Cooperation Power Transmission and Distribution System Strengthening | 200 | 35 | G |
| Supporting School Sector Development Plan | | 5.5 | G |
| Supporting School Education Sector Plan | 200 | 15.21 | G |
| Tanahu Hydropower | | 33.55 | G |
| Upper Trishuli- 1 Hydropower Project | 30 | 150.31 | NS[3] |

Source: (ADB, 2022)

The Asian Development Bank (ADB) has played a pivotal role in Nepal's recovery and resilience-building efforts, particularly in the aftermath of devastating earthquakes. Through 'The Earthquake Emergency Assistance Project, ADB provided essential support to Nepal when it needed it most. This project involved a substantial financial commitment, with ADB extending $200 million in loans and an additional $3.4 million in technical assistance (TA).

[2] Sovereign grant cofinancing
[3] nonsovereign cofinancing

*Figure 4.4: Earthquake impact on schools*



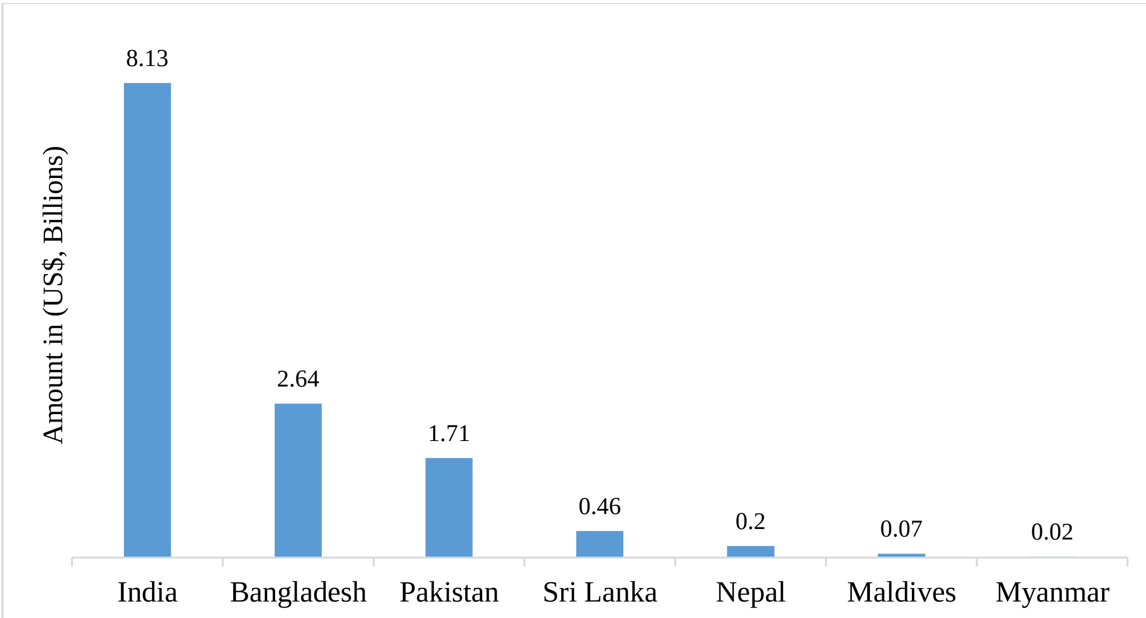

Source: (Paudyal & Bhandary, 2022)

The World Bank has approved a $150 million "Finance for Growth" development policy credit to help Nepal's green, resilient, and financial growth (GRID). This will strengthen the stability of the financial sector, offer a wider range of financial solutions, and make it easier to access financial services. This funding is part of the $4.2 billion that the development partners wanted to contribute for the GRID project. The subsequent Finance for Growth operation will cooperate with increased supervision of the financial sector to acknowledge financial stability risks in the case of the COVID-19 pandemic.

The operation will broaden capital, insurance, and markets for disaster banking facilities and stimulate financial product innovations. The operation also emerges as a novel climate agenda, complementing climate finance resilience policy initiatives across banking, insurance, and capital markets. This can pave the way for introducing green loan principles and green lending incentives, together with new insurance and products of the capital market used to deal with both climate mitigation and challenges to adaptation.

Nepal, as a member country of the Asian Infrastructure Investment Bank (AIIB), finds itself in a unique position with regards to the bank's contributions to climate finance. AIIB's allocation of only 12% of its portfolio to climate finance in any given country is notably the lowest among Multilateral Development Banks. This statistic underscores a significant challenge for Nepal, a nation particularly vulnerable to the impacts of climate change, as it receives a disproportionately low share of AIIB's climate-related investments.

*Figure 4.5: AIIB Approved Investments in South-Asian Countries, (US$, Billions)*

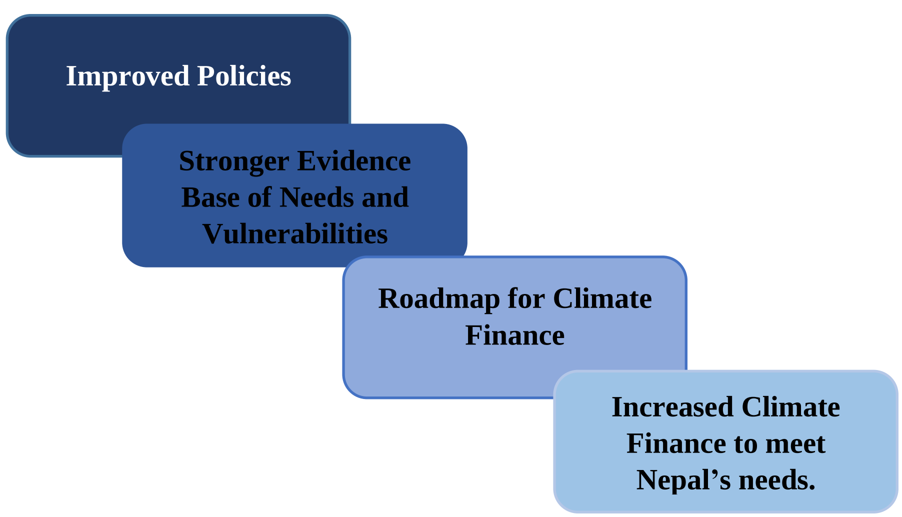



Source: (Hill, 2022)

However, there is a glimmer of hope on the horizon. AIIB has set ambitious goals, aiming to increase its climate finance commitment to 50% by the year 2025. This indicates a recognition of the pressing need to address climate change, especially in countries like Nepal that face acute environmental vulnerabilities. Nevertheless, as of now, AIIB's overall investment in Nepal remains relatively low, further emphasizing its narrow focus on climate-related finance in the country.

The Policy and Institutions Facility (PIF) supported the government of Nepal to run a Roadmap to Strategic Engagement in Twenty-Sixth Conference of Parties of UNFCCC (COP26).

*Figure 4.6: Roadmap to Strategic Engagement in COP'26*



They developed a climate finance roadmap which helped secure commitments on Climate Finance in line with Nepal's Climate Target.

Using the funds allocated to Nepal, some of the important issues can be addressed, including:

- **ADB-World Bank co-financing for the Kathmandu-Tarai Fast Track Road:** The Kathmandu-Tarai Fast Track Road is a 72-km highway that will connect the capital city of Kathmandu with the Terai region in southern Nepal. The project is being co-financed by the ADB and the World Bank.
- **IFC-Dutch Development Bank co-financing for the Upper Karnali Hydropower Project:** The Upper Karnali Hydropower Project is a 1,020 MW hydropower project in western Nepal. The project is being co-financed by the IFC and the Dutch Development Bank.
- **Japan International Cooperation Agency (JICA) co-financing for the Kathmandu Valley Water Supply Improvement Project:** The Kathmandu Valley Water Supply Improvement Project is a project to improve the water supply system in the Kathmandu Valley. The project is being co-financed by JICA and the Government of Nepal.
- **US Agency for International Development (USAID) co-financing for the Nepal Electricity Authority (NEA) Reform Project:** The NEA Reform Project is a project to reform the NEA, Nepal's state-owned electricity company. The project is being co-financed by USAID and the Government of Nepal.

# 5. Mapping of Policy, Institutional and Regulatory Arrangements

## 5.1 Mapping the Governance and Coordination of Climate Finance for Nepal's NDC Implementation

The Government of Nepal presents its enhanced Nationally Determined Contribution (NDC) under the Paris Agreement for the period 2021-2030, following Articles 4.2 and 4.11 of the Paris Agreement, Decision 1/CP.21 paragraph 23 and 24, and other relevant provisions of the Paris Agreement. The NDC considers the principle of common but differentiated responsibilities and respective capabilities considering national circumstances. Nepal is a highly vulnerable country to climate change and has taken significant steps to address the issue. The country's Second Nationally Determined Contribution (NDC) is a comprehensive document that outlines Nepal's plans to reduce greenhouse gas emissions and adapt to the impacts of climate change.

- ☞ Nepal will reduce its greenhouse gas emissions by 20% by 2030 compared to business as usual.
- ☞ Nepal will submit communication on adaptation to the UNFCCC, which will include its priorities, implementation, and support needs, seventeen plans and actions through the National Adaptation Plan (NAP).
- ☞ Nepal will accelerate adaptation by implementing the National Environment Policy (2019), National Climate Change Policy (2019), Environment Protection Act (2019), Environment Protection Regulation (2020), National Adaptation Program of Action (NAPA) (2010), Framework on Local Adaptation Plans of Action (LAPA) (2019), Disaster Risk Reduction National Strategic Plan of Action 2018 – 2030, Fifteenth Plan 18 (2019/2020-2023/2024), and other national strategies and action plans.
- ☞ Nepal is in the process of developing its National Adaptation Plan (NAP). Through this process, Nepal intends to implement medium- and long-term adaptation needs, including urgent and immediate priorities. Key outputs of NAP include the following:
- ☞ The NAP will be formulated by 2021. It will incorporate adaptation and resilience milestones to be achieved in the short-term (by 2025), medium-term (by 2030), and long-term (by 2050).
- ☞ By 2025, a Climate Information System will be established and operationalized.
- ☞ By 2022, a NAP Monitoring, Reviewing, and Reporting Framework will be developed and operationalized.

Nepal has set ambitious targets for mitigating and adapting to climate change under its Nationally Determined Contribution (NDC). The estimated cost of achieving these targets is significant, with conditional mitigation targets requiring USD 25 billion and unconditional targets totalling USD 3.4 billion. To achieve these goals, Nepal seeks financial, technological, and capacity-building support from various sources, including global funds and bilateral/multilateral agencies.

**Key Elements for Effective Implementation**

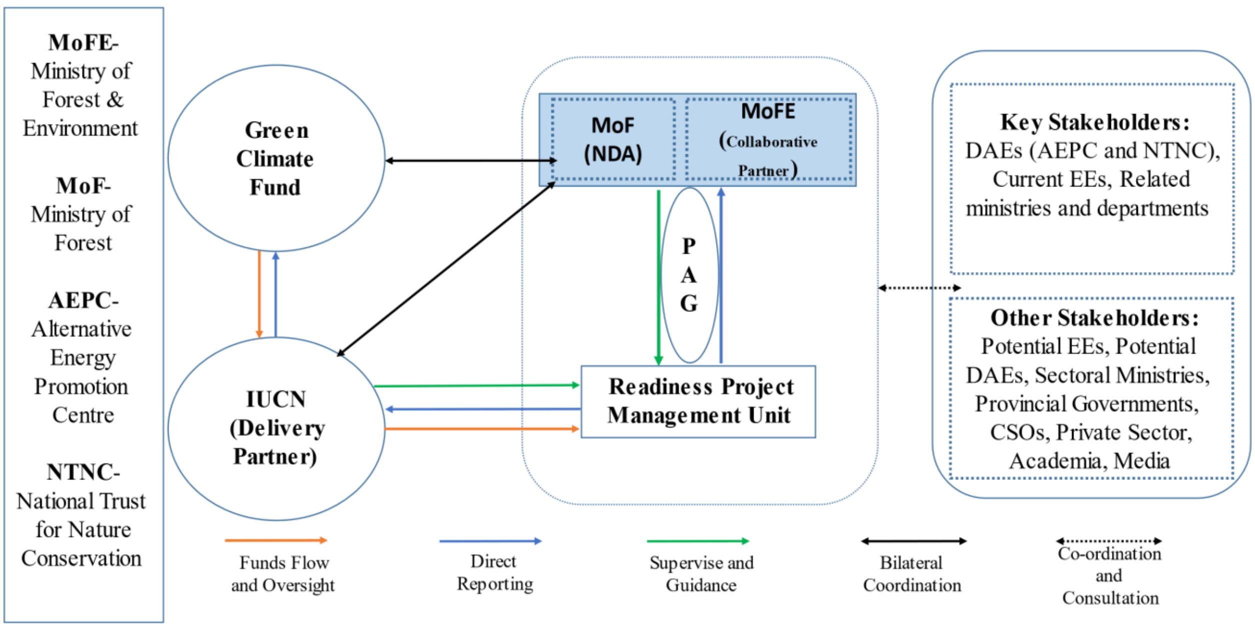
To ensure successful implementation of the NDC, Nepal has identified several key elements:

- ♦ <u>Governance</u>: Strengthening institutional capacity and enacting relevant acts and regulations.
- ♦ <u>Finance</u>: Developing an NDC financing and investment framework to streamline access to funds and bridge funding gaps.

- Economic Efficiency and Cost-Effectiveness: Maximizing economic benefits and ensuring cost-effectiveness during implementation.
- Equity and Inclusiveness: Ensuring equal access and benefit-sharing for women, children, youth, Indigenous Peoples, and marginalized groups.
- Monitoring, Reporting, and Verification (MRV): Promoting data-driven tracking of targets and strengthening data generation and validation.

**NDC Implementation Framework**

*Fig. 5.1: NDC Implementation Framework*




Source: (NDC, 2020)

## 5.2 Institutional arrangements for climate program and budget planning

There is a wealth of institutions that have an interest in climate change-related issues. This study has identified ten government ministries where climate change is now a policy concern, with dedicated staff and new institutional structures being put in place. The situation is similar for national civil society organizations and their counterpart international NGOs. The same applies also to development partners, where climate change has been added to the job description of advisory staff. The following section details the institutional arrangements that exist and those that are planned.

a) **National institutional arrangements for dealing with climate change.**

**Parliamentary Committees**

Two committees within the national legislature hold remits that address climate change issues. The first is the committee on natural resources, economic rights, and revenue sharing. This committee has 43 members. The ex-office members of this committee include the Prime Minister, together with the Ministers of Forests, Water Resources, Land Reform, and Agriculture (but not Environment). Most importantly, this committee has recommended that climate change be included in the forthcoming New Constitution. A second parliamentary committee is the Development Committee. This thematic committee provides guidance to line ministries, including the Ministry of Environment (MoE), and has the remit to monitor and evaluate the performances of ministries. In terms of institutional arrangements, it is a statutory committee of parliamentarians with its own secretariat, and it can draw on technical support from line ministries and other institutions as and when needed. This committee does not appear to have given attention to the MoE to date. There is a case for this ministry to undergo parliamentary review as it adapts as an institution to take on the major new national policy theme of climate change.

**Environment Protection and Climate Change Management National Council (EPCCMC):** The EPCCMC is a high-level advisory body chaired by the Prime Minister and is responsible for overseeing climate change policy and coordination.

**Inter-Ministerial Climate Change Coordination Committee (IMCCCC):** The IMCCCC is a technical committee chaired by the Secretary at the MoFE and is responsible for coordinating climate change policy implementation.

**Climate Change Fund (CCF):** The CCF is a national fund established to manage climate finance resources.

b) **Government Advisory Body: The Climate Change Council (CCC)**

Immediately prior to the 2009 UNFCCC Conference of the Parties (COP 15) in Copenhagen, a Climate Change Council (CCC) was constituted under the chairmanship of the Rt. Hon. Prime Minister to develop climate change as a major theme of the national development agenda in Nepal. This is now the highest advisory body dedicated to climate change and continues to be chaired by the Rt. Hon. Prime Minister. Its task is to provide high-level policy and strategic oversight, coordinate financial and technical support for climate change-related programs and projects, and secure measures to benefit from climate change-related international negotiations and decisions. Since its establishment in July 2009, the CCC has convened seven meetings, demonstrating a strong policy commitment to climate change. There are 26 members on the council, including eleven ministers and eight technical experts nominated by the government. The Secretary of the Ministry of Environment (MoE) is the Secretary to the Council. Key decisions already made by the CCC include the endorsement of the NAPA and the 2011 climate change policy.

c) **Government Consultative Body: The Multi-sectoral Climate Change Initiatives Coordination Committee (MCCICC)**

This is a national body created to coordinate action on national climate change-related activities and collaborative programs with development partners. The MCCICC is housed at the MoE and has representatives from government ministries, national institutions, international and national NGOs, academia, the private sector, and donors. All the NAPA thematic working group coordinators (Agriculture, Energy, Forests, Health, Physical Planning, and Home Affairs) sit on this committee. Since its formation in 2009, the Committee has met five times (noticeably, less often than the CCC). Its main aim is to strengthen multi-stakeholder collaboration in responding to climate change. It also has the task of facilitating strategic financing by providing a venue where needs are identified, articulated, and taken into account in the formulation of financing strategies by the government and its development partners. The Climate Change Management Division of the MoE acts as the Secretariat of this Committee. It might be expected for a national consultative body of this kind to hold meetings on a regular basis and work to a set agenda. To date, this appears not to be the case.

**d) National Climate Change Focal Point: The Ministry of Environment**

The MoE has the national mandate to formulate, implement, monitor, and evaluate policy, plans, and programs on environment, science and technology, and climate change. This is a very considerable agenda. It is also the National Focal Point for the UN Framework Convention on Climate Change (UNFCCC). The ministry consists of three divisions: environment, climate change management, and planning, evaluation, and administration. There are 11 sub-divisions within the ministry, three of which are within the Climate Change Management Division. The ministry has 53 staff posts. The ministry is a relatively small and newly created institution, with no presence outside its administrative headquarters in Kathmandu. It is currently working out how to increase its capacity so that it can coordinate and implement climate change policies at the sub-national level.

The Climate Change Management Division of the MoE is meant to coordinate all climate change-related projects implemented by the government, donors, Multilateral Development Banks, and other agencies. In addition, there are plans to establish a project management unit with support from climate change-related projects to oversee externally financed initiatives such as the SPCR (see previous chapter). Although this would provide immediate added capacity to the current structure, a longer-term option for channelling and harmonizing increased funding for climate change-related actions needs to be developed. The Department of Hydrology and Meteorology (DHM) is a key department for climate change-related action under the ministry. The DHM is the National Focal Point of the Inter-governmental Panel on Climate Change. In addition, the Alternative Energy Promotion Centre (AEPC) is a semi-autonomous agency under the ministry and is the national institution focused on developing and promoting alternative energy technologies in Nepal. The MoE has led several major national responses to climate change in recent years, including the formulation of the climate change policy, the preparation and endorsement of the NAPA, and establishing and facilitating both the CCC and MCICC. In the case of institutional reform, the MoE is in the process of further examining its current structure, while at the same time overseeing the development of major externally supported initiatives such as the SPCR, the LAPA, and the SREP programs.

**e) The National Planning Commission**

The National Planning Commission (NPC) advises the government on all aspects associated with periodic national plans, programs, and projects. It also plays a central role in advising ministries and departments on foreign aid and is the key national institution for cross-sectoral coordination of programs under various international conventions. The NPC is a ten-member commission, chaired by the Rt. Hon. Prime Minister. Specific thematic fields are assigned to each member. The NPC secretariat consists of five divisions, each headed by a joint secretary. The total staff complement at NPC is 152. The NPC is responsible for screening development plans and programs and, since 2011, has had the added responsibility to ensure that such plans and programs are climate resilient. To address this latter objective, the NPC now has a climate-resilient planning tool in place. In the course of mainstreaming climate change in government programs and projects, the NPC led the incorporation of climate-responsive program activities within the TYP. As a result of the TYP, line ministries are beginning to incorporate climate change-related activities into their annual plans and programs.

### f) Ministry of Finance

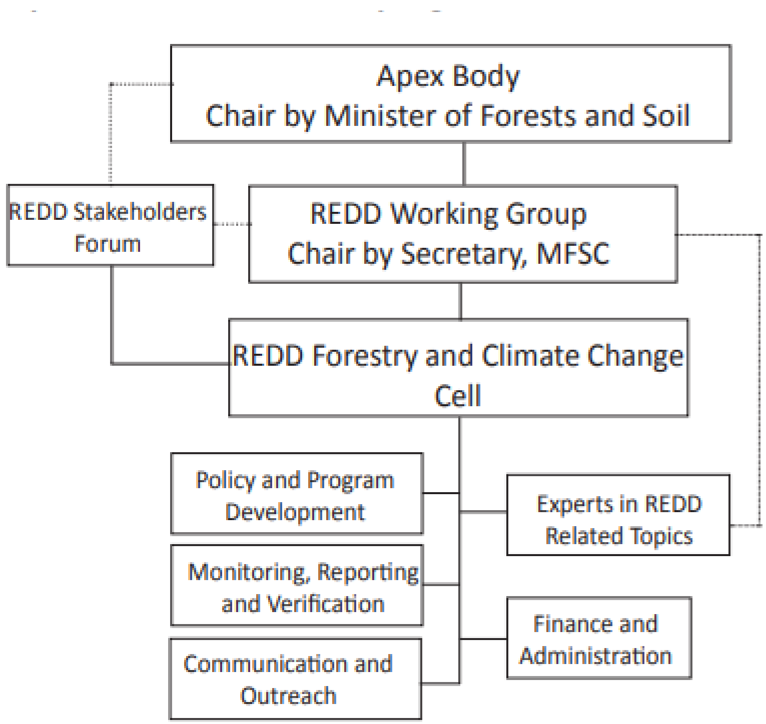
The programs and budgets for climate change-related activities prepared by sector ministries such as Environment, Forests, Agriculture, Irrigation, Energy, and Local Development are endorsed by the National Planning Commission, and then the associated budgets are submitted to the Ministry of Finance. These budgets are then reflected in the spending plans of each sectoral ministry. The Ministry of Finance has nine divisions, including a Foreign Aid Coordination Division and a Budget and Program Division. The Budget and Program Division aims to achieve efficiency in the allocated budget by strengthening project screening, rationalizing expenditure, and introducing performance-based allocation within a multi-year funding system (the medium-term expenditure framework) so that core projects do not go underfunded. The Ministry of Finance produces the government 'Red Book', in which program and operational budgets for each ministry and project are shown. In addition, the ministry has experience in developing both a gender-responsive budget and a pro-poor budget through the development of a set of indicators by which line items of the national budget are classified. This experience has direct relevance for the possible coding of climate change activities.

### g) Other Implementing Ministries

**Ministry of Forests and Soil Conservation**

The Ministry of Forests and Soil Conservation (MoFSC) is the sector ministry with the remit to formulate and implement policy, plans, and programs on forests, the natural environment, and biodiversity. It is also responsible for the management of protected areas. The ministry has five headquarter divisions and five implementation departments, which have nationwide coverage. The ministry has a staff complement of approximately 9,500, of which 7,300 are District Forest Office staff. The MoFSC is also the lead national institution for REDD (reducing emissions from deforestation and forest degradation) activities in Nepal. A multi-sectoral, multi-stakeholder coordinating committee has been established as the apex body for REDD policy development in the Ministry of Forests, chaired by the Minister. A REDD Working Group (RWG), under the leadership of the Secretary, Ministry of Forests, is also functional. The RWG is made up of representatives from the government, indigenous people's groups, community forest user groups, the private sector, and development partners. Within the ministry, a technical REDD cell has been established to coordinate the national REDD-Readiness process. The REDD Cell is led by a joint secretary and has three sections. The Policy and Program Development section oversees the assessment of policies and the design and monitoring of forestry programs related to REDD and climate change, including developing extension and capacity-building programs and activities. This section also provides back-up support to the Ministry of Forests regarding the international negotiation process. A second section, the Carbon Accounting and MRV Section, is responsible for the technical aspects associated with REDD, such as establishing and implementing the deforestation and forest degradation reference scenarios, as well as the monitoring and verification system for REDD implementation. The third section, the Outreach and Payment for Environmental Services section, is responsible for implementing pilot activities. It is also in charge of the documentation and dissemination of REDD-related pilot projects and providing information for both the Policy and Program Development and the Carbon Accounting and MRV sections. Additionally, this section is responsible for the implementation and delivery of extension and capacity-building activities for different stakeholders, including the government, civil society, and the private sector.

*Fig. 5.2: Institutional arrangements for the implementation of REDD programs*




(ADPC Policy Brief on CC Financing and Planning Nepal)

**Ministry of Agriculture and Cooperatives**

The Ministry of Agriculture and Cooperatives focuses on measures to increase agricultural production and productivity. To secure this goal, the ministry formulates and implements agricultural and cooperative development policies and plans. The ministry has five divisions as well as three centre-level organizations and four departments, with a total staff complement nationwide of just over 10,000. The MOA has recently formulated a climate change adaptation framework for food security. The identified program activities include crop production management, agricultural infrastructure, the redesign of cropping systems, livestock production and management, economic access to food, and food utilization. These programs are planned, implemented, and monitored by regional offices, district offices, and service centres. Disaggregated information on budget and expenditure on administrative and program activities is available. The Gender Equity and Environment Division is the focal point for climate change issues in the ministry. This division has been addressing climate change issues in agriculture through agriculture, food security, and agro-biodiversity conservation. The ministry is currently working to include agro-biodiversity in the post-NAPA projects.

**Ministry of Energy**

The Ministry of Energy develops policies, plans, and programs for the conservation, regulation, and utilization of energy. The ministry's main climate change related function is that it is responsible for developing clean energy in Nepal. Hydropower development, irrigation, and water resource management are major climate change-related program activities undertaken by the ministry. These activities are being implemented through the work of the Department of Energy, the Electricity Authority, and donor-supported project offices. The ministry is made up of five divisions and has a Rural and Alternative Energy Section within the policy and planning division. This division is the focal point for climate change issues in the ministry. The division has adapted its policy to address climate change issues within its three-year plan (2010/11-12/13). In addition, the ministry has plans to address climate change by adopting a river basin approach for water resource management.

**Ministry of Irrigation**

The Ministry of Irrigation is responsible for developing policies, plans, and programs for the conservation, regulation, and utilization of irrigation water. It also manages activities related to water induced disaster management, prevention, and rehabilitation. It consists of three divisions and two departments: the Department of Irrigation and the Department of Water-Induced Disaster Prevention. Major climate change-related program activities include irrigation in agriculture for food security, irrigation system management and capacity building, river training, and flood control for life and livelihood protection. These activities are planned and implemented by the two departments, as well as by regional, divisional, and river basin-level offices. Disaggregated information on budget and expenditure for administrative and program activities is available. The Ministry of Irrigation's three divisions are the Planning and Program Division, the Policy and Foreign Aid Coordination Division, and the Administration Division. The Policy and Foreign Aid Coordination Division has four sections, including an Environment Section. The Ministry has adopted a policy to design new projects and rehabilitate old ones to address climate change adaptation issues.

**Ministry of Local Development**

The Ministry of Local Development (MLD) plays a key role in developing policies and programs on rural development and local governance, including decentralization. The ministry consists of four divisions and twelve sections. The Department of Infrastructure Development and Agriculture Roads is the only department of the ministry. It coordinates with local bodies on environmental planning, which is planned to be expanded to include climate change-related activities. Seventy five District Development Committees (DDCs), 58 municipalities, and 3,915 Village Development Committees (VDCs) form the local bodies whose interaction with the national government is channelled through the ministry. The MLD's four divisions are administration, local self-government coordination, planning and foreign aid coordination, and municipal management. The Municipal Management Division is the focal division for climate change issues, and it has three sections, including an Environment Section. The Environment Section is responsible for the integration of environmental aspects into the planning cycle.

**Ministry of Home Affairs**

The Ministry of Home Affairs (MoHA) is the government ministry that coordinates disaster risk management (DRM) in Nepal. The Planning and Special Service Division in the MoHA is the focal point for disaster risk management. Being the national DRM focal point, the Ministry of Home Affairs has the responsibility to coordinate activities relating to disaster preparedness, reconstruction, and rehabilitation together with other disaster management-related agencies. A Central Disaster Relief Committee under the chairmanship of the Home Minister provides policy guidelines and directives for rescue and relief work.

**Ministry of Physical Planning and Works**

The Ministry of Physical Planning and Works is responsible for planning, designing, and executing infrastructure projects; coordinating urban planning and housing development; and constructing and operating water supply and sanitation services. All these functions can be expected to be impacted by climate change. There are three departments in this ministry: the Department of Urban Development and Housing, the Department of Water Supply and Sanitation, and the Department of Roads.

**Ministry of Health and Population**

Climate change will have an impact on human health. The frequent outbreak of diarrheal disease in far-western Nepal, associated with poor sanitation and water supply, already claims a heavy loss of life and illness. Similarly, the recent flooding of the Koshi River led to deteriorating human health associated with the loss of services and property, and such events are expected to happen with greater frequency on account of climate change. These changing health conditions brought about by climate change will likely lead to greater demands on the ministry's budget.

**h) Key Departments and Agencies**

**Department of Hydrology and Meteorology**

The Department of Hydrology and Meteorology (DHM) collects and disseminates hydrological and meteorological information for water resources, agriculture, energy and other development activities. It has four divisions and 15 sections with specific responsibilities, including climatology, to study and investigate climate change. The DHM is the national focal point to the IPCC, WMO and the meteorological activities of SAARC. It employs 237 personnel, of which sixty are professional staff. It presently maintains 340 met stations and 42 hydro stations from which it collects hydro met information, although there are plans to upgrade this system and build capacity under the planned SPCR program.

**Department of Forests**

The Department of Forests is responsible for the protection, management, and utilization of forests and the conservation of natural resources. It operates at four administrative levels: headquarters, district forest offices, Ilaka forest offices, and range posts. Community forestry is one of the priority programs of the department, which has received considerable support from bilateral donors. Approximately 35 percent of the total development budget allocated to the ministry is spent on the Community Forestry Program, and about 60 percent of this budget is funded through foreign assistance.

**Department of Soil Conservation and Watershed Management**

The Department of Soil Conservation and Watershed Management (DSCWM) prepares watershed management plans. It operates soil conservation and watershed management programs. There are district soil conservation offices in 56 districts, with a staff complement of approximately 650. The District Soil Conservation Offices are planning the implementation of watershed management activities, which are regarded as climate change adaptation programs. In addition, DSCWM has a major program in the Churia watershed, which was identified as a priority program under the NAPA and the SPCR.

**Alternate Energy Promotion Centre (AEPC)**

The main role of the AEPC is to provide guidance to the government on alternative and renewable energy technology policies. It supervises, monitors, and evaluates the overall alternative energy and renewable energy programs conducted by NGOs, companies, and line agencies. The AEPC is governed by a board headed by the Minister of Environment. It has four divisions and a total of 54 staff. The AEPC is involved in developing CDM projects in the alternative energy sector. There are energy and environmental units and sections in 72 districts. These district energy offices promote energy development and environmental conservation. Biogas plants have been developed, and incomes have been earned through clean energy development. The AEPC has developed micro-hydro projects as CDM projects. In addition, it is registering improved cooking stoves, improved water mills, and solar energy for CDM. The AEPC has a Climate and Carbon Unit for the integrated and long-term development of CDM. The AEPC also mobilizes subsidies and facilitates loans for alternative energy promotion. Similarly, the Central Rural Energy Fund and District Energy Fund have been created.

**i) Local bodies**

**District Level Coordination**

At the district level, line agencies, nongovernment organizations, community-based organizations, the private sector, and networks and federations of user groups support community-level implementation (see Chapter 6). The district development committee (DDC) leads inter-agency coordination through a coordination committee. The DDC is also responsible for planning and monitoring processes. Each DDC has an Energy and Environment Unit to facilitate services and coordination on such matters. The National Adaptation Program for Action (NAPA) defined that 80 percent of national climate change-related expenditure should be allocated for implementation at the local level. At the district level, the DDC is responsible for project planning and delivery. The DDC secretariat is responsible for selecting local service delivery agents. The Ministry of Local Development and the Local Government Capacity Development Program (LGCDP) have developed minimum conditions and performance measures for local bodies to support vertical and horizontal coordination and delivery.

**Regional Level Coordination**

Line ministries such as Agriculture, Forestry, and Irrigation all have regional offices. These regional offices are responsible for providing technical support, planning, and monitoring. The regional directorates are also responsible for coordinating among different line ministries at the regional level. The MoE is planning to establish regional-level offices based on a river basin approach.

**j) Private sector organizations**

The Federation of Nepalese Chamber of Commerce and Industry (FNCCI) provides advisory services to the government and acts as a lobby organization during the formulation of business and industry-related policies, acts, and government programs. The FNCCI is an umbrella organization of the Nepalese private sector and has a membership that comprises 91 district/municipality-level chambers in 74 districts and 66 commodity/sectoral associations. The FNCCI has established specialized cells, including an industrial environment and an energy promotion program.

**k) Civil Society Organization**

Several NGOs have active climate change initiatives. As with current government programming, defining what constitutes a climate adaptation program is not entirely clear, but initiatives are certainly growing within organizations, and the discourse around climate change is becoming more prominent. WWF and other international NGOs have supported the government in formulating its climate change policy and are supporting the implementation of adaptation projects in protected areas. National NGOs are also active. The role, contribution, and value of NGOs and civil society organizations have been recognized in the Climate Change Policy, which identified the need to enhance the capacity of the private sector, NGOs, and civil society involved in development.

The Climate Change Network Nepal (CCNN, http://ccnn.org.np/index.php) is a loose coalition of various organizations, including national and international NGOs and donors including DFID, JICA, and UNDP. The forum was established to raise awareness on climate change at the local and national level, coordinate among partners' organizations, jointly advocate for effective action for appropriate mitigation and adaptation measures regarding climate change and establish a strong community-based focus as an information-sharing platform. One prominent civil society institution is the Federation of Community Forestry Users Nepal (FECOFUN). FECOFUN aims to promote cooperation among forest user groups (FUGs) through the sharing of experiences and maintaining relationships between all stakeholders. It supports actions on forestry, environment, climate change, forest-based entrepreneurship, green jobs, CDM projects, biodiversity, alternative energy, and tourism. FECOFUN is an autonomous NGO with a membership of just over 13,500 forest user groups.

**l) Research organizations and Academia**

**ICIMOD**

The International Centre for Integrated Mountain Development, ICIMOD, is a regional centre serving the eight regional member countries of the Hindu Kush Himalayas. It has research programs with regional partner institutions, facilitates the exchange of experience, and serves as a regional knowledge hub. It covers a diverse range of subjects related to sustainable mountain development and addresses climate change as a thematic issue. The South Asia Network for Development and Environmental Economics (SANDEE) is hosted by ICIMOD.

**Universities**

The Department of Environmental Science and Engineering (DESE) at Kathmandu University currently offers academic programs related to natural resource management. Tribhuvan University and Pokhara University also run MSc programs and courses related to climate change.

**Development partners active in climate change**

Nepal has a long-standing relationship with international donors built up over many years of aid delivery. The UN agencies, bilateral agencies, and multilateral development banks all have a significant presence in Nepal. These same agencies are now prominent in the delivery of international support for the actions and programs required because of climate change within the country. It has been estimated that approximately USD 650 million of international public grant finance for climate change-related activities has been made available over the last decade, with support increasing in the last five years (Table 5). However, until a national database is established with well-defined categories of expenditure, this estimate can only be considered an indicative one. Of the 71 projects listed by donors, the largest number have been capacity-building and awareness-raising activities. In terms of spending on mitigation activities, projects aiming to strengthen the provision of clean (renewable) energy predominate. The dominant external actor, in terms of both the number of initiatives supported and the amount of finance committed, is the World Bank.

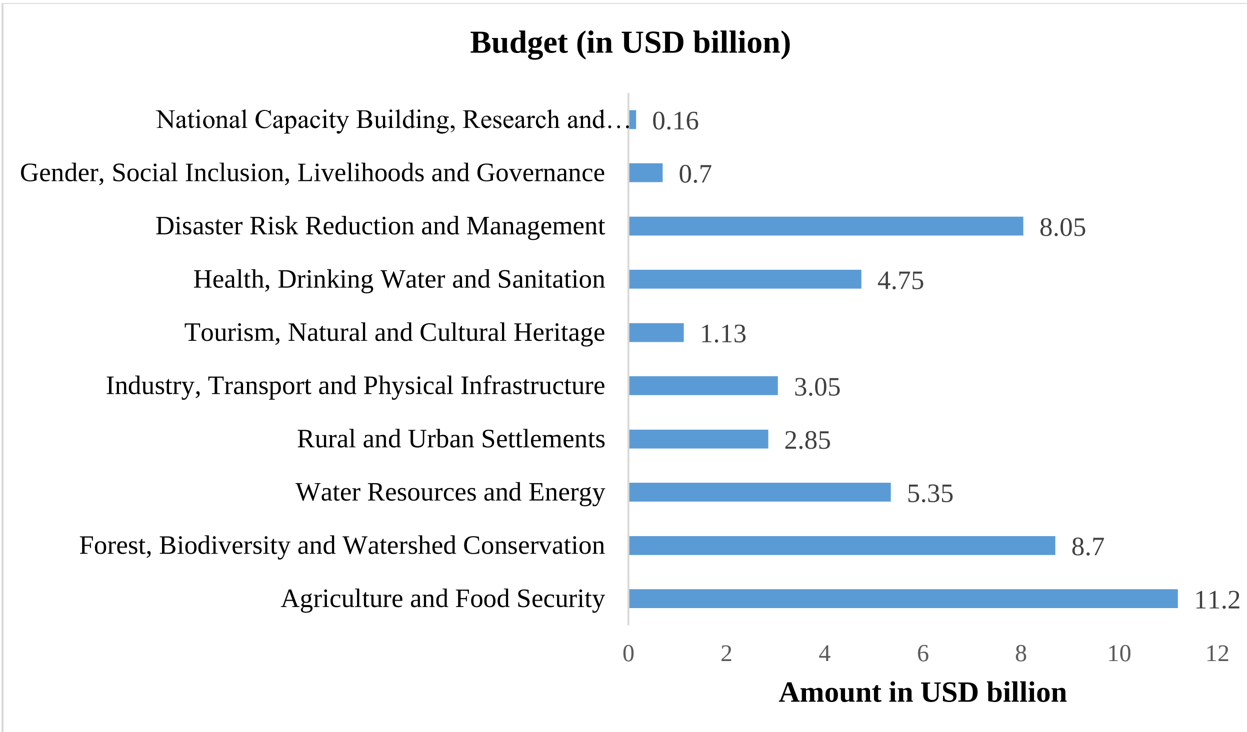
## 5.3 Stakeholder engagement for inclusive climate financing and spending

The comprehensive National Adaptation Plan (NAP) of Nepal underscores the nation's commitment to building climate resilience across various sectors, with a focus on sustainable development and environmental protection. Through these ambitious projects and initiatives, Nepal is striving to secure a sustainable and resilient future for its people and ecosystems in the face of climate change. It is also requisite to have proper monitoring, transparency, and accountability as key elements in the successful implementation of global climate finance initiatives. The National Adaptation Plan (NAP), with a total estimated cost of USD 47.4 billion, can be implemented in these areas. Apart from that, Nepal has a huge cost of adaptation to climate change, which will amount to 21 billion USD by 2030 and to 46.4 billion USD by 2050, as per the estimate of the National Adaptation Plan of Nepal. The document also says that Nepal will itself finance USD 1.5 billion of the costs, leaving USD 45.9 billion from external sources leading to

2050. This huge investment is to be financed by some multilateral development banks (MDBs) through different branches, with or without a coalition. These opportunities are mostly potential, as many financial institutions among MDB have broadened their work, particularly in South Asia or Nepal.

In the past, Nepal has received some funding from these institutions, which should ideally be enhanced and not limited in the future.

*Fig. 5.3: Budget allocation for Nepal under NAP*




Source: *(NAP, 2021)*

Stakeholder engagement is essential for inclusive climate finance spending in Nepal. It ensures that the voices of all stakeholders, particularly marginalized and vulnerable groups, are heard and considered in the decision-making process. This helps to ensure that climate finance is spent in a way that is fair, equitable, and effective.

**Stakeholders**

The key stakeholders in climate change adaptation and finance in Nepal include:

- Government agencies at all levels (federal, provincial, and local)
- Civil society organizations
- Non-governmental organizations (NGOs)
- Community-based organizations (CBOs)
- Private sector
- Academia
- Indigenous peoples and local communities
- Women and youth
- Marginalized and vulnerable groups

**Stakeholder engagement mechanisms**

There are a variety of stakeholder engagement mechanisms that can be used to ensure inclusive climate finance spending in Nepal. These include:

- **Public consultations:** Public consultations are a way to gather feedback from a wide range of stakeholders on climate finance spending priorities. They can be held in person, online, or through written submissions.
- **Focus group discussions:** Focus group discussions are a way to gather in-depth feedback from a smaller group of stakeholders. They are typically held with people who have a shared interest or experience, such as women farmers or youth groups.
- **Multi-stakeholder platforms:** Multi-stakeholder platforms are a way to bring together stakeholders from different sectors to discuss and collaborate on climate change adaptation and finance. They can be formal or informal, and they can meet regularly or on an ad hoc basis.
- **Community-based planning:** Community-based planning is a process that involves communities directly in the decision-making process. It is a good way to ensure that climate finance is spent on projects that are prioritized by the communities themselves.

**Good practices for inclusive governance**

Ensuring digital transparency in climate financing processes is crucial for fostering trust, promoting good governance, and maximizing the impact of climate finance. We can make climate financing processes easier to access, understand, and hold accountable by doing things like creating a central online platform, using open data formats, giving real-time updates, adding translation and localization, involving stakeholders, and using data visualization tools. Additionally, publishing annual reports, establishing feedback mechanisms, conducting regular audits, and promoting an open data culture further enhance transparency and accountability. These measures will empower stakeholders to make informed decisions and ensure that climate finance is effectively used to address climate change. There are several good practices for stakeholder engagement in climate finance spending. These include:

- **Transparency and inclusiveness:** The stakeholder engagement process should be transparent and inclusive, so that all stakeholders have an equal opportunity to participate.
- **Early engagement:** Stakeholders should be engaged early in the planning process so that their feedback can be incorporated into the design of climate finance projects.
- **Meaningful engagement:** The stakeholder engagement process should be meaningful so that stakeholders feel that their feedback is valued and that it will be used to inform decision-making.
- **Accountability:** The government and other implementing agencies should be accountable to stakeholders for the way that climate finance is spent.

## 5.4 Building institutional capacity for climate finance mobilization.

Building institutional capacity for climate finance mobilization is crucial for countries to effectively access and utilize climate finance to address climate change. It involves enhancing the knowledge, skills, and resources of individuals and institutions involved in climate finance management. This includes understanding the different types of climate finance instruments, the application processes, and the relevant policies and regulations. It also involves developing expertise in financial analysis, project development, risk management, and monitoring and evaluation.

Here are some key strategies for building institutional capacity for climate finance mobilization:

1. **Knowledge sharing and networking:** Facilitate knowledge sharing and networking opportunities among climate finance stakeholders from inside and outside Nepal. This could include organizing consultations (both online and virtual) with sector experts, research conferences, seminars, and online forums for sharing best practices, lessons learned, and emerging trends in climate finance.
2. **Capacity needs assessments:** Conduct regular capacity needs assessments to identify gaps in knowledge and skills among climate finance stakeholders. This can help tailor training and development programs to address specific needs.
3. **Training and education:** Provide training and arrange workshops on accessing international climate finance for government officials, financial institutions, and private sector actors. This could include courses on climate change mitigation and adaptation strategies, project finance, risk management, environmental and social safeguards, and environmental, social, and governance (ESG) for the private sector to comply with requirements for private sustainable and green finance. A dedicated certificate, diploma, or master-level course can be offered from reputable universities or research centres.
4. **Mentorship and coaching:** Establish mentorship and coaching programs to connect experienced climate finance professionals with emerging practitioners from external worlds. For instance, the sector-specific experts in the Independent Technical Advisor Panel of the GCF can be instrumental in guiding the quality of project documents and ensuring innovative approaches. This can provide personalized guidance and support for those seeking to develop their skills and expertise.
5. **Collaboration and support:** Provide institutional support to strengthen the capacity of key institutions involved in climate finance management. This could include funding for training, equipment, and staff development.
6. **South-South and North-South collaboration:** Promote South-South among developing countries as well as North-South cooperation to share experiences and expertise in building institutional capacity for climate finance mobilization. This can include knowledge exchange programs, joint training initiatives, and peer-to-peer learning opportunities.
7. **Engaging local communities:** Engage local communities in climate finance mobilization efforts to ensure that their needs and priorities are considered. This can help to build trust, transparency, and accountability in the use of climate finance.
8. **Promoting gender equality and inclusion:** Promote gender equality and inclusion in climate finance mobilization efforts to ensure that all segments of society have access to and benefit from climate finance. This can include targeted training programs for women and marginalized groups and gender-responsive project development and implementation.
9. **Leveraging technology:** Utilize technology to enhance climate finance mobilization efforts. This could include developing online learning platforms, creating mobile applications for accessing climate finance information, and using data analytics to inform decision-making.
10. **Monitoring and evaluation:** Establish monitoring and evaluation frameworks to track progress in building institutional capacity for climate finance mobilization. This can help to identify areas for improvement and ensure that capacity-building efforts are effective.

Building institutional capacity for climate finance mobilization is an ongoing process that requires continuous investment and commitment. By implementing these strategies, countries can enhance their ability to access and utilize climate finance to address climate change and build a more sustainable future.

## 5.5 Climate finance effectiveness at different levels in Nepal

The distribution of financial resources to support both adaptation and mitigation initiatives. The calculations derived from updates on climate fund allocations will aid in identifying deficiencies and facilitate dedicated collaboration in addressing climate change. The climate finance effectiveness at different levels in Nepal considers the following broad areas:

### a) Adaptation

Adaptation finance focuses on helping vulnerable communities and ecosystems adapt to the adverse effects of climate change. It includes projects and initiatives aimed at building resilience to changing climate conditions, such as infrastructure improvements, disaster preparedness, and agriculture practices.

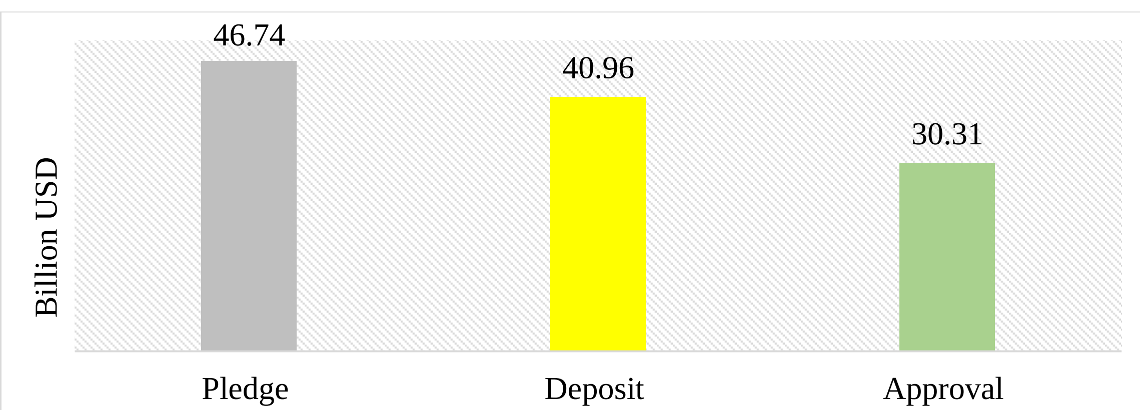
- Pledge: USD 5.5 billion
- Deposit: USD 5.0 billion
- Approval: USD 4.1 billion
- Disbursement: USD 2.3 billion
- Funds left for potential uses: USD 1.4 billion

### b) Mitigation – General

Mitigation finance supports efforts to reduce greenhouse gas emissions and combat climate change. This can include investments in renewable energy, energy efficiency, and sustainable transportation, among others.

- Pledge: USD 9.1 billion
- Deposit: USD 9.1 billion
- Approval: USD 6.7 billion
- Disbursement: USD 2.1 billion
- Funds left for potential uses: USD 2.4 billion

*Figure 5.4: Current Status of Global Climate Finance (in billion USD)*




Source: Author's Calculation from Climate Funds Update (2023)

**c) Mitigation - REDD (Reducing Emissions from Deforestation and Forest Degradation)**

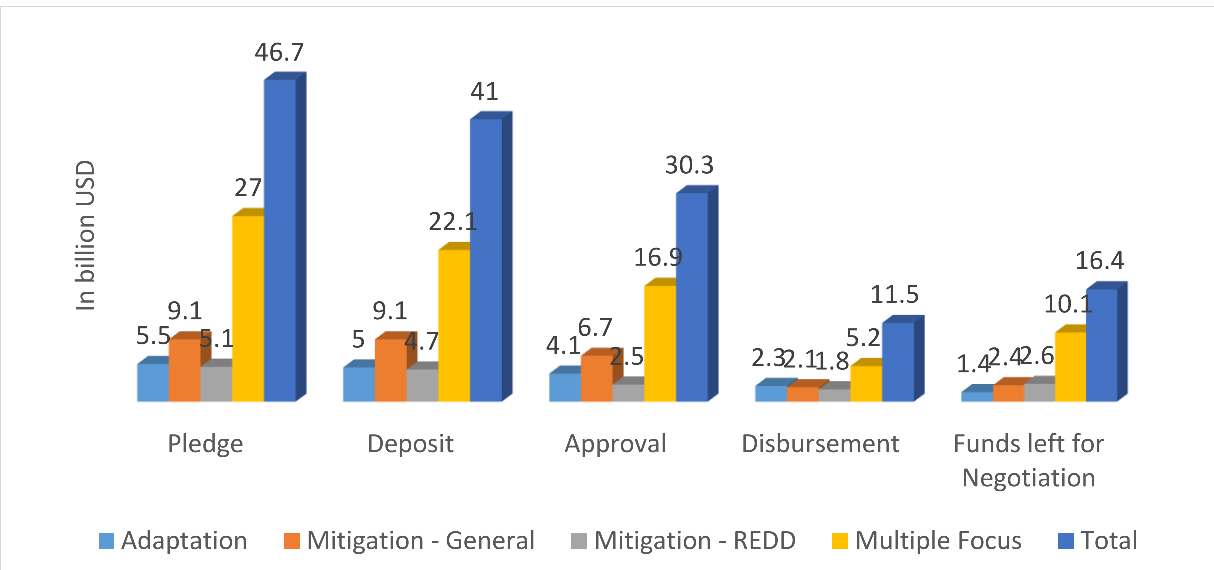
Mitigation-REDD specifically targets efforts to reduce emissions from deforestation and forest degradation, as forests play a critical role in sequestering carbon dioxide.

- Pledge: USD 5.1 billion
- Deposit: USD 4.7 billion
- Approval: USD 2.5 billion
- Disbursement: USD 1.8 billion
- Funds left for potential uses: USD 2.6 billion

d) **Multiple Focus: Climate finance** appears to encompass a broad range of climate-related initiatives, possibly including projects that address adaptation, mitigation, and other climate-related challenges simultaneously.

- Pledge: 27.0 billion USD
- Deposit: 22.1 billion USD
- Approval: 16.9 billion USD
- Disbursement: 5.2 billion USD
- Funds left for potential uses:10.1 billion USD.

*Figure 5.5: Demand and supply of international climate finance*




Source: (Climate Funds Update, 2022)

It's important to note that the figure 10 provided here represent the financial commitments made (pledges), the actual funds transferred (deposits), the projects and initiatives approved for funding (approval), the funds disbursed for implementation (disbursement), and the remaining funds available for future projects (funds left for negotiation). So, these are the sources that can be aligned with the allocation of the National Adaptation Plan at different levels in Nepal to ensure sustainable development.

Effective utilization of available avenues is possible, including: GCF, Adaptation Fund, Global Environment Facility, Least Developed Countries Fund (LDCF), Forest Carbon Partnership Facility-Readiness Fund (FCPF-RF), bilateral/multilateral channels (such as Jal Jungal by USAID, EU, UKAid, DFAT, etc.), and GRID by the World Bank, among others. Below is a snapshot of the existing opportunities as presented in a table:

*Table 5.1: Available multiple sources of funds*

| Source of Funds | Focus of the Fund | Fund Type | Pledge Amount (Million USD) |
|---|---|---|---|
| **Least Developed Countries Fund (LDCF)** | Adaptation | Multilateral | 2,075.02 |
| **Adaptation Fund (AF)** | Adaptation | Multilateral | 1,423.92 |
| **Pilot Program for Climate Resilience (PPCR)** | Adaptation | Multilateral | 1,155.79 |
| **Adaptation for Smallholder Agriculture Programme (ASAP)** | Adaptation | Multilateral | 382.1 |
| **Special Climate Change Fund (SCCF)** | Adaptation | Multilateral | 380.64 |
| **MDG Achievement Fund** | Adaptation | Multilateral | 89.5 |
| **Clean Technology Fund (CTF)** | Mitigation - General | Multilateral | 7,901.56 |
| **Scaling Up Renewable Energy Program (SREP)** | Mitigation - General | Multilateral | 779.34 |
| **Global Energy Efficiency and Renewable Energy Fund (GEEREF)** | Mitigation - General | Multilateral | 281.5 |
| **Partnership for Market Readiness** | Mitigation - General | Multilateral | 131.5 |
| **Amazon Fund** | Mitigation - REDD | Multi Donor National | 1,288.23 |
| **Forest Carbon Partnership Facility - Carbon Fund (FCPF-CF)** | Mitigation - REDD | Multilateral | 874.5 |
| **Central African Forest Initiative (CAFI)** | Mitigation - REDD | Multi Donor Regional | 794.77 |
| **Forest Investment Program (FIP)** | Mitigation - REDD | Multilateral | 752.56 |
| **Forest Carbon Partnership Facility - Readiness Fund (FCPF-RF)** | Mitigation - REDD | Multilateral | 469.99 |
| **UN-REDD Programme** | Mitigation - REDD | Multilateral | 389.8 |
| **BioCarbon Fund Initiative for Sustainable Forest Landscapes (BioCarbon Fund ISFL)** | Mitigation - REDD | Multilateral | 350.9 |
| **Green Climate Fund IRM (GCF IRM)** | Multiple | Multilateral | 10,322.03 |

| Source of Funds | Focus of the Fund | Fund Type | Pledge Amount (Million USD) |
|---|---|---|---|
| **Green Climate Fund (GCF-1)** | Multiple | Multilateral | 10,001.04 |
| **Global Climate Change Alliance (GCCA)** | Multiple | Multilateral | 1,652.83 |
| **Global Environment Facility (GEF5)** | Multiple | Multilateral | 1,152.41 |
| **Global Environment Facility (GEF6)** | Multiple | Multilateral | 1,117.16 |
| **Global Environment Facility (GEF4)** | Multiple | Multilateral | 1,082.98 |
| **Global Environment Facility (GEF8)** | Multiple | Multilateral | 852.71 |
| **Global Environment Facility (GEF7)** | Multiple | Multilateral | 728.38 |
| **Adaptation for Smallholder Agriculture Programme (ASAP+)** | Multiple | Multilateral | 93.48 |

Source: Multiple multilateral and bilateral sources

# 6. Recommendations and Way Forward

## 6.1 General considerations

Strengthening climate change management capacity within key institutions has begun. This capacity building is getting underway at both national and local levels and within vulnerable sectors and population groups. For example, projects are in the process of strengthening present capacity to ensure that government procurement practices recognize the risk associated with climate change and ensure that infrastructure design and construction are climate-proofed, and that climate change risk management becomes an operational activity undertaken by those government agencies responsible for designing and building infrastructure in vulnerable areas. Such projects are supporting the strengthening of capacities and institutions to integrate climate change risk management into development planning. However, much more needs to be done; the challenge is to identify and address the early strategic priorities. While the MoE leads on climate issues and coordinates donor-funded programs at the national level, there are a considerable number of climate change-related programs carried out by sector ministries under their regular programs that do not get reflected by the MoE. In addition, many NGOs implement activities that address climate change issues, but these programs are only recorded at the Social Welfare Council. Therefore, actual climate activities may be much larger than what is reflected in regular government programs. However, there remains a clear gap in addressing climate concerns. Perhaps the most visible gap is that the existing institutional structure does not support VDC-level climate programs. For example, if a VDC wants to make its water supply project climate resilient or plan for a climate resilient education program, there is no institution that it can presently approach. Institutional capacity is also a key aspect when analyzing future climate activities. For example, DHM is a department under the MoE that generates all climate-related information. However, it has limited capacity to provide area-specific information, which is important to generate information about climate impacts at the local level.

Currently, DHM collects information from less than 350 weather stations and 42 hydro stations nationwide. In the mountainous terrain of Nepal, this density of measuring stations appears far from adequate. There is also the challenge of institutional collaboration to overcome. For example, one of the Ministry of Forests and Soil Conservation’s departments is the department of watershed management. This department implements activities in priority sub-watersheds. In the current TYP, the department intends to implement programs based on the river basin approach. However, it has no working relationship with the Ministry of Irrigation, which also wants to develop basin programs. Forests and agriculture are also closely linked within any one geographical area, but none of the official programs of these sectors have a common thread that would help build synergy while addressing climate change. There are challenges for both the public and private sectors as they develop programs that address climate change. For example, although there is external support for Clean Development Mechanism (CDM) projects, there is still a gap in national support for such projects in the agriculture, livestock, and forestry sectors. The capacity of climate-related ministries and their departments is not enough to develop CDM projects, including the methodology for calculating the amount of carbon sequestration. CDM project requirements are stringent, and CDM projects in forestry, agriculture, and waste are more complex and require extensive monitoring compared to alternative energy CDM projects. Inadequate awareness among policymakers and industrialists, weak institutional capacity, inadequate resources, and a lack of baselines are the major limitations.

## 6.2 Key Recommendations

A. Accessing International Climate Finance and Formulation of Climate Finance Strategy:: Article 9.4 of the Paris Agreement has directed the climate finance mobilization, which is “Financial resources should aim to achieve a balance between adaptation and mitigation; GCF creates provision of 50:50 Taking into account country-driven strategies, and the priorities and needs of developing country parties, especially climate vulnerable (e.g. CVF) and have significant capacity constraints, such as the LDCs and SIDS, considering the need for public and grant-based resources for adaptation”. Nepal should assess the progress and existing challenges in accessing international climate finance as part of the global stock take of the Paris Agreement.

B. Ministry/Directorate level NDC Project Implementation Unit: GCF demands a long-term engagement of the team, from the submission of the project to the implementation of the approved projects. Moreover, GCF takes more than the expected time to approve any project and needs to address queries after queries until it finally disburses the funds following approval of the project. For this purpose, the concerned authority of the priority projects should form a Project Implementation Unit (PIU), and under the PIU, a pool of sector-specific experts should be hired contractually to provide time-to-time technical support from designing project proposals to project implementation, ensuring quality and impact.

C. Integration of GCF project with development project or program: Integration of GCF project with development project or program: All the prioritized projects under the NDC should be integrated with local adaptation as well as mitigation plans for greater impacts, especially achieving the sustainable development agenda. Climate change action (SDG 13) is one of the agenda items of sustainable development goals. Lebanon should revise its targets, considering ongoing concerns and future risks. In that case, under the PIU, each NDC project should identify the area of integration and potential multiple outcomes. Moreover, to reduce corruption risks, adaptation and mitigation projects should be designed to maximize dual-use benefits for local communities. Dual-use investments deliver immediate benefits to the local community and help them respond to future climate change challenges.

> “Any community dual-use benefits are particularly beneficial for influential groups who are more able to use them. From the perspective of anti-corruption, this is no bad thing, because by drawing in these groups, effective anticorruption can be achieved. The best way of ensuring the maximization of feasible dual-use benefits is to engage local communities at the design phase (Fischer, 2020; Omukuti, 2020). If local engagement proves difficult, development partners and anti-corruption activists could at least ensure that projects are deliberately and carefully designed to provide the highest level of community benefits based on comparisons of alternative designs while also meeting the climate adaptation requirements. This may be sufficient to ensure that projects deliver enough immediate benefits to trigger the types of community involvement that can control corruption.”[4]

D. Long-term Investment Agreement with GCF and Potential DPs/MDBs: Due to growing competition to access the less expensive climate finance from international sources and uncertainty in the future flow of climate funds from the richer countries as their priorities are

[4] https://www.researchgate.net/publication/358399952_Win-win_designing_dual-use_in_climate_projects_for_effective_anti-corruption_in_Bangladesh

changing and focusing more on mobilizing additional funds for both energy and geographical security, Lebanon should try to reach a long-term agreement with GCF and other potential multilateral funding entities. In the GCF Board meeting (B.28) a US$1.6 billion finance facility was approved to boost renewable energy to meet urgent climate needs by bolstering farmers' food security in the Federated States of Micronesia (FSM). It is the "first system-wide project of its kind in the FSM.[5]

E. Meaningful sectoral as well as institutional coordination: At the national level, greater attention is required to secure intersectoral coordination as there are many across-sector impacts of climate change. To assist this coordination effort, the Multi-stakeholder Climate Change Initiatives Coordination Committee (MCCCICC) should be strengthened through a more formalized way of working to achieve enhanced coordination at the technical level, including the holding of regular meetings with formal records. It would be beneficial to have the MCCICC meeting record fully in the public domain through a dedicated website (as is now standard practice with such meetings at the international level).

F. Proper targeting of the climate vulnerable and transparency in climate finance utilization: It is important to secure the right structures at the local level to ensure that the flow of climate finance reaches the most vulnerable communities. This will require the creation of significant new capacity within existing district-level structures. Mechanisms therefore need to be developed to improve local institutional capacity and accountability to implement climate change programs. In this regard, there is a need to understand and strengthen the role of the Energy and Environment Units within DDCs, as it is envisaged that they will play a big role in coordinating climate change-related activities at the local level.

G. Effective role of the CSOs: Civil society organizations have a strategic role to play in responding to climate change issues. With increased government support, NGOs, federations, and networks on natural resource management, such as FECOFUN, could play a significant role in community awareness and education on climate change.

H. Monitoring of Prioritized NDC Project Implementation: The Paris Agreement (Article 7.9) has obliged that "Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include:

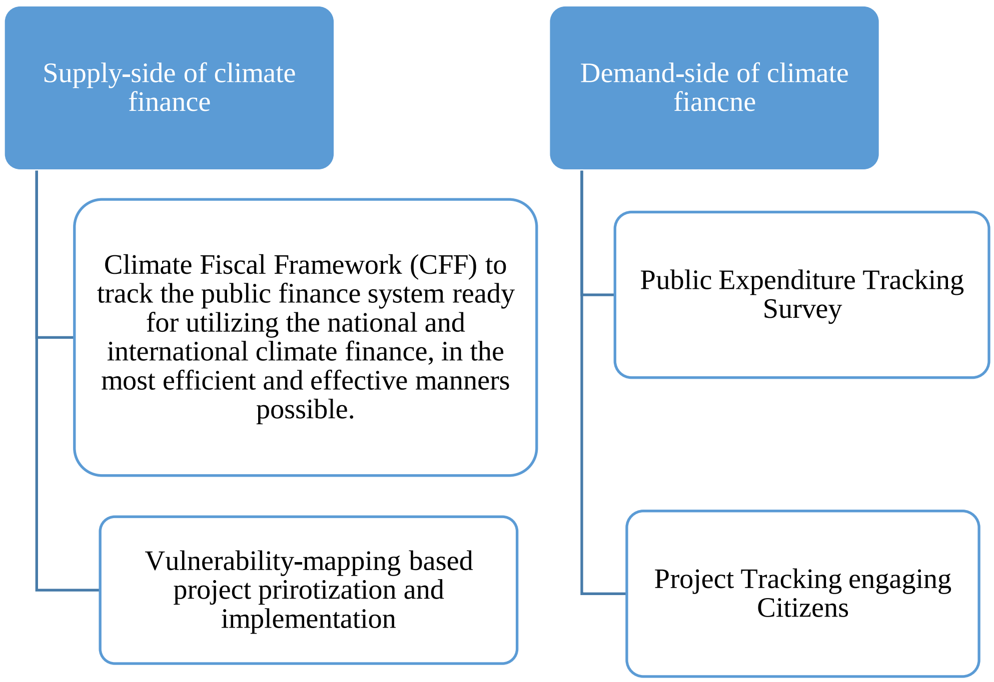
   i. The implementation of adaptation actions, undertakings and/or efforts;
   ii. The process to formulate and implement national adaptation plans;
   iii. The assessment of climate change impacts and vulnerability, with a view to formulating nationally determined prioritized actions, taking into account vulnerable people, places and ecosystems;
   iv. Monitoring and evaluating and learning from adaptation plans, policies, programmes and actions; and
   v. Building the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources."

As a signatory to the Paris Agreement and with the potential to access the GCF funds, Lebanon should develop a robust monitoring, evaluation, analysis, and learning (MEAL) based framework that would

[5] https://pfbc-cbfp.org/news-partner/approval-GCF.html

include both the supply and demand sides of the project implementation monitoring. The following tracking tools could be considered:

*Figure 6.1: Climate Finance and Prioritized Project Monitoring Tools*




Examples of two supply-side and demand-side MEAL tools have been illustrated below:

**a)** **Climate-budgeting**: UNDP first introduced the CFF to create the enabling framework, aiming to (i) establish greater national ownership of climate finance, better aligning this with the policies and strategies framed and adopted to combat the effects of climate change; (ii) promote government-NGO-private sector harmonization; (iii) enhance result management; (iv) increase mutual accountability; and (v) broaden the opportunity for climate-resilient development in Bangladesh. In the climate budget preparation, the CFF model has been applied, and it follows the Handbook on OECD-DAC Rio Markers[6] on climate change, which defines that an activity would be defined or classified as climate-change-related[i].

[6] Published in 2010 by OECD-DAC

*Fig. 6.2: Climate Budgeting Process*

**Step 1: Linking NDC Themes and Programmes with the Climate Relevance Criteria**

Developing guidance for identifying what is and what is not climate relevant, typically drawing on the national climate change policy; and defining a typology for climate change expenditure – which may for example be simply into two categories, adaptation and mitigation)

**Step 2: Assigning climate relevance weight against each of the Climate Relevance Criteria**

(a) Climate Sensitivity

(b) Climate Change Relevance)

**Step 3: Relevance of Projects and Programmes**

**Step 4: Estimating climate finance for multiple relevance criteria for rojects/programmes**

b) **Public Expenditure Tracking Surveys (PETS):** PETS are audits of financial flows that aim to measure the proportion of government resources actually benefiting schools. The scope of PETS can vary according to the type of expenditures tracked, the number of levels of public administration involved, and the sectors analyzed. They are most relevant where public accounting systems function poorly or provide unreliable information. Objectives of PETS are the following:

i. Evidence of limited impact of public or private spending on climate change adaptation and mitigation;
ii. Efficiency and effectiveness of spending;
iii. Emphasis on both climate resilience and poverty reduction;
iv. Equity and quality of project implementation; and
v. Evidence on community participation and integration of indigenous knowledge.

*Fig. 6.3: Outcomes of PETS*

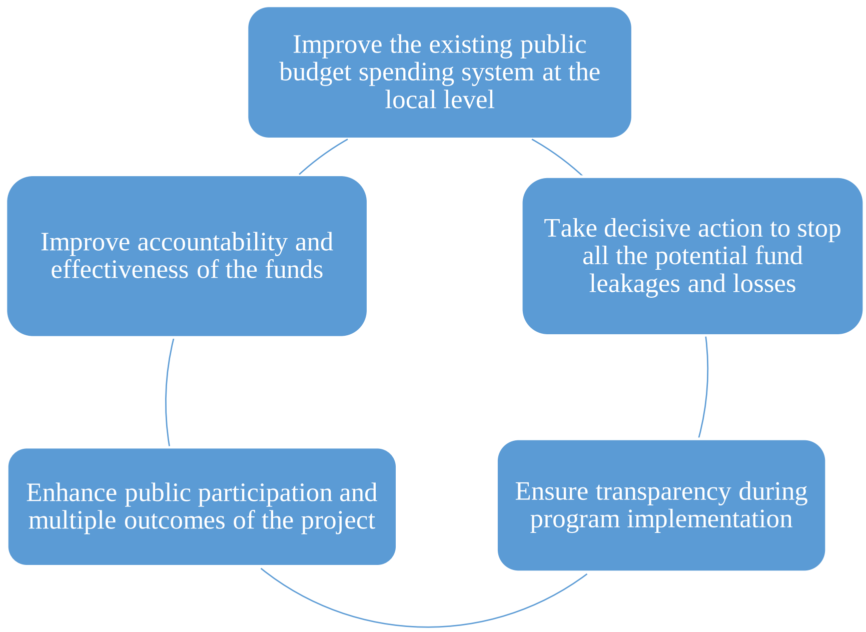



*Fig. 6.4: Indicators for the PETS*

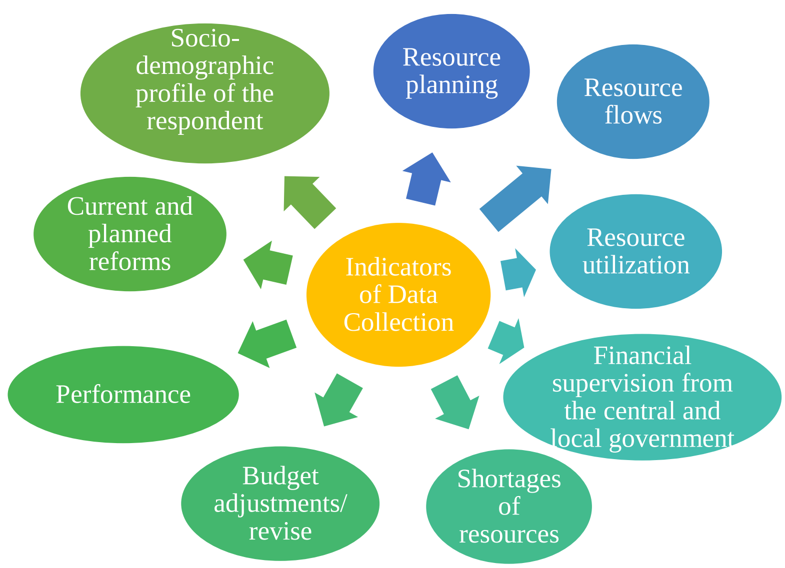


**Fig. 6.5: PETS-PROCESS**


## 6.3 Specifics to the Case of Nepal

Climate change financing is a complex issue interconnected with the interest of many stakeholders, external donor agencies including both bilateral and multilateral institutions, as well as domestic institutions comprising both public and private sectors. Furthermore, the impact of climate change financing affects the whole society, more to agricultural workers and those who work in open environment. Here are some recommended measures for generating more climate change national resources and making climate change expenditure conducive to the need of the society.

Nepal has immense potential to achieve the NDC targets through mobilizing the climate finance form different sources and a Whole-of-Governance approach should be adopted by the government and its stakeholders. Moreover, community-led approach would be key to implement all the climate adaptation and mitigation actions for a “country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate” (Article 7.5 of Paris Agreement).

**Public revenue for climate financing**

Nepal’s tax GDP ratio is highest in South Asia; therefore, it can not bear the further burden of new tax to introduce; therefore, new environmental or pollution tax does not seem feasible. Tax burden has particularly swelled-up after the federalization of the country. However, the country can merge different environmental and associated taxes into a common carbon tax or environmental tax, i.e with the merger of vehicle tax, taxes on the use of infrastructure, road maintenance and improvement duty, road construction and maintenance duty, and infrastructure tax. These tax types constitute approximately four percent of total tax revenue and 3 percent of the overall revenue of the government now. A common carbon or environmental tax once introduced can simplify the tax administration and also reduce the tax compliance cost. This efficiency cost can be channelled to climate change financing.

**Further exploration for carbon trade (buyers) after 2025**

Regarding the carbon trade, Nepal can use the World Bank’s Forest Carbon Partnership Facility (FCPF) by 2025; however, the country does not have any alternative buyer of carbon after 2025. It is expected that the government take initiative to continue having the facility even after 2025 for at least one decade until the country explores the alternative. In order to materialize this prospect of furthering carbon trade, Nepal should follow some strategic measures. Firstly, existing community based forest management practice should continue. Likewise, national forests will be transferred to communities to the extent possible. Nepal also has approximately 30,000 hectares of private forest in 13 districts of Terai -- west of the Bagmati river; the government should encourage the use of alternative energy sources for private including leasehold forest.

**Reorientation of CSR of FI towards climate change financing**

Development of mandatory Corporate Social Responsibility (CSR) is a new experience for Nepal. A pragmatic approach of making CSR of business activities more productive is to promote business sector invest in activities recommended by the government and establish acknowledge and reward mechanisms to their investments pertinent to CSR. The market-driven CSR activities are sustainable at the best interest of all the stakeholders compared to the mandatory and resource transfer model. Environment and Social Risk Management (ESRM) guidelines developed by Nepal Rastra Bank should enlist some sectors and activities with reference to Environment and Social Management System (ESMS) to promote investment in climate change adaptation and mitigation. New Industrial Enterprise Act 2016 requires this extension.

**Investment in hydropower**

Despite high level of hydropower generation potential, Nepal has long array of institutional, logistical, and profitability related constraints for public and private sector investments in hydropower. They all constitute supply-side constraints further aggravated by the lack of supporting infrastructure and overinvestment in inefficient power-plants. IFC and MIGA support is expected to mitigate this investment trap by supporting private financing that include the development of biodiversity related investment activities.

**Climate change auditing**

Altogether eight ministries in Nepal spend climate change related expenditure. They include Ministry of Federal Affairs and Local Development, Ministry of Physical Planning and Works, Ministry of Agriculture & Co-operatives, Ministry of Irrigation, Ministry of Forests & Soil Conservation, Ministry of Environment, Ministry of Industry, and Ministry of Energy. However, the data on budgeted and actual expenditure of the climate change budget across these ministries are not available. Office of the Auditor General Nepal (OAG/N) has prepared Environmental Audit Guide 2016; however, it is not exclusive to audit the climate change budget. Auditing guidelines for the activities on solid waste management, control of air and water pollutions are available but the exclusive climate change auditing is still not in place. Climate inclusive auditing and capacity building of the Office of Auditor General in this regard is extremely necessary for the effective use of public climate change expenditure.

**Insurance in farm activities**

In agriculture, the tendency of different farm activities getting insured is very minimal except in micro-credit and credit to extremely poor. In order to boost investment in different farm activities subsidy for insurance premium to initial few years deem necessary. Climate financing should be channelled for partial compensation of insurance premium of low-income farmers against the crop failure.

**Improvement in PFM system pertinent to climate change financing**

The design of climate change policy integration related reforms needs to account for different PFM systems and practices. Strong performance budgeting system might seek to integrate performance objectives related to national environmental and climate goals. Alternatively, a well-founded expenditure reporting and review process need to focus on the impact of measures towards climate goals alongside considerations of effectiveness and efficiency. Projections of financial requirements required incorporating resource need for CC adaptation, mitigation, and net zero emission targets together. These approaches could necessitate some modifications of our PFM system.

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# Annex

## ANNEX-1: SAMPLE CLIMATE FINANCE TRAINING CURRICULUM

**Module 1: Communications & Facilitation**

**Multistakeholder processes**

Nepal is a signatory to the Paris Agreement, Copenhagen Agreement, and UNFCCC. These agreements all emphasize the importance of multistakeholder processes in addressing climate change. Multistakeholder processes are inclusive and participatory processes that bring together different stakeholders from government, the private sector, civil society, and academia to work together to solve common problems.

In the context of climate finance, multistakeholder processes are essential for ensuring that climate finance is allocated and used in a way that is effective, equitable, and sustainable. Multistakeholder processes can also help to build consensus and support for climate action.

This module will explore different types and approaches of multistakeholder processes, and will provide participants with the skills to implement them in the context of climate finance in Nepal. Participants will also have the opportunity to learn from a panel of regional experts on multistakeholder processes and climate finance.

**Communication and consultation with different audiences**

Nepal is a diverse country with a rich cultural heritage. When communicating and consulting with different audiences in Nepal, it is important to be sensitive to cultural factors and to use appropriate communication channels.

This module will explore cross-cultural communication, with a focus on contextual forms of communication in Nepal. Participants will learn how to communicate effectively with different audiences, including government officials, private sector representatives, civil society organizations, and community members. They will also learn how to use different communication tools and techniques, such as focus group discussions, workshops, and social media.

**Empowering collaboration**

Collaboration is essential for effective climate action. This module will focus on integrating engagement into project concept notes and building capacity as a trainer. Participants will learn how to develop project concepts that are inclusive and participatory, and how to build the capacity of others to engage in multistakeholder processes. They will also participate in a simulation exercise on multistakeholder processes and communication.

**Learning outcomes**

By the end of this module, participants will be able to:

- Understand the importance of multistakeholder processes in addressing climate change
- Design and implement effective multistakeholder processes in the context of climate finance in Nepal
- Communicate effectively with different audiences about climate finance
- Develop project concept notes that are inclusive and participatory
- Build the capacity of others to engage in multistakeholder processes
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**Relevance to the Paris Agreement, Copenhagen Agreement, and UNFCCC**

This module is relevant to the Paris Agreement, Copenhagen Agreement, and UNFCCC in a number of ways. First, it emphasizes the importance of multistakeholder processes, which are all three agreements emphasize. Second, it covers topics such as cross-cultural communication and empowerment, which are essential for effective climate action in Nepal. Third, it provides participants with the skills they need to develop and implement effective climate finance projects and programs in Nepal.

Overall, this module is designed to help participants contribute to Nepal's fulfillment of its commitments under the Paris Agreement, Copenhagen Agreement, and UNFCCC.

## Module 2: International Climate Finance Foundations & Trends

### Climate Finance Fundamentals

Nepal is a highly vulnerable country to climate change, and it needs significant investment to adapt to and mitigate the impacts of climate change. Climate finance can help Nepal to meet its climate goals and to build a more resilient and sustainable future.

This module will provide an overview of the global trends in climate finance flows and markets, with a focus on Nepal. Participants will learn about the different types of climate finance available, and the roles of different stakeholders in the climate finance landscape.

### Climate Targets & Policies

Nepal has submitted ambitious Nationally Determined Contributions (NDCs) under the Paris Agreement. These NDCs outline Nepal's plans to reduce greenhouse gas emissions and to adapt to the impacts of climate change. Climate finance is essential for Nepal to achieve its climate targets. This module will explore how climate targets and policies interact with climate finance, and how Nepal can access climate finance to support its NDC implementation.

**International Institutions & Stakeholders**

There are a number of international institutions and stakeholders that can help Nepal to access climate finance. These include multilateral development banks, bilateral donors, green funds, and the private sector. This module will provide an overview of the different climate finance intermediaries and market facilitators, and their roles in providing country access to finance. Participants will also learn about the different implementing arrangements for climate finance projects and programs.

**Learning Outcomes**

By the end of this module, participants will be able to:

- Understand the global trends in climate finance flows and markets
- Explain the role of public, private, and country actions and policies in achieving global climate commitments
- Describe how climate mitigation and adaptation targets and policies interact with climate finance
- Explain the implications of climate targets for accessing and securing finance at the country level
- Identify the different climate finance intermediaries and market facilitators, and their roles in providing country access to finance
- Define implementing arrangement, including financial flow models, outlining the roles and scope of implementing agencies, accredited agencies, and executing entities in project formulation and implementation

**Relevance to Nepal**

This module is highly relevant to Nepal, as it covers topics such as:

- The different types of climate finance available
- The roles of different stakeholders in the climate finance landscape
- How to access climate finance to support NDC implementation
- The different climate finance intermediaries and market facilitators
- Implementing arrangements for climate finance projects and programs

Participants who complete this module will have a strong understanding of the international climate finance landscape, and how Nepal can access climate finance to support its climate goals.

## Module 3: Climate Finance Sources, Project Design, and Proposal Processes (Nepal Perspective)

### Climate Finance Flows

Nepal has access to a variety of climate finance sources, including multilateral funds, bilateral donors, green funds, and the private sector. The following are some of the key climate finance sources for Nepal:

- Global Environment Facility (GEF)
- Green Climate Fund (GCF)
- Adaptation Fund
- Least Developed Countries Fund (LDCF)
- Special Climate Change Fund (SCCF)
- NAMA Facility
- Green Investment Banks
- Private Sector Facility under the GCF

**Donor Priorities**

When developing climate finance projects, it is important to match the project needs with the priorities of the specific funding source. The following are some of the key investment priorities of the major climate finance funds:

**GCF:** renewable energy, energy efficiency, sustainable transport, climate-smart agriculture, forestry and land use, climate-resilient water management, and infrastructure
**Adaptation Fund:** community-based adaptation, health, food security, water management, ecosystems, and infrastructure
**LDCF:** adaptation planning, implementation, and monitoring
**SCCF:** technology transfer and capacity building for climate adaptation and mitigation

**Proposal Requirements and Processes**

The proposal requirements and processes of different climate finance funds vary. However, there are some common elements that all proposals must include. These include:

- A clear and concise project concept note
- A detailed project proposal that includes the following information:
    - ❖ Project objectives and activities
    - ❖ Budget and financing plan
    - ❖ Timeline and implementation schedule
    - ❖ Risk assessment and mitigation plan
    - ❖ Stakeholder engagement plan
    - ❖ Monitoring and evaluation plan
    - ❖ Operationalization of Key Aspects in Project Design

The following are some of the key aspects of project design that should be considered:

**Project identification:** The project should be identified in line with Nepal's climate priorities and needs.
Country ownership: The project should be owned by the Government of Nepal and other stakeholders.

**Barrier analysis and market assessment:** The project should address identified barriers and market opportunities.
**Theory of change and log frame:** The project should have a clear theory of change and log frame that outlines the project's objectives, activities, outputs, outcomes, and impacts.
**Climate rationale:** The project should have a clear climate rationale that explains how the project will contribute to climate mitigation and adaptation.
**Stakeholder identification and analysis:** The project should identify and engage all relevant stakeholders.
**Paradigm shift potential:** The project should have the potential to shift paradigms and lead to transformative change.
**Impact potential:** The project should have the potential to achieve significant climate impacts.
Non-Financial Proposal Requirements

In addition to the financial requirements, climate finance proposals also have a number of non-financial requirements. These include:

- Feasibility study
- Environmental and social safeguards assessment
- Gender assessment
- Alignment with government priorities
- Contracting and permitting plan
- Annexes on various topics, such as project management, procurement, and monitoring and evaluation

**Relevance to Nepal**

This module is highly relevant to Nepal, as it covers topics such as:

- The different climate finance sources available to Nepal
- How to match project needs with the priorities of specific funding sources
- The proposal requirements and processes of different climate finance funds
- The key aspects of project design that should be considered
- The non-financial requirements of climate finance proposals

Participants who complete this module will have a strong understanding of the climate finance landscape in Nepal and how to develop and submit successful climate finance proposals.

**Module 4 : Climate Finance Instruments & Financial Structuring**

**Climate finance instruments:** Introduces participants to a range of climate finance instruments and their core technical elements, highlighting fundamental features and different use cases. (The concepts will be covered in greater detail in the sectoral case study in Module 4.)

**Financial transactions:** Explores the different stages of the transaction process, what happens at each stage, and how the deal is subsequently monitored by investors.

**Driving project bankability:** Considers the factors affecting project bankability (e.g., cashflows, risk adjusted rate of return, a good financial model, sensitivity analysis, coverage ratios, stable policy) and the use of advisors.

**Sources of finance:** Considers different sources of funding, including sources of capital market finance, public finance, and alternative sources of finance (e.g., crowdfunding, community development financial institutions (DFIs), cryptocurrencies, alternative equity markets, and venture capital trusts, smart money), their requirements, the barriers affecting finance flows, and how to develop relationships with climate finance providers.

**Leveraging private finance:** Outlines why private finance involvement is essential for climate finance to sufficiently scale, what is required to leverage private finance (e.g., building the investment case, business models deal structuring, how to scale private finance investment, and blended finance approaches.)

**Climate finance in low-income countries:** Highlights the differences in climate finance between low-income countries and high-income countries. Analyzes the factors affecting these differences and how to manage and mitigate risk.

**DFIs:** Provides an overview of DFIs, explaining the different types and why they are important for climate finance, as well as best practices in DFI involvement.

**Effective communication:** Covers fundamental finance terminology, speaking the language of finance providers, and how to effectively communicate with financial stakeholders.

**Non-financial benefits**: Highlights the importance of non-financial benefits, traditional measures of success, and methods measuring non-financial benefits.

**Financial modeling:** Introduces participants to basic financial modeling practices, the importance of good financial models, international standards, and best practices for financial modelling.

**Financial structuring and project finance:** Considers how projects are structured (i.e., the range of potential project vehicles and the range of stakeholders.) Co-financing requirements, key project finance terms and development phases are also covered. Outlines ways to meet the requirements of different sources of capital through financial structuring (e.g., acceptable legal entities such as special purpose vehicles or utilities, contracts, national government support, co-funding, blended finance structures, cost-recovery and business models, pooled project facilities, etc.). Covers legal aspects of deal structuring, including negotiations, permitting, and procurement.

**Risk and risk mitigation:** Covers what we mean by risk, project risks and rewards, developing risk matrixes, managing risk, and risk mitigation.

**Engagement standards:** Considers best practices in transparency, governance, and conduct necessary for effective stakeholder engagement as well as conflicts of interest, bribery, and corruption.

**Learning Outcomes:**

Upon completion of this module, participants will be able to:

- Identify and describe the different types of climate finance instruments
- Understand the key stages of the climate finance transaction process
- Apply the principles of financial structuring to climate finance deals
- Identify and access different sources of climate finance, including private finance
- Communicate effectively with financial stakeholders
- Develop and implement financial models for climate finance projects
- Structure climate finance projects in a bankable manner
- Manage and mitigate climate finance risks
- Apply best practices in stakeholder engagement for climate finance deals

In addition to these specific learning outcomes, participants will also gain a broader understanding of the climate finance landscape and the role of different stakeholders in the climate finance ecosystem.

**Module 5: Sectoral Expertise**

**Agriculture fundamentals:** Introduces the main principles and concepts of climate-resilient agriculture. Focuses on understanding of (i) how climate change impacts agriculture and food security, (ii) how to carry out a climate risk assessment and prioritize support for the most vulnerable communities, and (iii) how to identify and appraise the best options for climate resilient agriculture projects.

**Agriculture financial mechanisms**: Covers finance of climat-resilient agricultural practices via unlocking the private sector potential and leveraging domestic budgets. Key climate finance mechanisms to be discussed include index-based insurance, micro-finance options such as micro-credits and loans, climate smart lending, and risk insurance pools

**Transport fundamentals:** Covers the fundamentals of calculating greenhouse gas (GHG) emissions based on fuel usage and/ or transport models, understanding basic urban planning/transport interface and incorporating externalities (positive and negative) into economic and financial analysis of projects.

**Transport financial mechanisms:** Provides an overview of the sector-specific mechanisms of municipal/sovereign investment and debt, public-private partnerships and concessions especially for public transport and bicyclesharing and, land value capture. Discusses key characteristics of the above including sovereign debt and guarantees of municipal debt by national governments, municipal bonds and use of proceeds requirements, and PPP structuring/concession development.

**Industry fundamentals:** Provides participants with an understanding of the fundamentals and methods for calculation of GHG emissions from the sector and identifies suitable mitigation action. Provides an overview of the emissions profile and broad structure of the industrial sector. Identifies relevant climate finance mechanisms and tools in the sector.

**Industry financial mechanisms:** Provides an overview of relevant financing mechanisms to encourage energy efficiency, including standardized performance contracts, energy insurance, performance-based finance, dedicated funds for debt-financing, energy service company financing and equipment leasing, mezzanine financing, equity funds, and contingent grants.

**Energy sector fundamentals:** Explains how the energy sector influences climate change and how climate change impacts the energy sector. Defines mitigation and adaptation solutions linked with financial mechanisms in the energy sector. Covers the background to the energy/power sector with a specific focus on renewables.

**Energy sector financial mechanisms:** Covers several key financial mechanisms used within the sector. It covers financial instruments for on- and off-grid renewables, clean cooking and small-scale renewable energy technologies, and energy transmission, distribution and, storage.

**Oceans and coasts fundamentals:** Provides participants with an understanding of the importance of oceans and coasts as ecosystems to help support the delivery of climate change adaptation and future blue economy principles. Discusses how climate change impacts blue economy roadmaps for Pacific Island Countries (PICs). Finally, the sub-module defines climate change mitigation and adaptation solutions linked with financial mechanisms to help support the development of sustainable ocean-based economies for PICs.

**Oceans and coasts financial mechanisms:** Provides a deeper dive into the ocean and coasts financial mechanisms, including carbon credits, government investment, investment development bank funds and, tech accelerators. Introduces and highlights the use of blue bonds.

**Urban infrastructure fundamentals:** Explores the fundamentals and methods for calculating GHG emissions from the urban infrastructure sector and identifies suitable mitigation actions. Explores the sectors importance in both mitigation and adaptation solutions. Explores urban climate impacts, urban emissions, the roles of cities in combating climate change, emission reduction potentials, and nature-based solutions.

**Urban infrastructure financial mechanisms:** Covers key financial mechanisms for the urban infrastructure sector. Includes a discussion on potential barriers linked with cities' financing, city-level financing, and enabling private sector participation.

**Health and well-being fundamentals:** Covers the fundamentals of connections and mechanisms between climate change and on human health, as well as the policy frameworks and commitments related to the climatehealth nexus.

**Health and well-being financial mechanisms:** Covers financial tools and mechanisms relevant in the sector (Green Climate Fund, Adaptation Fund, Least Developed Countries Fund, The Global Fund to Fight

AIDS, Tuberculosis and Malaria, UNITAID, Africa Climate Change Fund) and how health national adaptation plans interact with financial flows and instruments.

**Forestry and land use fundamentals:** Provides an overview of technical issues surrounding measurement, reporting, and verification (MRV) of forests and their carbon stocks, as well as safeguards, such as actions to address issues of permanence and the risks of reversals of REDD+ efforts.

**Forestry and land use financial mechanisms:** Provides an overview of eligibility for results-based climate finance activities under REDD+, and interim measures (i.e., project-based carbon offset schemes and voluntary markets). For-profit (credit, equity investments, insurance products, loan guarantees) and not-for-profit mechanisms (public finance instruments, grants) are also presented.

**Learning Outcomes**

Upon completion of this module, participants will be able to:

Understand the key climate change challenges and opportunities in the agriculture, transport, industry, energy, oceans and coasts, urban infrastructure, health and well-being, and forestry and land use sectors
Identify and appraise climate resilient agriculture and transport projects
Apply financial mechanisms to support climate-resilient agriculture and transport
Calculate greenhouse gas emissions from the industry and energy sectors
Identify and implement suitable mitigation and adaptation solutions in the industry and energy sectors
Apply financial mechanisms to support climate mitigation and adaptation in the industry and energy sectors
Understand the importance of oceans and coasts as ecosystems and their role in climate change adaptation and the blue economy
Identify and apply financial mechanisms to support the development of sustainable ocean-based economies
Calculate greenhouse gas emissions from the urban infrastructure sector
Identify and implement suitable mitigation and adaptation solutions in the urban infrastructure sector
Apply financial mechanisms to support climate mitigation and adaptation in the urban infrastructure sector
Understand the connections and mechanisms between climate change and human health
Identify and apply financial mechanisms to support climate-resilient health systems
Understand the technical issues surrounding measurement, reporting, and verification of forests and their carbon stocks
Identify and apply financial mechanisms to support climate-resilient forestry and land use practices

In addition to these specific learning outcomes, participants will also gain a broader understanding of the climate finance landscape and the role of different stakeholders in the climate finance ecosystem.

**Relevance to Nepal**

Module 5 is highly relevant to Nepal, as it covers topics such as:

Climate change impacts and opportunities in Nepal's key sectors
Climate-resilient project development and appraisal
Climate finance mechanisms for different sectors

Greenhouse gas emissions calculation and mitigation
Climate change adaptation and the blue economy
Urban climate resilience
Climate-resilient health systems
Climate-resilient forestry and land use practices

Participants who complete this module will have a strong understanding of the climate finance landscape in Nepal and how to develop and implement climate finance projects in different sectors.

**Module 6: Effective Delivery**

**Implementation**

This module will cover proven solutions to capacity gaps in implementing and executing entities, the workforce, supply chains, and technical expertise in Nepal. It will also be tailored to the unique needs of Nepal's climate finance landscape.

Some specific topics that will be covered in this module include:

How to strengthen the capacity of implementing and executing entities to manage and deliver climate finance projects
How to build a skilled workforce for the climate finance sector
How to develop and implement effective supply chains for climate finance projects
How to ensure that climate finance projects have the necessary technical expertise

**Absorptive Capacity**

This module will focus on the integration of climate finance and resource mobilization for SDGs and programmatic and regional approaches in Nepal. It will also seek to strengthen the country systems that are critical to absorbing finance, including transparency of results, financial flow tracking, risk management and mitigation, and those that enable Nepal to meet the fiduciary standards required by funders.

Some specific topics that will be covered in this module include:

How to integrate climate finance into Nepal's national development plans and strategies
How to mobilize resources for climate finance from a variety of sources
How to track and report on climate finance flows
How to manage and mitigate risks associated with climate finance projects
How to meet the fiduciary standards required by climate finance funders

This module will be informed by consultations with key stakeholders in Nepal and customized to the country's unique needs.

**Learning Outcomes**

Upon completion of this module, participants will be able to:

Identify and address capacity gaps in implementing and executing entities, the workforce, supply chains, and technical expertise for climate finance projects in Nepal
Develop and implement effective implementation arrangements and mechanisms for climate finance projects in Nepal
Integrate climate finance with resource mobilization for SDGs and programmatic and regional approaches in Nepal
Strengthen Nepal's country systems for absorbing climate finance, including transparency of results, financial flow tracking, risk management and mitigation, and those that enable Nepal to meet the fiduciary standards required by funders

In addition to these specific learning outcomes, participants will also gain a broader understanding of the practical aspects of implementing and delivering climate finance projects in Nepal.

**Relevance to Nepal**

Module 6 is highly relevant to Nepal, as it covers topics such as:

Strengthening the capacity of implementing and executing entities to deliver climate finance projects
Building a skilled workforce for the climate finance sector
Developing and implementing effective supply chains for climate finance projects
Ensuring that climate finance projects have the necessary technical expertise
Integrating climate finance into Nepal's national development plans and strategies
Mobilizing resources for climate finance from a variety of sources
Tracking and reporting on climate finance flows
Managing and mitigating risks associated with climate finance projects
Meeting the fiduciary standards required by climate finance funders

Participants who complete this module will have a strong understanding of the practical aspects of implementing and delivering climate finance projects in Nepal.

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[i] if it "…contributes to the integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research…" Coders have three options: that adaptation/mitigation

is a “principle objective,” “significant objective,” or “not targeted to the policy objective” (OECD, 2011a). For an activity to be classified as having adaptation/mitigation as a “principle objective,” it must be established that it “would not have been funded but for that [adaptation/mitigation] objective.” This is in contrast to activities categorized as having adaptation/mitigation as a “significant objective,” which have “other prime objectives, but have been formulated or adjusted to help meet climate concerns.”