Green Climate Fund Engagement Strategy of Nepal

Table of Contents

1.	Summary	6
2.]	Background	7
a.	Introduction to the Engagement Strategy	7
b.	Nepal's Engagement with the GCF	7
c.	The GCF Country Programme	8
d.	Overview of Climate Change in Nepal	8
e.	Methodology for Allocating GCF Finance	13
3.]	Policy Analysis	11
a.	Summary of national plans and priorities	11
b.	Analysis on linkages to GCF's investment priorities and strategic frameworks	12
4.	Thematic Engagement Strategy	15
a.	Food, Water and Health	15
b.	Resilient Infrastructure	18
c.	Forestry	20
d.	Energy	23
e.	Transport	25
f.	Cross Cutting	27
g.	Strengthening the Enabling Environment	28
5.	Strengthening Engagement	31
a.	Stakeholder Mapping	31
b.	Strengthening the NDA's Engagement	34
c.	Project Cycle Recommendations	37
d.	Funding Instruments and Operational Modalities	40
e.	Engagement with Accredited Entities	41
f.	Capacity Development	44
g.	Project Prioritization	45
6.]	Recommendations and Way Forward	47
7. .	Annexes	51
a.	Assessment of National Priorities and GCF Criteria	51
b.	Stakeholder Mapping	55
c.	Criteria for Proposal Evaluation	58
d.	Indicators for GCF Proposal Development	63

Acronyms

AE Accredited Entity

AEPC Alternative Energy Promotion Centre

AMIS Aid Management Information System

CC Climate change

CCC Climate Change Council

CCFF Climate Change Financing Framework

CFSC Climate Finance Steering Committee

CFU Climate Finance Unit

CIFs Climate Investment Funds

COP Conference of Parties

CSO Civil Society Organization

CTCN Climate Technology Centre and Network

DAE Direct Access Entity

DP Development Partner

DRR Disaster Risk Reduction

EDA Enhanced Direct Access

EEs Executing Entities

FG Federal Government

FNCCI Federation of Nepalese Chambers of Commerce and Industry

GCF Green Climate Fund

GDP Gross Domestic Products

GEF Global Environment Fund

Gg Gigagrams

GHG Greenhouse gas

GLOF Glacial Lake Outburst Floods

GoN Government of Nepal

IAE International Access Entity

IECCD International Economic Cooperation Coordination Division

IFC International Finance Corporation

IPs Indigenous Peoples

ITAP Independent Technical Advisory Panel

LCEDS Draft Low Carbon Economic Development Strategy

LG Local Government

MCCICC Multi-Stakeholder Climate Change Initiative Coordination Committee

MoF Ministry of Finance

MoFPE Ministry of Forest and Environment

MSME Micro, Small and Medium Enterprises

NAP National Adaptation Plan

NAPA National Adaptation Programme of Action

NDA National Designated Authority

NDC Nationally Determined Contribution

NIBL Nepal Investment Bank Limited

NREF National Renewable Energy Framework

NTNC National Trust for Nature Conservation

NGO Non-Governmental Organization

NPC National Planning Commission

PG Provincial Government

PPF Project Preparation Facility

PPP Public Private Partnerships

PSF Private Sector Facility

RE Renewable energy

SAP Simplified Approval Process

TC Technical Committee

TDF Town Development Fund

UNFCCC United Nations Framework Convention on Climate Change

1. Summary

The Green Climate Fund (GCF) was established as an operating entity of the United Nations Framework Convention on Climate Change (UNFCCC) in 2010. The GCF is expected to channel a large share of the USD 100 billion by 2020 in international climate finance that developed countries have committed to mobilize. Nepal as a party to the convention is eligible to access funding from GCF through national and international entities.

The Government of Nepal has nominated the Ministry of Finance (MoF) as the National Designated Authority (NDA), while the International Economic Cooperation Coordination Division (IECCD) serves as the contact point for the GCF. The IECCD operates as the interface between Nepal and the GCF, and the NDA ensures that activities supported by the GCF align with the country's national policies and priorities.

The Government of Nepal needs to strategically engage with the GCF, which will require developing effective processes for allocating and prioritizing investment, engaging and coordinating national stakeholders, and managing GCF project and programme development and implementation. The Nepal GCF Engagement Strategy has been prepared to guide the NDA and the Government of Nepal in meeting these requirements. This strategy is country driven and is based on Nepal's key national and sectoral priorities, including the Nationally Determined Contribution and the National Adaptation Programme of Action.

With Nepal's extreme climate vulnerability and its growing greenhouse gas emissions, the resource requirements for the country to achieve low carbon climate resilient growth are substantial. This strategy puts forward suggestions for prioritizing projects and programmes to leverage GCF finance between 2018-2022. These investments should achieve low-carbon climate-resilient development at scale, meet the financing needs of Nepal, and the investment requirements of the GCF.

A key requirement for successfully achieving climate adaptation and mitigation is strengthening Nepal's enabling environment to efficiently and effectively utilize public resources and harness the transformative potential of private finance. This will require policy and regulatory reform and improved planning at all levels of government. This strategy suggests a number of interventions for improving the country's enabling environment.

Achieving action on climate change also requires the coordination and engagement of a wide-range of stakeholders across sectors, including Federal, Provincial and Local Government, the private sector, development partners, and civil society. This strategy suggests recommendations for strengthening the NDA's systems, improving stakeholder awareness of the GCF and its processes, and developing the capacity of stakeholders such as the accredited entities which will be responsible for implementing GCF financed projects and programmes in Nepal.

The adoption of these recommendations will help the Government of Nepal to strategically allocate climate finance to meet medium-term development priorities. This strategy will also improve government systems for effectively and efficiently engaging stakeholders in the coordination and allocation of GCF financing. The achievement of these objectives will contribute to achieving a paradigm shift in Nepal to a low-emission and climate-resilient development pathway.

2. Background

a. Introduction to the Engagement Strategy

The **purpose of this strategy** is to prioritize sectors and thematic areas in Nepal for Green Climate Fund (GCF) financing and to align Nepal's climate policies and plans with the GCF's strategic priorities. Nepal's national and sectoral climate change strategies, plans and priorities will be the basis of this strategy, and these include the Nationally Determined Contribution (NDC), the National Adaptation Programme of Action (NAPA), and the Climate Change Policy (2011).

The **objectives** of this strategy are to:

- Identify priority sectors over the medium term (2018-2022), and possible GCF projects and programmes within these sectors;
- Provide recommendations for strengthening the enabling environment in the priority sectors;
- Strengthen the National Designated Authority's (NDA) engagement with key stakeholders;
- Strengthen the project cycle for designing and implementing GCF projects in Nepal, which will include the origination and selection of GCF projects and the development of concept notes and project proposals;
- Develop an evaluation process that the NDA can use for selecting and prioritizing climate change projects.

The **expected outcomes** from the Government of Nepal (GoN) adopting the recommendations in this strategy are:

- Strategic allocation of GCF financing to meet Nepal's medium-term development priorities;
- An improved enabling environment for the implementation of climate change projects in priority sectors;
- Allocation of GCF finance in a consultative and inclusive manner, with project stakeholders strongly engaged;
- Improved government systems for effectively and efficiently engaging stakeholders in the coordination and allocation of GCF financing;
- The strategy will be country driven and owned by the GoN, and will form the basis for Nepal's GCF Country Programme.

Living Document. This strategy should be continually updated and should form the basis for the Nepal GCF Country Programme.

- Over the medium-term, a number of key policies and plans will be developed and this strategy should be revised based on the formulation of the National Adaptation Plan (NAP) and the NDC implementation plan.
- In addition, the GCF continues to evolve as an institution and this strategy should reflect the new modalities, financing instruments, and mechanisms developed by the Fund.

b. Nepal's Engagement with the GCF

The GoN has nominated the Ministry of Finance (MoF) as the National Designated Authority (NDA) and the Chief of International Economic Cooperation Coordination Division (IECCD) – within the MoF – to function as the "Contact Point" for the GCF.

The NDA has also received readiness assistance for accessing and managing GCF financing, and the Engagement Strategy will build on the earlier readiness activities, which has included the development of the GCF Toolkit for Nepal 2017 and broader capacity building of the NDA and the

¹ The National Adaptation Plan (NAP) is currently under development. GCF investments in adaptation will also be aligned to the NAP once it is approved.

IECCD. The NDA has also undertaken wide-ranging consultations with key stakeholders across Nepal, domestic institutions have been nominated for accreditation and there are four funding proposals currently under development for submission to the GCF.

c. The GCF Country Programme²

A key purpose of this strategy is that it will guide and inform the development of Nepal's GCF Country Programme. The GCF Country Programme aims to turn a country's climate action aspirations into reality by identifying short-term and long-term projects and programmes and investment priorities. These are strategic initiatives that will help realize a paradigm shift in achieving low-emission and climate-resilient development. This strategy will be a key input for guiding the formulation of the Nepal GCF Country Programme.

- Section one of the GCF Country Programme outlines the country's key climate challenges, its socio-economic and development status as well as the national policy process to respond to climate change challenges. This strategy covers these points in "Section 2" and "Section 3" and "Section 4" – it provides a snapshot of national frameworks and an overview of enabling environment and regulatory framework for mobilization and deployment of climate finance
- Section two of the GCF Country Programme provides a summary of national plans in view of GCF operational modalities and investment criteria. This strategy identifies country priorities in the context of the GCF in "Section 4" and also suggests possible projects and Programmes that the GCF could finance over the medium-term.
- Section three of the GCF Country Programme outlines key steps in the updating, monitoring and evaluation of the Country Programme and its related activities. As with the Country Programme, this strategy is also a living document which will evolve with the changing context and landscape of climate finance in Nepal.
- The Country Programme also provides a snapshot of institutional arrangements, outlines coordination mechanisms, and identifies stakeholders. This strategy assesses the roles and responsibilities of stakeholders, including the NDA, and provides recommendations on strengthening engagement coordination in "Section 5".

d. Overview of Climate Change in Nepal

i. **Adaptation Context**

Climate vulnerability: While Nepal is among the lowest greenhouse gas emitters in the world, with a global contribution of less than 0.03 percent, the country has experienced consistent and continuous warming and extreme variability in rainfall.³ The NAPA, based on a detailed analysis over 1976-2005, reported a trend of observed warming of approximately 0.4 C – 0.6 C per decade, with spatial differences across the country. 4 Studies have projected that Nepal's annual temperature will increase 1.3-1.4 C by 2030 and up to 4.7 C by 2090.5 Moreover, the NAPA analysis has stated that precipitation data has not shown any general trends nationwide. There have been, however, regional precipitation trends observed. According to the NAPA analysis, data shows a general decline in premonsoon precipitation in far- and mid-western Nepal, and declining rainfall in some parts of the western, central and eastern regions. Future projections on precipitation show varying results, with both an increase and a decrease expected across Nepal.

² Green Climate Fund, 'Country Programme Template - Version 2', (Green Climate Fund: 2017).

 ³ Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).
 ⁴ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

⁵ Nepal Climate Vulnerability Study Team (NCVST), 'Vulnerability Through the Eyes of Vulnerable: Climate Change Induced Uncertainties and Nepal's Development Predicaments', (Institute for Social and Environmental Transition, 2009).

Agriculture, water and health sectors: The agriculture, water, and health sectors are extremely vulnerable to climate change due to a high degree of climate sensitivity and low capacity within these sectors. According to the NAP analysis, the agriculture sector is the most sensitive to climate change of all the economic sectors in Nepal.⁶ The NAPA, moreover, identified these sectors as priorities and recommended five priority activities: (1) Promoting community-based adaptation through integrated management of agriculture, water, forest and biodiversity sectors; (2) Building and enhancing the adaptive capacity of vulnerable communities through improved systems and accessing services related to agricultural development; (3) Glacial lake outburst flood (GLOF) monitoring and disaster risk reduction; (4) Adapting to Climate Challenges in Public Health; and (5) Empowering vulnerable communities through sustainable management of water resources and clean energy supply.⁷

Resilient infrastructure sector: The adaptive capacity of municipalities is currently low due to insufficient levels of investment and institutional capacity. Across the country, poor urban planning and infrastructure (such as inadequate drainage systems and urban expansion over flood-prone areas) have made floods a major problem in urban areas during the monsoon and heavy rainfall events. Municipalities in the Terai, a particularly flood-prone area, already face climate-related natural disasters. Damage to roads and drainage structures is also resulting in huge economic losses as transport services and daily livelihoods are disrupted. The NAPA identified resilient infrastructure as a priority area and recommended one priority activity: Promoting Climate Smart Urban Settlement.

Forestry sector: It is projected that climate change will result in changes to forest distribution and composition, adversely affecting the supply of ecosystem services and levels of biodiversity.¹⁰ Different geographic regions of the country have differing levels of vulnerability, and adverse climate impacts will disproportionately impact the livelihoods of vulnerable communities, women and socially disadvantaged people and groups, and indigenous communities.¹¹ In addition, the NAPA identified forestry sector as a priority area and recommended one priority activity: Forest and Ecosystem Management for Supporting Climate Led Adaptation Innovations.¹²

Resilient livelihoods and ecosystems: Climate change is expected to impact livelihoods at different temporal and spatial scales, with gender, caste and ethnicity also playing roles in climate vulnerability. Vulnerability is higher for those people in sectors which are directly impacted, such as in smallholder agriculture. According to the NAP analysis, Nepal's most vulnerable people — including poor households, women and communities dependent on natural resources — are already bearing the burden of climate impacts. Poor communities have a high reliance on ecosystem services and have a limited capacity to adapt to change, making them particularly vulnerable to climate change. Developing resilient livelihoods and ecosystems were also identified as priorities as a part of the NAPA analysis, and the following activities were recommended: (1) Community-based disaster management for facilitating climate adaptation; (2) GLOF monitoring and disaster risk reduction; and (3) Ecosystem management for climate adaptation. ¹⁴

GCF priorities: With Nepal highly vulnerable to the impacts of climate change, the medium-term priority for GCF finance should be on increasing investments in adaptation actions. Achieving climate adaptation is a priority in the GoN plans and policies, which emphasize the importance of reducing climate change impacts and implementing climate adaptation actions to safeguard livelihoods and

9

⁶ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁷ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

⁸ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁹ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).
¹⁰ ibid

¹¹ Department of Forest Research and Survey (DFRS), 'State of Nepal's Forests', Forest Resource Assessment (FRA) Nepal, (Kathmandu: DFRS, 2015).

¹² Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

¹³ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

¹⁴ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

climate vulnerable communities and ecosystems. The adaptation priorities of Nepal are articulated in the Climate Change Policy (2011), the NAPA, and the NDC. Moreover, Nepal's national priorities are also aligned with the adaptation strategic impact areas of the GCF: (1) Health, food and water security; (2) Infrastructure and built environment; (3) Livelihoods of people and communities; and (4) Ecosystem and ecosystem services.

Mitigation Context ii.

Emissions profile: Economic development in Nepal has been driven by low carbon growth. While Nepal's greenhouse gas emissions are relatively low on both an aggregate and a per capita basis, there are projections of future high emissions growth across sectors. 15

Energy: In 2015, the share of the consumption of fossil fuels in the overall energy consumption in Nepal is currently 16 percent per annum.¹⁶ Nepal also relies on biomass fuels due to the lack of development of other energy alternatives, and the combustion of biomass is another major driver of emissions. According to the Second National Communication (2015), GHG emissions from the energy sector is projected to grow substantially under business as usual estimations.¹⁷

Transport: Transport is the second largest energy consuming sector, and the demand for all transport services, particularly road transport and aviation has increased substantially over the past two decades. Under business as usual, rapid emissions growth is expected in the sector. The energy consumption share in 2010 was 6 percent, and it is projected that consumption in 2020 will be 8.2 percent and 10.7 percent in 2030.18

Agriculture: More than half of Nepal's GHG emissions are from agriculture. In the agricultural sector, 60 percent of emissions are attributable to livestock production, and approximately 24 percent of agricultural emissions result from cropping practices including rice cultivation and the use of synthetic fertilizers.¹⁹ There are also GHG emissions resulting from diesel use for irrigation and agricultural inputs, with 76 percent of water pumps run by diesel in 2010.20 It was projected that methane emissions will reach to 614 Gg by 2015, and will increase to 730 Gg by 2025 and 796 Gg by 2030. As a result, it is projected that total emissions in Nepal will reach to 835 Gg in the year 2030.²¹

Forestry: The forestry sector is a source of GHG emissions from deforestation, land-use change, and forest fires. But, due to Nepal's vast forest stock, with about 40 percent of land area forested, the country is a net GHG sink.²²

GCF priorities: As emphasised in the NDC and draft Low Carbon Economic Development Strategy (LCEDS), achieving mitigation is also a key priority in Nepal. GCF investments on mitigation should have a strong focus on achieving co-benefits, including though achieving poverty reduction and the Sustainable Development Goals, and also contribute to building climate resilience. Moreover, Nepal's national priorities are also aligned with the mitigation strategic impact areas of the GCF: (1) Energy generation and access; (2) Transport; (3) Forest and land-use; and (4) Buildings, cities, industries and appliances.

¹⁵ Government of Nepal, 'Second National Communication to the UNFCCC', (Kathmandu: Government of Nepal, 2015).

¹⁶ Government of Nepal, 'Economic Survey FY2014-15', (Kathmandu: Government of Nepal, 2015). ¹⁷ Government of Nepal, 'Second National Communication to the UNFCCC', (Kathmandu: Government of Nepal, 2015).

¹⁸ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

¹⁹ International Center for Tropical Agriculture (CIAT); World Bank; CGIAR Research Programme on Climate Change, Agriculture and Food Security (CCAFS) and Local Initiatives for Biodiversity Research and Development (LI-BIRD), 'Climate-Smart Agriculture in Nepal', CSA Country Profiles for Asia Series, (Washington, D.C.: 2017).

²⁰ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015). ²¹ Government of Nepal, 'Second National Communication to the UNFCCC', (Kathmandu: Government of Nepal, 2015).

²² ibid.

3. Policy Analysis

a. Summary of national plans and priorities

Nepal has a number of climate change planning processes and national and sectoral policies, which are described below. A number of these plans and policies, such as the National Determined Contribution (NDC) and draft National Low Carbon Economic Development Strategy (LCEDS), have overlapping mandates and put forward contradictory goals and targets.

Nepal has an overarching Climate Change Policy (2011), which has the goals of improving livelihoods by mitigating and adapting to the adverse impacts of climate change, and adopting a lowcarbon emissions socio-economic development path in the spirit of Nepal's commitments to national and international agreements related to climate change. A key goal of the Policy is to ensure that at least 80 percent of the total funds available for climate change activities (both adaptation and mitigation) flow to the grassroots level.23

Nepal's NDC is also an important document for prioritizing and allocating GCF financing. Nepal's NDC has an economy-wide focus, and prioritizes actions on renewable energy, green transport, decreasing air pollution, and maintaining at least 40 percent of the total land area of the country under forest. The NDC is the Government's long-term strategic framework for undertaking climate action, and therefore GCF investments must be aligned with Nepal's NDC.²⁴

Nepal has other relevant climate change plans, including the draft LCEDS, the NAPA, the 14th Periodic Plan, and sectoral plans.

- The draft LCEDS document is yet to be adopted, and the draft emphasises the mitigation opportunities and co-benefits from adopting renewable energy (hydro, solar, wind and biomass); low carbon agricultural production, including through green energy use; and improved forest management through ecosystem-based approaches.²⁵
- The NAPA was prepared to address climate vulnerability, and contains a list of priority adaptation options. These are building and enhancing adaptive capacity of vulnerable communities (both rural and urban); monitoring and reducing risk from natural disasters, including GLOF, and achieving adaptation outcomes in the water, agriculture, forestry and health sectors.26 The Local Adaptation Plan of Action (LAPA) framework similarly aims to improve adaptive capacity in local communities. But, unlike the NAPA, the LAPA framework outlines the process for formulating projects, monitoring and evaluating progress, and providing practical tools for implementing adaptation priorities in the poorest and most climate vulnerable communities.27
- The NAP process was initiated in 2015, and builds on the NAPA process by addressing Nepal's medium- and long-term adaptation needs. The development of future iterations of this Engagement Strategy should be linked to the NAP and the interventions it prioritizes.
- The 14th Periodic Plan includes a number of climate actions, such as conserving local crop varieties and promoting climate friendly agriculture; developing environment friendly agriculture by minimizing the negative impacts of climate change and the use climate smart technology; and monitoring and forecasting GLOF.28
- Other key sectoral plans, and climate change actions and priorities include the National Energy Strategy (2013), Forestry Sector Strategy (2016-2025) Nepal's Forest Policy (2015), Agriculture Development Strategy (2015-2035), Environment Friendly Vehicle and Transport Policy (2014), Climate Change Health Adaptation Strategies and Action Plans for Nepal (2016-

²³ Government of Nepal, 'Climate Change Policy', (Kathmandu: Government of Nepal, 2011).

Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).
 Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

²⁶ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

²⁷ Sunil Acharya and Raju Pandit Chhetri, 'Mobilizing adaptation Finance: Learning from Nepal's LAPA Implementation' (Climate Finance

Advisory Service, 2016).

²⁸ Government of Nepal, '14th Periodic Plan', (Kathmandu: Government of Nepal, 2017).

2020), Nepal Biodiversity Strategy and Action Plan (2014-2020), Urban Water Supply and Sanitation Policy (2009), National Urban Development Strategy (2017), and the National Disaster Risk Reduction Policy and Action Plan (2016-2030), which is under development.

b. Analysis on linkages to GCF's investment priorities and strategic frameworks

i. Investment Criteria

This strategy considers the GCF investment criteria and the relevant activity-specific sub-criteria and indicative assessment factors in the thematic prioritization in "Section 4", and in the project prioritization methodology assessed in "Section 5". The Fund has a strong emphasis on financing projects and Programmes that demonstrate the maximum potential for achieving a paradigm shift towards low-emission and climate-resilient sustainable development.

The project and programme recommendations put forward in "Section 4" are devised based on the GCF's investment criteria, including the impact potential, paradigm shift potential and the wider development benefits (environmental, social and economic co-benefits as well as gender-sensitive development impact) of climate investments. The project prioritization methodology in "Section 5" and the criteria developed in "Annex C" are also based on GCF's investment criteria, which will help to ensure that the proposals selected by the NDA are aligned to the GCF's priority areas.

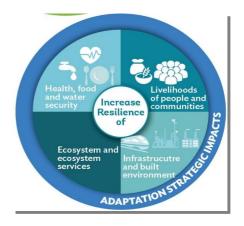
In conjunction with the GCF investment criteria, the preparation and implementation of GCF investments should comply with the GCF Indigenous Peoples Policy, Social and Environmental Policy, environmental and social safeguards, and other relevant policies and processes.

Energy generation and access Emission from

Forest and land use

Buildings, cities, industries and appliances

Figure One: Strategic Impact Areas of Green Climate Fund²⁹



ii. Strategic Impacts

As shown in Figure One, the GCF has prioritized eight strategic impacts areas, which aim to drive paradigm shifts towards low emission economic growth and climate resilience. The Fund will finance projects and programmes in the public and private sectors that contribute towards achieving at least one of the eight strategic impacts of the Fund. The GCF seeks to strike a balance between national priorities, potential to deliver concrete climate benefits, cost considerations and opportunities to deliver co-benefits.

In "Section 4" of this Strategy, the eight strategic impacts are prioritized over the mediumterm. The strategic impacts are analyzed at the sector level in relation to Nepal's planning and policy priorities, and specific investments are recommended for achieving these impacts. In addition, "Annex A" includes an assessment of the GCF strategic impact areas in the context of Nepal's

-

²⁹ Adopted from GCF, 2017.

policies and plans. This assessment demonstrates that the eight strategic impact areas of the GCF are also priority areas for undertaking climate action in Nepal.

c. Methodology for Allocating GCF Finance

GCF finance should be allocated in a strategic manner in Nepal. The key long-term strategic frameworks for allocating GCF finance over the long-term are the NAP (which is under development) and the NDC. The GCF Engagement Strategy, as the medium-term framework, is aligned to the NDC and will be aligned to the NAP once this is formulated. The methodology for prioritizing GCF finance over the medium-term has included reviewing Nepal's national and sectoral priorities and undertaking stakeholder consultations.

i. Reviewing Priorities

As per Tables Four and Five in "Annex A", the national objectives and frameworks have been reviewed in relation to the eight GCF strategic impact areas. This demonstrates that all of the eight GCF thematic areas are national priorities, and interventions in all of these areas are therefore warranted.

ii. National Consultations on Prioritization

Detailed consultations with stakeholders were held to confirm the priorities articulated in government documentation; and to allow government officials, and other key stakeholders, to provide an updated overview on the current adaptation and mitigation priorities of the GoN.

A key part of this prioritization was balancing the allocation of finance to mitigation and adaptation investments. Over the medium-term duration of this strategy, the GoN has stated in consultations that adaptation actions are the immediate priority given the extreme vulnerability faced by the country. Thus, over the short-term (between 2018-2019), the proposals that the GoN will submit will have a strong adaptation focus – and in line with this recommendation, the first four proposals under development for submission to the GCF are on adaptation. Investing in mitigation is also a priority over the medium-term (2020-2022), as reflected in the Climate Change Policy (2011) and NDC. Therefore actions on both mitigation and building climate resilience are also considered as priorities in this strategy.

iii. Detailed Assessment of Priority Sectors and Thematic Areas

Based on national priorities, the assessment of past climate finance flows, and national consultations, the following GCF thematic areas have been short-listed for the GCF to finance over the medium-term: (i) "Health, Food and Water Security"; (ii) "Resilient Infrastructure"; (iii) "Forestry"; (iv) "Energy"; and (v) "Transport".

The remaining GCF priority areas – (i) "Ecosystem and Ecosystem Services"; (ii) "Livelihoods of people and communities"; (iii) "Energy efficiency" – are included as cross-cutting areas. This is because the first set of proposals being developed by Accredited Entities (AEs) in Nepal have a strong focus on achieving adaptation in these sectors, and as climate funds have been financing a number of projects in these thematic areas.³⁰

A detailed analysis on these short-listed areas and the cross-cutting area is included below. In this, the rationale for prioritizing a particular sector or thematic area is outlined, which includes an assessment of the development benefits from allocating climate finance to this area. These assessments also provide recommendations for improving the policy and regulatory framework in

³⁰ For example, the Least Developed Countries Fund is currently funding projects on "Community Based Flood and GLOF Risk Reduction" and "Reducing Vulnerability and Increasing Adaptive Capacity to Respond to Impacts of Climate Change and Variability for Sustainable Livelihoods in Agriculture Sector in Nepal". Moreover, the Pilot Programme for Climate and Resilience is financing a project on "Building Resilience to Climate Hazards" and Germany's International Climate Initiative is financing projects on "Ecosystem-based Adaptation in Mountain Ecosystems" and "Improving the Resilience of Vulnerable Population Groups".

each of the priority sectors/thematic areas, and recommendations for preparing potential funding proposals over the medium-term.

4. Thematic Engagement Strategy

This section assesses the climate investment opportunities that the GCF could finance in Nepal over the medium-term duration of this strategy.

a. Food, Water and Health

i. Context

Agriculture is crucial to economic development, as it contributes one-third of national Gross Domestic Product (GDP), supports the livelihoods of two-thirds of the population, and employs more than 70 percent of the female population.³¹ The agriculture sector also has the highest carbon emissions of any sector in Nepal, and this is driven by land use change, livestock emissions, and carbon emissions from water pumping and fertilizer use.³² Therefore, investing in both adaptation and mitigation are immediate priorities in the agricultural sector.

Water resources provide the backbone for Nepal's social and economic development, maintaining agricultural livelihoods and generating hydropower. Nepal has abundant water resources, with more than 6000 rivers and streams and extensive water resources in the glaciers and snowpack of the Himalayas.³³ Climate change may lead to changes in precipitation, and shrinking glacial volumes, which over the long term may reduce the quantity, quality and timing of water availability.³⁴ Another threat to development will be from the destruction of critical infrastructure by floods, including GLOF and rain and flood-induced landslides, which are expected to increase into the future.³⁵ The impact of climate change is already evident in the water sector in Nepal, with the damage caused by flooding estimated to cost as much as 1.5-2 percent of national GDP.³⁶ In 2017, for example, devastating floods affected 1.7 million people and 461,000 people were displaced from their homes.³⁷

There are strong linkages between water and food security and health outcomes in Nepal. Currently, over 80 percent of all illness is attributed to inadequate access to clean water supply, and poor sanitation and hygiene practices.³⁸ While access to clean water has substantially improved over the past three decades, with 84 percent of the population having access to improved drinking water in 2015, climate change could threaten this progress and increase the frequency and spread of diarrheal diseases.³⁹ Increasing floods and droughts are also expected to exacerbate food insecurity;⁴⁰ and with increasing temperatures, Nepal's population will be increasingly exposed to increasing health problems from vector diseases, such as malaria.⁴¹

ii. National Priorities

The Climate Change Policy (2011) includes the following strategies for building resilience in the

³¹ Ministry of Finance, 'Fiscal Budget 2016/2017', (Kathmandu: Ministry of Finance, 2016).

³² International Center for Tropical Agriculture (CIAT); World Bank; CGIAR Research Programme on Climate Change, Agriculture and Food Security (CCAFS) and Local Initiatives for Biodiversity Research and Development (LI-BIRD), 'Climate-Smart Agriculture in Nepal', CSA Country Profiles for Asia Series, (Washington, D.C.: 2017).

³³ Government of Nepal, 'Water Resources Of Nepal In The Context Of Climate Change', (Kathmandu: Government of Nepal, 2011).

³⁴ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).
³⁵ ibid.

³⁶ Government of Nepal, 'Nepal Disaster Report - The Road to Sendai', (Kathmandu: Government of Nepal, 2017).

³⁷ United Nations, 'Nepal: Flood 2017', (Office of the Resident Coordinator Situation, 2017).

³⁸ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

³⁹ National Planning Commission, 'Review of Sustainable Development Goals', (Kathmandu: Government of Nepal, 2017).

⁴⁰ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁽Kathmandu: Ministry of Population and Environment, 2017).

41 Badu M., 'Assessing the Impact of Climate Change on Human Health: Status of Trends of Malaria and Diarrhea with Respect to Temperature and Rainfall Variability in Nepal', (Kathmandu: Kathmandu University, 2013).

water and agriculture sectors⁴².

- Monitoring the status of glaciers and glacier lakes and implementing adaptation activities in priority vulnerable glaciers;
- Forecasting water-induced disasters and risks created from climate change and providing early warning information;
- Identifying, developing and utilizing agricultural varieties and species that can tolerate droughts and floods;
- Introducing agriculture and disaster insurance in climate change affected areas.

The NDC states that "local varieties of crops will be promoted using local and indigenous knowledge and building on efficient technologies" and that "efforts are underway to develop flood and drought-resistant crop varieties to cope with climate change impacts". The NDC also identifies mitigation actions in the agriculture and water sector, including through improving conservation and management of soil and forests.⁴³ The draft LCEDS prioritizes actions in the agriculture, livestock and fishery sectors, and includes the following strategies.⁴⁴

- Developing and using low carbon agriculture systems, including technology that increases carbon sequestration in the soil;
- Increasing the efficiency of irrigation facilities and water use;
- Promoting the use of renewable energy and energy efficient and low-carbon technology in agricultural production.

The Agriculture Development Strategy (2015-2035) aims to build resilience of farmers to climate change and identify mechanisms for achieving mitigation in the agricultural sector. The climate measures identified in the strategy include supporting the implementation of the Local Adaptation Plan of Action (LAPA) in municipalities, and emphasizing the role of forestry sector components in agricultural development.⁴⁵

The Climate Change Health Adaptation Strategies and Action Plans for Nepal (2016-2020) has the objectives of generating evidence on the effects of climate change on health, managing risks of extreme climatic events and protecting human health from adverse effects of climate change. The major risks and impacts identified include adverse health impacts from extreme temperature fluctuations and fires, diminished food production in resource poor regions, and food- and water-borne diseases and vector-borne diseases especially in mountain areas.⁴⁶

iii. Recommendations on Strengthening the Enabling Environment

Building adaptive capacity in the agriculture and water sectors requires strengthening policies and institutions, mobilizing finance, and improving infrastructure. Developing the enabling environment would also improve the capacity of the government to mobilize finance, and improve the business environment for the private sector to deliver climate solutions.

Building climate resilience in the agriculture and water sectors will require long-term planning, especially by Local Government (LG). There are various institutional challenges including a lack of coordination between ministries. Effective coordination between all levels of government will be essential under the federal system.

There are opportunities for the private sector to engage in delivering climate action in the agricultural and water sectors. Nepal's agriculture sector has a tremendous scope for innovation in low-cost technologies and products.

⁴² Government of Nepal, 'Climate Change Policy', (Kathmandu: Government of Nepal, 2011).

⁴³ Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).

⁴⁴ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁴⁵ Government of Nepal, 'Agricultural Development Strategy 2015-2035', (Kathmandu: Government of Nepal, 2014).

⁴⁶ Government of Nepal, 'Climate Change Health Adaptation Strategies and Action Plans for Nepal (2016-2020)', (Kathmandu: Government of Nepal, 2016).

- There is a high potential for profitable investments in input-based technology and services development and promotion, and incentives should be in place to promote investment in these areas. Examples include tolerant seed varieties (including indigenous seed varietals and species which are resilient to local climatic conditions), eco-friendly fertilisers and pesticides, which can replace the chemical-based, fossil fuel driven inputs and technologies currently in use.⁴⁷
- A lack of adequate and reliable data on climate impacts (such as droughts and floods) is also a
 major constraint to achieving improved adaptive capacity, and information and
 communication technology solutions could be used to inform farmers of extreme weather
 events.⁴⁸
- Availability of water for irrigation is another major barrier to improving productivity and agricultural commercialisation in Nepal. The private sector can provide solutions to increase the amount of agricultural land under irrigation and green technologies such as solar water pumps are facing growing demand from farmers.⁴⁹

A key constraint to engaging the private sector in providing goods and services to build climate resilience and lower emissions in the agriculture and water sectors is a lack of finance. In Nepal, agriculture is currently a low-profit sector that is considered high risk by private sector investors. Farmers lack the knowledge and capacity to access credit, and investors are also less willing to provide finance to geographically scattered small-holder farmers and water users. Improving access to credit, including through the provision of microfinance, is therefore of high importance. Another barrier is that small-holder farmers currently carry the financial risk of climate change, and agricultural insurance is a solution the private sector could provide for overcoming this problem.

Box One: India Case Study

- The GCF has approved an adaptation project in India, which has a total investment of USD 166.3 M. The GCF has provided a grant of USD 34.4 M, and the state government contributed a grant of USD 124.9 M. The project is titled the "Ground Water Recharge and Solar Micro Irrigation to Ensure Food Security and Enhance Resilience in Vulnerable Tribal Areas of Odisha".
- The project is implemented by the National Bank for Agriculture and Rural Development (the DAE), and the executing entity is the Groundwater Division of Department of Water Resources, Govt. of Odisha.
- In Odisha, extreme food insecurity is combined with water scarcity there is also a lack of infrastructure for water conservation. Climate-related challenges will be addressed by enhancing ground water recharge in the community ponds through structural adaptation measures, and the use of solar pumps for micro irrigation. The use of solar pumps for irrigation will increase energy access and contribute to the state's climate-resilient, low emission crop planning.

iv. Potential Projects/Programmes

GCF projects and Programmes should have an integrated approach with a strong focus on strengthening institutions, especially at the local level. The investments should be pro-poor and targeted at vulnerable communities.

• Projects should have a focus on increasing productivity in the agriculture sector, including

⁴⁷ International Center for Tropical Agriculture (CIAT); World Bank; CGIAR Research Programme on Climate Change, Agriculture and Food Security (CCAFS) and Local Initiatives for Biodiversity Research and Development (LI-BIRD), 'Climate-Smart Agriculture in Nepal', *CSA Country Profiles for Asia Series*, (Washington, D.C.: 2017).

⁴⁹ B. Pandey, R. Foster, J. Holthaus, E. Kunen, B. Ngetich, B. Shrestha, 'Solar Water Pumping: Kenya and Nepal Market Acceleration', (SES Solar World Congress, 2015).

- through increasing irrigation. GCF investment could be used to increase the usage of solar-water pumps, including through providing farmers with grants and concessional financing.
- Developing climate resilient crop varieties to cope with droughts and floods is another priority over the medium-term, and this could be achieved by diversifying agricultural systems through the use of agroforestry. The International Finance Corporation (IFC) has estimated that there is a USD 4.8 billion opportunity up till 2030 in climate-smart agriculture to promote efficient technologies and local crops in an effort to make the sector more climate-friendly.⁵⁰
- The adaptive capacity of farmers could also be improved by developing and deploying services that minimize the risk of climate-related extreme events, including weather index-based insurance products in the agricultural sector.
- Given the high emissions from the livestock sector, there is also scope to invest in mitigation actions, such as biogas projects that convert animal waste to energy.

b. Resilient Infrastructure

i. Context

Urbanization in Nepal has been mostly haphazard and accompanied by inadequate and sub-standard urban infrastructure and services. Nepal's infrastructure needs are already very high, and this has been exacerbated by the devastating earthquake of 2015. Moreover, with the country's population projected to reach 36 million by 2050, the demand for infrastructure will increase substantially.⁵¹ The recent transition to a Federal Government (FG) system presents an opportunity to achieve urban development, as LG and Provincial Government (PG) will have an increased capacity to plan and finance local-level infrastructure development.

Without interventions to build climate resilience, intense rain-events and associated flooding are projected to lead to an increasing loss of urban assets and livelihoods under climate change. In addition, changing rainfall patterns and droughts are projected to impact water availability, thereby worsening water security for municipalities.⁵² The stock of built assets (both property and public infrastructure) is also highly vulnerable, as rapid urbanization and growth have been accompanied by an increase of informal settlements, which are particularly vulnerable to climate change.⁵³ Infrastructure in Nepal is also highly vulnerable to earthquakes. Moving forward, infrastructure should be both resilient to climate change and earthquakes.

ii. National Priorities

The Climate Change Policy (2011) prioritizes the development of climate resilient infrastructure and formulating and implementing design standards for climate resilient construction.⁵⁴ In the 14th Periodic Plan, there are also strategies to build infrastructure for the development of energy, transport and rural-urban linkages and the expansion of tourism and industrial sectors and MSMEs.⁵⁵

The NAPA (2010) identified and prioritized actions for achieving climate adaptation in urban settlements and infrastructure. The actions included enforcement of planning regulations, replicating eco-cities, developing urban groundwater monitoring systems, establishing household and community level waste management systems, establishing early warning systems for flooding, and developing

18

⁵⁰ International Finance Corporation, 'Climate Investment Opportunities in South Asia', (Washington D.C.: International Finance Corporation, 2017).

⁵¹ Government of Nepal, 'Nepal Population Report', (Kathmandu: Government of Nepal, 2016).

⁵² Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁵³ Acharya BR, 'Urban Poverty: A Sociological Study of Shankhamul Squatter', *Dhaulagiri Journal of Sociology and Anthropology*, vol. 4,

^{(2010), 179-192. &}lt;sup>54</sup> Government of Nepal, 'Climate Change Policy', (Kathmandu: Government of Nepal, 2011).

⁵⁵ Government of Nepal, '14th Periodic Plan', (Kathmandu: Government of Nepal, 2017).

mass public transport systems.56

In regards to mitigation priorities, the NDC does not explicitly prioritize actions on achieving mitigation through urban infrastructure development.⁵⁷ However, there is a goal in the draft LCEDS to "develop climate change resilient infrastructure through the development, use and promotion of the technologies that emit low carbon".⁵⁸

There are also sectoral strategies, plans and policies that prioritize building climate resilience in towns and municipalities. These include the Urban Water Supply and Sanitation Policy (2009), which focuses on integrated urban water supply and sanitation sector projects; the National Urban Development Strategy (2017), which includes policy actions to address climate change; and the Clean City Programme (2013), which covers five components: waste management, water and wastewater management, greenery promotion, pollution control and city beautification.

iii. Recommendations on Strengthening the Enabling Environment

Over 2018-2030, the International Finance Corporation (IFC) has estimated that there is a USD 4.2 billion opportunity to develop climate-resilient infrastructure in green buildings, municipal solid waste, and climate-smart urban water sectors .⁵⁹ The development of climate resilient infrastructure will require strengthened institutions and planning capacity, improved knowledge on climate impacts, and the mobilization of finance (including from the private sector) to close the climate viability gap.

Urbanisation is a cross-cutting issue, with all levels of the public sector responsible for delivering solutions. The FG should provide guidelines for integrating climate resilience into local planning, and should develop a long-term strategic vision for urban development that can be disseminated down to the local level. Climate change should be mainstreamed into municipal government planning frameworks, such as Urban Development Plans and Detailed Project Reports.

There is also a knowledge gap in Nepal on the impacts of climate change on infrastructure. The data on future climate impacts in urban areas is low quality and largely unavailable, which means that building resilient infrastructure is difficult. ⁶⁰ This knowledge gap also makes it difficult to calculate the incremental cost of climate proofing infrastructure – and therefore calculating the grant component of a GCF project. The NAP process will contribute to predicting future vulnerabilities, but detailed assessments on infrastructure at the local level will also be required.

Improving the resilience of infrastructure to climate change will require an increased capacity of LG and PG to finance capital expenditures – both levels of government are expected to face large resource gaps with the transition to a federal governance system. Both FG and LG have a limited capacity to finance capital expenditures without corresponding returns, and the use of loans, raising of private finance, and strategic deployment of development assistance, including climate finance, is imperative for improving the supply and quality of infrastructure. There is a potential for the private sector to be engaged in the development of climate resilient infrastructure, including through Public Private Partnerships (PPP) frameworks. PPP

iv. Potential Projects/Programmes

Climate finance from the GCF should be utilised for funding the viability gap to build resilience to future climate impacts. GCF investments should also be targeted to benefit the most vulnerable population groups, especially those living in informal settlements without secure tenure and livelihoods, which have the lowest capacity to adapt and will be more vulnerable to the impacts of

⁵⁶ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

⁵⁷ Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).

⁵⁸ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁵⁹ International Finance Corporation, 'Climate Investment Opportunities in South Asia', (Washington D.C.: International Finance Corporation, 2017).

⁶⁰ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁶¹ Ministry of Finance, 'A Study on Foreign Aid Mobilization in Federal Nepal', (Kathmandu: Government of Nepal, 2017).

⁶² World Economic Forum (WEF), 'Building Resilience in Nepal through Public-Private Partnerships', (Geneva: WEF, 2015).

climate change.

- Over the medium-term, GCF investment should focus on developing climate resilient infrastructure in municipalities. This would focus on mainstreaming climate change into existing municipal plans and developing a pipeline of bankable projects.
- Projects could be implemented in climate vulnerable municipalities, and focus on climate resilient drinking water and sanitation systems, solid waste management (which could be linked to waste-to-energy systems), and climate resilient river front development.
- And in addition to building adaptive capacity, these projects, where cost effective, should use low-emitting and energy-efficient technologies.

c. Forestry

i. **Context**

It is estimated that about 76 percent of Nepal's population depends on the goods and services provided by forests, with some 64 percent still using fuelwood as a major source of domestic energy. 63-64 Forests maintain food and water security, and provide vital ecosystem services. Forests are a key driver of Nepal's economy, with timber and non-timber forest products and nature-based tourism important for maintaining livelihoods. These are also a significant source of revenue for the government. 65 Nepal's Forests are a large carbon sink, with about 40 percent of Nepal's land area forested and a carbon stock of 177 tonnes per hectare, the trading of which could offer economic contributions.66

Over the past 50 years, a significant area of forests has been converted to agricultural land or degraded into shrub land. The rate of deforestation and forest degradation over the past 20 years, however, has remained relatively low due, in part, to the development and promotion of communitybased forest management regimes, leasehold forestry, and conservation areas.⁵⁷ There are more than 26,000 community-based forest management groups across the country that are directly engaged in managing about 30 per cent of the country's total forest area.68

While forest management has improved considerably in recent decades, forests remain threatened by deforestation and degradation, especially in the Terai, Population growth, increasing demand for forest products, poorly managed land use, and forest fires are putting pressure on forests and levels of biodiversity. 69 Climate change is likely to exacerbate forest degradation, resulting in changes to forest distribution and composition – which will adversely affect the supply of ecosystem services and levels of biodiversity. To Different geographic regions of the country have differing levels of vulnerability, with a study indicating that lower and mid-hill forests in tropical and subtropical zones are more vulnerable than upper-mountain and subalpine forests.⁷¹ Adverse climate impacts will also disproportionately impact the livelihoods of vulnerable communities such as the landless, forestdependent poor, women and socially disadvantaged people and groups, and indigenous communities.72

⁶³ Amatya, S.M., 'Financing for Sustainable Forests Management in Nepal', INDUFOR, (Auckland: New Zealand, 2013).

 ⁶⁴ Government of Nepal, 'Environment Statistics of Nepal', (Kathmandu: Central Bureau of Statistics, 2014).
 ⁶⁵ Government of Nepal, 'Forestry Sector Strategy 2016-2025', (Kathmandu: Ministry of Forests and Soil Conservation, 2016).

⁶⁷ Multi Stakeholder Forestry Programme, 'Sustainable Forest Management in Nepal', (Kathmandu: Ministry of Forests and Soil Conservation, 2016).

⁶⁸ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁶⁹ Multi Stakeholder Forestry Programme, 'Sustainable Forest Management in Nepal', (Kathmandu: Ministry of Forests and Soil Conservation, 2016).

⁷⁰ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

⁷¹ Thapa, G.J., E. Wikramanayake, and J. Forrest, 'Climate-change Impacts on the Biodiversity of the Terai Arc Landscape and the Chitwan-Annapurna Landscape', (Kathmandu: WWF Nepal, 2015).

⁷² Mainlay, J. and Tan, S.F., 'Mainstreaming gender and climate change in Nepal', *IIED Climate Change Working Paper*, No. 2, (London: IIED, 2012).

ii. National Priorities

The 14th Development Plan for the forestry sector has identified several issues around forest degradation and deforestation, and the need to address the challenges posed by climate change, including climate induced disasters. The Climate Change Policy (2011) also emphasizes the importance of achieving adaptation and mitigation in the forestry sector, and this includes: (1) achieving carbon sequestration through improved planning and management of forests and deforestation; and (2) proper utilization, promotion, and conservation of forest resources to build alternative livelihoods.

The NDC has the goal of maintaining at least 40 percent of Nepal's land area as forests. This will be achieved through sustainably managing forest areas under a variety of modalities. The NDC further prioritizes building adaptive capacity in community-based forests, and enhancing carbon sequestration through sustainable management of forests and the development of support programmes. Moreover, the draft LCEDS has a strong focus on forestry and puts forward strategies for the protection and improvement of forests, including emphasising forest management systems that have a high potential for achieving carbon sequestration and adaptation capacity (such as ecosystem-based adaptation and community-based forest management); and increasing the participation of women, indigenous nationalities, *Dalits*, and marginalized communities in forest management.⁷⁵ Furthermore, the NAPA also identified actions in the forest sector, including scaling up biomass energy technologies and improving the management of forest fires in the Terai and mid-hills regions.⁷⁶

Nepal's Forest Policy (2015) gives a high priority to sustainable and productive forest resource use, promoting forest-based enterprises and creating green jobs through private sector involvement. The Policy also envisions a forest development fund to increase private sector investment in forestry, and prioritizes studying specific impacts of climate change on ecosystems and forest resources. The Nepal Forestry Sector Strategy (2016-2025) aims to build enhanced and climate resilient forest ecosystems, through a decentralised, competitive and well-governed forestry sector that provides inclusive and equitable incomes, employment and development opportunities. The Strategy aims to decrease the annual deforestation rate, and enhance the carbon stock by at least 5 percent by 2025 as compared to 2015 level. Moreover, GoN has designated 2014-2023 as the 'Forest Decade', which is a programme of conservation and forest development. This components of this programme are the conservation of existing forests and biodiversity, sustainable forest management, and restoration of degraded forests through afforestation initiatives.

iii. Recommendations on Strengthening the Enabling Environment

The successful implementation of GCF projects will require strong coordination between FG, PGs and LGs and other key stakeholders – especially communities, which will need to have strong ownership of the implementation of GCF projects. It is also necessary to have a long-term vision and action plan for addressing future challenges related to climate change in this sector. Moreover, informed decision making requires good quality data, which includes an understanding of the future threats of climate change. According to the NAP Synthesis report, Nepal must improve its capacity to effectively monitor changes in the status of forest health.⁸⁰

⁷³ Government of Nepal, '14th Periodic Plan', (Kathmandu: Government of Nepal, 2017).

⁷⁴ Government of Nepal, 'Climate Change Policy', (Kathmandu: Government of Nepal, 2011).

⁷⁵ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁷⁶ Government of Nepal, 'National Adaptation Programme of Action', (Kathmandu: Government of Nepal, 2010).

⁷⁷ Ministry of Forests and Soil Conservation, 'Forest Policy 2015', (Kathmandu: Government of Nepal, 2015).

⁷⁸ Government of Nepal, 'Forestry Sector Strategy 2016-2025', (Kathmandu: Ministry of Forests and Soil Conservation, 2016).

⁷⁹ United Nations, 'Voluntary National Report to the 11th Session of the United Nations Forum on Forests', (Kathmandu: Government of Nepal, 2014).

⁸⁰ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

Nepal's Forest Policy (2015) highlights the need for private sector involvement in the sector, but private investment has been limited.⁸¹ It has been estimated that small and medium forest-based enterprises could generate more than USD 8.7 billion and 1.38 million work days through 400,000 sustainable full-time equivalent green jobs.⁸² Public-private partnerships can be effective at engaging the private sector in forest projects, and potential areas include reforestation activities, bioenergy and eco-tourism. To mobilize private investment, Nepal needs to develop an enabling policy, institutional and legislative environment to increase private sector involvement in forestry businesses.

Box Two: Bhutan Case Study

- The GCF has approved the "Bhutan for Life" project, which has a total investment of USD 118.3 M. The GCF has provided a grant of USD 26.6 M, and the Royal Government of Bhutan contributed a grant of USD 75.1 M. This project is implemented by the World Wildlife Fund (the AE), and the executing entity is the Ministry of Agriculture and Forests.
- Bhutan is committed to the goal of remaining carbon neutral, as re-stated in its NDC under the Paris Agreement.
- Much of Bhutan is managed under a network of Protected Areas (PAs), which are central to ensuring that at least 60 percent of the country remains under forest cover. However, PAs are coming under increasing pressure from a combination of economic development in surrounding areas, illegal extraction of resources, and the adverse impacts of weather-related events such as landslides, floods, and forest fires.
- The Bhutan for Life project will support improved management of the country's PAs.

iv. Potential Projects/Programmes

Proposals submitted to the Fund over the medium-term should focus on achieving both mitigation and adaptation outcomes.

- GCF projects could focus on developing non-timber forest products, micro entrepreneurship, and the sustainable harvesting of timber, and these could be linked to renewable energy (RE) technologies such as in the case study in Box Two. With rural household income largely derived from harvesting non-timber forest products, afforestation projects can strengthen livelihoods and increase income earning opportunities.
- GCF projects on afforestation, including through the promotion of community-based forest management, will achieve mitigation and can also have the co-benefits of building resilience to climate hazards, such as flooding, and also improve water security and enhance agricultural production.
- GCF investments could also enhance the provision of ecosystem goods and services from forest ecosystems including through restoring forests, grasslands, and wetlands and strengthening protected area management.
- It is vital that GCF projects in the forest sector have a focus on adaptation and the building resilience to climate hazards. Extreme droughts are causing increased incidences of forest fires that are affecting communities and causing losses extending over large areas of productive forest land. The degradation of forests due to climate change could also increase the risk and damage costs of flooding events and landslides.

⁸² International Institute for Environment and Development, 'Increasing Private Sector Involvement and Investment in Forestry in Nepal, IIED Briefing', (London: IIED, 2016).

⁸¹ Ministry of Forests and Soil Conservation, 'Forest Policy 2015', (Kathmandu: Government of Nepal, 2015).

d. Energy

i. Context

Despite having substantial renewable energy (RE) resources, Nepal faces critical energy supply issues and continues to have high rates of energy poverty. RE resources have not been captured due to geographical, technical, political and economic constraints. Energy insecurity in Nepal is also recognised as one of the major constraints to achieving economic development. Over the past decades, there has progress made in utilizing clean energy resources, including micro-hydro, solar, biogas and improved cook stoves in rural areas. 83

The GoN recognizes that achieving economic growth that is decoupled from carbon emissions is essential. Moving to a low carbon energy system also makes sense from a macroeconomic perspective, as fossil fuel imports put pressure on foreign exchange reserves and make the country vulnerable to fuel price shocks. In recent years, there has been increasing legitimacy for having a more balanced energy mix that consists of both on-grid and off-grid energy sources. This legitimacy has grown following the earthquake and the resultant damage to energy infrastructure, and also the recognition of the high cost to build transition lines across Nepal. Accordingly, the GoN has prioritised the increasing renewable energy generation capacity, including the use of off-grid systems, in the NDC.⁸⁴

Nepal is expected to experience rapid energy consumption growth into the future, and under business as usual energy sector GHG emissions are projected to increase from 4 million tons of CO_{2-e} in 2010 to 7 million tons in 2020 and 13 million tons in 2030.85 Currently, 85 percent of the population has access to electricity, while only 23 percent have access to clean cooking technologies.86 Nepal's energy use is primarily dominated by traditional sources of energy, mainly biomass for domestic purposes, which contributed 87 percent of renewable energy consumption in 2010.87 Due to its high reliance on biomass, the current fossil fuel consumption as a proportion of total energy consumption is only 12 percent per annum.88

ii. National Priorities

In Nepal's national development plans, the promotion of hydropower and renewable energy generation has been a key priority. The Climate Change Policy (2011) also has an objective of reducing GHG emissions by promoting the use of clean energy and by increasing energy efficiency. The specific policy actions are reducing GHG emissions through additional development and utilization of clean, renewable and alternative energy technologies; auditing the energy intensity of industries; and encouraging investments in clean energy sources with priority on hydropower.⁸⁹

The NDC promotes the expansion of renewable energy generation, including hydropower, solar, and waste to energy, and includes the below energy sector targets. Strategies for financing the NDC including creating an enabling environment to crowd in domestic and international private investment in energy efficiency and renewable energy technologies.⁹⁰

- Nepal intends to expand its renewable energy generation by 20 percent by 2020.
- By 2050, Nepal will achieve 80 percent electrification through renewable energy sources, and will also reduce its dependency on fossil fuels by 50 percent.

⁸³ Government of Nepal, 'Second National Communication to the UNFCCC', (Kathmandu: Government of Nepal, 2015).

⁸⁴ Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).

⁸⁵ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁸⁶ Government of Nepal, 'Economic Survey 2015-2016', (Kathmandu: Ministry of Finance, 2016).

⁸⁷ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁸⁹ Government of Nepal, 'Climate Change Policy', (Kathmandu: Government of Nepal, 2011).

⁹⁰ Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).

- There will be 2,100 MW generated by solar energy by 2030 with arrangements to distribute it through the grid. The NDC also prioritizes the development of off-grid energy solutions, including solar home systems and small and micro hydropower plants.
- And the share of biogas for cooking in rural areas will be increased to 10 percent, and every household in rural areas will be provided with improved cooking stoves by 2030, and there will be an additional 220 MW of electricity from bio-energy by 2030.

A core goal for the draft LCEDS is to decrease the dependence on fossil fuels through developing hydropower and other renewable energies. The draft LCEDS includes the following strategies to build energy security and achieve mitigation.⁹¹

- The draft LCEDS encourages the development and use of solar and wind power. The draft LCEDS promotes the development of solar through the grid and the use of off-grid solar in rural areas and for street lights in urban areas.
- The draft LCEDS also prioritizes waste-to-energy, including from waste generated in municipal areas.

Nepal's sectoral energy policies have a strong focus on maximizing the utilization of hydropower potential to meet domestic electricity demand. The National Energy Strategy (2013), which is yet to be approved by the government, also has a focus on electric vehicles and electric cooking. The long-term goal of this strategy is 100 percent energy generation, with a strong emphasis on hydropower. 92

iii. Recommendations on Strengthening the Enabling Environment

The GoN has received significant volumes of development assistance on RE and there are a number of projects currently under implementation. GCF investments should be coordinated with existing projects and programmes, and development financing from bilateral and multilateral partners (including climate funds, such as the Climate Investment Funds) could be a source of co-financing.

Strengthening the institutional environment for green energy implementation is a priority. The National Renewable Energy Framework (NREF), which is currently being implemented by the Alternative Energy Promotion Centre (AEPC), provides the framework to provide energy access and energy efficient technologies to local communities and indigenous people living in the mountains, hills and low lands. Supporting LGs with developing energy roadmaps is also required – as under Schedule 8 of the Constitution of Nepal, LGs now have a responsibility for implementing energy projects in their jurisdictions. Alternative Energy projects in their jurisdictions.

While GCF finance will largely have a focus on achieving mitigation through increasing the supply of renewable energy generation, there is also the option to utilize GCF finance for building climate resilient energy infrastructure. Energy systems are vulnerable to the impact of climate change – for example, from changing rainfall patterns impacting hydropower generation capacity.

There is a high potential to engage the private sector in the implementation of projects in the energy sector. Smaller energy projects, including off-grid projects, can be attractive for private investors as the upfront cost is lower than larger projects that require transmission lines. Another key priority is also strengthening maintenance systems, especially for off-grid energy systems. Energy subsidies have mostly been used for lowering the upfront cost of purchasing energy products, such as solar home systems, but not for improving the operations and maintenance of energy systems.

⁹¹ Government of Nepal, 'Draft Low Carbon Economic Development Strategy', (Kathmandu: Government of Nepal, 2015).

⁹² Water and Energy Commission Secretariat, 'National Energy Strategy', (Kathmandu: Government of Nepal, 2013).

⁹³ Alternative Energy Promotion Centre, 'National Renewable Energy Framework Programme Document', AEPC Board Meeting, (2017).

⁹⁴ Government of Nepal, 'The Constitution of Nepal', (Kathmandu: Government of Nepal, 2015).

iv. **Potential Projects/Programmes**

The IFC has estimated that there is a USD 24.6 billion investment opportunity to reach an installed capacity of 12,000 MW in hydropower as well as in other forms of renewable energy including solar and biomass to meet the clean energy goals under the NDC.95 Over the medium-term, GCF finance should be allocated towards the development of smaller decentralized energy solutions, with a strong emphasis on off-grid energy investments. AEPC is a key agency to engage on these projects, as it has the mandate to implement RE projects under 10 MW. RE projects should have a strong focus on municipalities and productive purposes.

- A RE programme can focused on increasing the generation capacity of municipalities. Municipalities will require increased electricity generation capacity for powering schools and hospitals; and with the FG advocating for every municipality to have one project that has a capacity of at least 500 kw, there is an opportunity for municipalities to be powered by RE.
- There is also the potential for waste to energy projects, both in rural and urban areas. In the Kathmandu Valley, for example, a waste to energy project could be commercially viable. And with increasing waste due to increasing urbanisation, there could be an interest from municipalities in developing waste to energy projects.
- The GCF finance can also be sought for green energy projects targeted at Nepal's productive sectors. For example, a GCF investment could deploy solar pumps for irrigating agriculture, and these would be cost-effective, especially in isolated areas of the country, as off-grid solar pumps minimise the construction of the grid. Solar pumps can also be used for providing drinking water. In 2010, 76 percent of water pumps were run by diesel and therefore using GCF finance to increase the usage of solar-water pumps could be considered transformational.96

e. Transport

i. Context

Due to the high economic, social and environmental costs from the current modes of transport, the development of sustainable transport systems is a key priority for Nepal. As a consequence of economic growth and increasing household purchasing power, vehicle ownership and usage has dramatically increased in Nepal.⁹⁷ In the Kathmandu Valley, air pollution from vehicular emissions is a key public health concern - rapid urbanisation has increased traffic congestion, air pollution, and traffic accidents.

Nepal has some of the fastest growing CO₂ emissions from transport fuel usage in the world. Between 1990-2011, emissions in the sector increased by 395 percent, compared to 49 percent globally.98 High emissions growth is projected to continue in the transport sector, and thus implementing sustainable transport systems will be vital for achieving mitigation.⁹⁹ There is an opportunity to decouple GDP growth and transport emissions through investing in low-carbon transport systems.

ii. **National Priorities**

Given that reducing emissions in the transport sector is a national priority, and that GCF investment in sustainable transport systems will deliver high economic, social and environmental benefits, it has been shortlisted as a priority area over the medium-term.

In Nepal, the transport sector has received relatively low levels of climate finance and development assistance. One project under implementation is the Kathmandu Sustainable Urban Transport Project,

⁹⁵ International Finance Corporation, 'Climate Investment Opportunities in South Asia', (Washington D.C.: International Finance Corporation, 2017).

⁶ Government of Nepal, Draft Low Carbon Economic Development Strategy, (Kathmandu: Government of Nepal, 2015).

⁹⁷ Ministry of Physical Infrastructure and Transport, 'National Environmentally Sustainable Transport Strategy for Nepal', (Kathmandu: Government of Nepal, 2014).

⁹⁹ Government of Nepal, Draft Low Carbon Economic Development Strategy, (Kathmandu: Government of Nepal, 2015).

which aims to improve the transport situation in Kathmandu Valley. In municipalities outside of the Kathmandu Valley, there is no provision of public transport services.

Previous five-year development plans reveal that transport development was a very high priority and various policy initiatives were taken; but these were almost exclusively focused on road expansion and improvement, not investment in public transport. Low-emissions transport is a priority in the Environment Friendly Vehicle and Transport Policy (2014) as a key response for reducing GHG emissions. The policy aims to reduce emissions from the transport sector, increase the share of electric vehicles in the vehicle stock to 20 percent by 2020, and providing a subsidy scheme for promoting electric and non-motorized vehicles.¹⁰⁰

The NDC states that 'moving towards an Environmentally Sustainable Transport System' is vital for achieving mitigation. The NDC prioritizes actions on promoting a public transport system and bicycle use, and the promotion of non-motorised transport to contribute to the reduction of pollution in urban areas. The NDC also includes the target of reducing dependency of fossil fuels in the transportation sector by 50 percent by 2050 through mass public transport and the promotion of energy efficient and electric vehicles.¹⁰¹

The draft Low Carbon Economic Development Strategy also prioritizes the "development of environment-friendly transportation that uses clean energy". The draft LCEDS includes actions for reducing GHG emissions in the transport sector, and prioritizes the promotion of mass public transportation and the use of bicycles in urban areas.¹⁰²

iii. Recommendations on Strengthening the Enabling Environment

As the short-term priority of the GoN is to use climate finance for building resilience in vulnerable communities, a proposal for a transportation project could be submitted to the GCF between 2020-2022. This is also a strategic timeframe as the Fund has not yet approved any public transport projects, and thus it is not clear what the Fund's requirements are at this stage for transport investments.

In the Kathmandu Valley, the public transport system is currently driven by private investment, but the quality of the service is considered unsatisfactory. Vehicles used by public transport operators are overcrowded, the routes are inefficient, and the supply of services is not meeting demand. Developing an electrified bus rapid transit system would require overcoming key barriers, including high upfront capital costs, lack of long-term financing options, and inadequate institutional frameworks for public-private cooperation.¹⁰³

The climate finance provided by the GCF on transport proposals would likely be in the form of a loan and would probably have to be heavily co-financed by either domestic or foreign private or public finance. This is because public transport systems could be commercially viable, particularly in the Kathmandu Valley with its high population density.

iv. Potential Projects/Programmes

Climate finance can be a catalytic driver of development given the low levels of capital investment in transport infrastructure. The IFC has estimated that there is a USD 10 billion investment opportunity in Nepal in transport infrastructure to enhance connectivity and upgrade urban transport, and USD 2.5 billion investment opportunity in electric vehicles. ¹⁰⁴ **Proposals submitted to the Fund over the medium-term should focus strongly on transport electrification.**

¹⁰² Government of Nepal, Draft Low Carbon Economic Development Strategy, (Kathmandu: Government of Nepal, 2015).

¹⁰⁰ Ministry of Physical Infrastructure and Transport, 'Environment Friendly Vehicle and Transport Policy', (Kathmandu: Government of Nepal 2014)

Government of Nepal, 'Nationally Determined Contribution', (Kathmandu: Government of Nepal, 2016).

¹⁰³ Ministry of Physical Infrastructure and Transport, 'National Environmentally Sustainable Transport Strategy for Nepal', (Kathmandu: Government of Nepal, 2014).

¹⁰⁴ International Finance Corporation, 'Climate Investment Opportunities in South Asia', (Washington D.C.: International Finance Corporation, 2017).

- There is a high potential for developing an electrified public bus system, and this could be implemented via a PPP with GCF finance used to leverage private investment in the sector.
- Electrified transport will also require a strengthened enabling environment and infrastructure such as charging stations would be required for making electrified public transport systems viable.
- GCF finance could also be used for developing an action plan that identifies and prioritizes the regulatory and policy changes required across timeframes, and calculates investment costs needed for developing a sustainable transport system.

f. Cross Cutting

i. Context

The GCF thematic areas not shortlisted as a part of this strategy – building the resilience of livelihoods and ecosystems and achieving mitigation in the industrial sector – should be addressed in projects and programmes in the prioritized sectors.

There are strong linkages between sectors, as GCF projects in the agricultural and forestry sector could, for example, contribute to building climate resilient ecosystems. Moreover, across the GCF's portfolio of projects, many investments in the Least Developed Countries have had a cross-cutting focus and have had a strong emphasis on building resilience in livelihoods. The reason why these thematic areas have not been shortlisted in this strategy is because of the high volumes of climate finance that has been allocated to building resilient livelihoods and ecosystems, and as achieving mitigation through increased improved industrial processes was not considered a medium-term priority by the NDA.

Significant volumes of climate finance from multilateral and bilateral sources has been directed towards building climate resilient livelihoods and ecosystems, and the first GCF proposals under development also focus on these areas. Whilst both of these thematic areas remain priority areas in this strategy, over the medium-term GCF projects will build resilience through investments in infrastructure and in the productive sectors. Moreover, while reducing the carbon intensity of industry, including through improving energy efficiency, is considered a priority under the NDC and the draft LCEDS, this is not considered to be an effective use of GCF finance over the medium-term. Lastly, given the importance of tourism to Nepal's economy and its exposure to climate change – this sector, which is not directly considered a strategic priority for the GCF, is assessed in this section.

ii. Climate Resilient Livelihoods

Climate change and extreme events interact with numerous aspects of people's livelihoods, with direct impacts on natural, physical, financial, human and socio-cultural assets. Climate change will disproportionately affect the livelihoods of the poorest households that are dependent on the informal sector and vulnerable to food insecurity. The poverty of both rural and urban households living in areas with a high vulnerability to natural disasters, including floods and landslides, will be exacerbated. Given these challenges, GCF finance should be used to build climate resilient livelihoods and achieve inclusive economic development of the most vulnerable and poorest communities.

With the livelihoods of the majority of the population largely dependent upon small-scale agriculture and forests, and the agricultural sector estimated to be the most vulnerable to climate change, GCF finance allocated to the agriculture, water and forestry sectors needs to be focused on building climate resilience and developing livelihoods, including through providing income-earning opportunities. Communities in municipalities are also vulnerable to climate change, as flooding will result in damage to property, urban infrastructure, and disruptions to business and commerce. Lastly, GCF

¹⁰⁵ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

projects should also have a focus on disaster risk reduction (DRR), especially in the context of productive sectors. Nepal's complex geography, and an absence of consistent climate data and climate scenarios, makes the projection of disasters difficult. There is inadequate capacity to forecast potential threats of large-scale disasters, and little preparedness to respond to and cope with disastrous events.¹⁰⁶

iii. Climate Resilient Ecosystems

Poor communities have a high reliance on ecosystem services and have a limited capacity to adapt to change, making them highly vulnerable to climate change. The Nepal Biodiversity Strategy and Action Plan (2014-2020) emphasizes biodiversity conservation and ecosystem resilience as key drivers of national prosperity. This strategy recognizes legitimate rights of all Nepali people, such as indigenous people and local communities, women, *Dalits* and other disadvantaged social groups over local biological resources. Ecosystem-based adaptation approaches should be used in the implementation of adaptation investments where possible, as these are cost-effective, environmentally friendly and sustainable.

iv. Industry and Energy Efficiency

While achieving low-carbon growth in the industrial sector was not considered a medium-term priority that the GCF should finance, there are other sectors where energy efficiency could be a priority. For instance, projects in the agricultural sector that are focused on irrigation, can also promote the adoption of energy efficient irrigation technology. And incentives provided for off-grid energy projects at the household level could perhaps also be linked to incentivising energy efficient lighting and appliances – the GoN has targets in the draft LCEDS to achieve 100 percent clean energy for equipment and lights and using cleaner production methods with more energy efficient equipment.

v. Climate Resilient Tourism

Another key sector that should be addressed in GCF projects is the tourism sector. The tourism industry at present directly supports almost half a million jobs (3.5 percent of total employment) and, as of 2014, directly contributes to 4.3 percent of total GDP.¹⁰⁷ Given that Nepal's forests and biodiversity are key assets to the tourism sector, tourism is highly exposed to climate change. Extreme weather and climatic conditions, including associated natural disasters, will directly impact the flow of tourists and the overall sustainability of the tourism sector. There are major gaps in policies and plans, with the National Tourism Strategy Plan (2015) not presenting clear adaptation actions; but as tourism is identified as a key thematic sector in the NAP process, this will provide clarity on achieving adaptation in the sector.¹⁰⁸ Developing inter-sectoral linkages will be key to implementing medium-term climate actions in the tourism sector. Adaptive capacity in the sector can be built by developing resilient tourism infrastructure, reducing the vulnerability of forests and biodiversity to climate impacts, and improving food and energy security. GCF projects could focus on enhancing nature-based tourism, diversifying low carbon climate resilient tourism opportunities, with an emphasis on engaging vulnerable communities.

g. Strengthening the Enabling Environment

Policy and regulatory reform are required for improving Nepal's access, allocation, and delivery of climate finance. Improving the enabling environment will also result in an increased capacity for the government to absorb climate finance, and to mobilize private finance for investing in adaptation and mitigation actions. There is a need to undertake a detailed assessment of priority policy, regulatory and legislative initiatives that target specific sectors, and this could be led and carried out by central

¹⁰⁶ Government of Nepal, 'Nepal Disaster Report - The Road to Sendai', (Kathmandu: Government of Nepal, 2017).

¹⁰⁷ World Travel & Tourism Council (WTTC), 'Travel & tourism: Economic Impact 2015 Nepal', (2015).

¹⁰⁸ Government of Nepal, 'Synthesis of Stocktaking Report for National Adaptation Plan (NAP) Formulation Process in Nepal', (Kathmandu: Ministry of Population and Environment, 2017).

and LG in consultation with stakeholders from the private sector and civil society organizations.

i. Climate Change Planning and Policymaking

Nepal has a number of planning processes and national and sectoral policies which are not aligned. For example, the NDC and the draft LCEDS have overlapping mandates, and contain contradictory goals and targets. Therefore, there is a need to align targets, policies and strategies and this could be completed through revising the national climate change policy.

In addition, GoN does not have a prioritized costed action plan for climate change implementation, either in sectors or at the national level. Developing a prioritized and costed action plan would assist with allocating GCF finance, and this could be based on the NDC and other key climate planning frameworks. This could also be developed for specific sectors by line ministries and LG/PG in a coordinated manner. The NDA in the Government of Bangladesh, for example, is using the Bangladesh Climate Change Strategy and Action Plan as its strategic framework for prioritizing and allocating GCF financing.

ii. Federal Government

Effective coordination between ministries is essential for the efficient and effective utilization of climate finance. "Section 5" of this Strategy suggests detailed recommendations for improving stakeholder engagement and coordination, and this includes the reform of the NDA's governance mechanisms. The recently endorsed Climate Change Financing Framework (CCFF), and other existing coordination mechanisms, are also important for harmonizing climate action across sectors and these should be utilized in the identification and implementation of GCF investments. Coordination is essential for utilizing GCF finance in a manner that builds on existing initiatives, including projects and programmes that are financed from other climate change funds.

iii. Provincial Government (PG) and Local Government (LG)

With the devolution of power to PG and LG under federalism, there is an urgent need to assist the new governments to identify priority regulatory reforms to strengthen frameworks. Improving the planning capacity of municipal and provincial governments is essential, as there is a lack of experience implementing climate change projects. Developing a pipeline of climate investments is another immediate priority. There is a need to mainstream climate considerations into existing planning processes, such as the municipal planning guidelines, and to develop specific LG climate change action plans that cover both adaptation and mitigation actions (this could involve building on the LAPA and other climate initiatives that are underway at the local level). Moreover, PG and LG could be incentivized to develop climate action plans through making it a requirement for accessing climate funds from the GCF and other climate financing windows. 109

iv. Project Development

A key barrier to accessing climate finance is the lack of a regular pipeline of bankable projects. The shortage of a pipeline of viable investments for financiers and investors is due to numerous technical and knowledge barriers, such as high transaction costs and small project size. The GCF requires sophisticated projects that result in transformational changes, and are compliant with stringent environmental and social safeguards. Significant scale-up of government capacity, improved coordination of climate finance, and removal of private sector barriers is required to create a strong pipeline of investible projects. To help overcome these barriers, the NDA should explore the option of using the Project Preparation Facility (PPF), which supports Direct Access Entities (DAEs) in moving

¹⁰⁹ The experience from Cambodia could be relevant for incentivising improved climate change planning by LGs and PGs. In Cambodia, government ministries and agencies need an approved Climate Change Action Plan in order to access grants from the Cambodia Climate Change Grant Facility. The Facility is in the form of a challenge fund and was established with support from the Cambodia Climate Change Alliance, a consortium of development partners.

¹¹⁰ Green Climate Fund, 'Analysis of barriers to crowding-in and maximizing the engagement of the private sector, including Private Sector Advisory Group recommendations', (2017).

innovative projects ideas from concept to formal submission. Other development partners can also provide support on project development, including bilateral agencies in Nepal and multilateral partners such as the Climate Technology Centre and Network (CTCN).

v. Mobilizing Finance and Engaging the Private Sector

In Nepal, the biggest barriers to mobilizing domestic and international private investment are weak governance and institutions, and insufficient infrastructure.¹¹¹ These include inconsistent and ineffective plans, policies and regulations; inefficient public procurement processes, including the technical screening and appraisal criteria for making financing decisions; and the low capacity of private sector developers, which lack an understanding of the climate investment opportunity. In Nepal, many private sector project developers lack financial strength, project implementation experience, creditworthiness, and collateral to borrow locally. Private sector developers also lack experience developing climate adaptation and resilience projects. Businesses, particularly MSMEs, have difficulties articulating the business case of low carbon climate resilient development to investors and financiers.¹¹²

As many climate change projects will not be financially viable to investors, new business models will need to be developed to unlock private investment. The government issued the PPP Policy in 2015 and plans to establish a PPP Center to facilitate investment in infrastructure and services. While PPP engagement has been concentrated in urban areas, there is a potential to use PPPs for engaging the private sector in projects across the country. ¹¹³ The successful demonstration of PPP projects, and creating awareness about the financial benefits of climate-smart investment, will be vital for mobilizing private finance.

30

World Economic Forum (WEF), 'Building Resilience in Nepal through Public-Private Partnerships', (Geneva: WEF, 2015).International Finance Corporation, 'Climate Investment Opportunities in South Asia', (Washington D.C.: International Finance Corporation, 2017).

¹¹³ ibid.

5. Strengthening Engagement

A vital component for the effective deployment of GCF financing is strong institutional frameworks and effective stakeholder engagement and coordination. This section of the Engagement Strategy will provide recommendations on the roles and responsibilities of stakeholders and options for strengthening the capacity of the NDA and its engagement mechanisms.

a. Stakeholder Mapping

This section builds on the earlier mapping completed by the NDA, and assess the roles and responsibilities of different actors under the FG system.

The key GCF stakeholders in Nepal are described in "Annex B". The stakeholders assessed are the NDA, FG agencies, the PG and LG, AEs, civil society, the private sector, and development partners. These stakeholders should be engaged in projects and programmes as outlined in Table Two, which describes the roles and responsibilities of GCF stakeholders in Nepal.

Table Two: Roles and Responsibilities of Stakeholders

Agency	Roles	Responsibilities
National Designated Authority (NDA)	(i) Focal point for the GCF in Nepal; (ii) Managing coordination and engagement of stakeholders; (iii) Providing strategic oversight aligned to national priorities on proposal development and accreditation; (iv) Disseminating information and raising stakeholder awareness.	(i) Facilitate accreditation process for national institutions and provide 'Nomination Letters' to institutions; (ii) Facilitate funding proposal development and approval and support identification of co-finance; (iii) Support and monitor the implementation of GCF projects/programmes; (iv) Issuance of an 'Expression of Interest' for concept note preparation and the 'No Objection Letter' for full funding proposal; (v) Convene and coordinate national stakeholders on proposal preparation and implementation; (vi) Support AEs with building capacity for GCF project and programme preparation and implementation; (vii) Provide information on procedures for accessing GCF finance.
Climate Finance Steering Committee (CFSC)	(i) Provide policy guidance to the NDA; (ii) Coordination with wider stakeholders.	(i) Provide policy guidance to the NDA on emerging national and sectoral climate finance issues and priorities; (ii) Provide strategic direction on low carbon and climate resilient development in Nepal; (iii) Facilitate the coordination of relevant ministries to prioritize areas/projects for GCF funding in line with the national policy and strategies; (iv) Facilitate the creation of an enabling environment for policy and institutional reforms to address policy, capacity and institutional gaps; (v) Enhance coordination and collaboration among stakeholders.
Technical Committee (TC)	(i) Provide technical and advisory support to the NDA and the Climate Finance Unit; (ii) Issuance of 'Expression of Interest', 'No Objection' and 'Nomination letter'.	(i) Provide oversight on the country readiness programme and other climate finance readiness activities and strategic engagement framework to enhance direct access of funds from GCF; (ii) Facilitate consultative processes with key stakeholders at the national level to develop policy and financing strategies for national climate change priorities; (iii) Lead in advising NDA and accredited entities on national climate change priorities to develop concept notes and full funding proposals;

		(iv) Provide technical review of concept notes and full funding proposals in-line with the national priorities and support indecision making process and justification of 'Expression of Interest' OR 'No Objection' letter to be issued by NDA for concept note preparation OR project full funding proposal application; (v) Support the technical review of candidate institutions/ entities interested in becoming accredited to the Green Climate Fund to aid decision-making on issuance of 'Nomination Letter'; (vi) Provide update on the status of the various programme related to climate change; (vii) Provide technical expertise to the Climate Finance Unit as required.
MoF	(i) Develop the national budget; (ii) Support identifying co-finance; (iii) Economic policymaking.	(i) Approval of GCF funding proposals; (ii) Identify and approve co-finance for GCF projects and programmes; (iii) Climate relevant budget allocation and tracking of climate expenses; (iv) Development of systems to improve MRV.
MoFE	(i) Implementation and facilitation of climate change priority setting and policymaking; (ii) Focal point for UNFCCC.	(i) Proposal development and review; (ii) Support strategic allocation of GCF finance in line with the NDC and other national priorities; (iii) Member of the CFSC and TC.
NPC	(i) Facilitate sectoral coordination and planning processes on climate change.	(i) Sectoral and national reforms; (ii) Costing of climate change programmes; (iii) Monitoring and evaluation of climate investment; (iv) Member of the CFSC and TC.
Provincial Government (PG)	(i) Design climate change projects and programmes; (ii) Approval of GCF funding proposals; (iii) Strengthen the enabling environment.	(i) Support proposal development; (ii) Approve funding proposals; (iii) Identify and provide cofinance; (iv) Undertake regulatory and policy reform and strengthen planning systems; (v) Member of the CFSC and TC; (vi) Member of the Project Committee.
Local Government (LG)	(i) Designing and implementing climate change projects and programmes; (ii) Approval of development projects and programmes; (iii) strengthening the enabling environment.	(i) Support proposal development; (ii) Proposal approval; (iii) Act as an executing entity of projects and programmes; (iv) Undertake regulatory and policy reform and strengthen planning systems; (v) Provide co-finance for GCF projects and programmes; (vi) Member of the Project Committee.
Technical Ministries	(i) Designing and implementing climate change projects and programmes; (ii) strengthening the enabling environment.	(i) Supporting proposal development; (ii) Act as an executing entity of projects and programmes; (iii) Provide co-finance for GCF projects and programmes; (iv) Member of the CFSC and TC; (v) Chair the Project Committee.
AEs	(i) Advancing the objectives of GCF, including by developing climate resilient and low carbon development	(i) Manage concept note and proposal development; (ii) Consult with stakeholders on project development; (iii) Manage and execute GCF funded projects and programmes in compliance with fiduciary standards and safeguards; (iv) Engage regularly with the NDA

	pathways in Nepal; (ii) engage stakeholders to develop projects in eight GCF result areas and investment priorities.	and all other concerned national stakeholders in GCF processes; (v) Member of the Project Committee; (vi) Provide co-finance for GCF projects and programmes
Executing Entities (EEs)	(i) Entities through which GCF proceeds are channelled or used for the purposes of a funded activity; (ii) In charge of executing, carrying out or implementing eligible activities under the oversight of AEs.	(i) Develop and submit funding proposals for projects and programmes through AEs; (ii) Execute funding proposals; (iii) Monitor and evaluate project impacts; (iv) No need for accreditation but work under the supervision and overall management of the AE; (v) Provide co-finance for GCF projects and programmes; (vi) Member of the Project Committee.
Private Sector	(i) Invest in climate change projects; (ii) deploy technologies for achieving adaptation and mitigation.	(i) Act as an EE of projects and programmes (particularly MSMEs); (ii) Provide co-finance for GCF projects and programmes; (iii) Act as an EE and/or AE; (iv) Member of the CFSC and TC; (v) Member of the Project Committee.
Civil Society	(i) Advocate on behalf of minority groups in Nepal; (ii) Incorporate gender and indigenous rights into GCF programming.	(i) Monitor GCF implementation, especially as it relates to communities and gender; (ii) Indigenous Peoples Platforms, including the Nepal Federation of Indigenous Nationalities (NEFIN), can strengthen knowledge, technologies, practices and efforts of local communities and indigenous peoples relating to addressing and responding to climate change; (iii) Monitor NDA processes to improve transparency; (iv) Monitor and facilitate consultations with populations affected by GCF supported projects and programs; (v) Act as an executing entity of projects and programmes; (vi) Member of the CFSC and TC; (vii) Member of the Project Committee.
Development Partners	(i) Support Nepal with financing and implementing climate projects; (ii) Develop capacity on accessing and deploying climate finance.	(i) Act as an international implementing entity or executing entity; (ii) Provide technical assistance to NDA, DAE and relevant stakeholders for capacity building through the readiness and preparatory support; (iii) Provide co-finance for GCF projects and programmes.
Academic Institutions and Knowledge Institutions	(i) Address knowledge gaps.	(i) Participate in national consultations; (ii) Provide input on the strategic allocation of GCF finance; (iii) Support the development of funding proposals.

As described below in Figure Two, the NDA should undertake consultations with stakeholders and coordinate engagement in GCF processes. The key focal agencies for the GCF in Nepal are the NDA and the AEs, both of which have roles in allocating, mobilizing and disbursing GCF finance. The technical ministries and sub-national government must also be engaged in project preparation and implementation, including as EEs. Figure Two also shows the flows of funding from the GCF to Nepal's stakeholders, and this includes readiness assistance for institutional strengthening and project preparation and project/programme finance.

b. Strengthening the NDA's Engagement

Strengthening the NDA's engagement with GCF stakeholders in Nepal is a key requirement for the effective deployment and disbursement of GCF finance. This section outlines recommendations for improving the NDA's engagement with stakeholders, including technical ministries and PG and LG. The coordination structures are shown in Figure Two; and Figures Three and Four show the coordination required for proposal development and project and programme implementation.

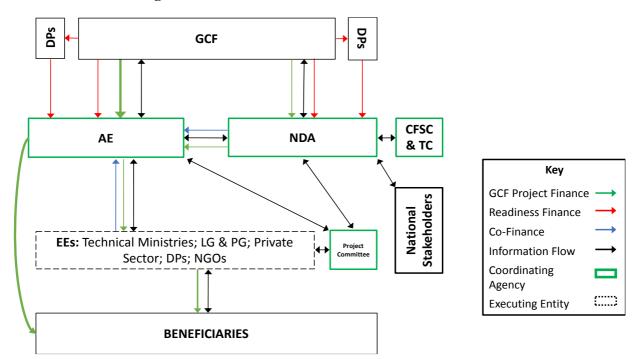


Figure Two: Fund Flows and Institutional Mechanisms

i. Governance mechanisms

- Climate Finance Steering Committee (CFSC) and Technical Committee (TC): The governing bodies of the NDA, the CFSC and TC, should broaden membership to include relevant technical ministries and also LG and civil society. This would result in the NDA's governance becoming more inclusive. But an increase in participants on the CFSC and TC would also result in increased transaction costs. Therefore, effective design is essential to mitigate tradeoffs between efficiency and inclusiveness.
- **Federal Government (FG):** There should be representation from the FG institutions relevant to the GCF priority areas shortlisted in this strategy. Currently, the TC does not have representation from the line ministries responsible for implementing climate change projects in the agriculture, water, energy, transport, and infrastructure sectors whereas the CFSC has broader line ministry representation. In addition, the committee members from the line ministries should have expertise in climate change. The NDA could request technical ministries to identify climate change focal points, which could represent line ministries on the CFSC and TC.
- **Provincial Government (PG):** PG should be represented on the CFSC and TC. PGs will have a role in implementing projects that cover multiple municipalities, and will have responsibilities for implementing and financing projects in LGs. PGs will have in role in oversight and implementation of projects, and will also be required to approve GCF proposals in their jurisdictions.

- Local Government (LG): LGs will have roles in designing and implementing projects and programmes, and LGs will also be required to approve GCF proposals in their jurisdictions.¹¹⁴
- **Private Sector:** Currently there is a private sector representative on both the CFSC and TC, but this representation does not reflect the diversity of the private sector in Nepal. Thus, it is recommended that the private sector seats are changed annually, and this rotates between business representatives from different sectors.
- **Civil Society:** The GCF puts a strong emphasis on engaging civil society, especially in terms of mainstreaming gender and indigenous rights into GCF programming. While the CF Steering Committee has a civil society representative, there is currently no seat for civil society on the TC. As with the private sector representative, a new civil society representative should be appointed annually given the diversity of Nepal's civil society.
- Improving transparency: To achieve inclusive and transparent representation, the private sector and civil society representatives on the CFSC and TC should be encouraged to regularly consult with the broader private sector and civil society community, including Indigenous Peoples (IPs).
- **Gender representation:** There should be increased gender representation of the officials in the NDA from the Ministry of Women Children and Social Welfare, and on the NDA's committees, in line with the GCF's emphasis on mainstreaming gender perspectives throughout its programming.

ii. Consultations

The NDA has a role as a conduit to disseminate information from the GCF to national stakeholders. These consultations and information flows are described in Figure Two.

- Over the short-term, consultations with the newly established municipal and provincial governments should take place to inform governments of GCF opportunities and to build capacity in developing proposals.
- The NDA should develop a communication strategy for disseminating information to stakeholders on a regular basis.
- As per the GCF Indigenous Peoples Policy, the GCF Gender Policy and Action Plan, and other relevant GCF procedures and policies; IPs, women and children, and other vulnerable and disadvantaged stakeholders should be consulted in the design or implementation of GCF activities.

iii. Coordination

Country coordination and multi-stakeholder engagement are critical for the effective preparation of funding proposals. These following approaches would increase coordination between stakeholders.

- Technical ministries should be strongly engaged in the development of concept notes and proposals. The lead technical ministries should review the concept note and proposal, including through a Project Committee, which should be chaired by the technical ministry. Within the technical ministries, the experts that are members of the TC could lead the review process.
- PG and LG should be involved in proposal preparation when the proposal is in their jurisdiction. PGs and LGs should have membership on the Project Committees, and both levels of government will be responsible for approval of funding proposals before the FG provides final approval as per Schedule 5 of the Constitution of Nepal. 115
- Improving coordination and harmonization of climate finance is also a priority. In 2009, development partners recognised this in the Donor Compact, but this has not been effectively implemented. GoN should look at developing coordination mechanisms, such as Technical Working Groups, to coordinate development partner assistance on climate change.

¹¹⁴ The roles of PG and LG are evolving with the transition to federal governance, and these roles will be updated once confirmed.

¹¹⁵ Government of Nepal, 'The Constitution of Nepal', (Kathmandu: Government of Nepal, 2015).

• The CCFF can be utilized for identifying synergies and coordinating/harmonizing GCF finance with other forms of climate finance. The CCFF will have a role in mainstreaming climate change into project pipelines, and this process could be used to identify potential projects and programmes that the GCF could finance. Where possible, other existing national processes should also be utilized, such as the Multi-Stakeholder Climate Change Initiative Coordination Committee (MCCICC) and the Climate Change Council (CCC), for identifying synergies and harmonizing proposal development with existing projects and programmes under implementation.

iv. Co-Finance

The requirements for GCF projects is that co-financing needs to be new and additional, and GCF projects require financial contributions not only in-kind contributions such as with GEF projects. The co-financing used in GCF projects should also be budgeted for delivering specific project/programme outputs.

- Globally, the vast majority of GCF projects have secured new and additional up-front cofinancing – that is, funding from sources other than the GCF. The GCF, however, does not yet have specific requirements on the level or sources of co-financing for projects/programmes.
- In the GCF Concept Note Users Guide, it is stated that "for projects/programmes that may not leverage a significant level of up-front co-financing, the AE may instead demonstrate a significant level of indirect or long-term investment mobilized as a result of the proposed activities".¹¹⁶
- In Nepal, co-financing could be sourced from FG and PG budgets. The NDA, AEs, and EEs should consult with Technical Ministries early in the proposal preparation stage to identify potential sources of co-finance from the national budget. Co-finance can be sourced from ongoing or planned initiatives that have thematic complementarity to the GCF proposals.
- The CCFF will be an important platform for identifying climate finance from government budgets, as this committee will coordinate representatives from relevant ministries to discuss resource availability for financing climate action.
- Development partners (DPs) could also be a key source of climate finance. The NDA should support AEs with identifying financing from DPs. Development Banks could be an important source of co-finance, particularly for future climate-resilient infrastructure investments. Approval from the FG will be required for mobilizing and blending development finance, as Article 59 (6) of the constitution delegates full authority to the FG to receive and mobilize foreign aid.
- The private sector is also an important source of co-financing. Private investment could be used for mitigation projects and programmes, which have required higher volumes of co-financing across the GCF project portfolio. The mobilization of significant amounts of private finance for adaptation is unlikely over the medium-term.
- Financing mechanisms could also potentially be a source of co-financing. Nepal has collected Rs 4 billion from taxing fuel products such as diesel and petrol in the Kathmandu Valley. This tax was formulated to finance programmes and activities focused on pollution control and management in Kathmandu. 117 In addition, GoN could establish a national climate change fund, which was proposed in the Climate Change Policy (2011). This fund could pool finance, including from the national budget and donors, which could be a source of co-financing for GCF investments. This fund would help to reduce the fragmentation of climate change financing in Nepal, and could create synergies between different sources of finance such as the aforementioned pollution tax. The presence of a climate change fund would also encourage development partners to channel climate finance through the government system.

-

¹¹⁶ Green Climate Fund, 'GCF Concept Users Guide', (Republic of Korea: Green Climate Fund, ND).

¹¹⁷ Ministry of Population and Environment, 'Priorities of the Environment and Climate Change Sector of Nepal', (Kathmandu: Government of Nepal, 2017).

- While the GCF has no specific requirement for co-finance as of 2017, the average co-financing level, the ratio of co-funding to the total volume of a project, was 43 percent. Co-funding levels vary significantly depending on the project: For mitigation projects, the average co-financing levels are higher (average level: 65 percent in 2017) than for adaptation projects (average level: 30 percent in 2017). Cross-cutting projects lie in between at 43 percent.¹¹⁸
- In addition, the larger-scale projects approved by the GCF globally have been heavily cofinanced. Therefore, if Nepal develops projects in the medium (USD 50-250 million) to large (USD > 250 million) financial brackets, it is likely that these will require more co-financing than projects in the smaller financial brackets.

v. Engagement with the GCF

The NDA should regularly engage with the GCF Secretariat on securing financing, diplomatic engagement, and advocating for Nepal's particular needs and requirements.

- The NDA should advocate for Nepal's needs with the GCF Secretariat and Board. Strong relations will be especially important once Nepal submits proposals for approval. The NDA's attendance at GCF related for will also improve its engagement, and the NDA should continue to attend the UNFCCC COP and other relevant GCF meetings.
- The GCF has previously held missions to Nepal. It is important that the NDA has a role in designing these missions to ensure they are fit for purpose and focused on addressing Nepal's needs, and also that the timing of these missions are suitable for the GoN.
- Lastly, the GCF is evolving. The NDA should have a regular channel of communication with the GCF Secretariat to ensure that relevant information is shared for example, the NDA needs to provide timely updates to stakeholders on all relevant matters, such as changes to template formatting and new procedures and policies and pilots like the Simplified Approval Process.

c. Project Cycle Recommendations

Based on the experience of project origination, prioritization and development of concept notes and full funding proposals in 2017, the project cycle has been reviewed and suggestions for strengthening the process are as follows.

i. Project Origination Phase

- The first step is the NDA conducting a request for proposals (RFP), and selecting proposals for submission to the Fund. The proposal ideas must be submitted by AEs using the concept note template and aligning the proposal ideas with the priorities identified in the Country Programme. The AE should demonstrate that it has consulted with relevant stakeholders, including FG and LG agencies, in the development of the project idea. The project must also identify EEs, which should be local agencies (including DAEs) if possible.
- At this stage of the project cycle, it is also important to identify potential co-financiers, which can include government agencies, private sector investors, and donors.
- Also, future RFPs that the NDA conducts could have a geographic focus, and proposal submissions should be based around the sectoral and thematic priorities outlined in this strategy and the Country Programme Document which will be developed following this strategy and endorsed by the NDA.

-

¹¹⁸ E Co, 'GCF insight: Co-financing', (2017).

ii. Proposal Development Phase

- The second phase of the project cycle is the development of the concept note and full funding proposal for submission to the GCF.
- At this stage, the Project Committee could be established that is chaired by the technical
 ministry and has representation from the AE, NDA, relevant government agencies (including
 sub-national authorities), and the EEs. This committee will provide oversight and guidance on
 the development of the concept note and the full funding proposal. The establishment of the
 Project Committee with vary in accordance with the project/programme, and is not a mandatory
 requirement.
- Civil society organizations, IPs, and other vulnerable and disadvantaged communities, should be consulted throughout the project preparation phase.
- Before a full funding proposal is submitted to the Fund, the AE should first develop and submit a concept note (pre-feasibility study). Following the NDA's review and validation, the Concept Note will be submitted to the GCF Secretariat for comments. If the project proponent submits a concept note through an AE to the GCF, the NDA will need to be copied on the submission.
- Once the concept note is reviewed by the GCF Secretariat, a full funding proposal (feasibility study) can be developed for submission to the Fund.
- Co-financing should be approved, and this could include finance from the national budget, international public finance, or private investment. The possibility of linking GCF projects with complementary projects should also be explored through consultations and coordination mechanisms such as the CCFF.
- The AEs may also require assistance with the development of the project documentation, and this could be provided by the PPF of the GCF and also development partners, including institutions such as the CTCN.

Federal Government GCF Proposal Approval No Objection Letter CFSC and **Provincial Government NDA** TC **Proposal Approval** Concept Note & Proposal Approval **Project Local Government** ΑE Committee Key **DPs CSOs EEs Proposal Approval** Consultations Preparatory **BENEFICIARIES** Assistance

Figure Three: Project Origination and Proposal Development Processes

iii. Proposal Approval Phase

- As the projects and programmes will be implemented in the jurisdiction of municipalities and provinces, both these levels of government will need to provide approval. As per the constitution, the approval of the FG will also be required for the implementation of a GCF project in LG.
- Once domestic approval is secured from FG and sub-national governments, the NDA should issue the no-objection letter.
- The project proponent may submit a proposal to the GCF in conjunction with the no-objection letter signed by the NDA.
- At this stage, the GCF acknowledges the submission and reviews it for completeness. The
 NDA should be included in the different stages of communication. The GCF Secretariat will
 carry out an initial review, which will be followed by an independent assessment by the
 Independent Technical Advisory Panel (ITAP). Following the ITAP review, the proposal is
 submitted to the GCF Board for consideration no later than three months before the Board
 Meeting where the funding proposal will be considered.
- The GCF Board will then make one of the following decisions by consensus: (1) approve funding; (2) approve funding with the conditions and recommendations that modifications are made to the funding proposal; (3) reject the funding proposal. The GCF sends a notification to the AE, interim trustee and NDA about the funding decision.

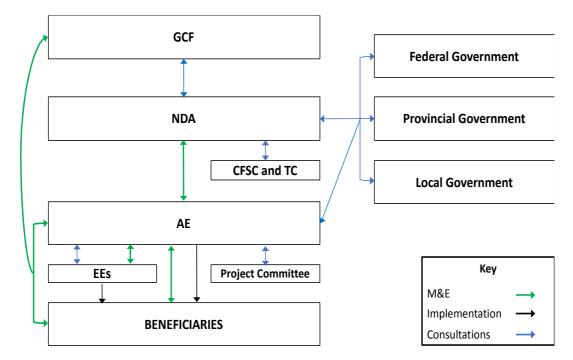


Figure Four: Implementation Processes

iv. Implementation

- The third phase of the project cycle is implementation of GCF projects and programmes. These linkages are illustrated in Figure Four.
- The AE has responsibility for monitoring implementation and communicating progress to the GCF, including through semi-annual progress reporting and a final evaluation report after the project or programme has been closed.
- The NDA will develop a tool for monitoring and evaluation of project and programme implementation by the AE. The NDA should maintain communication with the AE, EEs, and government partners and request updates on implementation progress.

- The Project Committee established in the proposal development phase could also monitor implementation progress, and the NDA can also receive regular updates through this mechanism.
- The NDA also has a role in communicating project implementation progress to international partners, including at the UNFCCC COP and other fora.
- The NDA should also collect best practices and integrate these experiences into the design of future GCF projects and programmes.
- Lastly, the NDA, in collaboration with the CCFF, has a role in tracking the climate finance flows to ensure that GCF financing is aligned to national priorities articulated in the Climate Change Policy (2011) and the NDC.

d. Funding Instruments and Operational Modalities

i. Instruments

The GCF uses four financial instruments: grants, concessional loans, equity and guarantees. Grants include reimbursable grants (providing funding after expenses have been incurred) and non-reimbursable grants. Concessional loans include senior loans and subordinate loans. It is important to note that two or more instruments may be blended, with more than one instrument being used by the Fund itself on a particular project, or instruments being combined with instruments from other financiers.¹¹⁹

In the Least Developed Countries (LDCs), most projects are adaptation focused and these have mostly been financed by public grants from the GCF and co-financiers. Among the GCF projects implemented in LDCs, loan financing has not yet been widely deployed. In countries where there have been projects financed by loans, these have been mostly for mitigation investments in the energy sector. ¹²⁰

ii. Simplified Approval Process (SAP)

The SAP is an application process for smaller-scale projects or programmes, which are valued up to USD 10 M with low levels of environmental and social risk and impacts. This process was designed to simplify and streamline the approval of certain small-scale projects, with a strong emphasis on DAEs. This modality will be applicable to Nepal once the accreditation applications for DAEs are approved.

iii. Enhanced Direct Access (EDA)

The EDA pilot programme is a modality for devolving funding decision-making to the DAE. The DAEs, under this modality, will screen, assess and select specific pilot activities for implementation. To ensure strong country ownership and multi-stakeholder engagement, the entity will need to have a decision-making body that should include civil society, the private sector and other relevant stakeholders, and should be sensitive to gender and IPs considerations. This modality could be utilised following the approval of the Nepal DAE applications.

iv. Private Sector Operations¹²¹

The GCF has set up the Private Sector Facility (PSF) to engage the local and global private sector to invest in mitigation and adaptation activities. PSF aims to change the current paradigm by de-risking the delivery of private capital and scaling up private sector investment flows for low carbon and climate

¹¹⁹ Fayolle, V. and Odianose, S., 'Green Climate Fund Proposal toolkit 2017', (London: Acclimatise and Climate and Development Knowledge Network, 2017).

¹²⁰ The "Tina River Hydropower Development Project in the Solomon Islands" was financed by a GCF loan. The "Sustainable Landscapes in Eastern Madagascar" is a private sector project with a mitigation and adaptation focus, and is financed by GCF equity. The "Senegal Integrated Urban Flood Management Project" is an adaptation project financed by a GCF grant, but also has loan co-financing. In addition, there are three regional/global projects with a focus on energy that are financed by GCF equity.

¹²¹ Green Climate Fund, 'The Green Climate Fund's Private Sector Facility', (Republic of Korea: Green Climate Fund, 2017).

resilient development. Project or programme proposals can be submitted to the PSF for approval at any time, and the PSF also prioritizes specific areas for investment through Requests for Proposals. The GCF will issue a new RFP in 2018 for the Micro-, Small, and Medium-Sized Enterprises Programme. The investment goals of this programme are to provide access to finance for MSMEs catalysing innovation and improvements for climate resilient low carbon growth with a special focus on vulnerable states. In Nepal, AEs should develop proposals that mobilize finance for local MSMEs in the agriculture, energy and transport sectors.

v. REDD-plus Pilot Programme

The REDD-plus Pilot Programme was approved in 2017. This pilot results-based payments (RPBs) programme will allow for the operationalization of the UNFCCC decisions for REDD-plus and the testing of procedural and technical elements of results-based payments in the context of the GCF. Given Nepal's stage of REDD-plus readiness, and the current support from the CIFs, this programme will not be a priority over the medium-term.¹²²

e. Engagement with Accredited Entities

AEs are accountable directly to the GCF's Board for the overall management of projects, as well as for the financial, monitoring and reporting aspects of project activities.¹²³ AEs can be **Direct access entities** (**DAEs**), which correspond to subnational, national or regional entities; or **International access entities** (**IAEs**), which may be bilateral, multilateral or regional entities.

- The GCF has a strong emphasis on deploying and disbursing climate finance through country systems via DAEs, and moving forward it is expected that a higher proportion of DAE developed proposals will be approved by the Fund.
- Thus far, the proposals selected for development in Nepal are being formulated by international entities. Future projects and programmes should be developed by DAEs once these are accredited in Nepal. The status of accreditation applications is outlined in Table Three.
- Based on an analysis of the comparative advantage of AEs, potential GCF projects and programmes that the AEs could develop are listed below. The purpose of these suggestions are to guide AEs in the development of funding proposals. However, AEs are not mandated to follow these recommendations.

i. Alternative Energy Promotion Centre

The Alternative Energy Promotion Centre (AEPC) applied for accreditation in April 2017 and will implement projects in the mitigation, adaptation and cross-cutting thematic areas. The maximum size of the projects implemented will be in the small size bracket (USD 0–50 million), and AEPC will be able to manage GCF projects that have minimal environment and/or social risks, and/or impacts.

AEPC is semi-autonomous agency and is managed by the Ministry of Forest and Environment (MoFE). AEPC is GoN's focal agency for promoting energy technologies that generate up to 10 megawatts, with a strong focus on energy access for households – including off-grid electrification and clean cooking technologies. AEPC provides grants and loans, including through the Central Renewable Energy Fund (CREF), a financial intermediary that manages funds for RE projects.

AEPC acts as a technical intermediary between the Government and donors who provide policy direction and finance for RE in Nepal, and the financial intermediaries — banks, private technology providers, non-governmental organisations (NGOs) and LG — that channel finance for RE investment to beneficiaries. AEPC's activities include RE policy formulation, planning and

¹²² Green Climate Fund, 'Request for proposals for the pilot programme for REDD - plus results - based payments', Meeting of the Board, Document GCF/B.18/06, (Republic of Korea: Green Climate Fund, 2017).

¹²³ While one AE needs to be designated as the lead implementing agency, two or more AEs can be involved in project implementation if engaged as an executing entity.

facilitating the implementation of policies and plans. From 2012-2017, AEPC was engaged in implementing the National Rural Renewable Energy Programme (NRREP).¹²⁴ Going forward, AEPC will implement the National Renewable Energy Framework (NREF), which will be an overarching framework to coordinate RE policies and programmes, engage stakeholders and mobilise finance.

With its extensive experience managing RE projects and programmes, AEPC will be a key entity for implementing RE projects. **Investments delivered by AEPC will be focused on small-scale renewable energy technologies, including solar, micro-hydro, biomass, and wind power. It is recommended that AEPC focuses on implementing the following projects.**

- Developing RE projects that power municipal services, including schools and hospitals.
- Waste-to-energy projects in municipalities, with a strong emphasis on engaging the private sector in implementation.
- RE projects targeted at Nepal's productive sectors, with a focus on low carbon climate resilient activities in the agricultural and water sectors.

Table Three: Application Status of Accredited Entities

Institution Name	Application Date	I nemec \$176		Fiduciary Function	ESS Category	
Alternative Energy Promotion Center (AEPC)	April 2017	Mitigation, Adaptation & Cross Cutting	Small	Basic & Specialized: Project management	В	
National Trust for Nature Conservation (NTNC)	April 2017	Adaptation & Cross Cutting	Micro	Basic & Specialized: Project management	С	
Town Development Fund (TDF)	Recently Nominated	Adaptation & Mitigation	Medium	Basic & Specialized: Project Management Fiduciary: Granting & Loans	В	
Nepal Investment Bank Limited (NIBL)	Recently Nominated	Adaptation & Mitigation	Medium	Basic & Specialized: Project Management Fiduciary: Loans	В	

ii. National Trust for Nature Conservation

The National Trust for Nature Conservation (NTNC) applied for accreditation in April 2017 for implementing micro projects (USD 0-10 million). NTNC is being accredited for project management, and will be able to implement projects that have minimal environment and/or social risks/impacts. NTNC is an autonomous, not-for-profit, non-government organization, with a mandate to work in the field of nature conservation in Nepal.

The experience of NTNC includes implementing integrated conservation and development projects, with a strong focus on eco-tourism. The support on tourism includes raising funds from tourists through user-pays models to finance community development. Past projects implemented by NTNC also include support on improving energy access, including through providing solar power, microhydro and biogas to off-grid users in and around conservation areas. Currently, the projects

¹²⁴ Dave Steinbach, Sunil Acharya, Ramesh Prasad Bhushal, Raju Pandit Chhetri, Basanta Paudel and Krity Shrestha, 'Financing inclusive low-carbon resilient development: the role of the Alternative Energy Promotion Centre in Nepal', *IIED Country Report*, (London: IIED, 2015).

implemented by NTNC cover the lowlands, the mid-hills (Kathmandu Valley) and the high mountains. NTNC has established an Energy and Climate Unit to address the emerging issues of climate change and renewable energy technologies. NTNC also has experience in implementing Global Environment Fund (GEF) projects, and has acted as an implementing partner for UNDP projects funded by the GEF.

There is the potential to develop climate proposals that have a strong conservation component. NTNC can also implement projects focused on small-scale RE. These can result in co-benefits to the tourism industry through, for example, providing power to tourism operators, and thereby contributing to achieving rural development. With the transition to federalism, NTNC will need to strongly engage municipalities.¹²⁵

Therefore, NTNC can implement projects focused on the forestry, food, water, and energy sectors. NTNC could implement the following projects and programmes.

- Integrated investment projects in protected areas and conservation areas. Such as building resilient livelihoods in and around protected areas and nature reserves, with a link to forestry, eco-tourism and DRR.
- A national programme on implementing eco-system based adaptation approaches in the water, food and forestry sectors.

iii. Town Development Fund

The Town Development Fund (TDF) will submit an application for accreditation in 2018. The TDF will implement projects up to the medium size bracket (USD 0-250 million) in adaptation and mitigation. It is expected that the TDF will be accredited to have a project management role and also specialized fiduciary functions for providing grants and loans, and will be able to implement activities with potentially mild adverse environment and/or social risks/impacts.

The TDF is a financing agency that provides support to develop climate proofed infrastructure. The TDF can raise finance from international public sources such as the GCF and multilateral development banks and blend it with domestic public and private finance. Given the narrow revenue base of municipalities and their limited capacity to finance capital expenditures, development assistance is crucial to develop climate resilient infrastructure.

The TDF is therefore an important entity for meeting Nepal's infrastructure gap, and also has an important role in implementing mitigation and adaptation actions. The TDF's major financing sectors are:

- Social infrastructure projects (drainage, public toilets, and slum area improvements);
- Basic utility infrastructure projects (such as drinking water and sanitation systems, roads, bridges, and public/municipal buildings);
- Economic or revenue generating infrastructure projects (such as transport systems and market place development).

The TDF is a financial intermediary that will have a vital role to play in the implementation and financing of GCF projects and programmes. Over the medium term, the TDF could implement the following projects and programmes.

- Implementation of low-carbon climate-resilient urban plans. This programme would involve mainstreaming climate change into urban planning frameworks, and implementing and financing pilot projects in municipalities.
- Waste-to-energy systems, which are linked to municipal solid waste management. This would also contribute to the electrification needs of municipalities.

¹²⁵ Under the constitution, protected areas, such as the Annapurna Conservation Area, will continue to be managed by the Federal Government

¹²⁶ Town Development Fund, 'Final Business Plan', (2017).

• Implementation of a low-carbon public transport system in municipalities. There is a high potential for developing an electrified public bus system, and GCF finance could be used to leverage private investment.

iv. Nepal Investment Bank Limited

The Nepal Investment Bank Limited (NIBL) will submit an application for accreditation in 2018. The NIBL will implement projects in adaptation and mitigation and will have a specialized fiduciary function for providing loans. It is expected that NIBL will be accredited to implement activities with potentially mild adverse environment and/or social risks, and/or impacts.

The NIBL is a commercial bank with a long history of banking in Nepal. NIBL has a strong antipoverty programme where social issues have been integrated into project design – poverty reduction and climate resilience are closely linked and are areas of focus for the country. NIBL has been the lead bank on a number of hydropower projects and other renewable energy projects in Nepal.

The NIBL could implement GCF projects and programmes in the food, water and energy sectors. The NIBL will have a role in providing finance to households and engaging the private sector in climate action. The rate of concessional financing could be lowered through blending NIBL credit with GCF finance. It is recommended that the following projects should be implemented by NIBL.

- The NIBL could finance RE investments, including through providing concessional loans to households and businesses for adopting RE technologies such as solar home systems and micro-hydro systems.
- Providing concessional loans to Micro, Small and Medium Enterprises (MSMEs) to achieve climate adaptation and mitigation, including farmers investing in solar-pumps.

v. Engagement with International Accredited Entities (IAEs)

Over the medium-term, IAEs will continue to have a role in implementing projects and programmes in Nepal. The first proposals being developed are being implemented by IAEs.

The local entities currently applying for accreditation cover most of the major climate sectors in Nepal and DAEs should preferentially implement projects. But there may be select sectors where IAEs continue to have a distinct advantage. In addition, transboundary, regional and international projects can be financed by the GCF, and IAEs may be engaged to implement these projects and programmes over the medium-term.

f. Capacity Development

i. NDA

- A key role of the NDA is supporting project origination, and appraising project proposals for submission to the GCF. The NDA should develop capacity in this area, including through developing knowledge of the best practices for achieving climate adaptation and mitigation in Nepal, and building understanding of the particular investment requirements of the GCF.
- The NDA also should have a detailed understanding of the best available technologies for Nepal's context, and the policy and regulatory reforms required for mobilizing public and private international climate finance.
- In relation to implementation, the NDA requires training on monitoring and evaluation of project and programme implementation. This includes monitoring the implementation of safeguards, and supporting the tracking of GCF financial allocations to ensure it meets national and sectoral priorities.
- Cross-country learning should continue to take place between NDAs. Globally, NDAs are
 facing similar challenges and there is an opportunity for the GoN NDA to learn best practices
 from other countries. The GoN NDA should also share its lessons and best practices with the
 global community.

• The high turnover of senior officials in the MoF can also have negative impacts on the capacity of the NDA. This results in delays and disruptions, as newly appointed officials require time to familiarise themselves with GCF procedures. This also affects the institutional memory of the NDA, and there should be strong institutional processes in place to minimise the impact of staff turnover.

ii. DAEs

- The capacity of DAEs also needs to be developed. In particular, DAEs require a strong understanding of GCF procedures and investment criteria to ensure that GCF resources are effectively mobilized.
- The NDA should inform DAEs about the types of financing instruments and new instruments being piloted.
- DAEs also lack capacity in concept note and funding proposal development. The NDA should support DAEs with developing projects and programmes that are fundable and facilitate the access of readiness assistance for project preparation.

iii. Stakeholders

• The understanding of wider stakeholders in Nepal also needs to be enhanced. The NDA should continue to undertake consultations, especially with the new sub-national governments, and disseminate relevant information through publications and other communication mediums. In line with this, the NDA is developing a publication to encourage the engagement of LGs in GCF processes and to inform LGs about the GCF, the role of the NDA, and the GCF proposals under development.

g. Project Prioritization

Project prioritization is a process for allocating limited finance through using a set of quantitative or qualitative criteria. It provides an important opportunity for the NDA to test the robustness of a project concept in terms of logic, risk and sustainability; reject unsuitable project alternatives; and identify those projects and programmes that should be developed as full funding proposals.

The NDA has developed a process for prioritization, which was used in the first call for proposals the NDA undertook. This process uses multi-criteria analysis to evaluate proposals. The criteria used in the first evaluation included Nepal's national and strategic priorities and the GCF's results framework and investment criteria. To strengthen this process, weighted criteria are suggested in "Annex C".

i. Screening Process

The first step in reviewing and appraising project proposals is screening using a checklist. Checklists are invaluable in helping to ensure that factors are not overlooked. Currently, the Climate Finance Unit of the NDA uses a checklist to shortlist projects based on template completeness – this checklist has been expanded in "Annex C". Additional criteria have been suggested, and this includes consultation with project stakeholders and the climate relevance of the project. If the proposal template meets these minimum criteria, it will then be screened by the TC using multi-criteria analysis.

ii. Multi-Criteria Analysis (MCA)

MCA involves scoring different attributes, and then weighting between attributes so that an overall score can be derived, which allows a comparison between projects. MCA is not limited to a single objective, allowing for consideration of a wide range of objectives and criteria (e.g. social, environmental, as well as economic criteria). To elicit the ranking, MCA is undertaken by experts or wider stakeholders – the selection of the committee that undertakes the MCA is a vital part of the

process. The benefit of using a MCA approach is that it is pragmatic, easily understood, and able to be adapted to nearly any type of project.

MCA requires two critical choices: (1) the selection of criteria by which alternatives will be assessed; and (2) the weighting of criteria. The selection of criteria is essential for capturing the most important expected impacts of a project and for assessing and evaluating projects. Suggested criteria are outlined in "Annex C", and these are designed to evaluate whether the project proposals are aligned with national priorities, the GCF investment criteria and GCF policies, and broader criteria that includes climate vulnerability and alignment to the Sustainable Development Goals.

The weighting of these criteria is also an important choice. The weighting can simply be uniform, wherein all criteria are equally considered, or the weighting may be subjectively set with weights determined via consultation or expert guidance to reflect the relative importance of the decision criteria. The weighting suggested in "Annex C" is uniform, which results in a simplified process, but the NDA may alter the weighting if particular criteria is considered to be of higher importance.

6. Recommendations and Way Forward

i. Investment Strategy

- Based on national priorities, the assessment of past climate finance flows, and national consultations, the following GCF thematic areas have been short-listed for the GCF to finance over the medium-term: (i) "Health, Food and Water Security"; (ii) "Resilient Infrastructure"; (iii) "Forestry"; (iv) "Transport"; and (v) "Infrastructure". The remaining GCF priority areas (i) "Ecosystem and Ecosystem Services"; (ii) "Livelihoods of people and communities"; (iii) "Energy efficiency" are included as cross-cutting areas.
- Investments should be targeted to benefit the most vulnerable population groups, including IPs and disadvantaged communities, which have the lowest capacity to adapt and will be more vulnerable to the impacts of climate change.
- There are strong linkages between these thematic areas, as GCF projects in the agricultural and forestry sector could, for example, contribute to building climate resilience in livelihoods and ecosystems. GCF projects will build resilience through investments in infrastructure and in the productive sectors.
- Lastly, given the importance of tourism to Nepal's economy and its exposure to climate change, this sector should also be considered a strategic priority for the GCF in Nepal.

ii. Strengthening the Enabling Environment

- Policy and regulatory reform are required for improving Nepal's access, allocation, and delivery of climate finance.
- Improving the enabling environment will also result in an increased capacity for the government to absorb climate finance, and to mobilize private finance for investing in adaptation and mitigation actions.
- There is a need to undertake a detailed assessment of priority policy, regulatory and legislative initiatives that target specific sectors, and this could be led and carried out by the government in consultation with national stakeholders. This assessment could be linked to revising the national climate change policy and developing a national climate change action plan. It could involve harmonizing overlapping policies and planning frameworks, and strengthening national and sectoral coordination on climate change financing.
- There is also an urgent need to assist the new PGs and LGs to identify priority regulatory reforms to strengthen frameworks, and this could involve building on the LAPA and other climate initiatives that are underway at the local level.
- Another key barrier to accessing climate finance is the lack of a pipeline of sophisticated bankable projects that meet GCF investment criteria, and to help overcome these barriers the NDA should support DAEs with accessing assistance for project development.
- Lastly, mobilizing private investment will require strengthened governance and institutions.
 Many private sector project developers in Nepal also lack financial strength, project
 implementation experience, creditworthiness, and collateral to borrow locally. And as many
 climate change projects will not be financially viable to investors, new business models will
 need to be developed to unlock private investment and the use of PPPs should be scaled up
 across the country.

iii. Improving Public Financial Management

• To improve the accuracy of the climate expenditure tracking under the budget code, it is recommended that the Aid Management Information System (AMIS) also tracks climate change expenditure for off-budget assistance. This should also be disaggregated, where possible, to assistance channelled to climate change adaptation and mitigation, and across sectors and geographic units. The Climate Finance Management Information System, which is under development, will also be linked to the AMIS.

iv. Strengthening the NDA's Engagement

- Strengthening the NDA's engagement with GCF stakeholders in Nepal, including IPs and CSOs, is a key requirement for the effective deployment and disbursement of GCF finance.
- To fulfil their mandates, the governing bodies of the NDA, the Climate Finance Steering Committee (CFSC) and TC, should broaden membership to include relevant technical ministries and sub-national governments. The representation of the private sector and civil society should also be more inclusive, and stakeholders should be encouraged to regularly consult with the broader private sector, civil society organizations (CSOs), IPs, and disadvantaged and vulnerable populations.
- The NDA could request technical ministries to identify climate change focal points, which could represent line ministries on the CFSC and TC.
- There should be increased gender representation of the officials in the NDA, and on the NDA's committees, in line with the GCF's emphasis on mainstreaming gender perspectives throughout its programming.
- Consultations with the newly established municipal and provincial governments should take
 place to inform governments of GCF opportunities and to build capacity in developing
 proposals. The NDA should develop a communication strategy for disseminating information
 to stakeholders on a regular basis.
- Technical ministries and PGs and LGs should be strongly engaged in the development of concept notes and proposals. Project Committees could be established, and these should be chaired by the technical ministry and have representation from relevant stakeholders.
- GCF coordination processes should be integrated with the CCFF, and where possible other existing national processes should also be utilized.
- The requirements for GCF projects is that co-financing needs to be new and additional, and co-financing could be sourced from FG and PG budgets, development partners, and the private sector.
- Financing mechanisms can also be a source of co-financing, including the fund which has been capitalized by taxing fuel in the Kathmandu Valley. The GoN should assess the feasibility and benefits from establishing a national climate change fund, which was proposed in the Climate Change Policy (2011).
- The NDA should regularly engage with the GCF Secretariat on securing financing, diplomatic engagement, and advocating for Nepal's particular needs and requirements. The NDA should develop strong relations with the GCF Secretariat and Board, including through attending GCF related meetings. The NDA should also have a regular channel of communication with the GCF Secretariat to ensure that relevant information is shared.
- Lastly, the NDA and/or NPC should commission studies and assessments to take stock of the landscape of completed, existing, and planned climate change initiatives and investments.

v. Project Cycle Recommendations

- In the project origination phase, the AEs should submit proposal ideas using the concept note template. The AE should demonstrate that it has consulted with relevant stakeholders, including FG and LG agencies, in the development of the project idea, and identify potential co-financing.
- Future proposals solicited by the NDA could have a geographic focus, and proposal submissions should be based around the sectoral and thematic priorities outlined in this strategy.
- The development and approval of funding proposals will require strong engagement and approval from all levels of government. And under the constitution, the approval of the FG will also be required for the implementation of a GCF project in LGs.
- Civil society organizations should be consulted, especially organizations focused on gender and organisations representing IPs.
- In terms of project implementation, the AE has responsibility for monitoring implementation and communicating progress to the GCF. The NDA should also undertake project and

- programme monitoring and evaluation through establishing regular communication channels with the AE, EEs, and other key stakeholders.
- The Project Committee established in the proposal development phase could also monitor implementation progress.
- The NDA should also collect best practices and integrate these experiences into the design of future GCF projects and programmes.

vi. Funding Instruments and Operational Modalities

- The NDA should utilize the SAP and EDA modalities once the accreditation applications are approved.
- Over the medium-term, the NDA should develop proposals for the PSF on mobilizing finance for MSMEs in the agriculture, energy and transport sectors.
- The REDD-plus Pilot Programme will not be a priority over the medium-term, given Nepal's stage of REDD-plus readiness and the current support other development partners on REDD-plus.

vii. Engagement with Accredited Entities

- The GCF will have an increasingly strong emphasis on deploying and disbursing climate finance through country systems via DAEs, and future projects and programmes should be developed by DAEs.
- TDF could implement the projects and programmes that include (1) the implementation of low-carbon climate-resilient urban plans; (2) waste-to-energy systems, which are linked to municipal solid waste management; and (3) a low-carbon public transport system in municipalities.
- NTNC could implement the projects and programmes that include (1) integrated investment projects in protected areas and conservation areas, with a link to forestry, eco-tourism, and DRR; and (2) a national programme on implementing eco-system based adaptation approaches in the water, food and forestry sectors.
- AEPC could develop (1) RE projects that power municipal services, including schools and hospitals; (2) waste-to-energy projects in municipalities; and (3) RE projects targeted at productive sectors, with a focus on the agricultural and water sectors.
- NIBL could implement projects on (1) RE investments, including through providing concessional loans for adopting technologies; and (2) providing concessional loans to MSMEs to achieve climate adaptation and mitigation.
- Over the medium-term, IAEs will continue to have a role in implementing projects and programmes in Nepal. Over the long-term, there may be select sectors where IAEs continue to have a distinct advantage, and IAEs could also be engaged to implement transboundary, regional and international projects.

viii. Capacity Development

- The NDA should develop capacity in project origination and appraising project proposals. The NDA also should also develop a detailed understanding of the policy and regulatory reforms required for mobilizing public and private international climate finance.
- The NDA requires training on monitoring and evaluation of project and programme implementation.
- Cross-country learning should continue to take place between NDAs, and the GoN. NDA should also share its lessons and best practices with the global community.
- The capacity of DAEs need to be developed. DAEs require capacity building to understand GCF procedures and investment criteria, and on concept note and funding proposal development.
- The awareness and understanding of wider stakeholders in Nepal should be built and the NDA should continue to undertake consultations, especially with the new LGs and PGs.

ix. Readiness Assistance and Project Preparation Support

- In addition to the ongoing readiness support the NDA is receiving, the GoN can access USD 1 million per year annually from the GCF.
- Readiness assistance could be used for revising the national climate change policy, developing a national climate change action plan, and establishing a national climate fund.
- Readiness assistance should continue to be used for building the capacity of DAEs.
- The NDA should also explore using readiness assistance to develop a pipeline of GCF projects, which could be lined to the national climate change action plan.
- AEs should be supported on project and programme preparation through the PPF of the GCF. Development partners can also provide support, including bilateral agencies engaged in climate change in Nepal, and multilateral institutions such as the CTCN.

7. Annexes

a. Assessment of National Priorities and GCF Criteria

Nepal has defined national priorities and commitments through national policies, strategies and plans with regard to climate change. Key national priorities related to investment opportunities for GCF fund are as follows.

i. Table Four: Alignment of GCF Adaptation Impact Areas with Nepal's Adaptation Priority Areas

GCF Strategic Impact Areas	Livelihoods of people and communities	Health, food and water security	Infrastructure and built environment	Ecosystems and ecosystem services
Climate Change Policy, 2011	 Forecast water-induced disaster and risks. Farmers' schools to conserve local crop varieties, promote local and indigenous knowledge and technologies. Utilization and conservation of forest resources as a means of alternative livelihood. 	 Develop modern water conservation technologies for flood control and irrigation systems. Forecasting and prevention of vector-borne, infectious and communicable diseases. Developing and expanding low methane emitting agricultural technologies. Developing drought and floods tolerant crop varieties. 	Formulate and implement standards for climate resilient bridges, dams and other infrastructure.	 Soil and water conservation through source protection, rainwater harvesting and environmental sanitation. Sustainable management of forests, agro-forestry, pastures, rangeland and soil conservation. Basin approach for water management.
National Adaptation Programme of Action (NAPA)	 DRR practices, including community-led programmes, providing insurance and developing an early warning system. Support Glacier Lakes Outburst Floods (GLOF) vulnerable communities 	 Introduction of climate resilient crops, improved water management, organic farming, and establishment of cooperatives. Sustainable agricultural land use system, agro biodiversity management. 	Installation of disaster risk reduction structures (e.g. early warning system).	Ensure ecosystem health and services through watershed and landscape level planning and management.

NAPA	through alternative livelihood opportunities.	Water supply and sanitation programmes in both rural and town areas.		
Nationally Determined Contribution (NDC)	 Development of the NAP, which will determine Nepal's adaptation needs post-2020. Address climate-induced disasters in earthquake affected areas. 	Enhance agricultural sector by adopting climate-friendly technologies and reducing climate change impacts.	• Strengthen the implementation of Environment-Friendly Local Governance (EFLG) Framework.	Deal with the impacts of climate change in mountains, hills and low- land ecosystems and landscapes.
Low Carbon Economic Development Strategy (draft)		 Climate smart agriculture technologies will be developed. low carbon agriculture will be promoted, and a public awareness campaign will be conducted. Increased food security from using traditional farming methods. More efficient use of water for irrigation. 	To develop climate change resilient infrastructure through the development, use and promotion of the technologies that emit low carbon.	 Promote ecosystem-based adaptation to reduce emissions. Capacity of ecosystem adaptation and carbon sequestration will be developed by emphasizing on agro-forestry and diversification.
14th Periodic Plan (2016/17 – 2018/19)	 Conduct environment education. Monitoring and forecasting of GLOF. 	 Identification and prevention of infectious and vector borne diseases. Awareness programme on environmental sanitation. Develop environment friendly agriculture by conserving local crop varieties. 	Focus on the construction of infrastructure that are environment friendly and resilient to climate change.	 Mainstream ecosystem based adaptation and implementation of REDD. Capacity building of local people for adaptation and mitigation of negative impact of climate change in ecosystem.
Sectoral Policy, Plans and Strategies	 National Disaster Management Policy and Strategy (Final	 Agriculture Development Strategy Action Plan 2014 Improved resilience of farmers to climate change, disasters, price volatility, and other shocks. Develop modern water conservation technologies for flood control, irrigation systems. 		Nepal National Biodiversity Strategy and Action plan 2014- 2020 Enhancing forest-based livelihood (promoting PES). Improvement in conservation of biodiversity in community- managed forests.

ii. Table Five: Alignment of GCF Mitigation Impact Areas with Nepal's Mitigation Priority Areas

GCF Strategic Impact Areas	Energy generation and access	Transport	Building cities, industries and appliances	Forest and Land use
Climate Change Policy, 2011	Reduce GHG emissions through development and utilization of clean, renewable and alternative energy.	Develop and promote transport industries that use electricity (electric train, ropeway, etc.).	Auditing of energy intensity of industries every two years.	 Carbon sequestration through scientific management of forests, formulation of land use plan and control of deforestation. Develop scientific land use system.
Nationally Determined Contribution (NDC)	 Generation and utilization of hydroelectricity. Scaling-up production of renewable energy technologies by 2030. Energy generation from waste. 	 Develop environment friendly sustainable transport system, such as bicycles and nonmotorized transport. Introduce fuel tax for air quality improvement in Kathmandu valley. Promote transport industries that use electricity e.g. electric train, rope way, cable car etc. 	By 2025, Nepal will strive to decrease the rate of air pollution through proper monitoring of source of air pollutants like wastes, old and unmaintained vehicles, and industries	•
National Adaptation Programme of Action (NAPA)	 Establishing and improving micro-hydro power projects affected by acute water shortages. Scaling up of biomass energy technologies. 		Building the capacity of local level institutions for efficient water and energy planning and project implementation.	 Improving the management of forests, including through agroforestry and plantations. Managing community-based forest fires in mid-hills and the Terai.
14th Periodic Plan (2016/17 -2018/19)	 Development of reservoir based hydropower projects. Electricity generation from small and micro hydropower. 	Build a Mechi-Mahakali electric railway.	Promote climate smart villages.	Programme on the land management and watershed management and mitigation of

14 th Periodic Plan (2016/17 -2018/19)	Construction and promotion of biogas, ICS and bio- briquettes focusing on household level.	 Promotion of energy during the construction of roads network. 		the impacts of climate change and natural disasters.Development of green entrepreneurs.
Low Carbon Economic Development Strategy (draft)	 Solar and wind energy promotion particularly in government and public buildings within 5 years. Development of indigenous technology that consumes less energy. 	Promote environment friendly transport operated by clean energy.		·
Sectoral Policy, Plans, and Strategies	 National Energy Policy, 2013 Ensure sustainability in the consumption of biomass energy resources such as improved cooking stoves. Promote renewable energy technologies (solar and wind) Minimize detrimental environmental effects resulting from energy supply and use. 	National Sustainable Transport Strategy (NSTS) for Nepal (draft) (2015- 2040) Maintain the standard of vehicle or engine condition Promote electric vehicles Greening the freight transport	National Urban Development Strategy-2017 Promote environment, heritage and tourism friendly economic functions in the Kathmandu Valley Promote optimal use of solar energy for all purposes	Forestry Sector Policy, 2015 Protect land from degradation by soil erosion, floods, landslides, desertification, and other ecological disturbances Conserve and use in a sustainable way biological diversity and genetic resources for the maintenance of prevailing ecosystems.

b. Stakeholder Mapping

i. Federal Government (FG) Stakeholders

The key FG stakeholders are MoF, MoFE, and the line ministries relevant to the thematic areas prioritized under this strategy. The FG will prepare national policies, such as the NAP, that will guide the provincial governments and municipal governments. PGs and LGs will have the authority to make their own policies under the constitution, but this will need be based on FG guidelines and will be aligned with FG policy. In addition, FG will continue to be responsible for national processes and projects, such as the management of national parks and implementation of transport infrastructure projects that cover multiple provinces.

ii. Ministry of Finance (MoF)

The MoF is the NDA of the GCF. MoF is engaged with other climate funds – it is the operational and technical focal point for the Global Environment Fund and is the focal point for development bank administered climate finance, such as the Climate Investment Funds (CIFs). The MoF is also engaged with bilateral donors that are financing and implementing climate change projects across Nepal. The MoF is responsible for climate relevant budget allocation, tracking of climate expenses, and the development of systems to enable improved MRV of climate finance. With its responsibility as the GCF NDA, the MoF is the primary agency for managing climate finance in the GoN.

iii. Ministry of Forest and Environment (MoFE)

MoFE is responsible for implementation and facilitation of climate change work in the country. MoFE also holds the responsibility for NDC and NAPA implementation, and MoFE is also developing the NAP. As the focal point for UNFCCC, MoFE is responsible for representing Nepal in the climate change negotiations. MoFE is also the designated authority for the Adaptation Fund and has been responsible for implementation of the CIFs and other multilateral and bilateral climate change funds. MoFE has a role in coordinating actors, developing climate change policies, and monitoring the implementation of national climate change processes.

iv. National Planning Commission (NPC)

NPC facilitates sectoral coordination and planning processes on climate change related programmes at the national level. NPC is also engaged in planning and implementing national priorities, such as the SDGs and Vision 2030, and setting sectoral priorities, including on off-grid renewable energy implementation. NPC has an important role in sectoral planning and undertaking bottom-up costing of climate change programmes, including loss and damage at the national and sub-national level.

v. Water, Food and Health Sector Stakeholders

The stakeholders that need to be engaged in the in the Water, Food and Health sectors are the Ministry of Agriculture, Land Management and Cooperatives, Ministry of Water Supply and Urban Development, Ministry of Water Resources and Energy, Ministry of Health and Population, and PGs and LGs. Development partners, NGOs, and the private sector, are also key implementing partners.

vi. Infrastructure Sector Stakeholders

The resilient infrastructure thematic area is multi-sectoral with a range of stakeholders that need to be engaged, including the Ministry of Water Supply and Urban Development, Ministry of Physical Infrastructure and Transportation, Ministry of Water Resources and Energy, and PGs and LGs. Additionally, addressing climate change concerns in urban and infrastructure planning demands the engagement of multilateral development banks, which provide high volumes of finance for infrastructure development, and the TDF.

vii. Energy Sector Stakeholders

The stakeholders that need to be engaged in the development and implementation of GCF projects in the energy sector include the Ministry of Water Resources and Energy, and PGs and LGs. Additionally, addressing climate change concerns in urban and infrastructure planning demands the engagement of development partners engaged in this space, including the UK Department for International Development, the private sector, and the Alternative Energy Promotion Centre (AEPC).

viii. Transport Sector Stakeholders

The stakeholders that need to be engaged in the development and implementation of GCF projects in the transport sector include the Ministry of Physical Infrastructure and Transportation, and the PG and the LG. Additionally, addressing climate change concerns in the transport sector demands the engagement of multilateral development banks, in particular, the Asian Development Bank which is currently financing a transport project; the private sector; and the TDF.

ix. Forestry Sector Stakeholders

The stakeholders that need to be engaged in the development and implementation of GCF projects in the forestry sector include MoFE (and its associated REDD Implementation Centre), and PG and LG agencies. Additionally, addressing climate change concerns in the forestry sector demands the engagement of relevant development partners, in particular the Food and Agriculture Organisation (FAO) and USAID; NGOs, such as International Union for Conservation of Nature (IUCN); and NTNC, which is engaged in forestry projects in national parks and conservation areas.

x. Other Relevant Federal Government Agencies

Ministry of Federal Affairs and General Administration has the mandate for coordination and facilitation of climate actions in LG jurisdictions. FG will continue to be responsible for developing national policies and guidelines related to climate change, and implementing climate initiatives in LG such as the LAPA Framework and EFLG Programme. The Ministry of Home Affairs is also a key partner for GCF engagement, as it is responsible for the coordination and implementation of disaster risk reduction actions.

xi. Provincial Government (PG)

Nepal has been federated into seven provinces. Under the constitution, the provinces will be responsible for implementing projects that cover multiple municipalities. PGs will have line ministries – and will be responsible for setting guidelines and standards on infrastructure and urban and land use planning, which municipalities must adopt. PGs also have the authority to raise taxes, including from vehicles and tourism. PGs will need to be engaged on project and programme design, approval and implementation, and could also provide co-financing for GCF investments.

xii. Local Government (LG)

Nepal has 753 LGs, which includes 460 rural municipalities and 293 urban municipalities (which includes 6 metropolitan cities, 11 sub-metropolitan cities, and 276 municipalities). Municipalities will have budgets and will have functional responsibilities around implementing investment projects related to infrastructure, including water, sanitation, and waste management systems. As with PGs, LGs need to be strongly engaged in all phases of the GCF project cycle.

xiii. Civil Society

Nepal has a large and active civil society community that should be engaged in the design and implementation of GCF investments. In particular, the NDA should ensure that civil society

organizations that are involved in climate action and promoting indigenous rights and gender are engaged in GCF processes.

xiv. Indigenous Peoples (IPs)

The IPs of Nepal, with their distinct social, cultural and economic features, can contribute and enhance the implementation of GCF investments. Moreover, IPs should be engaged and consulted at all levels and phases of GCF activities in line with the GCF Indigenous Peoples Policy.

c. Criteria for Proposal Evaluation

i. Minimum Criteria Checklist

The following is the minimum criteria for short-listing project proposals that will be evaluated by the TC. The CFU of the NDA will conduct the short-listing based on the below criteria.

- **a. Template completion** the template must be completed to a satisfactory level.
- **b.** Climate relevance—the proposal must be considered climate relevant. The proposal must demonstrate that it will achieve adaptation or mitigation results in at least one of the eight GCF strategic impact areas.
- **c.** Relevant stakeholders must have been consulted in the design of the proposal at a minimum, the template must provide evidence that relevant stakeholders have been consulted and are in agreement. This includes the focal ministry in the FG, and the relevant LG and PG.
- **d.** Accredited Entity (AE) The template must outline which AE will implement the project, and also possible executing entities.

Minimu	Minimum Criteria Checklist				
No.	Documents	Yes	No	Remarks Note	
1.	Concept Note Template			Concept Note template must be completed to a satisfactory level	
2.	Climate Relevance: Justification			The proposal must be considered climate relevant. The proposal must demonstrate that it will achieve adaptation or mitigation results in at least one of the eight GCF strategic impact areas. Alignment with national policies and priorities.	
i.	Adaptation			GCF Adaptation Priorities	
ii.	Mitigation			GCF Mitigation Priorities	
3.	Accredited Entity			The template must outline which AE will implement the project, and also possible executing entities.	
4.	Stakeholder Consultations (must be organized during the designing of the proposal)			At a minimum, the template must provide evidence that relevant stakeholders have been consulted and are in agreement. This includes the focal ministry in the FG, and the relevant LG and PG.	

ii. Multi-Criteria Analysis

The following criteria will be used by the TC for selecting project proposals that will be developed into a concept note and a full project proposal for submission to the GCF.

Criterion	Rationale	Scoring				
Alignment with CC Plans and Policies						
	If the project is focused on adaptation, it	1 – Project is not aligned.				
1a. Adaptation plans and policies	should be aligned with the NAP, NAPA, NDC and CC Policy, and the GCF	2 – Project is aligned to one plan or policy.				
	Engagement Strategy of Nepal.	3 – Project is aligned to two or more plans or policies.				
	If the project is focused on mitigation, it	1 – Project is not aligned.				
1b. Mitigation plans and policies	should be aligned with the LCEDS, NDC and CC Policy, and the GCF	2 – Project is aligned to one plan or policy.				
	Engagement Strategy of Nepal.	3 – Project demonstrates strong alignment with two or more relevant plans and policies.				
	If the proposal is cross-cutting and has both adaptation and mitigation elements,	1 – Project is not aligned.				
1c. Cross-cutting projects	it should be aligned with relevant climate policies and plans, and the GCF	2 – Project is aligned to one plan or policy.				
	Engagement Strategy of Nepal.	3 – Project is aligned to two or more plans or policies.				
Alignment with Sectoral and National Priorities						
2. Sectoral Plans	Alignment of the proposal with relevant	1 – Project is not aligned to any sectoral policies and plans.				
2. Sectoral Figure	sectoral policies and plans.	2 – Project is aligned to one sectoral policy or plan.				

		3 – Project demonstrates alignment to one or more sectoral plan or policy, and is directly linked to achieving a priority project in a sectoral plan.
		1 – Project is not aligned.
3. National Plans	Alignment of the proposal with the 14 th Plan.	2 – Project is aligned to one goal/target in the 14 th Plan.
	Pian.	3 – Project is aligned to one or more goal/target in the 14 th Plan, and is directly linked to achieving a priority investment project in the 14 th Plan.
GCF Investment Criteria ¹²⁷		
		1 – Proposal is not aligned to the "indicative investment factors".
4. Impact Potential	Contribution to the achievement of the Fund's objectives and result areas.	2 – Proposal is weakly aligned to the "indicative investment factors".
		3 – Proposal is strongly aligned to the "indicative investment factors".
		1 – Proposal is not aligned to the "indicative investment factors".
5. Paradigm shift potential	Catalysing impact beyond project investment.	2 – Proposal is weakly aligned to the "indicative investment factors".
		3 – Proposal is strongly aligned to the "indicative investment factors".
		1 – Proposal is not aligned to the "indicative investment factors".
6. Sustainable development potential	The programme/project's wider benefits and priorities, including environmental, social and economic co-benefits.	2 – Proposal is weakly aligned to the "indicative investment factors".
	social and economic co-ochems.	3 – Proposal is strongly aligned to the "indicative investment factors".

¹²⁷ The proposal should be reviewed based on "Annex III: Initial investment framework: activity-specific sub-criteria and indicative assessment factors" in "GCF/B.09/23": https://www.greenclimate.fund/documents/20182/239759/Investment_Criteria.pdf/771ca88e-6cf2-469d-98e8-78be2b980940

		1 – Proposal is not aligned to the "indicative investment factors".				
7. Contribution to gender-sensitive development	The contribution of the project to achieving gender-sensitive development.	2 – Proposal is weakly aligned to the "indicative investment factors".				
историен		3 – Proposal is strongly aligned to the "indicative investment factors".				
		1 – Proposal is not aligned to the "indicative investment factors".				
8. Responsive to recipient needs	Meeting the needs of vulnerable populations.	2 – Proposal is weakly aligned to the "indicative investment factors".				
		3 – Proposal is strongly aligned to the "indicative investment factors".				
	Country ownership of the	1 – Proposal is not aligned to the "indicative investment factors".				
9. Promote Country Ownership	project/programme. Determining whether the project is designed based on	2 – Proposal is weakly aligned to the "indicative investment factors".				
	Nepal's institutional context.	3 – Proposal is strongly aligned to the "indicative investment factors".				
		1 – Proposal is not aligned to the "indicative investment factors".				
10. Efficiency and Impact	Economic and financial soundness of the project/programme.	2 – Proposal is weakly aligned to the "indicative investment factors".				
		3 – Proposal is strongly aligned to the "indicative investment factors".				
Alignment to Existing Projects/Program	Alignment to Existing Projects/Programmes					
		1 – The proposal does not demonstrate alignment to existing initiatives.				
11. Alignment to existing initiatives	The proposal should build on existing initiatives, and where possible the proposal should identify synergies with	2 – The proposal is aligned to existing initiatives, but synergies are not identified.				
	other climate change investments.	3 - The proposal describes existing initiatives and mechanisms to achieve synergies with GCF financed projects/programmes.				

Selection of Accredited Entity (AE) and Executing Entities (EE) ¹²⁸						
	DAEs are arisational array IAEs arrays	1 – The proposal is implemented by an IAE when a relevant DAE is present in Nepal.				
12. Selection of Entities	DAEs are prioritized over IAEs, except when the international entity demonstrates a comparative advantage or	2 – The proposal is implemented by a DAE or an IAE if relevant. No strategic selection of EEs.				
	unique value proposition.	3 – Implementation by DAE or an IAE if relevant, and there is a strategic selection of the EEs.				

¹²⁸ International Entities should only be used if the IAE presents a distinct comparative advantage and has relevant experience in Nepal.

d. Indicators for GCF Proposal Development¹²⁹

i. Mitigation Indicators

Expected results	Proposed Indicators ¹³⁰	Baseline data
Paradigm shift objective		
1. Shift to low-emission, sustainable development pathways	E.g. cost per t CO ₂ eq decreased for mitigation projects.	Not required.
2. Volume of finance mobilized	E.g. volume of public and private co-financing.	Not required.
Impacts (strategic level)		
3. Increased low-emission energy access and power generation	E.g. level of capacity (MW) from existing RE sources.	Existing mix of power generation.
4. Increased access to low-emission transport	E.g. emissions levels from vehicles (including public transport).	Existing transport emissions.
5. Forest area under improved management and reduced carbon emissions practices	E.g. percentage of forested land.	Existing levels.
6. Annual energy savings	E.g. energy balance data	Existing levels.
Project/Programme outcomes		
7. Increased gender-sensitive low-emission development mainstreamed into government	E.g. number of gender sensitivity of policy, laws and sector strategies supported by the Fund.	Existing legislation.
8. Low emission power suppliers	E.g. MW of capacity from low-emission sources.	Existing low-emissions supply (including off-grid).
9. Increased use of low-emissions public transport	E.g. modal share (by transport type).	Existing transport use.

⁻

¹²⁹ Fayolle, V. and Odianose, S., 'Green Climate Fund Proposal toolkit 2017', (London: Acclimatise and Climate and Development Knowledge Network, 2017). ¹³⁰ There are others indicators that can be considered for each project.

10. Stabilization of forest coverage	E.g. rate of net deforestation and forest degradation, and livelihood benefits from sustainable forestry.	Current trends.
11. Lower energy intensity trajectory	E.g. energy savings (GWh).	Existing energy use.

ii. Adaptation Indicators

Expected results	Indicators	Baseline data	
Impacts (strategic level)			
1. Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions	Percentage reduction in the number of people affected by climate related disasters; Percentage of households adopting a wider variety of livelihood strategies/coping mechanisms.	Government data, pre- project assessment.	
2. Increased resilience of health and wellbeing, and food and water security	 Percentage of food secure households; Percentage of households with access to adequate water; Climate induced disease incidence in areas where adaptation health measures have been introduced (percentage of population); Area (ha) of agricultural land made more resilient to climate change through changed agricultural practices. 	Pre-project assessment.	
3. Increased resilience of infrastructure and the built environment to climate change threats	 Value of infrastructure made more resilient to rapid-onset events (i.e. flooding and landslides); Number of new infrastructure projects that withstand conditions resulting from climate variability and change. 	Not required.	
4. Improved resilience of ecosystems	 Area of habitat rehabilitated (e.g. reduced external pressures such as overgrazing), restored (e.g. through replanting) or protected (e.g. improved fire management); Number and area of agroforestry projects, forest pastoral systems, or ecosystem-based adaptation systems established or enhanced. 	Not required.	
Project/Programme outcomes			

5. Strengthened government institutional and regulatory systems for climate-responsive development planning	E.g. degree of integration/mainstreaming of climate change in national and sectoral planning systems.	Pre-project assessment.
6. Increased use and generation of climate information in decision-making	E.g. evidence that climate data are collected, analysed and applied to decision-making in climate-sensitive sectors at critical times by the government, private sector, and households. E.g. perception of households, vulnerable communities and emergency response agencies on the effectiveness of early warning systems.	Pre-project assessment.
7. Strengthened adaptive capacity and reduced exposure to climate risks	E.g. extent to which improved tools, strategies, instruments and activities are utilized for responding to climate variability and change.	Not required.
8. Strengthened awareness of climate threats and risk reduction processes	E.g. percentage of target population aware of the potential impacts of climate change and range of possible responses.	Pre-project assessment.
9. Beneficiaries	E.g. number of direct and indirect beneficiaries disaggregated by sex and income level.	Not required.