

Climate Adaptation Financing in Nepal

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Abstract

Nepal as a country vulnerable to the effects of climate change, and with limited domestic resources must priorities adaptation actions and relies on international support to finance its need. There have been substantial amounts of climate finance flowing into the country from a multitude of sources mainly in the form of grants and debt instruments, with over US\$3 billion committed by international providers over the last decade. Commitments to finance adaptation have been steadily increasing over the same period, however not all commitments translate to results on the ground, as over half of reported adaptation finance can be considered over reported. Specific challenges have been identified in absorbing climate finance in Nepal, including governance issues, lack of internal capacity, lack of coordination, inadequate climate finance management and lack of legislation and implementation strategies. This paper proposes reforms along the lines of transparency and accountability, localization and government ownership, capacity building, coordination, climate budgeting, monitoring and legislation to tackle these challenges and ensure better efficacy of climate finance in adaptation programs in the country.

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Introduction

Climate change has become ubiquitous over the past several decades with global temperatures slated to increase by 1.5° C before the mid-century (Intergovernmental Panel on Climate Change [IPCC], 2018). It is important for countries to recognize their vulnerability to its effects and this holds particularly true for a country as resource strapped and climate vulnerable as Nepal.

In 2019, Nepal was ranked as the 11th most vulnerable country amongst 187 countries by the Climate Risk Index and 47th by the ND Gain Index (Ministry of Forest and Environment [MoFE], 2020). This vulnerability manifests itself through adverse impacts such as droughts, floods, forest fires, glacial lake outbursts and increased prevalence of diseases in new areas. Ministry of Health and Population (MoHP, 2017) which are predicted to be more frequent and severe in the future. The Himalayas are expected to lose their entire ice cover by the year 2300, with snow mass at lower elevations projected to decline by 50%-80% by the end of this century (MoFE, 2021). The impact of these changes will be highly devastating for the Nepalese population and economy (Ministry of Finance [MoF], 2021). Each year, climate-induced disasters claim 647 lives and result in economic losses of over US\$22 million on average (MoFE, 2021). Such disasters are on the rise, with economic losses of up to US\$45 million recorded in just three quarters of 2019 (Rai, Chhetri & Dhital, 2020). This could translate to Nepal losing more than US\$62 billion (2.2% of annual GDP) by 2050 (Asian Disaster Preparedness Center, 2021).

Given this vulnerability, Nepal's miniscule contribution to global emissions at 0.027% (MoHP, 2017) and significant resource constraints, Nepal's climate change actions need to be focused on adaptation strategies. This involves increasing its systemic ability to adjust to climate change and its impacts, moderate potential damages, cope with the respective consequences and take advantage of opportunities (IPCC, 2001). Various adaptation measures and projects have thus been undertaken by the Government of Nepal (GoN) with significant financial support from the international community.

The scope of this paper upon reviewing the literature was limited to analyzing public monetary flows for climate action, given the present ambiguity in defining CF in the literature. Private sector financing and non-monetary concepts such as non-transferred resources and technical assistance were removed from consideration within this paper. This scope limitation was done to sharpen focus on the funds reflected in the governmental budget and on institutions involved in its management.

This paper seeks to analyze the effectiveness of the aforementioned financial influx in Nepal's adaptation efforts. Along this line, the following objectives are adopted:

- Outlining the historic effectiveness of climate adaptation financing in Nepal,
- Identifying existing challenges within Nepal's climate governance and financing mechanisms,
- Proposing systemic reforms to address identified challenges and improve absorption of climate finance.

Literature review

Before delving into the efficacy of climate finance (CF) in Nepal, available data, opportunities and challenges in CF as cited in the literature must be understood.

A concrete definition of CF is yet to be agreed upon internationally, but subsequent to the 2010 Cancun Agreements, much emphasis has been given to CF being “new and additional” and “adequate and predictable”. Development Initiatives (2016) poses it as incorporating local, national and international resources flowing through a multitude of intermediaries, instruments and implementing agencies whereas Climate Funds Update (2022a) mentions it as having differing structures of governance, modalities and objectives. Development Initiatives (2016) also considers CF to include non-financial instruments such as in-kind support, technical assistance and non-transferred resources. It therefore has an ever-evolving architecture that requires more understanding.

CF is critical for vulnerable countries as immense resources are required for adaptation action. The cost of adaptation for developing countries worldwide between 2010 and 2050 is estimated to be between US\$70 billion - US\$100 billion annually (Kalirajan, Singh, Thangavelu, Venkatachalam & Perera, 2011). Development Initiatives (2016) show that while the amount of funds marked as relevant to adaptation have significantly increased over the past decade, it may still be inadequate as between US\$28 billion to US\$67 billion more is required annually in addition to existing resources. They further provide the typology of adaptation support globally as primarily consisting of concessional loans (44%) and grants (44%) with the rest coming from non-concessional loans and other instruments.

CF faces various challenges globally. Monitoring exact flows is difficult due to a lack of a concrete definition and consistent accounting rules per Climate Funds Update (2022a), along with inadequate monitoring mechanisms at project levels (Atmadja, Liswant, Tamara, Lestar, & Djoudi, 2020). Kalirajan et al. (2011) states that funds have historically been wasted through inefficient project managements or corruption, with fungible resources being misappropriated for unapproved activities. They further claim that the presence of multiple providers can weaken coordination and harmonization of projects within a country. However, this is not to say that opportunities do not exist, as various interconnected activities can be linked and synergized to improve budgetary (Atmadja et al., 2020). Furthermore,

they claim that climate actions can be made more efficient and sustainable by integrating CF in national budgets as a cross-cutting policy issue and leveraging different funds and social capital at the local level.

Methodology

After defining the scope of study, the research to be conducted, the following methodology was adopted to address the context of CF in Nepal. First, within the “Effectiveness of adaptation finance in Nepal” query, the institutional framework and policies in place concerning climate action and financing in Nepal were analyzed. This was done through accessing governmental publications on climate change and relevant issues. The historical flow of CF into Nepal and its effectiveness was then analyzed through two primary mechanisms: a) sifting through publications and reports of Civil Society Organizations (CSOs); b) compiling and analyzing the available data concerning climate assistance to Nepal as found on the Organization for Economic Cooperation and Development- Development Assistance Committee (OECD-DAC) database. This helped to establish the historical trends in effectiveness of CF flows to Nepal, along with the overview of CF as understood through the institutional and policy frameworks. Second, for the “Specific challenges identified” section, both government publications and CSOs reports were referred to in order to identify gaps seen within climate action and finance mechanisms in Nepal. The diversity of sources utilized, along with holding an expert stakeholder consultation on the topic, helped to corroborate findings and provide coherence to arguments. Finally, in order to provide suggestions to be adopted within the “Proposed reforms” section, international principles on CF management, past CSO recommendations and findings of various ministries of the GoN were referred to, in addition to the potential opportunities for reforms identified after analyzing existing gaps. In this manner, mechanisms for institutional reforms that would help improve CF absorption in the country were identified and proposed, before coming to an actionable conclusion. A visual representation of the adopted methodology can be found in Figure 1 below.

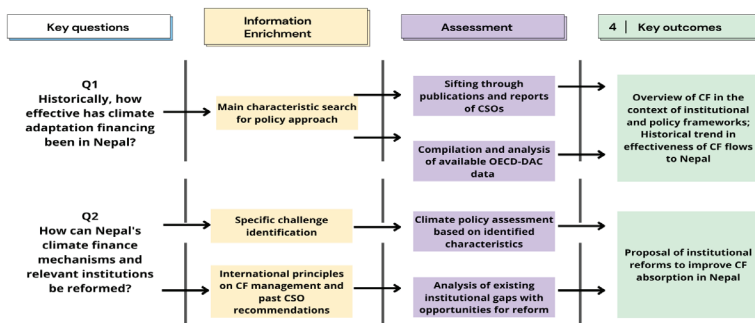


Figure 1: Visual representation of research methodology

Effectiveness of adaptation finance in Nepal

Institutional framework

Climate change action in Nepal is implemented by sectoral ministries and departments at the national and local level. However, a few focal government bodies - the Ministry of Forests and Environment (MoFE), the Ministry of Finance (MoF), the National Planning Commission (NPC) and the Ministry of Federal Affairs and General Administration (MoFAGA) - are identified for their roles in climate action and finance.

The MoFE is the primary agency responsible for the coordination of the country's climate change planning. It has a dedicated Climate Change Management Division which promotes national climate action with coordination amongst government agencies, the private sector and CSOs. Further arrangements for climate coordination within the MoFE are seen in Figure 2 below.

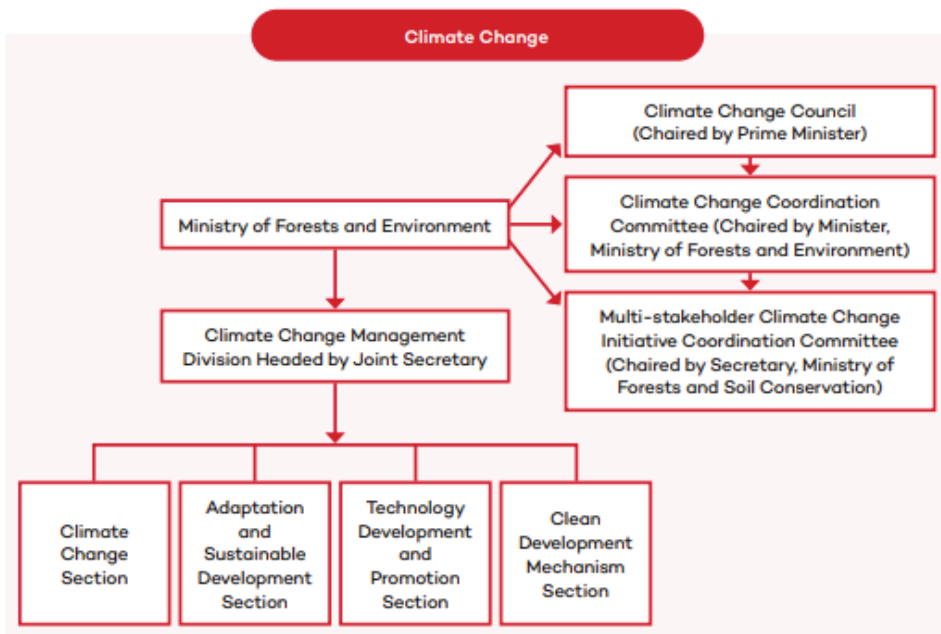


Figure 2: Institutional arrangement for climate coordination

Source: MoFE

The MoF contains the International Economic Cooperation Coordination Division which directly deals with international providers as the national focal point. It has oversight over the three modalities of development finance (budgetary support, earmarked support and earmarked budget) reflected in the national budget (Institute for Social and Environmental Transition Nepal, 2018). Within this division, the CF Unit has been established to better absorb and manage CF in Nepal.

The NPC is responsible for the formulation, coordination and assessment of national development plans in Nepal. As such, it is critical in ensuring coordinated adaptation actions by encouraging the integration of climate change actions within sectorial plans in its fiscal year planning. Similarly, the MoFAGA is responsible for the coordination, facilitation and monitoring of activities at subnational levels, which can play a critical role in localizing climate action, though such a spotlight has not traditionally been placed on this ministry.

Policy framework

Nepal's policy framework on climate change and financing includes the National Adaptation Program of Action (NAPA), 2010, the Local Adaptation Plan of Action (LAPA), 2011, the Climate Change Budget Code as introduced in 2013, the Climate Change Financing Framework (CCFF), 2017, the National Climate Change Policy (NCCP), 2019 and the National Adaptation Plan (NAP) for 2021-2050.

The NAPA framework was formulated to outline the climate impact and adaptation actions to be taken in the country. It adopts a top-down approach and does not provide for clear participatory mechanisms for local representatives in decision making and policy processes (Institute for Social and Environmental Transition Nepal, 2018).

LAPAs supplement the NAPA and lay out the framework for localizing climate action. It suggests a flexible and responsive bottom-up approach towards enhancing local level resilience to climate change. LAPAs are mostly externally funded, projectized, and face capacity limitations while local governments lack ownership over the process (Prakriti Resource Centre, 2018). Additionally they lack mechanisms for explicitly seeking out and incorporating available scientific knowledge in planning processes of development projects (Institute for Social and Environmental Transition Nepal, 2018).

The Climate Change Budget Code was formulated in 2012 and implemented in the 2013/14 fiscal year to facilitate better oversight over climate inflows and expenditure in Nepal. 11 defining criteria are used to classify the climate-relevance of projects as "neutral", "relevant" or "highly relevant". It is yet to be adopted at the subnational levels.

The CCFF is the national framework for integrating CF into planning and budgeting processes. It guides the GoN on aspects such as resource mobilization for the achievement of Nepal's strategic and climate goals and suggests mechanisms for monitoring expenditures. It proposes mainstreaming CF into existing processes and calls for more effective coordination between top-down policy measures and bottom-up planning and budget formulation. It emphasizes the need for capacity building within sectorial ministries and the MoF to ameliorate the CF architecture in Nepal. However, the framework only serves as a guidance document and has

not been implemented fully (Chhetri, 2021), nor is supported by any implementing legislation.

The NCCP serves as the GoN’s current overarching policy on climate action. It seeks to ensure transparency, accountability and active public participation in climate efforts, especially adaptation programs. Under the policy, adaptation measures are to be adopted in line with the local context (including knowledge, skills and technologies) of vulnerable areas. It explicitly defines the role of the different tiers of the GoN in prioritizing adaptation actions and promises an allocation of minimum 80% of total CF for programme implementation at the community level. It also proposes the modification and institutionalization of the budget code at all levels to ensure better financial tracking. Finally, it also states that an inter-ministerial coordination committee under the leadership of the MoFE is to be formed for climate change-related matters. However, such a committee is yet to be established.

Finally, the NAP sets out Nepal’s short-term (2025) medium term (2030) and long-term priorities designed to help achieve the adaptation actions set forth by the GoN in its 2020 Nationally Determined Contributions (NDC). Adaptation actions within the NAP are to be integrated with development efforts and will require US\$47.4 billion for their implementation up to 2050 - of which the government aims to contribute US\$1.5 billion. Of this, the GoN will require US\$2.1 billion annually until 2030 (MoFE, 2021). The NAP is yet to be implemented but government representatives are confident in receiving the required support from international providers (Chhetri, 2021). Reviews of the NAP are to occur on a five year basis and the policy is to be updated every 10 years.

The interaction of various levels of government and the various policies can be visualized as seen in Figure 3 below.

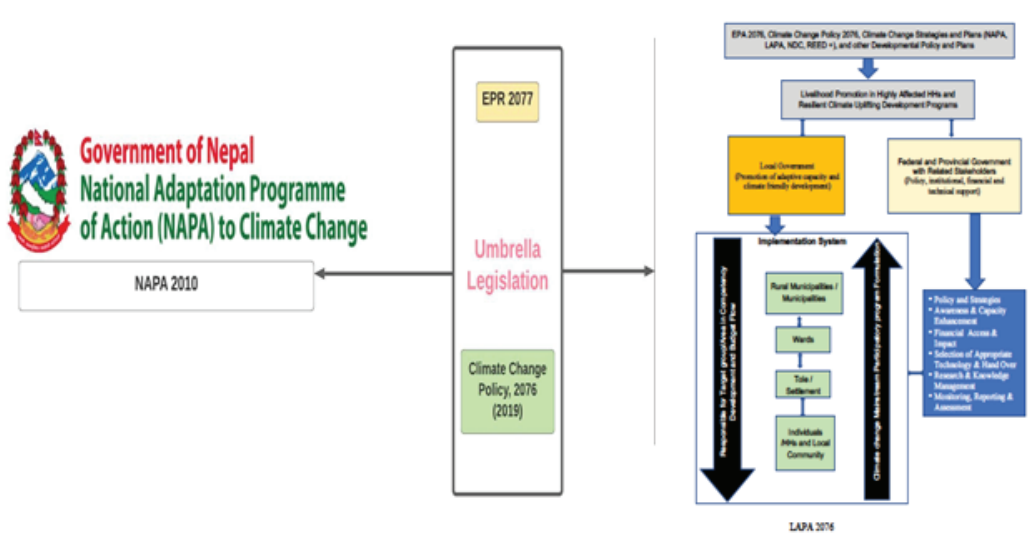


Figure 3: Governance framework for adaptation action across government tiers
Source: MoSTE. (2010). National Adaptation Programme of Action [NAPA] to Climate Change. Kathmandu

Historical CF

Over the past decade, Nepal has been mobilizing both domestic and international financial resources for its climate needs.

Expenditures on all climate actions constitute approximately 2% of the national GDP and 6% of total GoN expenditures (Patra & Terton, 2017). Climate-relevant finances within the national budget have increased significantly over the decade, from NPR 517,240,000 (10.34%) in 2013/14 to NPR 1,315,161,700 (37.03%) by 2018/19 (Prakriti Resource Centre, 2018). Finance marked as “highly relevant” however has not seen increases as 2018/19 figures amounted to 4.4% of the national budget compared to 5.36% in 2013/14 (Prakriti Resource Centre, 2018).

Based on the information compiled within the OECD-DAC database, Nepal has received CF commitments of US\$3,255,942,722 over the span of 2010-2022 from 37 providers across 1176 projects. Of this, on average 82% is annually marked as relevant for adaptation, with this percentage increasing over the decade, from 74% in 2010 to 98% in 2020. Adaptation finance has largely been provided through debt instruments (US\$1.8 billion or 62.3%) and grants (US\$1 billion or 37.5%). There seems to be an increasing trend of financing through debt instruments towards the end of the decade as the share of debt instruments increased from 35% in 2010 to 82% in 2020.

CF Effectiveness

Resources flowing into Nepal are not adequately allocated, with significant amounts not effectively reaching vulnerable communities and ecosystems. Per a study tracking adaptation finance in Nepal over a sample of 10 large and five complementary projects, 59% of reported adaptation finance could be considered over-reported (Rai et al., 2020). The study assessed the climate vulnerability context, the stated purpose and the linkage of activities to climate vulnerability amongst the sampled projects. It found that observation assessments of projects resulted in equal or lower scores compared to scores derived from project documentation. Only three out of the 10 large projects presented a high overall score rating while four out of five of the complementary projects scored high, indicating that larger budget projects tend to have proportionately lower contribution to adaptation in Nepal. Further discrepancies were noted in project execution as only two out of the seven highly adaptation-relevant projects within the sample had equal scores in the project documentation and in the field observation. The remaining five had lower field observation scores indicating discrepancies in activities as planned versus executed.

Specific challenges identified

Various challenges within the climate governance and financing mechanism in Nepal have been identified under the following themes.

Governance issues

While the NCCP requires integration of climate concerns into the policies of sectoral agencies, most have failed to mainstream climate change into their development process (Asian Disaster Preparedness Center, 2021). Symptomatic of this, adaptation actions are more project-based and lack governmental ownership, especially at the sub-national level. Many LAPAs have been prepared by non-governmental actors and are neglected by local governments in budgeting and implementation (Chhetri, 2021). Per the NPC, 460 LAPAs are still in the formulation phase, with a lack of local government initiatives (Chhetri, 2021). The implementation of adaptation projects thus largely remains top-down, with minimal participation of ground level entities (Institute for Social and Environmental Transition Nepal, 2018).

Lack of capacity

CF effectiveness is severely hindered by low internal capacity. Traditional structures in place for CF are seen to be rather fragmented, sectoral and isolated with limited resources (Regmi & Bhandari, 2013). Lacking capacity and experience in handling international funds, institutions are unable to adequately meet fiduciary standards and safeguards (Chhetri, 2016). The capacity for absorbing international funds is limited within the MoF and sectoral ministries, hindering systematic addressal of climate change (MoF, 2017). Local governments further lack the capacity to conduct specific activities to achieve NCCP targets in various sectors. This is largely due to inadequate financial resources and lack of governments' familiarity with the NCCP and NDC (Prakriti Resource Centre, 2018). Furthermore, local governments lack adequate human resources with the technical knowledge and skills required for localisation of climate action (Prakriti Resource Centre, 2018).

Lack of coordination

Climate action and financing requires institutional coordination to achieve effective results. There is a disconnect between priorities within the 3 tiers of government and sectoral ministries (Asian Disaster Preparedness Center, 2021). While climate change coordination committees exist, updated information on their mandate and achievements is lacking, leading to in transparent and unaccountable functioning. Such committees have also been established at the provincial level, but function in an ad hoc and informal manner (Prakriti Resource Centre, 2018). Sectoral ministries execute the majority of climate budgeting without proper coordination on collecting, monitoring and analysing outcomes and financial data of projects

(MoF, 2017). This may be due to lack of clarity on roles and responsibilities of different ministries within climate actions and financing. Despite linkages between the activities of different ministries, coordination to achieve policy alignment is lacking (Institute for Social and Environmental Transition Nepal, 2018). An example being the lack of coordination between the MoFE, Ministry of Home Affairs (MoHA) and the NPC despite potential for synergies between their respective mandates of addressing climate change, disaster risk reduction and SDGs (MoFE, 2020).

Inadequate CF management

Climate budgeting in Nepal faces various systemic problems. Access to international CF is rather unplanned and lacks alignment with national policies and priorities. Sources of finance are scattered and inadequately accounted, making it difficult to holistically access CF in Nepal (Chhetri, 2021). Additionally, climate budget ceilings are not benchmarked across the three tiers of government, hindering adequate tracking of the funds being channeled sub nationally. Despite the NCCP promising 80% of the climate budget for community level action, less than half of total funds reach the local level, due to inadequate mechanisms to transfer the funds (Institute for Social and Environmental Transition Nepal, 2018).

Many budget allocations made under climate expenditure are not climate-related (Asian Disaster Preparedness Center, 2021), indicating problems with the climate budget code. The criteria for defining climate activities have not been refined to reflect sector specific needs and are subjectively interpreted by sectoral planners, leading to climate budgets being overestimated (MoF, 2017). The budget code only reflects the allocation of resources, not the status of expenditure and does not distinguish between adaptation and mitigation activities. Coding occurs solely at the project head level rather than the activity level and expenditure tracking has not been established. As a result, specific information about climate expenditures are not included within the national budget monitoring system (Institute for Social and Environmental Transition Nepal, 2018).

Lack of legislation and implementation strategies

Climate policies and frameworks in Nepal largely take the form of guidance documents without imposing any legal obligations on the GoN to conduct climate action as specified. Implementation strategies are lacking for existing policies, with a stark example of LAPAs wherein their implementation has not yet been mandated to the local governments (Prakriti Resource Centre, 2018). No implementing legislation has been noted for the NAP, NCCP and CCFF either. Furthermore, the Environment Protection Act, 2076 (2019) mentions climate change, it is far from a comprehensive law mandating government action. Under article 24(1) of the Act, the different tiers of government may make and implement adaptation plans at

their respective levels. However, as can be noted from the language of the text, this does not impose any hard obligations and ownership for any level of government to undertake adaptation actions, leaving it up to governmental discretion. As such, there is a lack of comprehensive legislation on climate action and financing in Nepal that explicitly defines the roles and responsibilities of different governmental bodies.

Proposed reforms

Given these gaps and challenges, systemic reforms for climate governance and financing are suggested per the following themes.

Transparency and accountability

Transparency and accountability must be guiding principles in CF management to ensure good governance (Climate Funds Update, 2022b). This requires the establishment of a platform containing publicly available, verified and timely data and information on climate action and finance. It should integrate all relevant information from governmental bodies, institutional frameworks and laws to data on finance and results of proposed and implemented projects. The platform should also incorporate linkages to disaster risk management and SDGs to promote efficient policies. This could help policy makers across all levels of government to inform their decision making with an understanding of the overall CF architecture, implementation status and past experiences, while enabling the public and CSOs to hold the government accountable to climate policies. Effective communication of such a platform through publicity campaigns and training for concerned stakeholders will be imperative for ensuring transparency.

Localization and government ownership

Given that climate action is ultimately taken at the local level, the NDC, NCCP and CCFF should be localized, with subnational governments taking ownership over climate action. Following the principles of subsidiarity as expressed in the Rio Declaration of 1992, subnational governments should be empowered to develop coherent climate adaptation policies. Detailed implementation plans outlining policy targets should be adopted for localization upon identifying the strengths and gaps of local governments (Prakriti Resource Centre, 2018). Effective localization with two-way communication amongst governments at all levels will ensure improved resource allocation for the specific needs of each community.

Capacity Building

Capacity building is critical to CF as policies are ineffective when implementing institutions lack capacity. The aforementioned transparency platform can be used to educate governmental bodies on policies, national development priorities and mechanisms for coordinated climate action. Effective communication of climate

policies would sensitize sector ministries and sub-national governments and enable a better understanding of their roles and responsibilities (Prakriti Resource Centre, 2018). This should be supported by systemic capacity building of policymakers involved in climate action, disaster risk management and SDG achievement to promote policy alignment (MoFE, 2020). Furthermore, technically skilled human resources and adequate funding should be provided to local governments to enhance their fund absorption capacity.

Coordination

Given potential synergies across different thematic and sectoral policy processes, coordination should be improved between all institutions. Implementation strategies encompassing common objectives and financing for joint implementation of climate action, disaster risk management and SDG achievement should be established and systemic dialogue should be maintained between the MoFE, MoHA and NPC. Sectoral climate budget planning, monitoring and reporting should be coordinated with the support of the CF Unit. Ministries must collaborate amongst each other to establish thematic development agendas ensuring the implementation of existing climate policies. National and subnational level climate change targets should also be coordinated. The MoFAGA can be provided the mandate to oversee subnational climate action and financing for streamlining this coordination. Finally, information on the mandate and achievement of existing coordination mechanisms should be updated and made publicly available to provide greater opportunities for coordination and accountability.

Climate budgeting

CF should be streamlined into national development priorities rather than remaining projectized. Information flows between national and subnational levels should be strengthened to allow informed fiscal planning. All internal and external finances should be channeled through the public financing system to ensure CF is consolidated under a singular policy direction that can be held accountable to the Parliament (National Planning Commission, 2011). The government should thus develop a concrete definition of CF for Nepal and reflect it in the climate budget code, along with sector specific criteria for climate-relevance of projects. The code should also distinguish between mitigation and adaptation financing. The code and CCFF should be implemented at subnational levels, with inbuilt mechanisms for tracking climate expenditures.

Monitoring

Monitoring is critical in CF and will help address the gaps between needs and available funds. A national Measurement Reporting and Verification system to monitor climate action should be implemented per Paris Agreement requirements (Pillay, 2020). It could also incorporate disaster risk management and SDG

achievement efforts to develop better policy alignments between the three (Ministry of Forests and Environment, 2020). A frequent reporting on financial allocations and effectiveness of climate expenditure across ministries and subnational governments will improve transparency and inform policy decisions. Key performance indicators can be developed and reported through the public finance management system to allow for better review and analysis of trends. The Office of the Auditor General should be mobilized to conduct audits of climate expenditure. Additionally, the Parliament's Development Committee and the Committee on Natural Resources, Economic Rights and Revenue Sharing could be engaged to enhance CF monitoring in Nepal (Asian Disaster Preparedness Center, 2021).

Comprehensive legislation

Nepal needs to begin legislative processes to adopt a comprehensive legal framework on climate action and financing. The framework should clearly establish the role of subnational governments and sectoral ministries in implementing climate policies and establish a legally binding mandate for adopting the climate budget code and mainstreaming climate action. The Local Government Operation Act, 2074 can be amended for local level integration of adaptation and the Business Allocation Rules, 2074 should be updated to mandate the establishment of a climate change unit within each ministry. Finally the architecture for mobilizing CF as mentioned above should be codified for a binding effect on public institutions.

Conclusion

While Nepal has been receiving substantial CF for climate adaptation, not all of it has translated to results on the ground. While institutional and policy frameworks governing the CF architecture cover a wide variety of issues, challenges as mentioned above hinder effective absorption of funds. This has resulted in far less than the 80% fund transfer to local levels that climate policies in Nepal promise. In light of these gaps in Nepal's climate efforts, systemic reforms are necessary for better fund absorption. Large strides must be taken in enhancing transparency and accountability of climate governance mechanisms, increasing localization and government ownership of climate actions, building institutional capacity, ensuring coordination and implementing a robust CF management system. To this end, comprehensive legislation adoption is critical to translate past learning and existing guidance documents into reality. Such measures will also improve the credibility of Nepal, providing opportunities for significant increases in future CF influx to the country. Current institutional and policy mechanisms must be revisited in light of these proposals to mark Nepal as a climate action role model for other Least Developed Countries.

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