

NATIONAL CLIMATE FINANCE PLANS

UNIVERSITY OF WASHINGTON STRATEGIC ANALYSIS,
RESEARCH & TRAINING (START) CENTER

REPORT TO THE BILL & MELINDA GATES FOUNDATION

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STRATEGIC ANALYSIS,
RESEARCH & TRAINING CENTER

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Executive Summary

This report summarizes the work conducted by the University of Washington's Global Health Strategic Analysis, Research and Training (START) Center, in response to the Bill and Melinda Gates Foundation's (the Foundation) work order: "*National Climate Finance Plans*".

The Development, Policy & Finance (DPAF) team at the foundation engaged the START Center to gain a clearer picture of existing national climate finance plans and their key features, strengths, and weaknesses. This was achieved by conducting a review of key documents, by engaging with content experts, and answering and exploring relevant research questions about and related to the plans, their structure, organization, and detail.

Focusing geographically on Low-income countries (LICs) and Low-middle-income countries (LMICs) in Africa, Southeast Asia and the Pacific, START identified 14 national climate finance plans (or documents containing similar information) and assessed each plan against the client-provided research criteria. This assessment is provided in a separate "Criteria Spreadsheet" deliverable. This report summarizes our analysis of and conclusions from that assessment and adds insights from our key informant interviews (KIIs) and review of key documents, along with case studies and supplementary information for further research and next steps.

Key Findings

- We identified 14 national climate finance plans across three geographic regions. These plans vary in content, length, and level of detail. The degree to which they include the voices of marginalized communities, highlight local needs, and specify financing instruments varies widely. Based on our review, Kenya and Cambodia have the most comprehensive plans, while plans from the Philippines, Nepal, and Pakistan did not include sufficient detail to understand how they would achieve their Nationally Determined Contributions (NDCs).
- Some unique, and potentially good practice features of reviewed plans include strong engagement with a broad range of key stakeholders (Kenya); inclusion of broader development impacts and linking of in-country climate policy with implementation strategies (Liberia); outlining clear processes for project evaluation, selection, or exclusion (the Philippines); broad analyses of existing financial infrastructure and related resources (Solomon Islands, Vanuatu, and Pakistan); inclusion of case studies/learning from other countries (Vietnam).
- We interviewed five key stakeholders who offered useful insights and who all agreed that national climate finance planning is a vitally important topic that requires further analysis.

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Abbreviations

DEI	Diversity, Equity, and Inclusion
DPAF	Development, Policy & Finance team
GCF	Green Climate Fund
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
KII	Key Informant Interviews
LIC	Low-Income Country
LMIC	Low-Middle-Income Country
LoCAL	Local Climate Adaptive Living
MIC	Middle-Income Country
NDCs	Nationally Determined Contributions
SDGs	Sustainable Development Goals
START	Strategic Analysis, Research and Training Center
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

Introduction

Project Background

Securing adequate levels and forms of finance – both public and private – is critical to addressing climate change and implementing Nationally Determined Contributions (NDCs). NDCs outline country-specific actions to mitigate and adapt to climate change.

While they go by various names, national climate finance plans (and sector-based finance plans) can help create a national vision and framework for financing key climate investments and targets. Anecdotally, the quality and detail of these plans vary, with some providing clear, realistic, and comprehensive frameworks for financing climate priorities and others offering less of a plan than vague financing objectives.

Unlike NDCs, there have been limited efforts to assess national climate finance plans comprehensively, and there is no central registry currently compiling them. Additionally, different countries or regions may use differing terminology, publish reports through different government authorities, and publish in languages other than English, making traditional search strategies less straightforward.

Project Objectives

Overall project objectives are to:

- Gain a clearer picture of existing climate finance plans and their key features, strengths, and weaknesses.
- Engage with content experts and review literature to determine which features might make climate finance plans most effective and valuable.
- Address as many of the specified research questions/criteria as is relevant, and to explore other relevant research questions/criteria through our work.

The final deliverables are:

- A database/spreadsheet of identified national climate investment plans and their key features.
- A summary report analyzing plans, key findings, and insights (this document).
- A final presentation.

Methodology

Identifying Plans

We limited our initial search for national climate finance plans by prioritizing LICs and LMICs in South-East Asia, Africa, and the Pacific, according to the World Bank’s official categorizations for income-level and region. We used Google as our primary search engine, and prioritized reviewing documents published directly by government entities, particularly Ministries of Finance, Environment, and/or Climate. Search phrases included but were not limited to: “National Climate Finance Plan”, “Climate Investment Plan”, and “Climate Implementation Plan”. Due to time and language limitations, searches were conducted in English and French only, thus excluding any plans not published in either language.

Once an initial list was identified, we cross-referenced each plan to confirm inclusion of the document. In the initial stages, our inclusion criteria required publication by a government entity, and sufficient financial information and details to warrant further analysis. Documents were excluded if the information was quickly found to be superficial/not fit for analysis, or if there was consensus that the document did not otherwise have sufficient information to be considered a climate finance plan.

Once our initial sample of climate finance plans had been compiled, we reviewed and refined the list before moving forward with the assessment of each plan against the specified research criteria. Two countries were subsequently removed from the initial list after we began the assessment and once a deeper review revealed insufficient information to warrant inclusion.

Criteria Spreadsheet

A preliminary draft of the criteria spreadsheet was created by categorizing the research questions posed by the client in the initial work order. The categorization and included subcategories were refined as the project progressed, and with client consultation. The final criteria spreadsheet categories are:

1. Document Details
2. Diversity, Equity, & Inclusion (DEI)
3. Context-Setting
4. Financing
5. Sector Keywords
6. UW START Assessment (summarized in the “Conclusion” section of this report)

A description and notes on what we chose to include or exclude in our assessment for each subcategory is provided in the “Criteria Dictionary” tab of the Criteria Spreadsheet deliverable. These descriptions and inclusion guides were refined with client consultation, and with any further insights developed from KIIs and/or key documents as the project progressed. Throughout this exercise, we sought simply to identify and review plans as they are, while making some reflections on what appear to be their strengths and weaknesses, instead of assessing accuracy or likelihood of implementation.

A few additional notes on each category are provided here.

The “DEI” category: here we generally looked for references in the plan to both past initiatives as well as future goals that indicated the involvement of women, before concluding in the affirmative. Additionally, we considered the following specific groups when assessing a plan’s inclusion of marginalized populations: ethnic minorities, religious minorities, persons with disabilities, refugee or internally displaced persons, youth/adolescents, nomadic groups, and homeless populations. Similarly, a plan had to indicate involvement in the current published document to be assessed in the affirmative, but we also noted when countries stated an intent to include women and marginalized populations in government decisions moving forward.

The “Context-Setting” category: here we were specifically interested in references to other finance plans, initiatives, or activities that influenced the document, links to broader national development plans or other national strategies (including the country’s NDCs), and mentions of scaling local or community initiatives to regional or national levels.

The “Financing” category: three main financing areas were assessed when reviewing each plan: the gender-climate nexus, private financing, and financial risks and mitigation. Specific examples of financing instruments or case studies relating to financing were also sought out. Additionally, because of the emphasis on financing in our research, our findings for this section are organized and presented by “source of information” (i.e., criteria spreadsheet analysis, KIIs, or key document review).

The “Sector Keywords” category: in this section each plan was assessed to determine whether each of the seven specified keywords had been included, along with the degree of corresponding financial and implementation planning. A stoplight approach using three levels (green, yellow, or red) was used to assess the depth of inclusion and discussion around each of these sector keywords within each plan:

- Green indicated that the keyword was referenced with relatively high frequency, and that the plan included financial and implementation information for any projects or plans pertaining to that keyword.
- Yellow indicated that the topic was discussed but with an insufficient level of detail around the financing and implementation of related initiatives.
- Red indicated that the plan either had no mention of the sector keyword or only briefly mentioned it.

Notably, inclusion and depth of discussion for each topic may vary between plans, since some sector keywords may be more pressing and/or relevant in certain countries or regions). Like the “Financing” section, our findings for this section are organized and presented by “source of information.”

The “UW START Assessment” category: in this section we noted any obvious gaps and innovations in the plans. An overall impression was also assigned according to which stage of the NDC Best Practices-Investment Planning process (pre-investment planning; process and implementation, investment needs, or mobilizing investment) the plan appeared to be in (Figure 1)[1].



Figure 1: NDC Best Practices Investment Planning Theory of Change. Investment planning components fall into three stages as outlined in the second column.[1]

Key Informants

We relied primarily on client recommendations to identify our key informants. We also identified and interviewed faculty at the University of Washington that we felt would have interesting perspectives on the topic. Some identified key informants either did not respond to an interview request or were not available during the project timeframe. We set up 30- to 60-minute interviews with five individuals (Appendix 1), and each was sent an Interview Guide ahead of time, which included both the Project Background and Objectives, as well as a list of questions to guide the interview. The questions reflected the specific research criteria we were assessing as well as more general questions about the climate finance landscape. All interviews were conducted over Zoom and were recorded with explicit permission from each key informant for note-keeping purposes.

We revisited these interviews as part of our analysis and have highlighted particularly relevant takeaways in this report. The resources and documents shared with us by our key informants were also emphasized in our analysis and review of key documents.

Review of Key Documents

An initial review of key documents shared by KIIs (for information beyond the plans themselves, for example documents published by the NDC partnership or funding agencies) was conducted at the beginning of the project to get acquainted with the climate finance landscape, and later to supplement the synthesis in this report. We emphasized reviewing literature and resources that were specifically identified through our KIIs, especially to highlight case studies or best practices for the publication of national climate finance plans.

Other documents were reviewed, but the key documents that were referenced most often are:

- NDC Investment Planning: Best Practices Brief
- Mainstreaming Gender in Green Climate Fund projects
- Climate Finance Needs of African Countries

Analysis

For our final analysis of the plans and our key insights, we supplemented our assessment of each of the six criteria categories with the results from our key document review, along with the information from our key informants. Here we focus on highlighting context and background beyond what is presented in the spreadsheet deliverable, including best practices for each of those categories.

Findings

Here we summarize findings across the six categories in the spreadsheet deliverable, supplementing findings with information gleaned through the other data sources (KIIs and key document review).

Document Details

We aimed to capture the range in plan names and identify the most common government ministries or entities that were involved in the publication of the plans. We also wanted to see if there were any patterns arising from the year of publication (e.g., if more recent plans exhibited certain characteristics over older plans), and to capture the extent to which external consultants contributed to the plan.

We found that the most common phrases for the document titles were some form of “Financing Framework” or “Implementation Plan.” 8 of the 14 plans explicitly included “Climate Change” in the title, and “Nationally Determined Contributions” was explicitly included in two titles. Almost all plans were published between 2017 and 2021 (with only one, Vietnam’s, from 2015). This document date makes sense given that the Paris Agreement, which committed countries to articulating NDCs, was signed in 2016. We did not notice any immediate patterns stemming from the age of the documents (e.g., increasingly sophisticated costing over time). Finally, United Nations Development Programme (UNDP), United States Agency for International Development (USAID), and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) made the most frequent appearances as external partners supporting the development and publication of the plans, especially for the Asian countries (while we include them under “external consultants” because of clear reference to their role in authorship, the extent to which their support was financial is less clear). In Africa, the Kenya plan appeared to consult the most external partners, especially local ones, for their overall country climate finance planning process, and the Philippines plan also made reference to smaller consultants like Vigeo Eiris (that we feel more comfortable classifying as “consultants” rather than “financiers” of the plan).

Diversity, Equity, and Inclusion

We evaluated the degree to which women and other marginalized populations were involved in the creation of the national climate finance plan. This category was measured based on the hypothesis that including these groups in the development of the plan would improve the quality of the plan’s consideration of variable impacts on different population groups, particularly those most vulnerable to climate change. As climate change disproportionately impacts women, marginalized groups,

children, Indigenous Peoples, and communities,[2] meaningfully involving subpopulation specialists and, importantly, members of these communities and subpopulations who can bring valuable perspectives and lived experiences, is likely to strengthen plans by improving prioritization.

From our assessment, we found that it was often not explicit or clear to what extent women and marginalized populations were involved in the development of the plans. Most commonly, women or marginalized populations were listed by 6 plans as beneficiaries or stakeholders, but their actual level of involvement in planning processes was generally unclear. As such, we were unable to test the above hypothesis that meaningful inclusion would contribute to more comprehensive plans. However, we were able to use other metrics to gauge at least the relative presence of these groups across different plans: the Benin plan actively acknowledged the low representation of women (21% of people involved in the National Environment and Climate Funds were women) in the development of the plan and highlighted it as an area for improvement.[3] However, beyond this, it was unclear how Benin intended to increase women's engagement in their planning and implementation processes, aside from referring to their gender policy and stating that gender sensitivity should be considered in transformational actions.[3]

Similarly, the Micronesian plan reported having only one woman in its legislature at the time of publication, highlighting broader gender disparities in leadership and policy development in the country, although engagement with legislation for drafting the plan is unclear.[4] Micronesia also reported that women's councils and associations exist in each state, but the degree to which they are engaged in planning processes was noted to vary state by state.[4] Broader gender-inclusion in climate change policies in the country was also identified as being infrequent, although approximately 41% of stakeholders consulted for the climate finance plan were women.[4] The Solomon Islands' plan also emphasized plans for gender and social inclusion in future policymaking over existing efforts as demonstrated in Figure 2.[5] Conversely, the Ghana plan explicitly specified that deliberate efforts were made to engage gender experts throughout the plan development process, including involvement from the Ministry and Department of Gender which has supported the mainstreaming of gender issues into broader national development processes.[6]

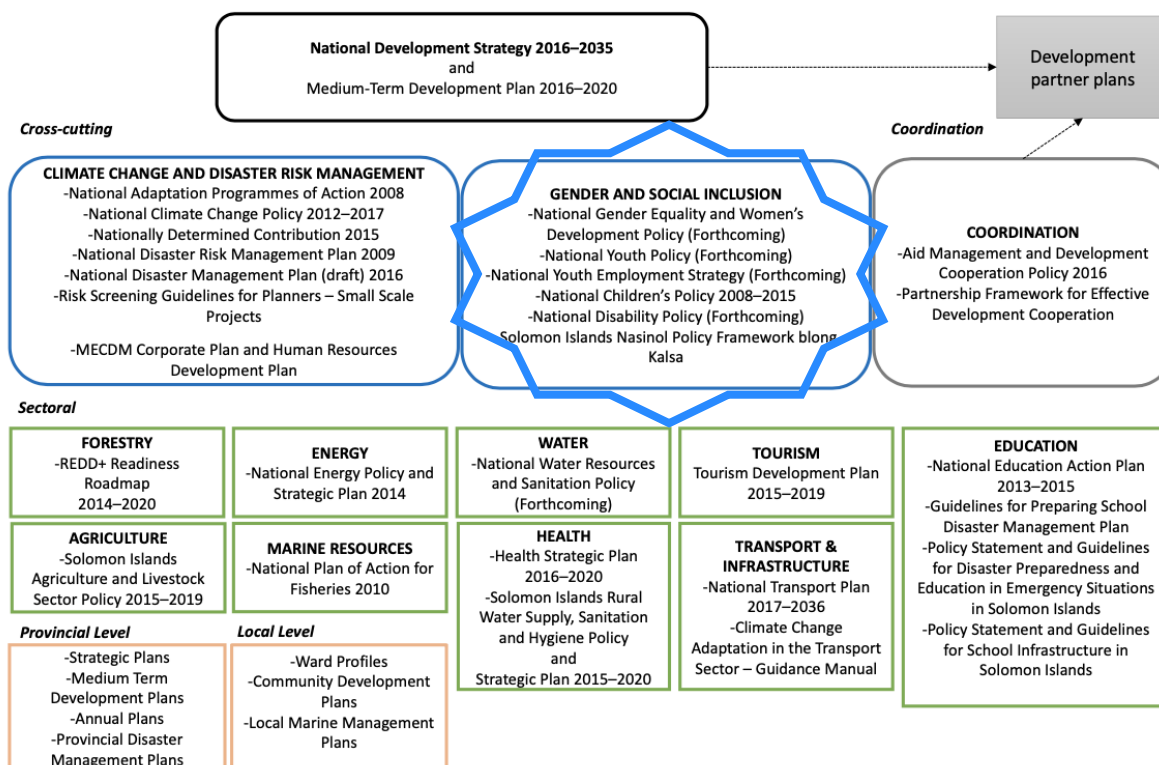


Figure 2: National Policy Landscape of the Solomon Islands highlighting many forthcoming gender and social inclusion policies[5].

References to marginalized populations were much less frequent than referencing gender inclusion. Three plans identified marginalized groups as beneficiaries, though no details on specific involvement with the creation of the plan are described. Four plans did not have any references to marginalized populations or groups. There was also some discordance in terms of how marginalized populations were defined. For example, the Liberia plan referred to marginalized groups as youth, children, people with disabilities, and people living with HIV/AIDS,[7] while the Kenya plan specified underprivileged/marginalized populations as women, youth, and minorities.[8] Multiple countries also referenced “vulnerable and marginalized populations” without defining precisely which groups this encompassed. None of the plans that were included in this review made any mention of refugees, migrants, or internally displaced persons.

Thus, while some countries did have some involvement from women and marginalized populations, it appears from our review that additional efforts are needed in most countries in order to more fully integrate these groups into government planning and climate investment processes. Including gender mainstreaming and social inclusion considerations throughout all NDC investment planning

stages is identified as one of the “best practices” in the NDC Investment Planning: Best Practice Brief.[1] This includes focusing on gender inclusion at the various stages of the investment planning process (stakeholder engagement vs. project prioritization), and not just in the planning and drafting of the plan itself.[1]

Additionally, many countries sought or intended to seek funding through the Green Climate Fund (GCF); the GCF maintains a set of requirements related to gender and social inclusion for countries to secure funding, which may increase the incorporation of these considerations in future plans.[1] Gender mainstreaming in the GCF project cycle includes a gender analysis, gender assessment, gender-responsive results framework, and project implementation for each plan or goal the country has.[9] These gender and social inclusion requirements look specifically to improve health and safety, access to education, cultural preservation, improved access to energy, gender empowerment, and the reduction of gender inequalities.[1,9]

Context-Setting

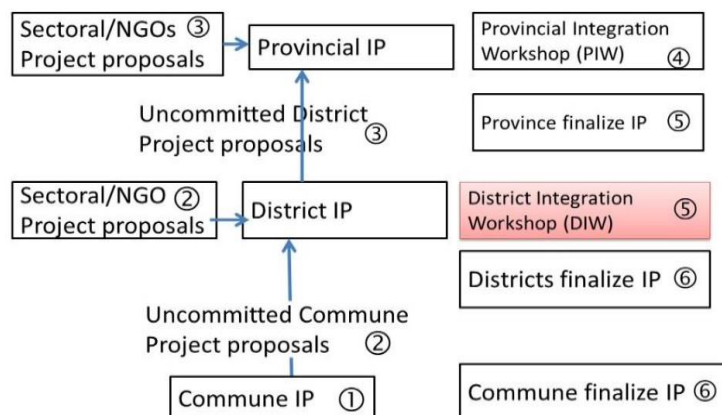
We aimed to capture how well each plan was contextualized, including whether it considered local/community needs (compared with only aggregate/national ones), if it attempted to link climate finance with broader national development goals, and if it acknowledged its place with regards to those other plans and priorities. We also aimed to capture whether a given plan focused primarily on climate adaptation, mitigation, or both.

INCLUSION OF LOCAL NEEDS

National climate financing plans should account for wide differences in impacts and needs across communities, with particular consideration for poor and marginalized communities. Those communities with a lower socioeconomic status are disproportionately impacted by the effects of climate change and are also more dependent on natural resources.[2] If municipalities and communities are engaged in planning efforts, and/or identified as key stakeholders, local issues can be brought to national attention, and can influence national priorities and planning.

From our assessment, all plans (except for the Philippines plan) had detailed information on the inclusion of local needs. The Cambodia plan exhibited an especially strong inclusion of local needs, and even highlighted how local authorities are uniquely positioned to identify climate change responses that best meet the needs of local communities (see Figure 3).[10] The Cambodia and Benin plans both receive support from the Local Climate Adaptive Living (LoCAL) Facility which promotes integration of climate adaptation into local governments planning and budgeting systems, increases awareness at local level, and increases investments to local governments for climate

adaption.[3,10,11] LoCAL is designed and hosted by the United Nations Capital Development Fund and aims to promote green and climate-resilient communities and local economies.[11]



Source: Climate Change Financing Framework at the Sub-National Level in Cambodia, Pak. (UNDP, 2013)

Figure 3: Subnational/local planning and financing processes in Cambodia[10]

The Kenya plan also has a particularly strong inclusion of local needs into national planning with the Kenyan Government focusing on devolution and decentralization to improve self-governance at the local level, with the goal of empowering local voices in articulating needs related to climate change and improving the equitable sharing of resources.[8] Many Kenyan County Governments integrated climate change within their 2013 County Integrated Development Plans, of which five County Governments have also established County Climate Change Funds which identify, prioritize, and finance investments to reduce climate risk and attain adaption priorities.[8] Lastly, Nepal has given the responsibility to provincial and local governments for identifying vulnerable communities, assets, and areas at risk for climate change.[12] These identified communities and areas are then allocated 80% of climate funding to use at the local level.[12]

LINKAGES TO BROADER DEVELOPMENT PLANS

Aligning climate finance plans with existing development plans improves consistency and coherence across national and subnational efforts, could strengthen the likelihood of securing funding, and helps ensure climate investments maximize development benefits.[1,13]

In our assessment, all countries included an explicit link from the climate finance plan to other plans or priorities including national development plans. Rwanda linked local needs initiatives to their Nationally Determined Contributions (NDCs),[14] and Nepal also referenced their NDCs when it came to implementing their plans and priority activities,[12] The Kenya plan states that they will ensure enhanced resilience to climate change towards the attainment of Vision 2030 by mainstreaming climate change into Medium Term Plans and implementing adaption actions.[8] Many

countries (Benin, Kenya, Liberia, Rwanda, and the Philippines) also included linkages from their investment plans to various Sustainable Development Goals (SDGs). This aligns with the United Nations view that all SDGs are fundamentally linked to climate change and is especially pertinent for LICs and LMICs.[15] In addition, all countries linked their plans to national development documents, budgeting processes, or at the very least discussed the need to mainstream the climate change sector into these broader development strategies. Some countries, such as Cambodia and Benin, also engaged their ministry of development planning as one of the primary authors of their climate finance plan.[3,10]

CLIMATE ADAPTATION AND MITIGATION

Assessing whether investment plans emphasize climate adaptation instead of mitigation can shed light on what types of financing a country is planning to pursue and the priorities that that country has. Additionally, mitigation and adaptation strategies require different approaches, so using appropriate costing strategies for each is important. For example, the costing for adaptation may encompass a wider range of sectors, given the types of activities may involve a similar amount of human resources and administrative efforts.[1] Adaptation vs. mitigation financing should also be assessed across sectors, as at least one KII highlighted that adaptation funding for health has historically been particularly sparse despite the substantial impacts and advocacy from the health community for many years.[16]

From our assessment, eight of the 14 plans prioritized adaptation, three prioritized both, and two prioritized mitigation. The Philippines plan identified a balance of adaptation and mitigation strategies in their eligible green expenditures section, but as details were minimal and none of these projects were funded, it was not possible to determine if mitigation and/or adaptation were a priority.[17] If we focus on how plans tagged allocation across their funding estimates, we see that the Ghana plan anticipates greater investment needs for adaptation (\$12.9 billion USD) than mitigation (\$9.81 billion USD),[6] whereas interesting the Micronesia plan emphasizes mitigation investment needs (\$38.6 million USD, 56.5%), more than adaptation (\$18.9 million USD, 27.7%), atypical for a small island developing state.[4] The emphasis on mitigation financing in Micronesia is related to sectoral spending where the majority of adaptation and mitigation climate finance is projected to be allocated on renewable energy (44.7%), followed by climate change disaster risk management (29.7%), and the energy sector (15.1%).[4]

Financing

Broadly, there was high variability in the financing details included in each plan. A sector-specific finance plan with lots of financial information (e.g., the Lesotho Renewable Energy Sector plan) is difficult to compare with a high-level NDC implementation plan (e.g., the Rwanda plan), which inherently contains less granular information. This variation makes comparisons between plans complex and highly qualitative. Additionally, details summarized may not reflect the most current climate-related financial landscape. Some country plans, such as the Solomon Islands, Vanuatu, Nepal, and Pakistan, included broader analyses of existing financial infrastructure and available resources (e.g., funding sources, human capacity analysis, public financial management, institutional analysis, etc.), with many gaps and challenges identified. Significant changes may have occurred since publication, and earlier publication dates may explain some of the information gaps that were identified (e.g., the Vietnam plan).

CRITERIA SPREADSHEET

Gender-climate nexus: from our assessment, financing aimed at the gender-climate nexus varied between plans, with the Kenya plan, Liberia plan, Rwanda plan, and Cambodia plan providing the most financing, policy, and implementation details in this area. There were five plans (the Philippines, Pakistan, Vanuatu, Vietnam, and Nepal plans) that either did not address or include any financing related to the gender-climate nexus, or only stated an intention to use a gender-based lens for future planning or reporting.

Private sector: in general, most plans identified a need to increase private sector engagement while also reporting limited formal engagement at the time of publication. Exceptions were the Lesotho, Liberia, and Ghana plans, which all included cost estimates for private financing related to certain initiatives, such as private investment needs in microgrids and other distributed renewable energy technologies in Liberia.

Financial risks and mitigation: the discussion around financial risks and mitigation of these risks varied across plans:

- Ghana, Kenya, Lesotho, Cambodia, Vanuatu, and Pakistan plans all discussed both financial risks and mitigation strategies.
- Apart from identifying monitoring and evaluation gaps related to financing, the Liberia and Rwanda's plans did not specify much in the way of either specific financial risks or their mitigation.
- The remaining six plans all highlighted financial risks but without much or any detail on mitigation of these concerns.

Section I of the NDC Best Practices document highlights a process for countries to access and/or increase private sector investment and funding from external sources.[1] Although many of the plans included in our assessment address some of the 11 components for NDC investment planning, none addressed all eleven[1]. Many barriers to investment (Component 7) likely persist, as identified by national planners in most countries.

KEY INFORMANTS

The following are takeaways from our key informant interviews around different types of climate finance planning and implementation, challenges/barriers, and opportunities:

- **“NDC” vs. “Implementation” vs. “Investment” plans:** The distinction between these are that NDCs act as political commitments and the first step in the process. An *implementation* plan follows, to outline the NDC implementation strategy and necessary technical assistance. Finally, an *investment* plan can be developed, which will contain the most financial information (including costs) and enabling or precluding policies, legislation, and investment. Investment plans will vary depending on available resources, targeted sectors, and targeted investors, as there does not currently appear to be any consensus from investors around a particular investment plan format, aside from having a clear lead agency. Lastly, the majority of these documents are political and not scientific documents and therefore their actual impact on climate change is a bit unclear.
- **Public-Private Financing for Climate Investment:** Effective climate finance involves multiple sources and an *enabling environment*. Part of the investment planning process should include identification of the best or most appropriate investment stakeholder (e.g., GCF is interested in funding many projects but does not want to crowd out the private sector). Depending on what gaps exist in the enabling environment, a rough timeline to scale-up private investments could occur within 18 months.

Additionally, determining capital flow calculations at a subnational level is quite challenging, which might make sub-national and sector planning more difficult. Capital markets in many LMICs are not especially robust. If a country is unable to issue sovereign bonds, then they are locked out of capital markets and will have great difficulty attracting external investment flows. The “V20,” (Vulnerable 20) countries also tend to have poor credit ratings, limiting their ability to secure greater investment flows.

- **Country Income Levels and Climate Finance:** Availability of funding also varies depending on a country’s income-level status, which can be dynamic, requiring countries to pivot their climate finance strategies as they achieve broader development targets. Cambodia transitioned from a

LIC to an LMIC and reported an accompanying shift in funding as LICs tend to have greater access to grants and concessional financing.[10] Existing income-level categories may be outdated when setting financing terms available to MICs that have high-vulnerability to climate risks (e.g., small island nations). For example, the Local Climate Adaptive Living (LoCAL) Facility previously mentioned offers performance-based climate resilience grants to ensure climate change expenditures at the local level, prefers to fund Least Developed Countries (LDC).[11]

LITERATURE

Climate financing in lower-resource settings tends to be a more challenging endeavor than in higher-income countries. The gap between the climate finance needs in LMICs and available funding is vast. A recent analysis of Climate Finance Needs of African Countries estimated the cost of implementing Africa's NDCs until 2030 to be at least \$2.8 trillion USD, with African governments committing \$264 billion USD of domestic resources, or just 10%.[18] Of these total costs, most (66%) emphasize mitigation across the transportation, energy, industry, and agriculture/land use sectors, despite high adaptation needs.[18]

In general, many of the LMICs identify significant challenges in the climate financing space both within the assessed climate finance plans and key documents.[18] Baseline gaps in financial monitoring systems, regulatory landscapes, and limited in-house technical capacity constrain many countries ability to effectively access and utilize domestic and international sources of funding. In higher income countries, private finance often makes up most of the total climate finance, whereas in regions with a greater proportion of LMICs, the split between public and private finance is the opposite (Figure 4), placing a potentially undue burden on already under-resourced public infrastructure.[18]

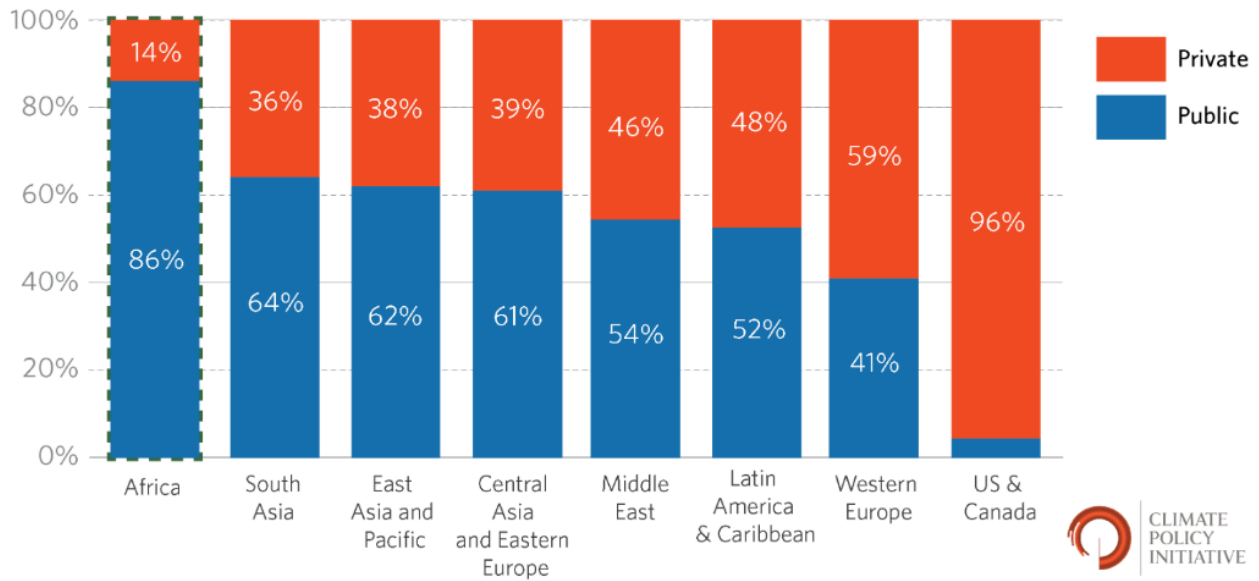


Figure 4: Share of private vs. public climate finance by region[18]

The lack of private investment in Africa is not due to lack of demand or opportunities for investment or weaker financial systems, but also related to the upfront costs of capital itself, which can be highly sensitive and weakened by foreign exchange issues, risk perceptions, and lengthier returns on investment relative to other regions.[19] Increased advocacy and planning by LMICs is needed to encourage more foreign investment. This was rumored to have begun at COP27, with some African countries developing investment packages so potential investors could have a better understanding of the whole picture.[19] Another factor which impacts private investment is adaptation vs. mitigation priorities. Private climate finance mostly flows to mitigation, when sometimes adaptation needs are higher.[18] For example, most LDCs have a low contribution to global warming but they're at high risk to climate change impacts. Thus, these countries may have a hard time financing their adaptation projects through private investments.[18]

Other identified climate finance challenges include the broader international funding architecture, which was identified as being somewhat hindering, particularly regarding a lack of clarity or complexity around eligibility criteria when funding opportunities are announced, along with the practice of supporting project-based strategies, which contribute to issues with project sustainability.

International debt is another topic highlighted as a pressing issue in key climate finance documents, as it represents a significant source of financial outflow compared to climate finance, particularly after the COVID-19 pandemic. A recent report unearthed that debt repayments represent 18 times what small island developing states receive in climate finance.[20] This is mirrored in the Africa, where international debt accounts for more than half of climate finance.[21] While some experts

have suggested scaling up debt-for-climate swaps, as a double-pronged strategy to provide debt-relief in exchange for NDC pledges being met, the International Monetary Fund (IMF) recently identified challenges with negotiating and coordinating these swaps in addition to monitoring compliance.[22]

The NDC Investment Planning Best Practices Brief addresses many of these challenges, apart from international debt, providing a toolkit to establish appropriate documentation, planning, and strategies to mobilize climate investment.[1] However, limited in-country capacity in many countries may hinder action to fully address the 11 components of NDC investment planning, requiring ongoing external support.

Sector Keywords

The sector keywords were provided by the foundation based on interest of category involvement in the national climate financing plans. The sector keywords identified were: sanitation; flooding, droughts, and water stress; agriculture adaption; smallholder farmers; food security; and health.

CRITERIA SPREADSHEET

The criteria spreadsheet provides a high-level assessment of sector keyword inclusion in each national climate financing plan. While this gives insight to the distribution and inclusion of the sector keywords, a more detailed analysis by sector experts to assess the climate and financial relevance of proposed planning is recommended. For example, decentralized sanitation, fecal sludge treatment plants, and pit latrines are all positive ways to adapt the sanitation infrastructure, while sewers are not a sustainable way to respond to sanitation issues, and they do not service small communities well.[23] We did not take into account the impacts of the sanitation technologies described, and thus the traffic lights related only to inclusion of the keyword, rather than potential downstream impacts.

In general, the Sub-Saharan Africa region had more “green” traffic lights relating to sector keywords, when compared to the South-East Asian and Pacific regions – perhaps indicating greater alignment with development goals. The requirement to get a “green” traffic light requires both comprehensive descriptions and supporting financial information, so the increase in “green” traffic lights could be due to 1) Increase of sector keywords as a priority throughout the national climate finance plan, or 2) overall more descriptive financial information throughout the plan, regardless of sector keywords. In other words, lack of financial information (“yellow” traffic light) could be due either to the keyword being less of a priority for the country or overall lack of financial information throughout the whole plan.

The three countries with the most detailed plans according to sector keywords were the Kenya, Cambodia, and Rwanda plans. Similarly, the three sector keywords that were addressed the most thoroughly across all 14 plans were agricultural adaptation, health, and food security. Most countries described “health” in relation to human health, specifically vector-borne disease. The Cambodia plan highly referenced health specifically for human health risks (Dengue, Malaria, other vector-borne diseases) health infrastructure risks, financed health projects, and finance gaps.[10] Kenya and Liberia considered both human and animal health risks and impacts.[7,8]

Lastly, outsider expectations for sector keywords did not always align with reality. For example, the Pakistan plan identifies flooding as a threat but otherwise does not include any further planning, financing, or discussion for this keyword, despite Pakistan suffering from devastating flooding in 2010 and again in 2022.[24] Similarly, the Philippines plan had a large emphasis on COVID-19, and the health and economic impact on the country.[17] While the Philippines did not have a strong presence in sector keywords, those that were mentioned were tied to the impacts of COVID-19.[17]

KEY INFORMANTS

The KIIIs largely agreed that these sector keywords were important areas to consider when reviewing climate finance plans, although they noted that some of the terms were quite broad and therefore might make any analyses or comparison challenging.

While the use of traffic lights as an indicator of frequency and robustness made sense for almost all the keywords, for the “sanitation” keyword, we had discussions about using the system to denote the *effectiveness* of different types of sanitation initiatives instead. Suggested elements included innovation, sustainability, and relevance (e.g., investing in sewers would be considered a “red” categorization as the infrastructure is costly, not sustainable, and does not serve smaller communities.[23] In contrast, a “green” initiative could be toilets that do not use water as they are more sustainable, reduce methane, and can generate some electricity via the collected fecal sludge waste).[23] While certainly highly pertinent, this level of analysis went beyond the project scope and technical expertise of this START assessment.

LITERATURE

The NDC best practices document does not appear to address these sector keywords except in the context of specific countries identifying investment needs relating to these topics. However, other resources do place more emphasis on these keywords. A June 2022 analysis considered a wide range of sector and subsectors in their analytical framework of climate finance needs; these included many of the same or related keywords across mitigation, adaptation, and loss and damages, with an emphasis on agriculture, water, sanitation, crosscutting, health, and resilience.[18] The Climate &

Development Knowledge Network also emphasizes these topics at a more granular level, drawing attention to smallholder farmers as a vulnerable group that is rarely reached by traditional financing mechanisms, due to their tendency to work in more informal sectors.[25]

Conclusion

Overall, we found that the 14 national climate finance plans included in this analysis varied greatly by document name, aims, content, financial detail, and overall impression. The selected plans included in our analysis were published between 2015 - 2021 (with most plans after the 2016 Paris Agreement) and multiple plans indicated that additional relevant sector plans were in existence or in development at the time of publication. These supporting documents – not found by this review – may address some of the gaps noted in the broader plans and our overall impressions.

Cambodia and Kenya were found to have the most detailed plans, emphasizing financial projections, inclusions of stakeholders, and strong local governance. Conversely, Nepal and Pakistan had the least robust plans and seemed to be in an earlier stage of planning, as both plans highlighted the financial infrastructure that would be required to support climate-related finance instead of current planning or implementation. Consideration of the different economic and development statuses of each country is important as it may help to identify where investment may be most feasible and effective, and what supports, aside from financial, may be required in order to achieve intended targets.

Our KII's emphasized the importance of understanding national climate finance planning and the nuance and ongoing lack of clarity in this subject area, such as the need for countries to develop NDCs, implementation plans, *and* investment plans. The identified discrepancies between the national climate finance plans included in our analysis can be partially attributed to the different scope or aim of each document. Ongoing learning and capacity building efforts by organizations, such as the NDC Partnership, are vital initiatives to elucidate current and future national climate finance planning.

Appendix

Appendix 1. List of key informants interviewed, along with the key resources they identified.

KEY INFORMANT	ORGANIZATION	AREA OF EXPERTISE
Jeremy Hess	University of Washington	Climate Change and Health
Charlie Donovan	University of Washington	Climate Finance and Investment
Anika Heckwolf	London School of Economics - Grantham Institute	Environmental Policy Evaluation
James Birch	Bill and Melinda Gates Foundation	Agricultural Policy
Amanda McKee	NDC Partnership	NDC Planning and Implementation

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