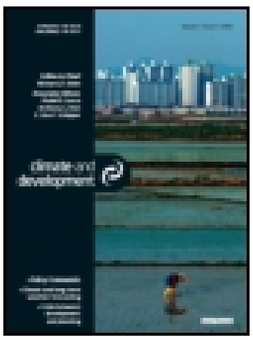

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Climate mainstreaming via national climate funds: the experiences of Bangladesh and Ethiopia

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ABSTRACT

A number of countries have established national climate funds to finance climate actions. This paper explores how these funds help to mainstream climate change and examines the barriers they encounter in the process. The analytical framework uses a process-based understanding of policy integration to examine how financial incentives are able to support climate mainstreaming. Methodologically, this paper examines the experience of the Bangladesh Climate Change Resilience Fund and Ethiopia's Climate Resilient Green Economy Facility. Policymakers, officials related to the funds, and other stakeholders were interviewed. This paper finds that national climate funds sought to achieve mainstreaming by engaging with sectoral ministries. Such engagement was expected to lead to changes in sectoral and system-wide policy goals and instruments. The three main approaches for sectoral engagement were: serving as implementing entities, participating in fund governance, and via in-house climate change units. The findings underscore how finance received by the funds shapes programming, how the lack of detailed plans limit the ability of policies to pull in the finance desired, and the inconsistent role played by climate change units. A disaggregated approach to climate mainstreaming allows us to identify where and how financial incentives can be useful.

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Climate change; climate mainstreaming; climate finance; policy integration; national climate funds

1. Introduction

The inherently cross-sectoral nature of climate change means that climate change cannot be confined to a Ministry of Environment alone. Therefore, many governments have sought to integrate climate change into the work of sectoral ministries. Climate mainstreaming refers to the integration of climate change into planning and implementation. The lack of financial resources is a widely acknowledged barrier for climate mainstreaming (e.g. Thuy et al., 2014). This paper examines the provision of financial incentives through national climate funds for the purposes of climate mainstreaming and identifies the barriers that prevent the integration of climate change into sectoral implementation.

Clayton-Bass and Dalal define climate mainstreaming as 'the informed inclusion of relevant environmental and climate change concerns into the decisions of institutions that drive national, local and sectoral development policy, plans, rules, investment and action' (Dalal-Clayton & Bass, 2009, p. 11). This definition is useful for its comprehensiveness. It includes both plans as well as investments and it includes mitigation as well as adaptation. What climate mainstreaming really means in practice and how actors can best achieve it are questions that are far from settled. These varying interpretations manifest in different ways as the case studies will illustrate.

To uncover how incentives may help to mainstream climate change, this paper explores the experience of two national climate funds. National climate funds are dedicated funding vehicles that channel domestic or international resources towards climate-related projects and programmes. The findings of this paper are rooted in the empirical evidence from the Bangladesh Climate Change Resilience Fund (Bangladesh) and the Climate Resilient Green Economy Facility (Ethiopia). The methodology involved interviews with government officials, fund managers, and other stakeholders ($N = 40$) in addition to analysis of primary documents. The findings, however, travel beyond these contexts and inform the wider debate about how the use of incentives to support mainstreaming of climate change actually works out in practice.

This paper identifies the conditions under which national climate funds aid mainstreaming. It examines how incentives offered by national climate funds interact with policy contexts and organizational tools, such as climate change units, in shaping mainstreaming. In particular, it investigates how national and sectoral plan create the policy pull to channel financial incentives and help increase the scale of implementation. As these national climate funds mobilize resources from international sources, the article also identifies how the funding stipulations help or detract from mainstreaming. Furthermore, it examines the role played by climate change units in sectoral ministries in serving as the link between the funds and sectoral planning and implementation.

This paper makes two primary contributions to the study of climate policy in developing countries. First, this paper builds on recent developments in the policy integration literature. To understand policy integration in a more granular manner,

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policy integration scholars have put forward frameworks that identify and disaggregate the dimensions of policy integration. This paper carries forward this development and applies it to climate mainstreaming. More precisely, it identifies how national climate funds impact specific dimensions of climate mainstreaming. Second, while many papers emphasize the need for climate finance and identify the lack of climate finance as a barrier, literature that directly tackles that role of national climate funds in aiding mainstreaming is rare.

After presenting a synthesis of the concept of climate mainstreaming, the paper contextualizes the use of incentives and puts forward an analytical approach that emphasizes an interactive approach to mainstreaming. Then, the article presents evidence from Ethiopia, and Bangladesh to illustrate how the various funds have tried to facilitate climate mainstreaming. Each of these cases reveals a distinctive approach where national climate funds can shape and influence the mainstreaming agenda. The discussion section brings together insights from the cases on how the national climate funds help scale up implementation, the role of policy, and the use of dedicated climate change units. The article concludes with a discussion of the barriers to climate mainstreaming.

2. How incentives help to mainstream climate change

2.1. Climate mainstreaming as policy integration

Climate mainstreaming is usually defined as the integration of climate goals into sectoral policies (Braunschweiger & Pütz, 2021). The usual answer to why integration varies is the presence of barriers. Eisenack et al. (2014 and 2015) have suggested investigating precisely *why* certain barriers impede mainstreaming in addition to identifying barriers and creating typologies, which has long been the focus of the earlier literature. That has led scholars like Biesbroek et al. (2015) to suggest the need to shift the focus away from barriers and into identifying causal mechanisms that lead to mainstreaming. There has also been a recognition of the policy context in which climate mainstreaming takes place. Climate policies may vary across countries because countries have different climate policy paradigms. There may be multiple policy paradigms within the same country. Therefore, climate policy formulation is more a process of 'layering' rather than wholesale replacement (Vij et al., 2018). In other words, climate mainstreaming cannot presume a blank policy slate.

Because mainstreaming has been understood by a number of scholars as the integration of climate considerations into sectoral plans, there has been an effort to understand the compatibility of climate and sectoral goals. When climate change goals are compatible with sectoral goals, climate mainstreaming is more likely. The findings however are context specific. Other scholars have found that sectoral strategies may run counter to climate-first strategies. For example, an agriculture strategy that solely focuses on enhancing yields may not necessarily promote farmer resilience (Kuhl, 2018).

Whether or not climate and sectoral goals align well, scholars have found that mainstreaming is more likely to happen at discursive levels rather than in actual policy instruments themselves. There is growing consensus that climate mainstreaming has not moved beyond symbolic levels (Alons, 2017; Candel, 2017, 2019; Drimie & Ruysenaar, 2010; Runhaar et al. 2018). In other words, while the goal of achieving climate mainstreaming may be expressed in frameworks and high-level policy documents, these objectives are not translated into sectoral policies (Candel, 2019). Furthermore, those high-level frameworks may also lack the teeth needed to actually enforce climate mainstreaming into sectoral policies. For example, Von Lupke and Weil find integration at the level of policy discourse and negotiation in Mexico's climate and energy sectors, however, they do not find support for integration through other channels, tools, and instruments. Therefore, climate policy integration falls apart when it doesn't have the support of those instruments.

Another reason why climate objectives may be prevalent in policy frames but remain absent from sectoral plans and strategies is international aid. For example, ministries that lead the design of climate policies may try to strategically align themselves with donors to be responsive to their priorities (Faling & Biesbroek, 2019; Walsh, 2017). Analyzing policies on climate-smart agriculture in Kenya, Faling and Biesbroek (2019) found that those advocating for climate-smart agriculture policies pointed to the availability of international climate finance.

While the literature mostly points to the disconnect between overarching national-level climate plans and sectoral plans as the reason for the lack of mainstreaming, this paper takes the disconnections as the starting point. In other words, one of the tasks of national climate funds would be to help align policy goals of sectoral ministries so that policy instruments adopted by the sectoral ministries are aligned with the overarching climate policies. More specifically, this paper shows how policymakers try to use funds to close the gap between climate and sectoral policies through the use of financial incentives.

One of the major contributions of this paper to the literature on climate policy is the application of a disaggregated policy integration framework to climate change. Policy integration is viewed as necessary when 'societal challenges … are crosscutting the boundaries of established jurisdictions, governance levels, and policy domains' (Candel & Biesbroek, 2016, p. 212). Candel and Biesbroek's processual framework allows us to distinguish the dimensions of policy integration. In doing so, when applied to climate mainstreaming, we are better able to understand the constituent elements of climate mainstreaming. In particular, this paper identifies when and how financial incentives impact the various dimensions of climate mainstreaming. In doing so, the paper attempts to place incentives in a broader set of policy choices that a government needs to make to integrate climate change goals across government. Incentives can help with certain dimensions of mainstreaming while complementary policies are needed to support other dimensions.

Second, this paper focuses on national climate funds as potential drivers of mainstreaming. While there has been some attention to policy entrepreneurs and how they may help to bridge across sectoral boundaries to integrate climate change, this paper focuses on national climate funds as

providers of incentives. These incentives mostly take the form of direct grants for implementation or as grants to subsidize overall loan packages.

2.2. Analytical framework

2.2.1. Dimensions of climate mainstreaming

This section builds on Candel and Biesbroek's 'processual understanding' of policy integration. Here, the term 'policy integration' is used interchangeably with mainstreaming. The analytical framework decomposes policy integration into four dimensions: policy frame, subsystem involvement, policy instrument, and policy goals. Policy frame is about problem definition. For example, how narrowly or broadly is climate change defined? A high level of climate mainstreaming would indicate that the cross-sectoral nature of climate change is recognized, therefore, the problem definition would be broad. A narrow definition of climate change that does not encompass other sectoral issues would not reflect the cross-cutting nature of climate change.

Subsystem involvement considers which actors are actually involved in addressing climate change. For example, in many countries environment ministries are often the lead entities in implementing climate change programmes. When climate change has broad subsystem involvement, subsystems other than the environment subsystem would also be involved. The terminology of subsystem is mostly used to indicate that these subsystems form only a part of the overall governance system.

Policy goal refers to goals at system-wide governance levels. Are climate change concerns adopted in high-level policy goals? For example, do national development plans, the primary policy planning documents in many developing countries, consider climate change? In addition to the incorporation of climate change into governance-level planning, Candel and Biesbroek also point to the need to investigate the level of coherence between policy goals. For example, even though a government may have included climate change in its national policy documents, it may still have policies that support fossil fuels.

Policy instrument refers to the integration of climate considerations within the instruments used by sectoral ministries. How do subsystems incorporate climate change into their policies? The assumption here is that a high level of climate mainstreaming means that subsystems will formulate policies and plans that include climate change. Not only would the ministry of environment have plans and policies that include climate change but climate change would also be incorporated into the plans and strategies of subsystems that have substantive linkages with the issue.

2.2.2. The role of incentives

National climate funds provide incentives to encourage actors within the subsystem and across subsystems to implement climate change related programmes. These incentives can be direct financial grants to implementing agencies. The financial instruments used by the national climate fund will depend on the fund's level of sophistication. The cases discussed below show how national climate funds have sought to enlist the support of sectoral ministries. Similarly, the national climate funds have also used tools such as mainstreaming units to serve as conduits of information and sources of internal capacity for the sectoral ministries. Furthermore, national climate funds have also worked on the assumption that supporting sectoral ministries' programming will eventually pave the way for greater integration of climate goals into sectoral policies themselves.

By providing financial incentives, a national climate fund helps implementing agencies to scale up implementation. For example, when a national climate fund provides resources to a line ministry to install solar irrigation pumps, it increases the deployment of clean energy technologies. Incentives from national climate funds are relevant for two reasons. First, given that the domain of this analysis is developing countries, even when a ministry has fully internalized climate considerations in its plans, it may not be able to implement them. Second, a resource blend from a national climate fund may encourage the ministry to choose cleaner alternatives over more fossil-intensive ones.

To summarize, I focus on how incentives shape subsystems' engagement with climate change. The other three dimensions of policy integration – policy goals, policy instruments, and policy frames – are important because they shape the contexts in which the precise relationship between incentives and subsystem engagement unfolds.

3. Methodology and data

This analytical focus of this paper is on how financial incentives provided by national climate funds helped to mainstream climate change. To understand the mechanisms and processes at play, detailed case studies offer the most promise. A major goal of this paper is to increase the knowledge base of climate change-related institutions in developing countries. The two funds selected for study, the Bangladesh Climate Change Resilience Fund and the Climate Resilient Green Economy Facility of Ethiopia, have significant track records in operations. While the universe of national climate funds has grown over the last 10 years, these funds provide the benefit of operational track records. Furthermore, these funds were also able to mobilize significant financial resources. Therefore, the paper focuses on national climate funds in developing countries. In addition, these funds were designed to attract international finance. These funds are well poised to help shine light on how the nature of international climate finance filters through domestic policy contexts to shape mainstreaming. Bangladesh and Ethiopia folded the funds into the national policy frameworks on climate change.

Data was collected through interviews with policy officials in the three countries through field visits in Addis Ababa and Dhaka. The research protocol was approved by the Institutional Review Board of Tufts University. Consent was obtained orally. The requirement for written consent was waived. The breakdown of the interviewees is provided in Annex 1. The interviews lasted between 30 and 75 min. The interview questions sought to better understand how the funds were designed, how he funds made allocation decisions, how the implementing agencies engaged with the funds, and

the types of support provided to the fund and through it. The questions also tried to uncover how the fund managers and the implementing agencies justified the use of funds for specific projects. I followed up with a few interviewees via email. Documents from the funds, policy documents, and other reports provided further data sources.

4. Case studies

4.1. Ethiopia

4.1.1. CRGE facility

Ethiopia launched a highly ambitious Climate Resilient Green Economy Vision and Strategy in 2011. The government aimed to pursue a carbon-neutral growth path while achieving middle income status by 2030. A key component of this plan is its financing arm, the CRGE Facility. The CRGE Facility's goal is to mobilize finance from different international sources and channel them to sectoral ministries for implementation. It is housed in the Ministry of Finance and Economic Cooperation but is jointly managed by the Environment, Forests and Climate Change Commission and the finance ministry. As the Ethiopian government wanted to give donors the flexibility of the modality they could use in channeling their contributions, donors could choose between contributing directly to the government-managed account or through the Multi-Partner Trust Office at UNDP.

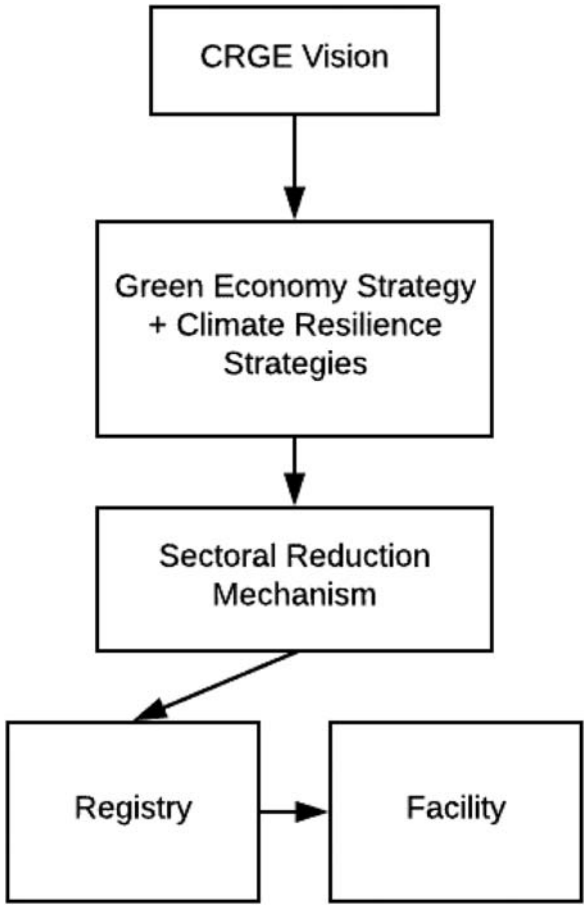

Figure 1. Translating the CRGE vision into CRGE Facility projects.

4.1.2. National plans

To transform Ethiopia's CRGE vision into concrete priorities, the government set up a sectoral reduction mechanism (SRM). The SRM was expected to match external financing with actions that support the government's policy objectives. The CRGE Facility's operational manual outlines a four-step process for the SRM: development and validation of Sector Reduction Action Plans (SRAPs); technical and financial review of the SRAPs; financial mobilization and allocation of investment; and monitoring, evaluation, and reporting of results. As the steps indicate, the SRM was expected to break away from a project-based approach. The process is diagrammed below in Figure 1.

We can divide the funds disbursed by the CRGE Facility into two broad categories: fast track finance, and finance for further planning and implementation (in accordance with the SRM). The CRGE Facility used the initial round of funding from the UK to support 'fast track projects' as a test of concept. The source of these funds was the UK's Strategic Climate Institutions Program (SCIP). In SCIP's design document, DFID aims for a 'running start without having to pause to wait for proposals' (DFID, n.d., p. 5). There were two significant consequences of the push to roll out projects. First, the projects' broader links with sectoral plans were tenuous. DFID's International Aid Transparency Initiative agreed with this assessment (International Aid Transparency Initiative, 2015). The report identified how a project-based approach would not yield sector-wide impacts due to the lack of comprehensive engagement from sectoral ministries, apart from the immediate units involved in project design and implementation.

The general resource-constrained setting of the Ethiopia also shaped how the use of funds was justified. For example, how the Ministry of Water, Irrigation, and Energy (MWIE) approached the funding call from the CRGE Facility is illustrative. In interviews with MWIE officials, they provided two justifications in support of the fast track projects, despite short-circuiting the SRM process. First, they argued that the high degree of unmet needs in Ethiopia meant that interventions helping to fill such gaps are welcome in any case. For example, the CRGE Facility provided support to deploy solar power to communities whose energy needs were not being met. They further noted that budgetary allocations from the government probably would not have been sufficient to help fund such activities from the ministry. As a result, officials prioritized the ability to fill gaps rather than design projects that conformed to the larger policy frameworks.

Apart from missing concrete links with sectoral plans, the second major impact of SCIP funding was that the CRGE Facility was also constrained by its short timeframe. The fast track projects had a horizon of two years, a requirement from the UK, with officials noting the need to design projects that could be executed within the grant duration time. From the UK's vantage point, in addition to having 'off the shelf' projects, as financing was allocated to projects already vetted by DFID, there was a lower fiduciary risk. Such stipulations, however, went up against the potential of the projects to be 'transformational' as an extensive planning and design process was not possible. Similarly, it was not possible for the CRGE Facility to utilize the SRM given the short duration of the

projects as sectoral ministries were still formulating their plans. The original understanding of the government and donors was that sectoral ministries would apply for funds on the basis of investment plans. Sectoral plans, however, were slow to materialize and their unavailability meant that funding allocations had to be made in their absence. For example, the sectoral plan of the Ministry of Water, Irrigation, and Energy was still under development when the fast track projects were identified and executed.

While the SRM awaited elaboration from sectoral ministries, a number of planning processes moved forward and their links with the SRM and the structure envisioned by the CRGE strategy was not always clear. The CRGE Facility's experience with the Climate Investment Funds' Multi-Sector Investment Planning, Norway-led REDD+ investment plan, and UNFCCC-driven adaptation planning are illustrative of the heavy emphasis on planning. The Multi-Sector Investment Planning for climate resilience (MSIP) responds to the Ethiopian government's demand for 'large-scale, programmatic, inclusive investment planning' (AfDB and World Bank Group, 2016). MSIP was expected to add value as it would result in an investment plan that contains costed, bankable projects. The Ethiopian government would be better positioned to respond to the demands of multiple climate finance institutions such as the GCF, the GEF, the Adaptation Fund, and the CIFs. It is unclear how these planning efforts build on the process envisioned under the original Sectoral Reduction Mechanism. Furthermore, these three plans are operating in parallel with efforts to design a country programme and a project pipeline for the Green Climate Fund. In this manner, rather than shifting from planning to implementation with each new round of funding, the focus has been on producing new plans.

4.1.3. CRGE units

To support climate mainstreaming, policymakers and donors envisioned that climate change units (CRGE units) in sectoral ministries could play an essential role. Their working theory was that climate change units would champion the cause within their respective sectoral ministries and lead to the ministries incorporating climate considerations in their planning and operations. As the CRGE units would be involved in writing proposals to access finance from the CRGE Facility, such a process would build their capacity to design programmes and projects reflecting climate considerations and, ultimately, help revise and align sectoral plans with CRGE objectives. The government initially established CRGE units as parts of larger directorates. Five ministries, however, have upgraded the CRGE units into directorates themselves: Industry, Transport, Urban Development and Housing, Livestock, and Fisheries (Interview E11, 2017). CRGE units still exist in the Ministry of Agriculture and the Ministry of Mining and Natural Gas. All of the CRGE directorates/units/focal persons are situated in the part of the ministry that is responsible for environmental impact assessments. As the Environment Protection Agency (EPA), the precursor to the Ministry of Environment and Climate Change (now Commission for Environment, Forestry, and Climate Change), spearheaded the development of the CRGE vision and strategy, it is not surprising that most ministries selected an arm of their ministry that had pre-existing relationships with the EPA.

The CRGE units, however, have had limited impact on the actions of the planning and budgeting directorates of the sectoral ministries. Ministries have not consistently utilized CRGE units to develop funding proposals. Second, their placement outside of the planning and budgeting directorates means that they continue to be sidelined. For example, in the Ministry of Water, Irrigation, and Energy, there is no institutionalized process for the CRGE unit to actually review the plans of the directorates and assess whether they are in conformity with the objectives of the CRGE strategy and the sectoral strategy. Consultations have only been informal and ad hoc (Interview E5, 2017).

For fund contributors, the establishment of CRGE units provided a visible and traceable indicator that they could use to show progress. For example, DFID's Climate High-level Impact Program had indicators such as establishing CRGE units in 10 key line ministries (DFID Ethiopia, 2012). Despite the eagerness of DFID to support the establishment of CRGE units, it is clear from interviews with officials in sectoral ministries that not all ministries were convinced of the need to set up a CRGE unit. The exact role such units would play to facilitate the mainstreaming of CRGE objectives was also unclear. Interviews with high-ranking officials display an acute awareness of the variation that exists in the utilization of CRGE units across ministries (Interview E2, 2017). A key informant stressed the need for a stocktaking exercise to assess the success of the CRGE units thus far and devise a way forward so that there is more standardization in the role of the CRGE units. The lack of a strong monitoring and evaluation system has meant that it is hard to keep track of the performance of these units and ultimately the performance of these ministries themselves in implementing the CRGE strategy. Despite the quarterly meetings and annual reports that are made to the interministerial committee, without good information on progress, any remedial action is hard to take.

4.2. Bangladesh

4.2.1. Bangladesh Climate Change Resilience Fund

The Bangladesh Climate Change Resilience Fund (BCCRF) was established as a multi-donor trust fund that was focused on financing adaptation and resilience actions in Bangladesh. The World Bank was the administrative agent of the fund. The Bangladesh Climate Change Trust Fund (BCCTF), often described as the 'sister' fund to the BCCRF, mobilizes domestic resources and allocates money to sectoral ministries for executing climate change-related projects. While discussions on these funds were ongoing during the formulation of the Bangladesh Climate Change Strategy and Action Plan (BCCASAP), they were officially launched after the BCCSAP was finalized. The BCCRF ceased operations upon World Bank's disengagement from the fund. One of the many reasons that led suspension of the fund's operations was a disagreement amongst the actors involved on how the fund was adding value, which was rooted, in part, in varying understandings of fund impact and the role of public finance. The focus of this section is on the BCCRF given that the BCCRF sought

to attract international climate finance. The BCCTF has mobilized domestic climate finance.

4.2.2. National plans and coordination

The BCCSAP utilized a cross-sectoral approach in its institutional arrangements. Both the BCCRF and the BCCTF asked for project applications to demonstrate conformity with the Bangladesh Climate Change Action Plan to show the conceptual link between the project and how it would address climate change. As sectoral ministries did not have strategies or plans that had integrated climate change into their formulation, the funds used the national climate plan as the basis to examine whether the projects did indeed support climate objectives. The BCCRF mobilized approximately US $180 million dollars.

Evidence suggests, however, that the role played by climate change units has been inconsistent and tentative due to both domestic and external forces. The BCCSAP's institutional arrangements for implementation were built around the National Environment Committee (chaired by the Prime Minister), a national steering committee, chaired by the Minister for Environment and Forests to coordinate line ministries, and climate focal points in all of the relevant ministries as the foot soldiers to help integrate climate change from within the line ministries. Domestically, despite the strong political will of the Prime Minister to address climate change, there were difficulties in translating such commitment to operational level action. For example, meetings of the National Environment Committee were rarely convened (Interview B2 and B5, 2017).

There were two general concerns about the impact the fund was really having in terms of supporting climate objectives. From a vulnerability standpoint, as no nationwide vulnerability map was available, the BCCRF did not make allocations based on the potential to reduce vulnerability to climatic stressors. The BCCTF did not apply vulnerability indicators in their allocation process either. The Department of Environment's process to develop a national vulnerability index at the district level started only in 2016 and officials expect the national planning commission to incorporate the index into its financial allocations. For example, how the lack of clear vulnerability criteria translated into project design is apparent in the case of solar-powered irrigation pumps. One of the flagship programmes of the BCCRF was installing solar-powered irrigation pumps. As the irrigation pumps were sold to farmers on credit, with the cost of the pump subsidized through a grant element, the fund sought to provide the pumps to those farmers that could provide evidence of three harvests a year. By requiring such cash flows, the fund implicitly did not target the most vulnerable communities. While it is possible to argue that the purpose of the fund was not to target its finances towards the most vulnerable populations in Bangladesh, it does suggest a need to better profile the beneficiaries and the criteria used in making allocations so that the overall impact of the fund can be understood.

Another set of concerns pertains to whether its use of resources was efficient in terms of financial additionality. First, BCCRF grant resources were used to reduce down the loan component of IDA projects. Given that such loans, most likely, would have been underway regardless, the need to use the BCCRF blend is not self-evident apart from reducing financial costs to the government (Interviews B2 and B6). Subsidizing existing projects also allowed the World Bank to use such off-the-shelf projects as BCCRF projects rather than design new ones. In other words, there was a misalignment of incentives. While fund contributors wanted new and transformational projects, the World Bank's low agency fees (as the fund manager) meant that it did not have the incentives in place to invest in the design of new projects.

4.2.3. Climate change units

Coordination activities of the climate change units also display sensitivity to external finance. For example, as a part of the Comprehensive Disaster Management Program (CDMP), the Department of Environment (DOE) appointed climate change focal points across line ministries and regularly hosted coordination meetings. As the programme drew to a close, however, the coordination efforts started to wane and the coordination cell in the DOE was closed. In a study conducted by USAID, only 30% of the nominated focal points (climate change units) could even recall that they had been nominated as focal points (Anderson et al., 2018). The Bangladesh Climate Change Trust Action 2010 notes that a role of the BCCTF is to

> assist climate change cells or focal points formed in different ministries and in the Department of Environment in respect of climate change including the Climate Change Unit established in the Ministry of Environment and Forest for playing their effective role.

As the two funds lacked a clear strategy on how to engage with the units, the potential of the units has gone untapped.

Apart from direct coordination through climate change units, an implicit operating assumption was that climate change programming would build the capacity of the sectoral ministries and create the ground for mainstreaming by encouraging sectoral ministries to articulate links between their sectors and climate considerations. In interviews with BCCTF officials, they noted that there were no explicit attempts by the BCCTF to build capacity in ministries that were not as proactive in submitting proposals. The BCCTF has allocated most of its funds to projects submitted by the Local Government Engineering Department (LGED) and the Water Board. Both of these agencies are large bureaucracies and have the in-house capacity to produce project proposals. Therefore, it is not surprising that these agencies leapt at the prospect of obtaining concessionary or grant finance. In other words, in the pursuit of mainstreaming by means of building capacity by funding projects, national climate funds may reinforce capacity differentials across various sectoral ministries.

Given that the two funds involved overlapping but mostly distinct actors, the underlying political dynamics were different. For example, as the BCCRF was a multi-donor trust fund with an international financial institution as its trustee. The BCCTF was capitalized using domestic expenditure and involved the engagement of sectoral ministries directly in its governance in a manner that the BCCRF did not.

5. Discussion

This section discusses the insights from the case studies. First, the findings are discussed in the context of the dimensions of mainstreaming, reflecting on how national climate funds affected subsystem involvement in particular. The diagram captures how the supply of incentives by national climate funds is geared towards subsystem engagement. This subsystem engagement is expected to subsequently impact policy goals, instruments, and eventually framing. The following section reflects on the nature of financial instruments and how the stipulations on funding shaped the effectiveness of the funds (Figure 2).

5.1. Dimensions of climate mainstreaming

5.1.1. Subsystem involvement

5.1.1.1. Sectoral ministries as implementing agencies. The most direct way in which the funds sought to achieve engagement from the subsystems by enlisting sectoral ministries as implementing agencies for the fund's projects. Ministries were invited to submit projects. In other words, national climate funds helped to scale climate interventions by intensifying the implementation of existing policies and by altering the political dynamics amongst different coalitions. By requiring all projects to be tightly coupled with the BCCSAP, the BCCRF helped to reinforce those policies. While the CRGE Facility struggled to provide such loops of reinforcement, the BCCRF had some success. The availability of grant funding on top of annual budgetary appropriations was attractive to sectoral ministries and helped to garner their interest. Financing the implementation of national climate plans, however, did not mean that there was complete agreement on how to achieve climate objectives or if the kinds of projects prioritized by the funds would lead to desirable results as discussed in the following section.

5.1.1.2. Fund governance. The three funds displayed varying strategies for engaging with other line ministries. The BCCTF directly incorporated sectoral actors into the governance of the fund. Ethiopia's CRGE Facility is housed in the Ministry of Finance and Economic Cooperation but the Environment, Forests and Climate Change Commission jointly chairs the committee. Including sectoral ministries in the governing bodies of the funds helped to increase interest in the climate funds. In Bangladesh, there have been concerns about conflict of interest given that sectoral ministries also implement projects supported by the funds.

5.1.1.3. Mainstreaming units. Mainstreaming units in sectoral ministries can be a crucial link between a national climate fund and the sectoral ministry. While not direct appendages of the funds themselves, funds made varying uses of mainstreaming units. Evidence from Bangladesh and Ethiopia demonstrates that mainstreaming units (CRGE and CDMP) are sensitive to external financing. For example, when the Comprehensive Disaster Management Plan project was underway in Bangladesh, the climate change units displayed greater activity. In addition, the placement of mainstreaming units in sectoral ministries warrants investigation. Ministries that place mainstreaming units in planning and budgeting-related directorates may display a higher level of mainstreaming than in contexts where mainstreaming units are confined to departments responsible for conducting environmental impact assessments. Ethiopia's experience suggests that when mainstreaming units are placed in EIA units, they lack the critical natural link with planning and budgeting, thereby undermining the ability of CRGE objectives to be integrated into sectoral work. In Bangladesh, the national planning commission formulated guidance on incorporating climate change into budget requests knowing that the sectoral ministries had prior experience with climate change through their work with the climate change trust funds. When we cast mainstreaming as a policy coordination problem, this finding is consonant with the literature. For example, Jordan and Schout identify the need for 'underlying capacities' to be present so that the linkages between actors can be built (Candel & Biesbroek, 2016; Jordan & Schout, 2006).

5.1.2. Policy frame

As existing literature suggests, climate policies can have broad policy frames. The mandates of the national climate funds were similarly broad. These funds recognized that climate change was a cross-cutting issue. Similarly, the overarching climate policies governing the funds were also cast in broad terms. Evidence from case studies does suggest that national policies, when climate change is broadly defined, helps to enlist a wide set of stakeholders. For example, in Ethiopia, the policymakers responsible for the CRGE Vision and Strategy stressed the importance of the deliberate economic frame that they adopted in order to win over the attention of ministries that were focused on economic issues (Interview E2 and E17, 2017).

5.1.3. Policy goals

The sequence in the setting up of national climate funds and policy coordination mechanisms varies and shapes outcomes. In Bangladesh and Ethiopia, the expectation was that the funds would help to strengthen the grounds for coordination. In Bangladesh the trust fund facilitated inter-ministerial coordination, at the operational level, by encouraging ministries to submit climate-related projects and generating the awareness and capacity for the planning ministry to subsequently integrate climate more concretely. In Ethiopia, the establishment of the CRGE architecture did not imply that policy coordination had been reached. Rather, the expectation was that sectoral ministries would subsequently develop their sectoral plans to address climate change. Ethiopia's experience underscores the cautionary message from the literature that looks cross-sectoral coordination. Candel and Biesbroek note that substantive policy efforts within subsystems should be coordinated, not replaced, by procedural instruments at a governance system level (Jochim and May 2010) in (Candel & Biesbroek, 2016, p. 225). In other words, an overarching plan such as the CRGE strategy is not enough. It is also important to consider the role of the various departments, or subsystems, within ministries, in their ability to influence to the ministry's policy objectives in regards to climate mainstreaming.

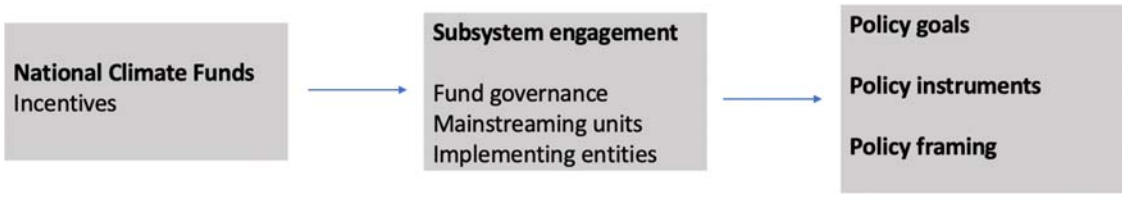

Figure 2. How national climate funds and climate mainstreaming via subsystem engagement.

5.1.4. Policy instruments

While these countries formulated comprehensive climate change plans, their integration into national development plans was inconsistent. In Ethiopia, the CRGE strategy and vision were announced during the first phase of the Growth and Transformation Plan. Therefore, the CRGE strategy was only able to complement the second phase of the Growth and Transformation Plan – GTP II. In Bangladesh, the BCCSAP also developed independently of the national planning process. Apart from sequencing considerations, two challenges are common in both countries. First, indicators vary in their level of precision. Compounded by data availability challenges, tracking progress is challenging. Second, even though climate considerations may have been incorporated system-level planning documents, coherence across policies does not automatically follow.

5.2. Financial instruments

The experiences of national climate funds in these countries have also helped to illuminate the barriers that stand in the way of mainstreaming with incentives. As these funds attracted international climate finance, the funds are subject to set of requirements that are negotiated with fund providers. For funds that mobilize purely domestic capital, these barriers may manifest in different forms.

5.2.1. Timing and tenor

A salient barrier to climate mainstreaming is the impact of funding horizons. In both Bangladesh and Ethiopia, the funds from donors were accompanied by the condition for a quick turnaround. Such a condition meant that the ability of the fund to impact mainstreaming was limited. As discussed above, had fund managers enjoyed longer funding time horizons, it is likely that the project design, and therefore links with mainstreaming objectives, would have been more deliberate. Instead, given the pressure to demonstrate an efficient disbursement process and results, there was an emphasis on supporting already available off-the-shelf projects.

5.2.2. Isomorphic mainstreaming

In the case of national climate funds, the tendency has been to fund activities that promote further planning. As the Ethiopian case study helps to illustrate, there has been a tendency to emphasize planning. The assertion here, however, is that such a proliferation of planning takes place because the agencies and multilateral institutions promoting the plans have different *ideas* about what to finance and different risk appetites. As a result, it is possible for a national climate fund to get locked in a cycle of extensive planning. What compounds the duplicative planning problem is when different international actors interface with different domestic interlocutors, thereby amplifying already existing turf battles.

5.2.3. Targeting

While this paper has focused on the role of incentives in mainstreaming climate change, it also became apparent through interviews that actors have different understandings of the climate programming needed to help mainstream. For example, some scholars have been critical of a perspective that emphasizes technical fixes and infrastructure build out, in a manner that does not address the social roots of vulnerability, as the way to mainstream. In Ethiopia, the desire for transformational change has meant support for market-oriented policies that do not necessarily support climate resilience (Kuhl, 2018). In this manner, the climate funds have taken on the dominant perspective of what climate mainstreaming means. Cautioning against such tendencies, scholars have observed that, 'the discourse of "mainstreaming" can itself be seen as framing the "problem" of policy as being overly technocratic and managerial. This kind of approach would run counter to core principles of resilience theory' (Friend et al., 2014, p. 10). Furthermore, what may be required is transformational change as opposed to mainstreaming when 'mainstreaming merely reinforces existing hierarchies, knowledge and power' (Friend et al., 2014, p. 7). In other words, there are two potential roles for national climate funds. The first would involve scaling up existing programming. The second one would recognize the limits to the existing paradigm and adopt a more targeted approach to address issues and populations that are left out under the dominant framing of climate mainstreaming.

6. Conclusion

This paper examined the provision of incentives by national climate funds and how those incentives contribute to climate mainstreaming. Many scholars point to the need for financial incentives and yet analyses of how financial incentives work in practice are rare. This paper takes an interactive approach in that it shows how incentives work in a larger policy context. It analyzed the experience of two national climate funds. The evidence presented here shows how the domestic policy context and the nature of external financing impact the ability of national climate funds to contribute towards mainstreaming.

The national climate funds examined in this paper were primarily focused on achieving scale, that is, helping to implement policies. When policies are fully articulated, national climate funds can directly help to underwrite the cost of implementation. Yet, comprehensive and fully operationalized plans

are rare. As the cases examined here illustrate, incomplete planning did not allow for the national climate funds to reinforce those plans by supporting implementation. Similarly, the incentives provided by the funds was tied to the nature of external financing that the fund received. The funding stipulations created a set of imperatives that detracted from the overall goal of implementing national climate plans. Host country policymakers need to be aware of how detailed policy plans can help pull in climate finance that can reinforce their objectives. Donors should be cognizant of how their funding stipulations may impact mainstreaming.

There is a clear need for further research on capacity building and implementation. As capacity building is either a stated or unstated goal of many financing instruments, there is a need for more rigorous assessments of how entities like national climate funds can help capacity building. In particular, there is a need for an assessment of organizational culture within ministries and agencies and how they enable or prevent integration of climate change into planning and operations. Likewise, the precise mechanisms by which boutique climate finance projects can trigger large-scale transformational change need further consideration. As this paper showed, a tight coupling is needed between climate plans and the incentives actually provided.

The primary significance of this study is that it shows how national climate funds can help mainstream climate change. It advances the scholarship by disintegrating the dimensions of climate mainstreaming and identifying where climate funds have impact. It shows how national climate funds can engage with sectoral ministries and identifies how funding stipulations can constrain greater engagement. A number of policy implications flow from this study. First, the role of national climate funds depends on the larger context in which the funds are embedded. For example, the two funds examined here were established at a time when policymakers needed to encourage sectoral ministries to engage with climate change. As more and more sectoral ministries have started to articulate their own climate plans, how national climate funds can best support those plans will have to be re-assessed. If a government is already making annual budget allocations to implement climate actions, funding allocations from a national climate fund to sectoral ministries may no longer be necessary. The national climate fund may be able to test and demonstrate new technologies, engage with local communities that may lack proper access to finance, and serve as a node of expertise on climate programming. Second, national climate funds have found themselves needing to compete with global climate funds. Policymakers should reframe this relationship into one that is mutually supporting. As a larger number of national climate funds and other climate finance vehicles gain experience and display the necessary fiduciary standards and safeguards, these funds can serve as building blocks in the global climate finance architecture that allow for greater voice and participation by developing countries.

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Annex 1. Interviews

Bangladesh	
Interview Code	Description
B1	Climate finance expert
B2	PKSF Official
B3	Ministry of Environment and Forests, official
B4	Transparency International Bangladesh
B5	GIZ official
B6	World Bank BCCRF team
B7	Bangladesh Climate Change Trust Fund official
B8	Former negotiator
B9	Ministry of Environment and Forests, official
B10	Ministry of Finance
B11	Ministry of Finance, GCF NDA official
B12	UNDP official
B13	Researcher
B14	Bangladesh Climate Change Trust Fund official
B15	JICA official
B16	USAID official
B17	World Bank official
B18	IDCOL official
B19	World Bank official

B17 and B19 were via email. All of the other interviews were held in person.

Ethiopia	
Interview Code	Description
E1	Global Green Growth Institute official
E2	Official, Ministry of Finance and Economic Cooperation
E3	Official, CDKN
E4	Official, DFID
E5	Official, Danish Embassy
E6	Official, UNDP
E7	Official, UNDP
E8	Former official, Environment Protection Authority
E9	Official, Ministry of Agriculture
E10	Official, UNDP regional office
E11	Official, Agriculture Transformation Agency
E12	Independent expert
E13	Official, Norway
E14	Former official, Zenawi administration
E15	Official, Ministry of Water, Irrigation and Electricity
E16	Official, USAID
E17	Multi-Partnership Trust Fund Office
E18	Official, Prime Minister's Office
E19	Environment, Forest, and Climate Change Commission (second interview)
E20	Official, CRGE Facility (second interview)