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RESEARCH ARTICLE

The green climate fund and its shortcomings in local delivery of adaptation finance

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ABSTRACT

The Paris Agreement recognizes the important role that local level actors play in ensuring climate change adaptation that contributes to meeting the global temperature goal. As a financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC) and the largest dedicated climate fund, the Green Climate Fund (GCF) is critical to achieving this goal. How GCF allocates its resources is therefore a critical area of research. This article assesses GCF's commitment to the local delivery of adaptation finance and identifies the key barriers to GCF's achievement of this commitment. The analysis finds that although GCF's policies and communications fully commit to funding local level adaptation, three key barriers still prevent it from delivering finance to the local level. First, GCF lacks a unified framework for identifying and defining the local level, local actors, and local adaptation processes. Second, GCF exhibits limited transparency and accountability in relation to how approved funding for adaptation is spent, particularly for projects that claim to generate local level adaptation outcomes. Third, some Accredited Entities have limited experience and capacity for designing and implementing projects that deliver finance to the local level. This is because the local delivery of finance is not prioritized by GCF during the accreditation of entities or provision of readiness support to Accredited Entities. Our findings indicate limited evidence of GCF's full operationalization of its commitment to supporting local adaptation. We recommend that GCF develop and apply a unified framework for defining what constitutes 'local'.

Key policy insights:

- GCF is committed to supporting local adaptation finance in developing countries but has failed to adequately operationalize this commitment.
- To increase local delivery of climate finance, GCF should develop a unified framework for local delivery of adapation finance that emphasises local actors' leadership in design, implementation, and management of adaptation projects.
- GCF should also increase transparency and accountability of funded projects to enable independent assessments of local delivery of adaptation finance by making project information, including financial reports publicly available.
- GCF should ensure that Accredited Entities have capacity to develop and deliver projects that deliver adaptation finance to the local level e.g. by requiring entities to provide evidence of support for local adaptation during accreditation.

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1. Introduction

The Paris Agreement recognizes the acute climate impacts on local actors and mandates climate action that address these impacts at the local level to achieve the global temperature goal (UNFCCC, 2015). International climate finance for adaptation remains central for achieving the adaptation objectives set out in the Paris Agreement, i.e. reducing people's vulnerability to climate change (Ayers, 2009; Ellis et al., 2013). However, the deficit in adaptation finance, particularly in developing countries, is large and will grow as countries' adaptation needs increase alongside intensifying climate change impacts (Alcayna, 2020; Khan et al., 2019). Transformational actions are needed to enable marginalized communities to implement climate resilient development approaches using scarcely-available resources (Crick et al., 2019). To be most effective, adaptation actions need to integrate local knowledge (Chalise & Naranpanawa, 2016), avoid elite capture, reduce the dependency of local actors on external support, and increase agency and self-sufficiency (Westoby et al., 2021). Local adaptation enables local actors to appraise climate risks and use this knowledge to inform climate action (Barrett, 2013a; Hussain & Ahmad, 2019). Hence, the effectiveness of adaptation ultimately depends on the local level.

Although adaptation is not only 'a local responsibility' and should be complemented by actions at other levels (Nalau et al., 2015, p. 89), local adaptation determines the distributive and procedural justice outcomes of adaptation actions (Edvardsson Björnberg & Hansson, 2011). Local actor engagement increases the likelihood of fair and equitable adaptation (Alam et al., 2017; Susskind & Kim, 2021). However, this is usually insufficient for achieving equitable and effective adaptation (Kumar, 2015), as local actor consultations may exhibit elite control, thus preventing locally-led processes and resulting in narrow and top-down technocratic approaches to adaptation (Eriksen et al., 2021; McNamara et al., 2020; Orindi et al., 2017; van der Ploeg et al., 2020). Instead, local actors need control over the allocation and use of adaptation resources (including climate finance) and to be involved in the implementation of adaptation actions (Tye & Suarez, 2021). As climate finance is already scarce (Persson & Remling, 2014), local delivery of adaptation finance (as opposed to solely financing the national level) increases finance effectiveness, provides resources for local actors to confront drivers of vulnerability, and restructures local institutions to address adaptation needs (Sharma et al., 2014). It is therefore important to critically assess whether and how this scarce financing is delivered to the local level to support adaptation. While existing research has focused on understanding the local delivery of adaptation finance for the overall climate finance landscape (Soanes et al., 2021) or for specific climate funds (Manuamorn et al., 2020), analyses of local delivery by the Green Climate Fund (GCF) is still limited.

The GCF is the largest dedicated climate finance mechanism, having approved projects worth US$2.822 billion for adaptation (as of April 2021) (GCF, 2021b). As a financial mechanism of the UNFCCC, the goal of GCF is to contribute towards the achievement of the Paris Agreement goals, which then requires GCF to support local delivery of international climate finance. Yet very little is known about GCF's approach to delivering adaptation finance to the local level. Most existing work on GCF is conceptual, focusing on how GCF should design its structures (Bowman & Minas, 2019; Brechin & Espinoza, 2017; Cui et al., 2014; Markandya et al., 2015). The few existing empirical works have focused on areas such as GCF's engagement with the agenda on loss and damage (Kempa et al., 2021), the performance of its policies (Frenova, 2020), and its regional allocation of finance (Fonta et al., 2018). Recent evaluations have assessed GCF's performance against its mandate, e.g. the accreditation function of environmental and social safeguards and a general evaluation on GCF's overall performance (GCF, 2021b; IEU, 2019a, 2020). A critical analysis of GCF's local delivery of adaptation finance can identify barriers that should be addressed by GCF to increase effectiveness of adaptation finance allocations.

This paper conducts a critical analysis of GCF's approach to local delivery of adaptation finance. The analysis asks: (a) how does GCF view and demonstrate its local delivery of adaptation finance, and (b) what are the barriers to GCF's local delivery of adaptation finance? The paper uses data from document reviews and interviews with representatives of institutions working with GCF or supporting GCF projects to understand the historical and political context determining approaches to local delivery of adaptation finance by GCF. Empirically, the paper provides key insights into the functioning of GCF's policies and structures in relation to the delivery of adaptation finance to the local level. The analysis contributes to ongoing debates on local delivery of climate finance by demonstrating that the nuances of local delivery of adaptation finance can only be understood through analyses of individual climate finance mechanisms.

The article has six sections. Section 2 summarizes current literature on local adaptation, climate finance, and local delivery of adaptation finance. Section 3 presents the methodology and data used in this paper. Section 4 presents the results, while Section 5 discusses the findings. Section 6 concludes by providing recommendations on how GCF can address these challenges to enhance support of local adaptation.

2. Literature review

Recent research on the governance of climate change conceptualizes local adaptation as: (a) community-based, focusing on actions that reduce poverty in local communities while increasing their capacity to respond to climate risks (Ayers & Forsyth, 2009; Dodman & Mitlin, 2013); and (b) locally-led, where local actors have agency over adaptation priorities and their implementation (Soanes et al., 2021; Westoby et al., 2021). In both conceptualizations, the sub-national level (e.g. town, city, municipality level, etc.) is used as a scalar determinant of the local level. Local actors are also considered as essential components of local adaptation (Boda & Jerneck, 2019; Regmi et al., 2016; Vij et al., 2019). Hence, local adaptation ultimately involves responses to past, current, and anticipated climate change risks by individuals, households, small and medium-sized enterprises, and local government authorities and institutions (Colenbrander et al., 2018; Soanes, 2017). Whether and how this finance is delivered determines the extent of adaptation by these local actors.

Existing research finds that international, national, and local factors determine local delivery. Only a small fraction of global adaptation finance (10–20%) is intended for the local level and for improving the agency of these local actors (Price, 2021; Soanes, 2017; Soanes et al., 2021). Additionally, local actors with higher vulnerability to climate change risks receive disproportionately less adaptation finance as compared to those with lower vulnerability (Barrett, 2013a, 2014; Price, 2021). Instead of vulnerability, local delivery of adaptation finance depends on different socio-political factors such as national political commitment and the types of finance instruments used to deliver adaptation finance (Manuamorn et al., 2020; Manuamorn & Biesbroek, 2020). This existing research on local delivery contributes to the broader work on access to climate finance and frames the local level as central to the overall effectiveness of climate finance (Caldwell & Larsen, 2021; Doshi & Garschagen, 2020; Grecksch & Klöck, 2020; Tanner et al., 2019).

Existing literature further identifies barriers to local delivery of adaptation finance as linked to: (a) readiness and capacity; and (b) existing structures for enabling adaptation (Colenbrander et al., 2018; Dahlberg, 2015). First, local actors lack the capacity and readiness to meet the regulations for accessing finance (Chiriac et al., 2020). Finance institutions' access requirements are too complex for local actors' direct access of finance (Price, 2021). Local actors also lack a comprehensive understanding of the overall climate finance landscape, e.g. where to access finance for local adaptation (Wilkinson et al., 2014) or the capacity to meet the fiduciary requirements for accessing finance (Colenbrander et al., 2018). Second, structural barriers involve the mismatch between available climate finance packages and the needs of local actors (Soanes, 2017). Climate finance mechanisms' preferred instruments for financing adaptation, i.e. loans as opposed to grants (Savvidou et al., 2021), are less suitable for some local actors (Dahlberg, 2015). This barrier specifically applies to local actors with limited creditworthiness or capacity to manage debt-based climate finance (Bracking & Leffel, 2021; Colenbrander et al., 2018). Local delivery of adaptation finance is also geographically biased, usually following donor or political interests (Barrett, 2014; Islam, 2022; OECD, 2021).

Recommendations for increasing local delivery of adaptation finance mostly target changes by climate finance institutions as starting points. First is capacity development, such as ensuring that local actors have a comprehensive understanding of the climate finance landscape (Negreiros et al., 2021). Second is restructuring climate finance mechanisms in favour of local actor direct access, e.g. through simplified approval processes and small grants (Bosma et al., 2018). Third is devolved finance mechanisms to reduce access barriers for local actors (Price, 2021; Restle-Steinert et al., 2019).

3. Methodology and data

Understanding GCF's approach and barriers to local delivery of adaptation finance required data on GCF's commitment and efforts to deliver adaptation finance, and on actors' perceptions of the efficacy of these efforts. In this research, we used a jurisdictional and actor-centric definition of the local level to guide our analysis of local delivery (Di Gregorio et al., 2019; Soanes et al., 2021). Local delivery of finance for adaptation involves directing finance to local actors, i.e. actors at or below the sub-national level (province, municipality, districts), which includes individuals, households, community groups, intra-state regional NGOs (as opposed to national NGOs), and local government to support actions that respond to current or anticipated climate risks. Hence, local delivery ensures the direct allocation of adaptation finance to local actors. However, adaptation is inherently multi-level and actors designing and implementing adaptation projects are encouraged to consider multi-level processes (Conway & Mustelin, 2014). Therefore, this definition is useful for tracking adaptation funding allocations through project activities to specific actors.

This research used methods that provided insights into issues of local delivery of adaptation finance both within and around the GCF. Data were collected using two methods: (a) a review of GCF documents; and (b) semi-structured interviews. First, a review of GCF documents created a foundational understanding of local delivery within the GCF, based on purposefully selected GCF documents, i.e. policies and guidelines and their operationalization in project design and implementation (up to and including the 27th Board meeting in November 2020) which were publicly available from GCF website (see Table 1). The review closely examined: (a) GCF's policies and guidelines on funding allocation and management, and how these were applied in project design and early implementation, and (b) issues with local delivery based on evidence of finance allocation to and use by the local level, and whether and how these issues were discussed and addressed by GCF.

Second, thirty-two semi-structured interviews with representatives of institutions working with and for GCF were used to generate deeper insights into evidence of local delivery from the document review. This provided an understanding of the local delivery of finance both within and around GCF. Interviewees were purposefully selected (Handcock & Gile, 2011; Patton, 2002) and were those that had internal or external specialist knowledge on the functioning of GCF's delivery of climate finance. Interviewees represented two types of institutions: (a) those that (had) work(ed) directly with GCF, e.g, GCF's Accredited Entities (current and those undergoing accreditation), National Designated Authorities, Board Observers, and GCF's external consultants; and (b) those supporting National Designated Authorities and Accredited Entities' programming, e.g. through research or capacity development.

The semi-structured interviews were conducted remotely between September 2020 and February 2022 (see Table 2). Interviews were anonymized due to the political sensitivity of issues relating to GCF and climate finance for both developed and developing countries (Nightingale, 2017; Omukuti, 2020). Interview questions focussed on: (a) interviewees' understanding of the 'local' level and local adaptation; (b) their experiences with funding and implementing local adaptation, and engaging with GCF; and (c) their opinions on GCF's performance of the local level delivery of adaptation finance, based on issues identified through the document review.

Analysis of GCF document content and interview data was based on thematic and content analysis. Interview notes and transcripts were qualitatively analysed using thematic analysis (Braun et al., 2014), where interpretive coding generated themes from interviews and that represented gaps in GCF's local delivery of

Table 1. Type, description, and number of GCF documents reviewed for this study.

Document type	Description	Number
Board Meeting proceedings reports	Reports of the proceedings of Board Meetings. Reports also included information documents for the Board and decisions taken at the meetings. Only Board meetings held before December 2020 considered.	27
Approved project proposals	Approved funding proposals for adaptation and cross-cutting projects approved before December 2020.	107
GCF policies and guidelines and guides	GCF policies, strategies, and guidelines for its operations (e.g. GCF gender policy) and guides (e.g. country programme guidance), dated December 2020.	97
Annual Performance Reports	Annual performance reports for 2019, published on the GCF website in December 2020.	42
Total		273

Table 2. Type, description, and number of interviewees for this study.

Actor type	Description	Code	Number of interviews: Worked directly with GCF	Worked with Accredited Entities	Total
Research institutions	Academic institutions i.e. researchers affiliated with universities, Non-academic research institutions e.g. thinktanks, Independent researchers/consultants.	RI	2 [a]	8 [b]	10
Private sector	Private sector finance investors, Intermediary institutions e.g. development financial institutions that channel private sector finance to other institutions.	PS	7 [c]	2[d]	9
Public sector	Government institutions, including government-based Accredited Entities	*P*	3[e]	–	3
CSOs	NGOs working on different aspects of climate finance, including non-government Accredited Entities.	CS	3	7[f]	10
Total					**32**

[a]Research institutions contracted directly by the GCF for research or capacity development of Accredited Entities.
[b]Research institutions contracted directly by and working with Accredited Entities on research or capacity development.
[c]Private sector entities already accredited or undergoing accreditation by the GCF.
[d]Private sector entities working with Accredited Entities and are part of the GCF's Board Observers.

adaptation finance. Content analysis identified how themes emerging from the interviews were discussed in GCF documents (Vaismoradi et al., 2016). Terms used to identify content included: 'local', 'actor', 'stakeholder', 'engagement', 'capacity', 'reporting' 'transparency', and 'accountability'. Relevant paragraphs in GCF documents were read to understand the context and issues being discussed. The review of purposefully-selected GCF document reviews and interviews enabled data triangulation, which increased the robustness of findings. Respondent identifier codes (Table 2) are used in the results section to associate themes to specific interviewees, e.g. RI-1 signifies the first interviewee from a research institution, and PS-2 represents the second interviewee from a private sector institution.

4. Results

GCF's policies and communications pledge to fund local adaptation. Mechanisms such as the Readiness Program and the Simplified Approval Process seek to strengthen Direct Access Entities' capacities to develop project pipelines and get these projects funded by GCF (GCF, 2017a). GCF's Enhanced Direct Access (EDA) funding window aims to enable access to finance by regional, national, and local institutions and allocate this finance through devolved mechanisms within countries in developing countries (GCF, 2019d). Local actor (also referred to as 'local stakeholder(s)' in some GCF documents) engagement is critical to GCF's local adaptation objectives. GCF guidelines, e.g. GCF (2019e), indicate that increased country ownership of adaptation can be achieved via the use of local knowledge, capacity building, and institutional strengthening that enables actor engagement, which in turn translates into local adaptation. GCF further 'consider[s] Country Ownership as the measure through which countries – via consultation with relevant national, local, and community-level … [actor] – demonstrate ownership of, and commitment to, efforts to mitigate and adapt to climate change' (GCF, 2017c, para. 2). GCF guidelines require that project design and implementation ensure a 'consultative process [which] should be inclusive and seek to engage all relevant actors within the government, the private sector, academia, civil society and other relevant … [actor] groups or sectors' (GCF, 2014, para. 6). Further guidance by GCF frames actor engagement as a consultative process, where Accredited Entities take the lead in 'meetings, trainings, workshops, facilitation, and consultations' with local actors (GCF, 2019e, p. 7).

Interviews and document reviews provided further insights into GCF's approach to local delivery of adaptation finance and identified three barriers to GCF's local delivery of adaptation finance committment: (a) the absence of a framework for defining the local level; (b) limited transparency and accountability in relation to GCF's intended and actual spending on local level adaptation; and (c) limited actor capacity to engage with the local level. These are discussed below.

4.1 Framework for defining the local level

A review of GCF documents indicates that GCF lacks a unified framework for defining the local level, which means that local level actors and processes are subjectively identified by Accredited Entities. This presents barriers to/challenges for effective delivery in GCF's delivery of adaptation finance to the local level. GCF has already identified the need to directly engage local actors in developing countries (Bruun, 2017; GCF, 2016c, para. 171). However, GCF does not apply a consistent framework to clearly identify and differentiate between different local actors (GCF, 2015e, para. 284) and offers no singular guidance on what constitutes a local actor. Some GCF guidance documents consider Direct Access Entities as 'local' (GCF, 2015e, para. 265). In other documents, 'large financial institutions' are considered as 'local' (GCF, 2015e, para. 276). GCF (2020d) emphasizes the centrality of local actors to the EDA modality but refers to 'local actors and communities (p.6), public/private institutions, community-based organizations, local governments, and SMEs' (p.7), while also mentioning 'private sector (or their representatives) and central government entities' (p.1) as local actors. Other documents, such as GCF (2015d, p. 1) and GCF (2015e, para 284), also compound these groups of actors together as local actors.

How local actors are involved in adaptation projects funded by GCF is also not clear. GCF's Board Observers have called for a greater focus on local actors through targeted capacity development interventions, such as the Readiness programmes (GCF, 2016c, para. 172, 288). Civil Society Organisations (CSOs) working with GCF note that local engagement requires channelling finance via sub-national governments, local CSOs, or intra-national devolved finance mechanisms (CS-8; GCF, 2015e, para. 284). However, although some sub-national entities are already seeking accreditation with the GCF, the process has been slow, meaning that these entities have so far collectively secured limited funding from GCF (PS-9). This suggests that GCF's work with local actors is still at a nascent stage.

The confusion on the definition and status of local actors has led Accredited Entities seeking funding from the GCF or implementing funded projects to apply subjective and often varied approaches to defining the local level. Some of these approaches conflict with CSO Board Observers' and Board Members' understanding of what constitutes the local level, local adaptation, and local actors. For example, FP095, which a project approved by GCF Board in 2018 for implementation by the Agence Française de Développement (AFD), specifically plans to reallocate funding from GCF to 'local financial partners' such as 'public and private financial institutions, microfinance institutions … [and] companies operating in the targeted countries' such as 'small and medium size companies, managed or owned by women' (GCF, 2018d, p. 7). Before approval, GCF Board Observers noted that the project lacked 'an outreach and engagement focus with a wider and more inclusive set of local actors' and 'clarity about what kind of institutions would be targeted as "local financial partners" ' with Board Observers recommending that the project 'not allow funding for local subsidiaries of multinational banks, but focus exclusively on domestic financing institutions, including smaller ones' (GCF, 2018e, para. 912–915). Nevertheless, the project was approved without further consideration of this concern. A 2019 annual performance report by AFD indicates on-lending to national institutions such as the National Bank of Egypt and the Bank of Pacific in Ecuador (GCF, 2020a) which do not represent local actors and signifies a failure by GCF to address the valid concerns raised by the Board Observers. By contrast, during the approval of FP086 at the same Board meeting, the GCF Board requested increased local engagement by the project through 'a clear allocation of funding under the gender action plan for the contribution and direct agency of local women's groups and neighbourhood associations' e.g. small grant facility component (GCF, 2018e, para. 827).

These two examples suggest varied interpretations of 'local' within GCF. The approval of FP086 shows that GCF understands the centrality of local actors and their agency in adaptation decision making to adaptation projects. However, the approval and implementation of FP095 suggests GCF's deviation from this definition. The varied interpretations of what is considered the local level, local actors, and processes that constitute local delivery makes it difficult to confidently determine whether (or not) programmes and approved projects claiming to channel finance to the local level do so.

4.2 Transparency and accounting for local level spending

A review of GCF documents indicates that GCF has low transparency and accountability in relation to its financing, which further affects the transparency of financing of the local level for adaptation. The GCF lacks an accounting methodology to capture local level spending by approved adaptation projects, which limits assessments of Accredited Entities' intention to spend on local level adaptation and actual channelling of finance to the local level.

Although the GCF and its Accredited Entity partners are committed to funding local level adaptation, approved budgets do not disclose whether and how (much) money disbursed to local actors and hence cannot be used to verify claims of local allocation. Some of GCF's funded projects claim to work with local actors or have a local adaptation component. FP147 by the Food and Agriculture Organisation commits to working with local actors (GCF, 2020f, para. 47, 50, 90). However, the project's approved budget does not indicate how much finance will be allocated to these actors (GCF, 2020f, pp. 41-43). FP089 by the Food and Agriculture Organisation in Elsavador (GCF, 2018c) also fails to disaggregate finance allocations to specific local actors mentioned in the project proposal. FP042, a project implemented by AFD, which plans to invest in the empowerment of 'women's groups within oases' in the Boudnib Valley in Morocco does not indicate how much finance will be invested for these local groups (GCF, 2017b, p. 7).

GCF does not require Accredited Entities to indicate spending on different funded project activities at any stage of the project development, review, or approval process. This means that the lowest level of budget allocation breakdown is by project output. The exception is during project review by GCF Secretariat, where Accredited Entities are requested to provide budget breakdowns of spending by activity only when budgets seem to be based on overestimates of costs (RI-9). For some projects, such as those based on on-lending or on-granting, information on allocations to local actors may be (justifiably) unavailable at the time of project approval, e.g. FP061 which was approved for implementation by Ministry of Health and Environment of Government of Antigua and Barbuda in East Caribbean states (GCF, 2018b). Accredited Entities are required to submit annual financial reports, but such documentation does not track spending at the local level (PS-9). Reporting templates require only general spending against approved and disbursed funds (GCF, 2020b, p. 19). Templates that feed into the annual performance reports for Accredited Entities only require reports on spending by component, sub-component, or output (GCF, 2020c). Yet, there are inconsistencies in how these terms are applied (PS-9). While some proposals indicate activities as contributing towards results (GCF, 2020f, p. 60), others link activities to outputs sub-components and components (GCF, 2016a, pp. 11–16). Attributing funding to a single level is further challenging for projects that involve activities cutting across levels, e.g. local and national level actors (GCF, 2015a, pp. 19–21).

The absence of granular activity-level information of finance allocation is further compounded by an inconsistency in the overall detail of available budgetary information across different approved projects. For example, some project proposals provide breakdowns by component and sub-component (GCF, 2016a), results (GCF, 2020f), or output (GCF, 2020e). GCF's programming manual does not provide a clear definitional distinction between these terms (GCF, 2020g). The result is different levels of detail on how funded projects plan to allocate their approved funding.

A lack of consistency also features in the sources of funding that are accounted for in these budget breakdowns. For example, although some project proposals provide breakdowns of both GCF-approved funding and co-financing from other partners (GCF, 2017b, pp. 6–8), others offer no such disaggregation (GCF, 2015c, pp. 5–6). Other projects receiving in-kind co-financing do not provide granular accounts (GCF, 2015a, p. 6). In some instances, budgets for private sector-funded adaptation projects provide no breakdowns whatsoever, e.g. GCF (2015b). The lack of consistency in the level of information that is displayed in a funded project budget means that it is challenging to determine single project planned spending on different project activities, or to make comparisons across projects. These information and transparency issues that particularly emerge from the lack of requirements for GCF project proposals to share this information therefore limit systematic accounting of local spending.

An absence of granular data on spending runs counter to GCF's policies and stated processes. GCF's Governing Instrument states that '[t]he Fund will operate in a transparent and accountable manner guided by efficiency and effectiveness' (GCF, 2011, p. 2). GCF's information disclosure policy outlines the information to be shared with the public, either on GCF website or upon request (GCF, 2016b). Further, several measures support transparency, such as the provision of monthly updates for the proposal pipeline (GCF, 2019b), public broadcasts of Board meetings, and public disclosure of project approvals (GCF, 2019f). But such disclosures do not extend to 'who gets what' in terms of funding, which is an important gap that should be addressed going forward.

GCF uses its information disclosure policy to defend its limited transparency, particularly on the spending of approved finance. Board Observers have noted the limited transparency of GCF's accreditation processes (GCF, 2015f, para. 237, 242) and limited local actor participation in Readiness activities by NDAs (and hence allocation of Readiness funding) (GCF, 2016c, para. 103) and have requested GCF and its Accredited Entities to disclose information relating to how projects are designed and implemented (GCF, 2017d, para. 198). However, GCF's disclosure policy permits non-disclosure of information if it is considered sensitive to any of GCF's actors or represents Accredited Entities' intellectual property. Previous requests by different actors to GCF for detailed project budgets have been denied, noting 'financial, business, or proprietary and non-public information belonging to a party outside GCF' as reasons for non-disclosure (GCF, 2018a, p. 1). Such information on budget allocation is only obtainable from the Accredited Entities (CS-3) which means that it is considered intellectual property of the Accredited Entity as opposed to GCF's (RI-9). Overall non-disclosure of granular project spending presents further challenges to independent assessments of GCF's allocation patterns on local adaptation. The tracking and aggregation of data on finance to the local level by GCF itself, based on clear guidelines for identifying and working with local level actors (as argued above), would satisfy the need for transparency and accountability while meeting the requirements of non-disclosure policy for protecting sensitive data.

In summary, even though GCF publicly shares information on approved projects, there is limited evidence available that can be used to establish whether, or to what extent, GCF delivers finance to local actors.

4.3 Accredited entity capacity to engage with the local level

Analysis of data from the review of GCF documents and interviews shows capacity gaps for working with level actors by GCF's Accredited Entities. GCF's funding model is dependent on its accreditation process which determines eligibility of institutions in accessing GCF funds and implementing projects (GCF, 2011). International Accredited Entities are understood as being international institutions cleared by GCF to apply for GCF funds and implement projects in developing countries, while Direct Access Entities are national and regional institutions that receive clearance to access funds directly from GCF instead of going through international intermediaries (Masullo et al., 2015).

Interviewees noted that Direct Access Entities often lack the capacity to engage with local actors, and that there is little to no capacity building support provided by GCF that specifically addresses this gap (CS-4; CS-8; CS-10). Concerns relating to the capacity of Direct Access Entities is discussed at most Board meetings, e.g. (GCF, 2017e) in relation to: (a) the capacity of these institutions to submit high-quality proposals (GCF, 2017e, para. 123); (b) using Readiness support to build capacity of institutions for accreditation (GCF, 2019c, para. 471); and (c) developing project pipelines and access funding (GCF, 2015e, para. 77–78).

However, GCF's past and current capacity development programmes have been found as being inadequate for addressing these capacity needs. For example, the Readiness programme is not designed to fully address the capacity of national government institutions to channel finance to local levels (IEU, 2019b). Board Observers have called for project preparatory support to be 'extended to other project … [actors]', further noting that 'Readiness Programme unduly prioritizes national public authorities and call … for more guidance for National Designated Authorities in engaging with CSOs, local marginalized groups' (GCF, 2019c, para. 502). This means that Readiness support provided by GCF inadequately addresses key capacity gaps that are essential for the local delivery of adaptation finance. In response to this concern, GCF has drafted guidelines for the Readiness programme, which provide 'support for other [actors] … to ensure the wider spectrum of climate finance … [actors] are engaged, capacitated and involved in the *national programming process*' (GCF, 2020h, para. 12) (emphasis added). By not specifically mentioning local actors in this guidance, GCF maintains vagueness, thus making it less likely for the Readiness programme to automatically support non-national actors.

Data from both interviews and document reviews highlighted that Accredited Entities' capacity gaps are also linked to GCF's approach to accreditation. Institutions with experience working at local levels have noted that they use this experience to successfully design programmes that locally deliver adaptation finance (CS-4). For the GCF, assessments note that the accreditation process is not driven by strategic needs nor designed to effectively assess specific accredited entity capacities (IEU, 2019a). Instead, accreditation is based almost entirely on the ability to manage finance (PS-9). Consequently, the accreditation process fails to assess whether institutions have any ability to deliver locally-led adaptation (IEU, 2019a), resulting in the disproportional accreditation of entities with little to no experience with locally-led adaptation (RI-4; PS-9). Even after accreditation, Direct Access Entities encounter challenges in getting approval for funding (CS-9), which further delays processes that could be used to address these capacity gaps.

Accredited Entities are expected to engage with local actors and to understand local needs and present them to GCF for funding. Accredited Entity capacity gaps identified in this research become more consequential for countries with no direct-access accredited entity,(RI-10). As of 2019, 81% of countries eligible for GCF funding did not have a GCF accredited Direct Access Entity (IEU, 2019b, p. 124). The burden of local actor engagement and local delivery of finance becomes disproportionately larger for entities in countries with only one Direct Access Entity as they are likely to experience human, financial, and time resource constrains which limits their capacity to adequately engage with local actors (RI-10).

In summary, GCF accreditation processes do not explicitly recognize the value of capacity to work with local actors as a requirement for the delivery of finance to the local level. The lack of an experience requirement for accreditation and no explicit emphasis on capacity building for Accredited Entities generates a capacity gap that persists into project approval and the materialization of adaptation activities. GCF should recognize the importance of accredited entity capacity to work at the local level in determining local delivery of adaptation finance, and use its accreditation and capacity development functions to address this gap.

5. Discussion

GCF procedures and practices are not adequately suited to deliver finance to the local level. This analysis finds that GCF: (a) lacks a framework for defining the local level or local actors; (b) has low transparency on budgets and spending at the local level; and (c) has significant capacity gaps in its Direct Access Entities' ability to engage local actors. These issues exist alongside others that relate to diffucuties in access to finance by developing country entities, inadequacy of adaptation finance, and the failure of GCF finance allocations to target vulnerable regions and countries (Garschagen & Doshi, 2022; Samuwai & Hills, 2018; Zamarioli et al., 2020). The outcome is that GCF's commitment to supporting local adaptation is instead replaced by processes that prioritize (inter)national institutions that have limited capacity, experience and capacity to achieve locally-led adaptation and deliver finance to the local level.

Accredited entities exhibit clear capacity gaps that prevent identification of, and engagement with, local actors. There is no framework for defining and formally including local actors, resulting in limited consistency when including local actors in financing processes. Moreover, opaque accounting avoids public accountability on local level spending on adaptation and climate outcomes. There is no formal mechanism to reflect local actor adaptation priorities or to engage them as active agents experiencing and dealing with climate impacts. The findings make it clear that local actors are not adequately included in, and have little control over, planning and implementation of GCF investments in adaptation.

A major concern within the international climate finance landscape has been ensuring that national and regional entities have easier access climate finance (GCF, 2021b). However, other than access, the capacity of these institutions to disburse funds and to link with local actors are essential for channelling finance to the local level (Tanner et al., 2019). The limited consideration of Accredited Entities' experience working with local actors during accreditation limits the effectiveness of GCF's efforts to ensure that sufficient capacity is available for its funding to reach the local level. This means that key Paris Agreement principles and GCF's investment criteria – such as country ownership, needs of the recipient, and efficiency and effectiveness –

are assessed solely based on whether there is national level actor buy-in as opposed to whether investments contribute towards local actor needs (Omukuti, 2019, 2020). Local level delivery of finance is a greater challenge for countries with limited national level engagement with GCF, such as those without a GCF Direct Access Entity. This means that although local actors are seen by GCF as important for adaptation, GCF has not developed adequate mechanisms for these actors to engage with it.

The absence of a unified framework for defining the local level means that Accredited Entities apply their own frameworks and judgement when identifying local actors and processes. For entities with limited experience in supporting projects that prioritize local delivery of finance, the frameworks they adopt may be based on erroneous assumptions about the identity and needs of these local actors. The reality, as this study finds, is that adaptation financiers (such as GCF) or their intermediaries may claim to work with local actors but instead target (inter)-national institutions, who have limited capacity, experience, and willingness to promote locally-led adaptation.

Adaptation planning and implementation requires a cross-level approach. Adaptation actors are encouraged to design adaptation projects that leverage multi-level and cross-sectoral decision-making (Adaptation Fund, 2021), as adaptation actions at one level have implications for other levels (Barrett, 2013b; Fisher, 2015). However, due to the cross-level power dynamics between actors and institutions, local actors are likely to have limited influence on adaptation decisions and outcomes from cross-level projects (Di Gregorio et al., 2019; Nagoda, 2015). Hence, climate finance investments are still needed at the local level to enable local actors to 'investigate their own views and issues' and to exercise agency over how actions at other levels affect them (Daniell et al., 2011, p. 251). Additionally, actors designing multi-level adaptation projects must make 'boundary judgements' of who is to be included and excluded (Graversgaard et al., 2016; Midgley, 2000). As this research found, the identification of *boundaries for localness* can be subjective and driven by power inequalities. An actor-centric framework for defining the local level would ensure that local actors who have previously been overlooked in adaptation processes that claim to target the local level have control over these processes and outcomes (Hsu et al., 2020; Locatelli et al., 2020).

The low transparency and accountability in allocation of finance and spending at the local level, which emerges from the absence of granularity in available records, limits *independent* verification of local delivery of adaptation finance by GCF. The lack of granularity may be because projects do not directly fund local actors. Instead, Accredited Entities designing adaptation projects may expect that the adaptation benefits to local actors will emerge from investments in actors and actions at other levels (Lesnikowski et al., 2021; Westerhoff et al., 2011). However, adaptation interventions that increase the autonomy of local actors in adaptation planning and implementation, while also encouraging cross-level learning, are more effective in reducing vulnerability (Agrawal et al., 2012; Westerhoff et al., 2011). This means that investments in adaptation at the national level should also be accompanied by financing of the local level.

Low transparency and accountability stifles actor trust, particularly for international climate finance institutions that are publicly fubded, such as GCF (Bird, 2010). The lack of public disclosure on the local delivery of funds may foster distrust among actors in the climate finance landscape. Low transparency could reduce developed country and co-financing contributions, thus cutting total finance available for adaptation particularly for least developed countries that are prioritized by GCF's finance allocations. Indeed, trust is essential to increase ambition for climate action by both developed and developing countries as they work towards the Paris Agreement goals. Further reductions in adaptation funding could be catastrophic for local actors in highly vulnerable developing countries.

Climate finance mechanisms can enable or hinder successful adaptation, and in extreme cases can result in maladaptation (Atmadja et al., 2020). As the largest dedicated climate finance mechanism, GCF is key to unlocking climate finance flows to (and in) developing countries. GCF's actions are already transforming the climate finance landscape. For example, GCF and the Adaptation Fund are considering consolidating their accreditation procedures, such that an institution already accredited by the Adaptation Fund can have a 'fast tracked' and 'smoother' accreditation by GCF (GCF, 2019a). GCF's role and influence within the climate finance landscape means that its approach (or lack of) to delivering funding to the local level will set the course for future climate finance flows. This is particularly important, as developing countries' commitments to ensuring locally-led adaptation (UK COP26 Presidency, 2021) cannot be achieved without stronger international commitments to delivering adaptation finance to local actors.

As with other research that tracks delivery of finance, e.g. Soanes et al. (2021) and Manuamorn et al. (2020), the main limitation of this study is in its use of data that represents an 'intention to spend' finance at the local level, as opposed to actual spending. At the time of data collection, all GCF's approved projects were still under implementation. The data therefore only provided insights into GCF's and Accredited Entities' intentions (or lack thereof) to deliver finance to the local level. Actual delivery of finance and its outcomes can only be evaluated after project completion.

In summary, the promise of GCF was that it would support adaptation by those who are particularly vulnerable (GCF, 2011). As of 2021, the GCF, which is the largest dedicated multilateral climate financing mechanism for adaptation, offers limited evidence that can be used to judge its local delivery of adaptation finance to developing countries. These gaps suggest a lack of urgency on the climate change action that is called upon by the Paris Agreement, and which can only be achieved if local actors receive sufficient funding to address the drivers of vulnerability to climate change risks.

6. Conclusion

The Paris Agreement and the UNFCCC emphasize the importance of the local level in global climate action goals. To achieve the goals of the Paris Agreement, GCF has sought to deliver finance to the local level in developing countries, e.g. through enhanced direct access and simplified approval of projects. This article identifies barriers to GCF's delivery of adaptation finance to the local level to support locally-led adaptation. It finds that although GCF policies emphasize the importance of the local level in adaptation, they prevent the evaluation of how effective it is in delivering finance to the local level.

First, GCF lacks a framework for defining the local level. Policy documents lack clarity on local actor roles in adaptation processes and projects. Consequently, Accredited Entities apply subjective and inconsistent definitions of the local level to projects, with local consultation conflated for local engagement. GCF needs to develop and adopt a unified framework for guiding and measuring the delivery of adaptation finance to the local level. Such a framework can be jurisdictional and actor-centric, i.e. focus on actors below the subnational level. The framework should also promote agency of local actors, with emphasis on local actor control over allocation and use of finance by ensuring that these actors lead the design, implementation, and management adaptation projects.

Second, GCF has low transparency and accounting for spending on local adaptation, which prevents assessment of whether (or not) GCF's approved projects are delivering finance to the local level. Accounting processes fail to capture information on local spending. GCF should ensure that Accredited Entities implementing funded projects provide detailed accounts of project implementation in line with relevant frameworks. For example, reporting against the framework for local delivery would require entities to specify how local actors control allocation and use of adaptation finance. GCF should then make this information publicly available.

Lastly, GCF's Accredited Entities lack the capacity to generate vertical linkages with the local level, resulting in an entity portfolio that meets GCF's fiduciary standards and has experience implementing projects *at the local level* but little experience with locally-led adaptation that is required to successfully channel finance to the local level. This is because GCF's accreditation process seeks out entities that have the capacity to manage GCF funds but not capacity to work at the local level. GCF can use its 'Readiness' support funds to strengthen partner capacity to deliver finance to the local level. Additionally, GCF should commit to accrediting entities that can demonstrate experience of developing and implementing projects with high local actor agency. This will demonstrate the urgency placed on adapting to climate change by the GCF, and its committment to local adaptation.

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