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Does Climate Finance Support Institutional Adaptive Capacity in Caribbean Small Island and Developing States? An Analysis of the Green Climate Fund Readiness Grants

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Abstract: The impacts of climate change are already felt across the globe, and (SIDS) are at the forefront. Small Islands Developing States (SIDS) are extremely vulnerable to climate change and adaptation is crucial, however they often lack funding or the fiscal capacity to make the necessary investments and require support from climate finance instruments. The Green Climate Fund (GCF) was designed with the objective of achieving a "paradigm shift" towards low-carbon and climate resilient country-driven development pathway. Despite the amounts invested, assessing the impacts of climate finance on adaptation and adaptive capacity, particularly at the institutional level remains a challenge. Researchers identified two key components for more efficient adaptation policies at the national level: the degree of adaptation mainstreaming and institutional adaptive capacity. In SIDS, institutional capacity at the national level is seen as a key component to achieve the objectives of climate change strategies, and is supported by several programmes, including the Green Climate Fund Readiness Preparatory Support Programmes. However, to date few studies have analysed the linkages between climate finance, adaptation mainstreaming and adaptive institutional capacity. Through the review of the Readiness Grants and semi-structured interviews in three Caribbean SIDS, this research assess how climate finance may promote institutional change through the mainstreaming of adaptation policies at the national level and contribute to more institutional adaptive capacity. It shows that the grants had a positive impact, which can be limited to by the strength of the institutions in place. These results demonstrate that access to climate finance can create a window of opportunity for countries to accelerate institutional change and allow to make recommendations on how to maximise the impacts adaptation funds. More in-depth studies would be needed to examine the complementary influence of the different climate finance flows (multilateral or bilateral) and their interplay with national institutional mechanisms.

Keywords: green climate funds; readiness grants; adaptation; SIDS; mainstreaming; adaptive capacity

1. Introduction

Small Islands Developing States (SIDS) are heavily affected by from the consequences of climate change, namely are including "increases in temperature, the growing impacts of tropical cyclones (TCs), storm surges, droughts, changing precipitation patterns, sea-level rise (SLR), coral bleaching, and invasive species, all of which are already detectable across both natural and human systems" [1] (p. 2045). To address these challenges several financial mechanisms were established under the United Nations Framework Convention on Climate Change (UNFCCC) to provide financial resources to developing country Parties. The financial mechanism serves the Kyoto Protocol and the Paris Agreement. The Global Environment Facility (GEF) has been operating since 1994, while the Green Climate Fund (GCF) was

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adopted as financial mechanism in 2011 with the aim to channel a substantial part of international funds through bilateral, multilateral and private sources to support the achievement of mitigation and adaptation goals of climate action in developing countries and vulnerable states.

The Paris Agreement called for financial support to a "pathway towards low greenhouse gas emissions and climate-resilient development" and for implementation that reflects "equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances." To respond to this call developed countries committed to jointly mobilize US$100 billion per year by 2020, from a variety of sources, to address both mitigation and adaptation challenges in developing countries. Most of the multilateral funding should be channelled through the GFF as a key financial mechanism to support to design and implementation of ambitious Nationally Determined Contributions (NDCs), and balancing contribution to mitigation and adaptation and engaging with the private sector in low-carbon, resilient investments.

The GCF was designed with the core mandate to drive a "paradigm shift" towards low-emission and climate resilient country-driven development pathway [2]. The GCF also targets a 50 percent-50 percent allocation of funds between adaptation and mitigation and is expected to provide a dedicated support for Least Developed Countries (LDCs), Small Islands Developing States (SIDS) and African countries. So far, the GCF has supported 196 projects worldwide for a total amount of USD10.4 billion [3].

Despite the amounts invested, assessing the impacts of climate finance on adaptation and adaptive capacity, particularly at the institutional level remains a challenge. A large body of research has questioned the impact of adaptation finance programme and compared/analysed? adaptation policies at various levels. A review of the development of policies, institutions, and financing of adaptation in international agreements between 1992 and 2013, found that following mitigation approaches (that came first in climate policy), technical solutions are prioritised in adaptation projects, while social, political, and cultural problems where the roots of vulnerability reside, are neglected [4**Error! Bookmark not defined.**].

In addition, two key components for more efficient national policies have been identified: the degree of environmental/ climate policy integration, meaning the understanding by cross-sectoral ministries of the importance of climate change adaptation and the subsequent consideration of the impacts of climate change into their national policies [5–8] and the adaptive capacity of institutions, meaning their ability to enable adaptive capacity in the country and external actors to promote change [9–13]. These two elements are not necessarily present in the institutional make-up of countries, with ministries often working in silos and with potential conflictual objectives (Runhaar, Driessen and Uittenbroek, [7]. As a cross-cutting issue, climate change adaptation requires interventions from a wide diversity of sectors [14], and some level of institutional adjustment, including more mechanisms for collaboration and coordination at the national level and lasting changes in the practices to make institutions themselves more able to adapt to the consequences of climate change [5]. Institutional capacity at the national level is thus needed to implement relevant and efficient climate change adaptation strategies, and is supported by several capacity building programmes, including the Green Climate Fund Readiness Preparatory Support Programme (Readiness Grants). However, to date, few studies have analysed the linkages between climate finance, adaptation mainstreaming and adaptive institutional capacity.

Most research on projects supported by the GCF, focused on analysing the decision-making process in order to understand which countries would benefit the most from climate finance allocations analysing the decision-making process, and whether climate finance targets the most vulnerable countries. Dorman and Ciplet [15] highlighted the discrepancies in funds allocation looking at the energy sector showing that high or middle income countries benefitted the most, while Garschagen and Doshi [16] demonstrated that some criteria for allocation, such as political stability or institutional capacity, were applied to the most vulnerable countries making the poorest countries with low institutional capacity less likely to receive funds. Other scholars investigated the issue of country ownership [17]; the role of intermediaries [18,19] or the potential for a paradigm shift from the current development model to low-carbon and resilient societies [20,21]. The Readiness Grants are described as aiming "to strengthen [countries'] institutional capacities, governance mechanisms, and planning and programming frameworks towards a transformational long-term climate action agenda." [22]. Their 'transformational' role and the potential for

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'paradigm shift' has been emphasised by several GCF Boards members [20], however, the 2018 of a review of the Readiness Programme in on the GCF criteria, conducted the Independent Evaluation Unit of the GCF, did not specifically address the issue of "paradigm shift" or "transformational" potential in terms of institutional change [23].

Thus, assuming that and effective integration of climate change adaptation concerns, objectives and concepts is essential for transformation, this research aimed at shading light in these aspects by assessing how climate finance promotes the mainstreaming of adaptation policies at the national level and can lead to more institutional adaptive capacity through the analysis of the GCF Readiness Grants proposals and implementation.

In order to get insights from different socio-economic, institutional and environmental context, this study focused on three Caribbean SIDS recipient of six or more Readiness Grants, which are representative of the diversity of the region. Antigua and Barbuda is a high-income small island State, which is directly in the path of hurricanes and was ranked in 2012 by the World Bank amongst the top Five countries most at risk to multiple hazards, "with 100% of their population and land area exposed to two or more environmental hazards" [24] (p.6). The country has strategic plans to address climate change, although its high level of debt limits its fiscal space[1]. Belize is a middle-income continental SIDS, overburdened by debt and suffering from SLR due to its low-lying situation. The country has well-developed climate adaptation and sectoral resilience plans [25][2]. Finally, Haiti is the only LDC in the region. The country suffers from climate change manifestations along with natural hazards such as earthquakes and an unstable social and political landscape. The country has several national and sectoral plans to address climate change issues[3].

The study further attempted to answer whether the award of Readiness Grants promoted and catalysed a certain degree or form of institutional change, looking particularly at:

- Whether the grants have led to more collaboration between ministries, increased involvement of stakeholders (e.g. business sector and civil society organisation (CSO), and contributed to improve the integration of adaptation issues across ministries;
- Whether the Readiness Grants promoted more (contribute to enhance) institutional adaptive capacity.

To answer these questions a preliminary review of the literature on environmental and climate mainstreaming and on institutional adaptive capacity was conducted to define the conceptual framework that informed the analysis of the Readiness Grants. The results of the review are illustrated in section 2 below, while section 2.2 provide details on the rationale for the research and section 3 the methodology applied to assess the Readiness Grants proposals and implementation in order to answer the research questions. Section 4 presents the results and Section 5 and 6 discusses the findings and suggests policy recommendations.

2. Conceptual framework: institutional change in the context of climate change adaptation as barrier and enabler

Understanding what constitutes efficient climate adaptation policies is a challenging task given the complexity of the concept of "adaptation policies", which makes difficult narrowing down the components of a climate adaptation policies [26], their intentionality [27] and their scope. However, several scholars agree that the challenges presented by climate change call for a major systemic change, including "institutional innovations, changes in power structures and social and economic behaviours" [28](p. 2).

2.1. Climate change adaptation and institutional changes

Institutions can be conceived as a 'fixed structures' referring to a set of bodies or a set of rules and norms, or as a dynamic process of 'shared practices' and interaction (Beunen and [29,30]. In this research, institutions are understood as governing bodies and entities at the national level, the procedures and

[1] For more information, see Appendix A.

[2] For more information, see Appendix A

[3] For more information, see Appendix A

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processes that guide their interactions and the laws and regulations they create [31]. Institutions play an important role in climate change adaptation (CCA), the institutional framework or institutional weakness having been identified as barriers to adaptation [32]. Cuevas [33] additionally argues that due to the complex and overreaching ('wicked') nature of climate change adaptation, an institutional approach is needed: both institutional change and building institutional capacity are required to address the issue, and adaptation mainstreaming cannot happen without institutional change. Patterson [34] summarised three reasons for institutions to change: i) **increasing changes in society** and the widespread recognition of climate change as a major societal issue; ii) the necessity of **strong climate change leadership** to face challenges to come; and iii) developing a **cross-sectoral long-term focus** instead of a siloed short-term vision.

Institutions are often characterised by continuity, by the tendency of agents to maintain the system in place [35]. This means that institutions are posed to remain stable unless 'exogenous shocks' provoke radical transformation. Patterson, de Voogt and Sapiains [36], studying Santiago de Chile's municipal adaptation planning, show that national recognition of climate change and the creation of the Division of Climate Change took more than ten years to occur. Conversely, they also show empirically how stakeholders can work through the system to achieve change. Mahoney and Thelen [35] investigated gradual institutional change, defining institutions as a dynamic compromise between conflicting entities allocating resources. They also highlighted the subjectivity of the rules within institutions, which can be interpreted differently depending on the actors and the context, and the variability of compliance to these rules, due to their level of acceptance of the rule or the availability of resources for enforcement. According to Mahoney and Thelen [35] this would open to create potential for transformational change without external shocks. In line with this analysis, Beunen and Patterson [29] use the concept of 'institutional work', (or the intentional changes resulting from the actions of individuals) to describe institutional mechanisms gradual changes in environmental governance, and the multiple agencies and actors involved. They argue that the variety of actors involved is key, as small single actions may not be noticed but the cumulative effect of individual actions may be significant.

Another prominent feature of institutions is linked to cultural, historical, and social context in which they operate. The sustainability of institutions depends on their legitimacy, efficiency, and external support [37]. This requires the ability to change and adapt to stay relevant to their constituents, creating also opportunities and space for institutional adaptive capacity. Adaptation to climate change encompasses all these elements and the transformation of institutions which is happening to some degree is both exogenous and endogenous.

2.2. Efficiency and coherence in climate change adaptation policies: the concept of policy integration or mainstreaming

There is an extensive debate on efficiency and coherence in climate change adaptation policies and on the key role of adaptation mainstreaming in achieving transformational change. Eisenack et al. [38] argue that "mainstreaming" is an "enabling condition" to overcome barriers to adaptation, particularly the 'fragmentation' of institutions, that undermine the ability to link the multiplicity of sectors encompassing adaptation policies. Adaptation integration or mainstreaming is part of the broader Environmental Policy Integration (EPI) debate which also include Climate Policy Integration (CPI), [7], in some case considered a narrower and weaker interpretation of EPI [39]. CPI comprises both adaptation and mitigation policies and it has been defined as "the integration of environmental aspects and policy objectives into sector policies, such as energy and agricultural policy" [5] (p.1). However, this definition does not convey the conceptual complexity of the meaning of "integration". CPI contains also a normative prescription (OR dimension?), referring to the motivation to "change the dominant paradigm at multiple levels of governance" which "changes the rules of the game and challenges ideas, attitudes, or activities that are considered mainstream or normal" [40] (p.2). A more comprehensive characterisation defines CPI from a practical and normative point of view as "the incorporation of the aims of climate change mitigation and adaptation into all stages of policy-making in other policy sectors (non-environmental as well as

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environmental)" including "a commitment to minimise contradictions between climate policies and other policies." [41] (p.19)

Integration is therefore opposed to dedicated environmental or climate policy, or "concrete" policy as coined by [27]. Many authors concur that due to the multi-sectoral nature of adaptation policies, integration brings a range of benefits including i) improving policy coherence, ii) a more efficient management of human and financial capital, and iii) improving access to financial resources [42]. However policy integration is still a broad concept and how is happens, how it is measured and what is the outcome of integration has been extensively debated [5,7,8,42,43]. Particularly, the analysis of adaptation mainstreaming focused mainly on the following elemnts:

- *Enabling factors and barriers*: the normative framework, the political will, cognitive and analytical capacities, and the institutional (organizational and procedural) arrangements [44]
- *Integration levels*: horizontal policy integration; vertical policy integration; stakeholder integration; knowledge integration; temporal integration [43].
- *Integration as a process, an output or an outcome* [5].

Mickwitz et al. [41] additionally suggest five criteria to evaluate CPI, looking at *consistency* between policy goals, the *weighting* given to climate change impacts compared to other policy goals, *reporting* and climate change indicators, the *resources* or knowledge about climate change impacts and the *inclusion* of climate change mitigation and adaptation impacts into policies.

Existing structures, or collaborative processes are important to implement adaptation mainstreaming strategies, while the lack of sustained political will and of cooperation between stakeholders are significant barriers to adaptation integration [8], more than the lack of financial resources.

SIDS face specific barriers to adaptation, which reinforces the idea that adaptation mainstreaming is particularly relevant to context of SIDS and led to identify three guiding principles to evaluate adaptation mainstreaming in SIDS: i) increased collaboration between sub-national, national and regional level; ii) reduced reliance on project-based funds and availability of resources for institutional changes; and iii) innovation, or the freedom to innovate and learning by doing [45].

CCA mainstreaming is crucial to more efficient interventions and institutions play a key role in adaptation mainstreaming process. Thus, institutions themselves need to build adaptive capacity, to be more responsive and able to address potential unforeseen challenges ahead.

2.3. Institutional Adaptive Capacity

Government (National and local) Institutions play a major role in drafting and implementing climate change adaptation policies. The assessment of institutional adaptive capacity is particularly relevant as the aim of the Readiness Programme is to achieve a "paradigm shift" to low carbon and more resilient societies. Nevertheless the definition of "paradigm shift" or "transformational" change according to the GCF remains unclear [20,21], it can be understood to involve an institutional make up which is conducive to increasing adaptive capacity in a society.

The IPCC Assessment reports [46] (p. 2216) describe adaptive capacity as a component of vulnerability that include "The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences." For Fidelman et al. [12] (p.2), adaptive capacity is "a critical property for fostering adaptation" and respond to environmental changes. Adaptive capacity is also defined as "the property of a system to adjust its characteristics or behaviour, in order to expand its coping range under existing climate variability, or future climate conditions" [47] (p. 168). Thy imply the ability to design and implement effective adaptation strategies, and react to climate-related hazards and stresses to reduce the likelihood of the occurrence and the negative impacts (ibid). However, individuals or organisations are limited in their adaptation possibilities by social rules and procedures at local, national or international level [48]. An enabling environment is therefore required to allow society to adapt to climate change. Referring to institutions and the role they play in shaping societal makeshift, Gupta et al. [11] defined adaptive capacity of institutions as their ability to enable adaptive capacity in the society. Considering the scale and rapidity of the manifestations of

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climate change, it is therefore important to determine whether institutions will themselves adapt, and whether they will promote or hinder adaptation [49].

To **assess institutional adaptive capacity**, Gupta et al. [11] have developed the Adaptative Capacity Wheel, a framework presenting six objective dimensions of adaptive capacity and twenty-two criteria for analysis (Figure 1). The dimensions are variety, learning capacity, room for autonomous change, leadership, resources and fair governance. The framework has since been used and tested in several studies (including but not limited to [12,13,49,50]. In their paper, Grothmann et al., [13] observe that institutions and the policies they make are aligned with the society's perception of a specific issue and that therefore for adaptation measures to be adopted they would need to be perceived as necessary. They suggest integrating psychological dimensions in the adaptive capacity wheel adding the dimension of belief (in adaptation policies) and motivation (for adaptation policies). The literature review therefore establishes that i) adaptation mainstreaming requires institutional changes; ii) institutional adaptive capacity and adaptation mainstreaming overlap; and iii) institutional change, adaptation mainstreaming, and institutional adaptive capacity cannot happen without broad societal support.

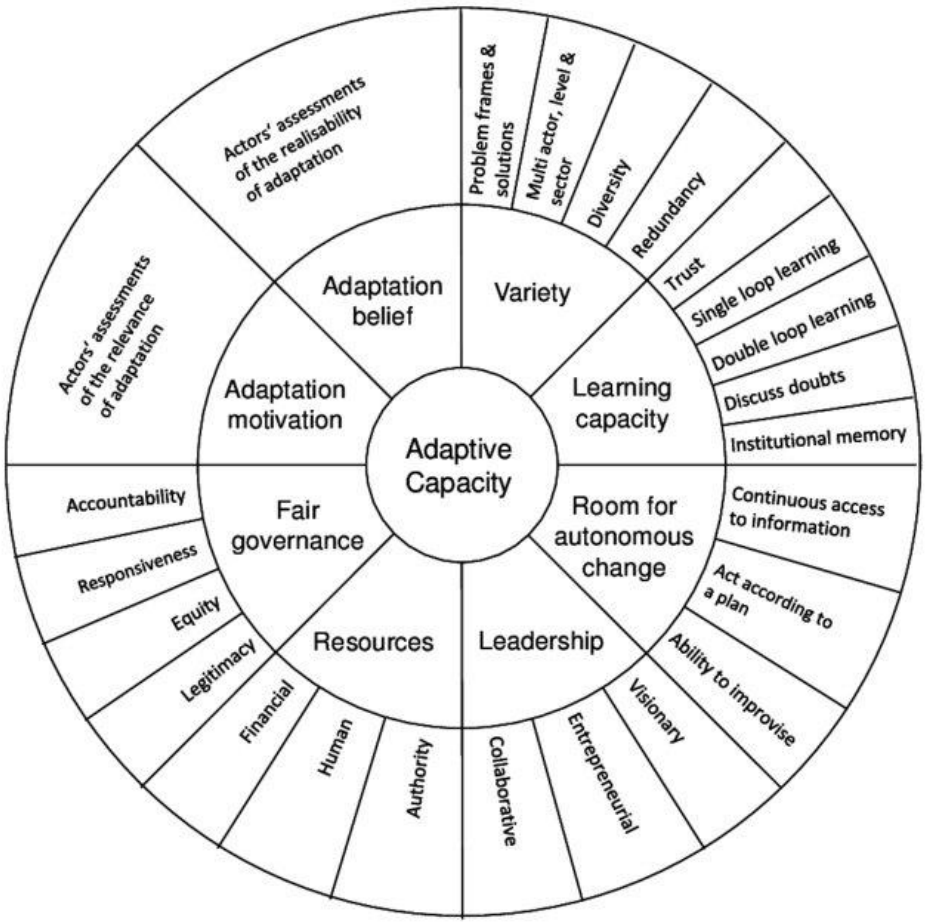

Figure 1. The Adaptive Capacity Wheel from Gupta et al. [11] as extended by Grothmann et al. [13] to include two psychological dimensions.

3. Materials and methods

3.1. Rational and research focus

Readiness Grants supporting projects and programmes and technical assistance to enhance access climate finance, aim to ensure that eligible countries and their national accredited entities meet the requirements in terms of financial management capacity, environmental and social safeguards, and gender integration. The grants are limited to USD 1million per country per year for institutional capacity building

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and to USD 3million per country per year for the formulation of National Adaptation Plans (NAP) [22]. The objectives of Readiness Grants are ambitious and support programmes aiming to achieve at least one of the objectives indicated the Table 1 below [51] (p.2).

Table 1. Objectives of Readiness Grants*.

Objective	Description	Title 4
Capacity building for climate finance coordination	Countries established *human, technical and institutional capacity to drive low-emission and climate resilient development*, including through direct access to the GCF	data
Strategies for climate finance implementation	Ambitious strategies implemented to guide GCF investment based on analyses of emissions reduction potential and climate vulnerability and risk and in complementarity with other sources of climate finance	data
National adaptation plans and/or adaptation planning processes	National adaptation plan (NAP) and/or other adaptation planning processes formulated to catalyse public and private adaptation finance at scale	data
Paradigm-shifting pipeline development	*Country priority-aligned* and paradigm-shifting concept notes and funding proposals submitted by countries with least capacity, including LDCs, and direct access accredited entities	
Knowledge sharing and learning (cross-cutting)	Increased levels of *awareness, knowledge sharing and learning* that contribute to countries developing and implementing transformational projects in low-carbon and climate-resilient development pathways.	data

*source: Green Climate Fund, 2019, [51] (p.2).

Out of ninety-seven Readiness Grant Proposals (RGPs) approved in the sixteen Caribbean SIDS, and ten more in the pipeline as of June 24th, 2021 [52] six countries have received most of the funds, either directly or through multi-country grants. These countries had more than six approved RGPs, representing 54 percent of the approved proposals globally in all the eligible counties. For the purpose of this paper, among these six countries three were selected with at least one completed readiness programme or project in addition to the six or more RGPs approved: Antigua and Barbuda (two completed), Belize (one completed) and Haiti (two completed). The countries were also selected on the basis of their institutional and socio-economic diversity in order to provide a comprehensive overview of the region. The selected and analysed as relative number (e.g. AB-1; AB-2; AB 3) are listed in Appendix B.

Since 2015, thirty RGPs were approved for Antigua and Barbuda, Belize and Haiti, either as a direct grant or a multi-country grant. This research focuses on the national level discarding the proposals for strengthening the capacity of implementing entities or local authorities (thirteen) [22]. Out of the remaining seventeen RGPs, the analysis involved twelve of them, those focusing on non-sectoral institutional capacity building: five targeting Antigua and Barbuda; three targeting Belize; and four targeting Haiti.

The proposals' analysis was complemented with background information and data from the review of GCF country programmes, country's Nationally Determined Contribution, Adaptation communication, National Adaptation Plans and GCF reviews from the Independent Evaluation Unit when available.

3.2. Assessing Adaptation Maintreaming

Acknowledging that the Readiness Grants promote "long-term strategies across key policy areas" and provide "a framework for increased collaboration between different government institutions" [53](p. 6), the 12 selected RGPs were analysed to determine whether the grants promoted more collaboration between ministries, increased involvement of stakeholders, and contributed to improve the integration of

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adaptation issues across ministries. First, the assessment of climate adaptation integration was done coding the RGPs documents by noting occurrences of four key words and expressions: "Adaptation mainstreaming", "mainstreaming adaptation" in relation the research question 1. and "Adaptive capacity" in relation to the research question 2 included in the Introduction. The coding used both exact match and stemmed words to determine whether the proposals expressly referred to these words/expressions.

Second, after a preliminary review of barriers and adaptation needs in the RGPs, the analysis applied the Wamsler and Pauleit's [40] conceptual framework to selected documents. The RGPs documents were coded by noting occurrences of phrases that related closely to the following categories:

- *Programmatic mainstreaming*: the modification of the implementing body's sector work by integrating aspects related to adaptation into on-the-ground operations, projects or programmes;
- *Managerial mainstreaming*: the modification of managerial and working structures, including internal formal and informal norms and job descriptions, the configuration of sections or departments, as well as personnel and financial assets, to better address and institutionalise aspects related to adaptation;
- *Intra- and inter-organisational mainstreaming*: the promotion of collaboration and networking with other departments, individual sections or stakeholders (i.e. other governmental and non-governmental organisations, educational and research bodies and the general public) to generate shared understandings and knowledge, develop competence and steer collective issues of adaptation;
- *Regulatory mainstreaming*: the modification of formal and informal planning procedures, including planning strategies and frameworks, regulations, policies and legislation, and related instruments that lead to the integration of adaptation;
- *Directed mainstreaming*: higher level support to redirect the focus to aspects related to mainstreaming adaptation by e.g. providing topic-specific funding, promoting new projects, supporting staff education or directing responsibilities.

The result from coding through key words and from the application Wamsler and Pauleit's conceptual framework were integrated in a single quantitative analysis.

3.3. Assessing Adaptive Capacity

In order to qualitatively assess whether and how the Readiness Grants contribute to enhance institutional adaptive capacity in the three selected countries, this study applied a simplified Adaptive Capacity Wheel Framework developed by Gupta et al. [11], integrating the beliefs and motivational elements suggested by Grothmann et al. [13]. This framework is comprehensive, has been well-tested and suitable to be applied to variety of institutional context [50]. In allowed to assess whether institutions facilitate or hinder institutional change towards climate change adaptation integration.

The criteria of the Adaptive Capacity Wheel were tested through interviews with relevant stakeholders. The outcomes of the interviews were used to refining and complementing the findings of the document analysis. They provided explanatory elements to determine whether the government representatives from the targeted countries, a delivery partner and a representative form GCF considered that they were equipped and better prepared to implement relevant adaptation policies.

Seven semi structured interviews were conducted following a single question set[4] slightly adapted for regional interviewees. For anonymity, interviewees are referred to by codes as follows: representative from the GCF (GCF1), representatives from the governments of Antigua and Barbuda (A&B1), Belize (Bz1 and Bz2) and Haiti (Hi1), and representatives from one delivery partner (DP1 and DP2). The authors manually clustered and classified/evaluated? the qualitative data from the interviews using 7 institutional adaptive capacity elements and 24 related criteria defined by Gupta and colleagues in the Adaptive Capacity Wheel framework:

[4] Detailed question set is available in Appendix C

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Table 2. Clustering Dimension and Criteria for the Assessment of Institutional Adaptive Capacity (Adapted by Gupta et al, 2010 [11] and Grothmann et al. 2013 [13]**).**

Categories	Definition and Aim	Corresponding Criteria
Variety/ Diversity	Assess whether a variety of sectors and a diversity of stakeholders were engaged and consulted in the making of the various Readiness outputs, and whether the Readiness Grants promoted a diversity of approaches in defining core adaptation policies.	- Problem frames and solutions - Multi actor, level and sector - Diversity - Redundancy
Learning capacity	Assess if the Readiness Grants favoured the development of a culture of learning and sharing in targeted and across ministries, including increased monitoring and evaluation of activities.	- Trust - Single loop learning - Double loop learning - Discuss doubts - Institutional memory
Room for autonomous change or Agile planning	Assess the contribution of the Readiness Grants to the production of more agile adaptation plans, looking at the capacity of actors to access information, act according to plan or improvise.	- Continuous access to information - Act according to plan - Ability to improvise
Leadership	Analyse the role of leadership to understand to what extent the Readiness Grants promoted a visionary, entrepreneurial, or collaborative leadership and more processes of exchanges between Ministries.	- Visionary - Entrepreneurial - Collaborative
Resources	Assess the potential of the Readiness Grants to develop the capacity of core staff and their ability to access to more financial or technical support.	- Authority - Human - Financial
Fair governance	Assess whether the Readiness Grants encouraged a higher degree of transparency, equity, accountability and whether they strengthened the legitimacy of the institutions.	- Legitimacy - Equity - Responsiveness/ Transparency - Accountability
Belief and Motivation	Assess how the Readiness Grants contributed to increase the belief of the efficacy of adaptation interventions and the overall motivation to implement adaptation policies at the national level.	- Belief - Motivation

The evaluation assessed the impacts of the Readiness Grants on institutional adaptive capacity against three levels of impacts: no noticeable change (=); small positive impact (+); and significant positive impact (++).

The results of the RGPs documents' analysis and of the interviews are described in Section 4 below.

4. Results: Assessing the Effects Readiness Grant's in SIDS

4.1. Contribution of Readiness Grants to adaptation integration: a promising opportunity

The analysis of common needs and barriers to adaptation integration for the three countries found that they include: limited staff capacity, pointing out to the need for creating new positions or ongoing trainings; lack of baseline data, scattered, missing data or data inaccuracies, the need for better data collection and data analysis; lack of monitoring and evaluation systems; lack of required policies, processes or procedures; critical lack of financial resources and lack of technical financial capacity; limited knowledge and awareness of climate change issues at the national level, including key actors like

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parliamentarians; limited role, engagement and awareness of the private sector; and need to strengthen coordination mechanisms. All these elements sometimes refer to a specific department (National Designated Authorities (NDA), procedures (like the GCF No objection procedure) or relate to a broader national context (the issue of data for example or financial resources). To address these challenges, the countries implemented strategies with various degrees and scope of potential for adaptation mainstreaming.

4.1.1. Programmatic mainstreaming

This section discusses the measures included in guidelines or general policy frameworks, while the regulatory mainstreaming section below refers to measures directly integrated into laws and regulations. The two sections overlap only for A&B where the NAP became a regulatory document and not only a policy guidance. Indications of programmatic adaptation mainstreaming found in RGPs relate to the development of NAP or the review of existing plans to integrate CCA priorities (Antigua and Barbuda and Haiti). Other references to climate change programmatic mainstreaming are linked to climate finance planning and provisions for development of funding proposals. Compared to the Antigua and Barbud and Haiti, Belize has the lowest occurrences of adaptation of all the countries, but the highest occurrence of adaptation compared to other criteria and GCF processes (three and eleven). The study of overall proposals from Belize, including those not selected for this research, reveal indeed a more programmatic strategy, where the opportunities offered by the GCF Readiness Grants are targeted at strengthening and accrediting entities, and focused on developing sectoral plans. Unlike, Antigua, Barbuda and Haiti who developed proposals first targeted at national capacity building, out of the nine Readiness Grants Belize received so far, four of them aim at strengthening entities for accreditation, three are sectoral (fisheries, water, disaster risk reduction), and one is targeted at the private sector. Only one readiness proposal (the earliest one in 2016, B-6) aimed only at institutional capacity building.

4.1.2. Managerial mainstreaming

The RGPs as expected contain substantial references to climate change and climate finance managerial mainstreaming, which can be explained in relation to the previously identified needs and barriers. Most managerial mainstreaming interventions entail capacity building, with a few references to creating new positions (consultants) or bodies within the NDA. Occurrences for adaptation specifically are rarer except in Haiti, with activities targeted at reviving and strengthening coordination bodies for climate change (with a focus on adaptation), capacity building for the Direction of Climate Change (DCC) and the Ministry of Environment (MoE), along with other closely related ministries such as the Ministry of Planning. A key measure in one of the proposals (H-6) for example is to conduct a gap assessment and develop a comprehensive training curriculum for cross-Ministries personnel. The production of data and knowledge for decision making is also important in the various proposals, with measures aiming at developing or strengthening officers training and consolidated data tools, and shared knowledge platforms on CCA.

4.1.3. Inter-Intra organisational mainstreaming

Inter-Intra organisation mainstreaming is an important element for all three countries, with a strong emphasis on stakeholder engagement. “Stakeholders” is often loosely defined, sometimes referring to non-governmental actors such as the private sector, civil society organisations (CSOs), or research institutions, sometimes referring to other Department or Ministries, or other departments within the same Ministry. In most interventions, stakeholders’ engagement takes the form of consultations and capacity building through trainings and workshops. In Antigua and Barbuda and Haiti, there are also provisions for the set up and strengthening of a permanent consultative body to the NDA on matters related to climate change including adaptation. One of the RGP (AB-1) mentions international stakeholders, however it doesn’t provide details about the role and type of stakeholders. For Belize, intra-inter organisation mainstreaming activities are mostly related to the strengthening and implementation of GCF procedures.

4.1.4. Regulatory mainstreaming

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Regulatory mainstreaming is mostly absent from the analysed RGPs, with the exception of Antigua and Barbuda where one of the proposals (AB-1) mentions the National Adaptation Plan as a new sectoral legislative output to be approved by the Cabinet, gazetted, and become a law, along with proposed amendments of current regulations. There is no explicit reference to such regulatory changes in the other proposals. This illustrates the different choices made by countries regarding the plans, developed within the RGPs and whether they will be strategic guidance, general policy documents or will become legally enforceable.

4.1.5. Directed mainstreaming

There is little reference to directed mainstreaming in the reviewed documents. The analysis of the documents for Antigua and Barbuda suggests that the country adopted an overall directed strategic mainstreaming for climate change policies. There are few interventions in the documents which could be coded as "Directed", however all the proposals taken together show a strategic intent to mainstream climate finance and adaptation at all levels, with a focus on one Direct Access Entity, the Department of Environment (DoE). Even though coordination mechanisms exist, and large consultations have taken place, the DoE is at centre of all suggested interventions. There is no evidence of proposals to submit another implementing entity for accreditation according to Antigua and Barbuda Country Programme [24].

Overall, the analysis shows the RPGs contain elements for broader adaptation mainstreaming and institutional capacity building. However, most of the provisions are at the level of procedural interventions and there is an overall lack of regulatory outputs. Table 3 below summarises the main findings related to the potential of the proposals for adaptation integration.

Table 3. Strengths and Weaknesses analysis of the selected Readiness grant proposals in terms of adaptation mainstreaming.

Criteria for climate adaptation integration Wamsler and Pauleit (2016)	Strengths	Weaknesses
Programmatic Mainstreaming	Climate finance planning Development of NAP (e.g. Haiti as a strategy non-binding) Participatory development of framework, multi-year documents (country programmes, NAP) Focus on baseline assessments and data collection to inform policies and plans	- Very few measures to indicate consultations mechanisms are permanent - Very few mentions of budgetary interventions - Activities sometimes vaguely defined ("strengthening" without more details on how this will be achieved)
Managerial Mainstreaming	Capacity building interventions Creating new positions (consultants) Knowledge sharing mechanisms (workshops, platforms)	- Staff training sometimes limited to the NDA or the hosting Ministry
Inter-Intra organisation mainstreaming:	Multiple provisions for Stakeholder consultations Capacity building interventions Focus on the engagement of the private sector References to regional/ international cooperation on adaptation tools and planning	- Stakeholders vaguely defined

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Regulatory mainstreaming	New sectoral legislative output (NAP – Antigua and Barbuda) Amendments of current regulations (Antigua and Barbuda only)	- Very few references to regulatory enforcement (most interventions remain at the programmatic level)
Directed mainstreaming	Mainstream climate finance and adaptation at all levels (Antigua and Barbuda only)	- Centralisation and limited accreditation of new implementing entities

In Addition, there are significant differences between countries: if Haiti's focus on adaptation is clearly marked, it is less evident in Belize's proposals. Finally, the most promising provisions in the RPGs may be through the set-up of consultative processes, whether directly related to adaptation, or linked to GCF procedures. Although there is little evidence that the creation of working groups for the achievement of the project's objectives would lead to a long term and regular practice of cooperation, they build the basis and have the potential to create collaborative habits and to drive engagement with new relevant stakeholders. These key points have been further explored during the interviews with NDAs and delivery partners, when assessing the potential impacts of the readiness grants on institutional adaptive capacity.

4.2 Impacts of the Readiness Grants on institutional adaptive capacity

This section illustrates the results of the application of the seven dimensions and twenty-four criteria of the Adaptive Capacity Wheel [11] aimed at exploring whether the Readiness Grants positively influenced institutional adaptive capacity through discussing the criteria with target interviewees. Overall, the respondents were overall positive in their assessments of the grants, however with significant limitations. Some criteria emerged as irrelevant.

Variety of perspectives, actors, and solutions

According to the respondents, variety/diversity was promoted through the involvement of a variety of actors and sectors, which brought new approaches. Stakeholders' engagement was required from the GCF to ensuring country ownership (Bz1) and the support of the grants to engagement and capacity building of a wide range of actors, which would not have been possible otherwise (A&B1). In addition, the collaboration of national implementing entity with CSO representatives and the private sector have been cited as positive advances by all respondents. In Antigua and Barbuda and Haiti local actors have been engaged through consultation and incentives to participate in adaptation actions (A&B1). In Haiti a whole readiness grant is dedicated to involve municipalities in climate adaptation activities with targeted climate finance funds. In Belize, the grants created opportunity for regional collaboration, and exchanges between NDA from different countries, contributing to the development of higher quality grant proposals (Bz2).

The development of NAPs and country programme also contributed to increase the variety of actors and climate adaptation challenges addressed, incorporating consultations and engagement at various levels in all countries. Participation and collaboration with other Ministries increased due to the creation of dedicated committees (Bz2, A&B1), or reactivatation (H1). These committees are often composed of representatives from key sectoral ministries, CSO representatives and the private sector, and can act as advisory for the no objection procedure or the development of projects.

To highlight the relevance of the involvement of a variety of actors, stakeholders and sectors, one interviewee (DP1) observed that "Climate change is everything, and everything is climate change" meaning that there are no sectors in the Caribbean SIDS which will not feel the effects of climate change, and that therefore addressing and adapting to climate change should be the core issue for all institutions.

Learning capacity and continuous learning

It is overall recognised that readiness grants improved learning capacity. However, learning interventions are still 'siloed' and targeted to the NDAs or to small teams responsible for the GCF grants (DP1) limiting the awareness on climate change and adaptation within the competent Ministry (H1). Nevertheless, linked to the variety assessed above, interviewee from Antigua and Barbuda (A&B1)

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observed that specific sections of their readiness grants were designed to improve knowledge and shared learning, including engagement with key Ministries and stakeholders, especially local communities and environmental groups which enhanced the knowledge and capacity of the DoE and NDA.

The implementation of the grants also strengthened the role of NDAs in knowledge production, notably related to gender policies and environmental and social protection (Bz2, H1). The requirement to report to GCF improved the need and capacity for monitoring and evaluation and a regional readiness grant was designed to strengthen Measurement, Reporting and Verification (MRV) capacity in several countries including Belize and Haiti (Bz2).

Activities developed within the Readiness Grants have also promoted the learning from parties outside the national implementing agency/NDA (MoE, H1) and the need for increased shared learning lead to the development of knowledge management platforms (Haiti, Antigua and Barbuda) and new knowledge related website sections and updates (Belize). Finally, the continuous learning is fostered by the need to keep up to date with GCF policies and procedural changes (Bz2, A&B1).

Agile planning and autonomous change

Readiness Grants allowed for agile planning and autonomous change in several ways: a. participative design of guiding documents, strategic plans, and the development of national plans like country programmes or NAP; b. national entities, local authorities, and stakeholders' capacity building, to promote either their accreditation or the development of concept notes for funding; c. alignment with national plans ensured by a no objection procedure in Haiti. In addition, Belize centralised all climate finance into one department (Bz1, Bz2) and Antigua and Barbuda only has one accredited national implementing entity with the DoE.

However, interviewees also mentioned several issues linked with overlapping competencies, bureaucracy (DP2, Bz2), and multi-level chain of decision and plans being stalled due to changes in governance (DP2).

Leadership

Respondents agreed that a long-term vision and a clear agenda was essential to address climate change policy issues, particularly for adaptation. There is a strong centralisation of decision making and resources whit the high-level institutions, and government representatives which are particularly active in the international area[5]. While the commitment of hight level representatives, such as Head of States, is considered positive, it can lead to prioritise short-term interventions neglecting long-term adaptation policies that exceed the electoral mandate (DP1). Despite adaptation being a very high priority in Antigua and Barbuda, respondent (A&B1) observed that short-term decisions sometimes contradicted with long term resilient action and governments had tough choices to make; that short-term projects and grants may be inadequate to achieve long-term goals, particularly those concerning the changes in the institutional structure, awareness or culture (DP1, DP2, A&B1).

At the country level, Antigua and Barbuda demonstrated a clear direction and vision which helps to coordinate and enhance the coherence of the various readiness grants to ensure the achievement of their longer term adaptation objectives. The DoE, being both NDA and accredited national implementing entity, has a strategic control over the funds (A&B1) and ownership of the projects and programmes. This allows countries to design plans tailored to their context and to develop local knowledge, rather than implementing programmes designed overseas.

Belize improved the institutional structure creating a Climate Finance Unit, which centralises all climate finance proposals in one place to ensure coordination and avoid duplication of efforts. However, the parallel strategy of multiple implementing Entity accreditations and sectoral proposals might in the end "dilute the efforts" (DP2).

Haiti, which is dealing with other socio-economic vulnerability and policy instability, is struggling in integrating CCA as a priority the country, even though most sectors are already negatively impacted. The role of the DCC is to design strategic documents and guidelines for other actors to be implemented by

[5] This is evidenced by the recent appointment of Grenadian Prime Minister as the Head of the next Conference of the Parties in 2022 [54]

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other national intuitions and actors with the support of Readiness Grants, however a lack of coordination with stakeholders (e.g. other Ministries or bilateral or multilateral funding bodies) may lead to duplication of efforts. Enhanced national ownership of climate change adaptation was indicated as essential (H1).

Despite the complexity of the implementation process Readiness Grants increased collaborative leadership through improved participation of stakeholders, implementation of cross-ministerial advisory or technical committees, and the importance of the no objection procedure.

Access to Resources

Access to resources is the core objective of several Readiness Grants, which aim to strengthen entities to be accredited and submit strong funding proposals. It is also an imperative for countries which have "reached the limits" of what they can do to adapt and are overburdened by debt and adaptation costs (A&B1). The Readiness Grants comprise several provisions to strengthen NDA and national implementing entities' capacity on GCF procedures and accreditation process. In the case of Belize, the Readiness Grants were instrumental in structuring the Climate Finance Unit. The growth in capacity in the MFED supported additional funding and enable to secure a higher number of Readiness Grants than other countries (Bz2).

In Antigua and Barbuda, the accreditation of the DoE facilitated the access additional funding as it allowed them development of a GCF country programme which provide a clear country's climate finance strategy that is required to apply for multi-year grants. This supported the country's application for project proposals and multi-year Readiness Grants lead into receive over USD50 million from the GCF (not including Readiness Grants) and additional 10 million from the Adaptation Fund (A&B1).

Readiness Grants helping to build staff capacity in NDAs and in other departments and ministries, had a very positive impact on individual skills and confidence improving human capital withing the institutions (DP1). In Antigua and Barbuda, the grants were instrumental both in building internal capacity and hiring new staff "to become ready to access climate finance and implementing climate action" (A&B1).

However, due to an overall lack of skilled and trained resources in the countries and region, in some countries the huma resources turnover has increased, particularly in Haiti where skilled government staff moved to other agencies or the private sector to benefit from a higher salary (DP2, H1).

Promotion of Fair governance

According to the respondents, the implementation processes required by the GCF helped strengthen internal procedures, equity, transparency and legitimacy of the departments in charge of climate change, climate change finance, and CCF overall increased.

In all countries, capacity building on gender issues and environmental and social protections helped achieving higher equity standards and positioned the NDA as a legitimate 'champion' in these matters, who can take the lead in replicating the policies in other Ministries, particularly in Belize where the MFED showed high influence on integrating gender and environmental and social guidelines (Bz2).

In Antigua and Barbuda, earlier grants aimed at accreditation of an implementing entity for the GCF and the Adaptation Fund. They enhanced internal systems, standards and requirements regarding procurement, conflicts of interest and financial management which increased transparency, legitimacy and efficiency "to make sure the climate action was done in a correct manner" (A&B1; Bz2)

In the case of Haiti, centralisation helped building the capacity of the NDA, however a weak institutional framework and the lack of national accredited entities limited the autonomy and operation of the NDA (H1).

Psychological

The Readiness Grants, through the enhanced participation of a variety of actors, helped to enhance the understanding of climate change as a societal issue rather than exclusively as an environmental issue. In Belize, climate change is considered an "economic and development issue" and in Antigua and Barbuda, adaptation became a "way of life". In Haiti, the level of awareness is still low as the MoE is still struggling to prioritise climate change and understanding the interdependences between climate change and socio-economic challenges.

Knowledge sharing on GCF processes and the possibility to access climate finance helped to enhance the motivation and interest of other Ministries other than the implementing authority or NDA(Bz2).

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However, excluding Antigua and Barbuda where residents' awareness is really high, due to their past extreme climate events and their increasing intensity and frequency (A&B1), there is still need for awareness rising (DP1, Bz2) to broaden the understanding on climate adaptation and for advocacy to support adaptation policies and help controversial political choices. Some RGPs did contain provisions for awareness campaigns, however the assessment of their results would be premature as their implementation is ongoing. As emerged from the interviews "Climate change is a global issue but ownership at the national level is still lacking", particularly in Haiti, where crucial sectors are negatively impacted by climate change, awareness about adaptation is low.

4.2.1. A positive impact on a limited number of institutions

According to the analysis of the interviewees' responses, the Readiness Grants already contributed to some extent to more adaptive institutions. Drawing from Munaretto and Klostermann [49], the Readiness Grants contribute to strengthen elements on both side of the adaptation wheel: the more dynamic right side (Variety, Learning Capacity and Room for autonomous change) as well as the structuring left side (Leadership, Resources and Fair Governance), while having inconclusive impact on the Psychological element, as, the influence of the Readiness Grants on belief/motivation is still partial/uncertain. The contribution to the Variety and Resources elements of the wheel is the more evident in all the countries. This is linked with the purpose of the Readiness Grants itself of for strengthening institution capacity, access to resources, and 'country ownership' and stakeholders' consultations. The Grants also improve collaborative leadership, stakeholders' empowerment and transparency. However, it was not possible to fully test the learning capacity especially concerning single/double loop learning sub-criterion not applicable in the context of the grants, but it is worth noting the efforts to improve monitoring and evaluation and shared learning. The findings illustrated above are summarised in Table 4 below.

Table 4. Evaluation of each criterion.

Element	Criterion	Evaluation[1]
Variety	Problem frames and solutions	+
	Multi actor, level and sector	++
	Diversity	+
	Redundancy	N/A
Learning capacity	Trust	+
	Single loop learning	N/A
	Double loop learning	N/A
	Discuss doubts	+
	Institutional memory	+
Agile planning and room for autonomous change	Continuous access to information	+
	Act according to plan	+
	Ability to improvise	=
Leadership	Visionary	=
	Entrepreneurial	N/A
	Collaborative	++
Resources	Authority	+
	Human	++
	Financial	++
Fair governance	Legitimacy	+
	Equity	+
	Responsiveness/ Transparency	+

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	Accountability	++
Psychological	Belief	=
	Motivation	=

[1] no noticeable change (=); small positive impact (+); and significant positive impact (++).

An important caveat to highlight is that most of the positive contribution to institutional adaptive capacity emerged in departments directly working on climate change or climate finance, while the spill over effect in other ministries and institutions was difficult to assess through the interviewees' responses.

During the interviews, three key themes emerged: the issue of the retention of skilled workers in government bodies, with low salary grade; the possibility of increased regional collaboration through the Readiness Grants; the question of opportunity such asthe attractiveness of available climate finance for debt burdened governments (Belize, Antigua and Barbuda) or governments with scarce resources (Haiti). The possibility of getting additional funds pushes the governments in a direction they might not otherwise have taken.

5. Discussion

This research explored how climate finance may promote adaptation mainstreaming and institutional adaptive capacity, through the development and implementation of GCF Readiness Grants and related project and programmes in three Caribbean SIDS. It first analysed the influence of the grants on adaptation mainstreaming by looking at the interventions and provisions included in selected grants proposals. The study then examined the potential contribution of the Readiness Grants to longer-term potential institutional changes and increased institutional adaptive capacity analysing the results of semi-structured interviews with NDAs, implementing authorities and delivery partners .

5.1. An opportunistic short-term move for potential long-term adaptation integration

Relating to climate changed adaptation integration, the analysis focused on evaluating whether the Readiness Grants had an influence on the way ministries worked together and whether they contributed to more collaboration between ministries, increased involvement of stakeholders, and the integration of adaptation issues across ministries. Adaptation integration was not a specific intent of the Readiness Grants (except for AB-2, H-2 and H-3) but the results show a positive influence in promoting more climate finance and adaptation mainstreaming into intributions and their programming, especially with the development of inter-ministries coordination mechanisms and improved stakeholders' participation. This is aligned with the findings of Zamarioli, Pauw and Grüning [19] who highlighted that Readiness Grants have enhanced stakeholders' engagement.

However, involving mostly a limited number of sectors, the influence is often limited to the achievements of specific objectives (e.g. coordination to write funding proposals, consultations to develop a plan) in line with Adelle and Russel's [39] view of CPI. Additionally, it remains unclear whether the provisions for collaborative processes are contingent and short-term or long-lasting, given the short timeframe of the study (4 months between April and August 2022). Institutional change is usually slow and incremental [36]. However, in the investigate countries, some provisions were implemented over a few years only. The processes for change observed in the analysis add an element to those described in the literature and defined as "climate finance opportunism". Countries highly indebted or with low fiscal resources rely on external grants to promote adaptation policies and reforms, and the GCF provides a window for middle and high-income SIDS to access concessional grants. In the three countries studied, the "financial opportunism" of getting Readiness Grants led to a quicker pace of institutional change, which, if not readily visible across the board and all ministries, however it is significant for the units administrating the grants and their parent ministries. "Climate finance opportunism" adds a layer to Runhaar et al.'s analysis [8] pointing out the role that financial resources can play in promoting adaptation mainstreaming. However, these results can be fragile and, for them to really 'take roots' and be sustained when funding is no longer available, broader top level and societal support is required [37]. Changes

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operated only to access funds might be at risk of reversal if requirements to access them are modified. In addition, there are few provisions in the Grants studied dealing with regulatory interventions, which limits the enforceability of the measures and their sustainability over time. The stability of the changes can be assessed with Patterson's [34] three reasons for institutional change related to climate change. In Antigua and Barbuda, condition i) societal support and ii) strong leadership, are robust drivers for implementing the institutional changes needed both to access climate finance and to deliver stronger adaptation policies. Condition iii) long-term focus, is recognized and accepted but implementation faces short-term challenges. In Belize, condition ii) is met with the MFED leading the climate resource mobilisation to deliver funds the country needs, however condition i) and iii) were not thoroughly evidenced during the research.

The case of Haiti shows that changes are happening despite the apparent lack of all three conditions and seem more driven by the motivation of a core, trained team within the MoE, and the possibility of accessing funds needed to support Country's development. Certainly, the lack of a national accredited implementing entity limits the awareness on available adaptation funds, and the ability to prioritise adaptation policy and projects. Therefore, the measures for adaptation mainstreaming are more evident in Antigua and Barbuda and Belize, while a broader ownership and understanding still need to be developed in Haiti. This analysis is aligned with Robinson's findings [45], that adaptation mainstreaming strategies needed an identified national 'champion' institution to be effective and successful.

5.2. Divergent strategies for institutional adaptive capacity

Applying the Adaptive Capacity Wheel [11,13] to assess the expected impact of Readiness Grants on institutions allowed to provide abroad overview of the elements most included in the grants, and to identify those relevant for the improvement of future readings proposals and the GCF.

Not surprisingly, the Readiness Grants have been particularly successful at strengthening the 'Resources' part of the wheel. Building the country's adaptative capacity requires funds, and the responsible institutions have aimed to enable it by bringing in additional resources. The analysis highlighted three different pathways that the countries undertaken to use the grants to fit their adaptation needs.

In Antigua and Barbuda, the strengthening of the DoE alone allowed the country to take full ownership of the grant design and implementation. This emboldened the country to implement its strategic design with further Readiness Grants on NAP, multi-year programmes, regional projects supporting other regional entities and countries and finally submitting fully developed sectoral adaptation programmes.

In Belize, the strategy aimed at maximising climate finance with a multi-pronged approach to support adaptation priorities, with the centralisation and strengthened capacity of one unit to design the projects, and the submission of multiple entity accreditation and sectoral adaptation proposals. The strategy has been successful as Belize has benefitted from the highest number of Readiness Grants in the region and has increased regional cooperation.

As regards Haiti, it is still early to assess the approach followed, as the need for technical capacity and basic knowledge was greater and most of the grants focused on this issue. Moreover, because the country does not yet have an accredited entity, it relies on external agencies to access funds, and this can limit the full deployment of a national climate adaptation funding strategy. However, Haiti showed to be able and committed to incrementally build its institutional adaptive capacity, including at the local level, despite the challenges and the lack of accredited entity.

6. Conclusion

This study investigated and illustrated the links between climate finance and institutional change, particularly, it highlighted the influence of GCF Readiness Grants on adaptation mainstreaming and institutional adaptive capacity.

The research demonstrated that the selected GCF Readiness Grants have had a positive but limited impact on adaptation mainstreaming and institutional adaptive capacity in the three countries studied.

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The analysis shows that the proposals contain elements for adaptation mainstreaming, specifically related to inter-intra organisations, programmatic and managerial mainstreaming. There is however a lack of provisions regarding regulatory outputs or directed mainstreaming. Moreover, the Readiness Grants promote institutional adaptive capacity, particularly through Variety of perspectives, actors, and solutions, Resources and Collaborative Leadership elements, and is often limited to a single unit (NDA, Climate Finance Unit, DCC or DoE) for capacity building.

The results show a "climate finance opportunism" by which countries accelerate institutional change, hereby increasing adaptation mainstreaming and adaptive capacity, in order to be eligible to additional GCF funds. This in turn provides more resources to support countries' adaptation needs. The potential effects depend on the strategies each country developed to benefit from the Readiness Grants and on the strength and pre-existing capacity of the institutions in place.

Several challenges were met in conducting the research, and the limitation of the scope and methodology call for further studies which are suggested below.

The disclosure policy of the GCF calls for improvement. This has been noted in previous papers and confirmed during this research. Incredibly long delays relating to the publication of reports on the GCF website prevented the researcher to consult crucial documents such as completed RGPs documents.

Qualitative input and semi-structured interviews were chosen to assess institutional adaptive capacity; therefore, the analysis is based on the respondents' views and potential bias due to their direct involvement with the Readiness Grants. Consulting with more respondents would have maybe yielded more nuanced conclusions.

Similarly, the choice of the three countries aimed at giving an overview of the diverse use of the Grants, so the research did not attempt to compare countries, rather to note and aggregate interventions in favour of adaptation mainstreaming and institutional adaptive capacity to draw general conclusions. A comparative study or an in-depth analysis of one country might be interesting to further understand the mechanisms and motivations behind the observed changes.

This project focused on selected national GCF Readiness Grants. without including regional readiness grants or proposals targeting specific sectors. To have a comprehensive analysis of adaptation mainstreaming and institutional change in the region would help to extend this research to sectoral readiness grants and compare the results obtained at national level with those from the different sectors to evaluate if and how elements of adaptation mainstreaming are present, and how they might complement each other. Area for future research may also include institutional capacity building and adaptation mainstreaming at the sub-national level to examine how climate finance can contribute to change through a bottom-up or multi-level approach. The GCF project proposals, or financing from other multilateral or bilateral funds were also excluded from the study. Additional research may include the interventions from other financing sources and disaggregate the contributions from several programmes running in parallel.

Appendix A: Climate change and adaptation policies in Antigua and Barbuda, Belize, and Haiti

Description
Caribbean SIDS are facing common climate change threats, but diversified impacts According to the 6th IPCC report on adaptation (Working Group II), SIDS are already facing many climate change impacts: temperature increase, stronger tropical cyclones, change in rainfall patterns, more intense and repeated droughts, storm surges, sea-level rise (SLR), and threats to biodiversity like coral bleaching or the growth of the number of invasive species (Mycoo et al., 2022). People in coastal cities and rural communities have already been affected, along with almost all economic and social sectors: health, water, agriculture, infrastructure and food security (Mycoo et al., 2022). SLR is a particular threat as it is estimated that in 2017, 22 million people in the Caribbean lived below six metres above sea level (Mycoo et al., 2022). Additionally, extreme weather events like tropical cyclones are increasing in intensity and frequency: in 2017 alone, twenty-two out of the twenty-nine Caribbean islands were affected by a Category 4 or 5 hurricane (Mycoo et al., 2022). Although this overall picture

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applies to all Caribbean SIDS, potential impacts of climate change are nuanced by countries' particular vulnerabilities.

Antigua and Barbuda

Antigua and Barbuda is a Caribbean Small Island Developing State (SIDS) of around 456 km^2 of land, divided in two inhabited islands and other small islands (Government of Antigua and Barbuda, 2022). The country was ranked in 2012 by the World Bank amongst the top Five countries most at risk to multiple hazards, "with 100% of their population and land area exposed to two or more environmental hazards" (Government of Antigua and Barbuda, 2022, p.6). Climate change impacts Antigua and Barbuda in two main ways: i) physical impacts; ii) economic and social impacts.

Sea-Level rise (SLR), droughts and hurricane are of particular concern as Antigua and Barbuda is composed of low-lying islands: 70 percent of Antigua is below 30 m above sea level, and most of Barbuda below 3 m above sea level (Government of Antigua and Barbuda, 2022). Estimations indicate that given the current and projected levels of SLR, Antigua and Barbuda might lose by 2080 50.8 to 64.9 km^2 of coastal land - in other words, up to 14 percent of the country's inhabited land (Government of Antigua and Barbuda's, Department of Environment Ministry of Health, Wellness and the Environment, 2021). With climate change, droughts are also expected to become more intense and frequent (up to 81.8 percent of probability of severe droughts over a five-year period), with an average rainfall decline around 26 percent under a business-as-usual scenario (Government of Antigua and Barbuda, 2022). Droughts cause a particular strain on the water supply with heavy reliance on water desalination plants running on fossil fuel energy (*ibid*). Finally, the country is particularly exposed to extreme weather events, with projection of direct hit by a tropical storm every 6six to seven years (*ibid, p.6*).

Extreme weather and other expected climate change impacts have a disproportionate bearing on Antigua and Barbuda's already strained economy. Despite being ranked among the high-income countries, the country is socially fragile with 14 percent of people unemployed and 18 percent below the poverty line (Government of Antigua and Barbuda, 2022). External shocks can have a devastating impact on the populations (it is estimated an additional 10 percent of the population is at risk of poverty), infrastructures and the country's development as a whole (the economy depends on tourism at 80 percent). For instance, Hurricane Irma in 2017 caused "damage and loss of USD155.1 million (10 percent of Gross Domestic Product -GDP) impacting houses, public buildings, hotels, firms engaged in tourism sector and safety nets of vulnerable households" (Government of Antigua and Barbuda's, Department of Environment Ministry of Health, Wellness and the Environment, 2021, p. 27). Such losses impact a small-sized economy already plagued with a heavy debt burden, averaging 104.36 percent of GDP in 2015 (International Monetary Fund, n.d.), which limits the country's fiscal ability to cope with climate change impacts with adequate adaptation or mitigation interventions (Government of Antigua and Barbuda, 2022). In addition, Antigua and Barbuda's ability to attract international climate funds is limited by its high-income status ((World Bank Group, n.d.), preventing the country to access concessional loans (Government of Antigua and Barbuda's, Department of Environment Ministry of Health, Wellness and the Environment, 2021).

Belize

Belize is classified as a SIDS and is ranked amongst the upper middle-income countries. It is rather large compared to other Caribbean SIDS, covering an area of around 22,967 km2, including 280 km of coastland. Around 42 percent of Belize's population live in poverty (Government of Belize, 2021). Climate change is considered one of the biggest threats to the country's development. It is estimated, depending on the projections, that Belize will witness by 2100 a temperature rise ranging between 2 and 4 degrees Celsius, and a 20 percent increase in the intensity of rainfalls while the rainy season will decrease by 7-8 percent (Government of Belize, 2021). The country is ranked 3rd among small states for susceptibility to natural disasters and 5th for climate change risks among SIDS (Cheasty et al., 2018; Government of Belize, 2021). The low-lying topography of the country makes Belize's major infrastructures particularly at risk from flooding, storm surges and SLR (Cheasty et al., 2018). The capital city, Belize City, which is on the coast, is particularly exposed (Government of Belize, 2021). Extreme

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weather events are projected to have severe impacts on the country, with an average 7 percent GDP loss every year (Cheasty et al., 2018).

The country's economy is reliant on agriculture, fisheries and tourism – sectors which will all be severely affected by climate change. Losses are estimated to amount 10-20 percent of agricultural production by 2100, and annual losses of USD 12,5 million for fisheries. SLR, extreme weather events, flooding, vector-borne diseases are a considered a threat to the tourism industry, along with the impacts on biodiversity (coral reefs) and landscape (beaches). Total tourism income could decrease by up to USD 24 million a year (Government of Belize, 2021). Climate change could threaten the energy sector: the change in rainfall patterns and anticipated decrease in precipitation coupled with increased evaporation could impact the hydropower electricity generation which represents around 50 percent of the country's electricity (Cheasty et al., 2018).

Finally, Belize's economy is vulnerable to the devastating consequences of extreme weather events and the country is burdened by a high-level of debt (around 100 percent of GDP) which limits its ability to make climate change adaptation investments (Cheasty et al., 2018).

Haiti

Haiti is the only Caribbean SIDS amongst the world's Least Developed Countries. The country is located at the heart of the Caribbean and shares the island of Hispaniola with the Dominican Republic. It is one of the largest Caribbean SIDS, with a total land area of around 27,750 km2 and a territorial sea of 30,000 km2. Most of the Haitian territory is occupied by a mountainous landscape and abrupt slopes (Gouvernement de la République d'Haïti, 2021). Haiti is the poorest country of the Latin America and Caribbean region and is ranked 170 out of 189 countries in terms of human development index (World Bank, 2021).

Haiti is particularly vulnerable extreme weather events: it is located right on the hurricanes' paths, and the country gets regularly hit by tropical storms. It is estimated that during the last 20 years, the country lost on average USD400 million a year to climatic events (Gouvernement de la République d'Haïti, 2021a).

Haiti is most affected by flooding, drought, intense rainfall, landslides, soil erosion, saltwater intrusion, and hurricanes. Haiti's institutional, social and economic fragility additionally contributes to aggravate the situation: deforestation and lack of proper water drainage system increase the impacts of hurricanes, storm surge, and flooding (Institut de la Francophonie pour le Développement Durable and Ministry of Environment - Republic of Haiti, 2021).

Current and expected climate change's impacts are likely to worsen: the average yearly temperature should increase by 0.8 to 1 degree Celsius in 2030, annual rainfall should decrease by 6 to 20 percent and some studies point to an increase up to 80 percent on category 4 and 5 hurricanes (Gouvernement de la République d'Haïti, 2021a). Other projections estimate SLR increase around 0.13 to 0.56 m by 2090 and that 50 percent of Haiti will be at risk of desertification by 2050 (Institut de la Francophonie pour le Développement Durable and Ministry of Environment - Republic of Haiti, 2021).

Flooding is of special concern for Haiti. The country's urban centres, located in the alluvial plains of large river systems, are especially vulnerable to inundations risks. Hurricanes Hanna (2008), Sandy (2012), Matthew (2016) caused intense floods, destroying many lives and buildings, and an increase in water borne diseases (Institut de la Francophonie pour le Développement Durable and Ministry of Environment - Republic of Haiti, 2021). Extreme weather events linked to climate change often exacerbate other natural disasters: in 2021, tropical storm Grace hit the country shortly after a 7.2 earthquake stroke the southern peninsula.

Climate change strongest impacts are already felt in the agriculture and fisheries sectors, along with affecting the availability of freshwater resources. The expected coupling of decrease of annual rainfall with more intense downpours will negatively impact food productivity and worsen food security issues. Freshwater supplies will additionally be more vulnerable to the change in precipitations and saltwater intrusions caused by storm surges (Institut de la Francophonie pour le Développement Durable and Ministry of Environment - Republic of Haiti, 2021).

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Finally, Haiti's overall lack of institutional capacity, adequate funding and infrastructures are serious challenges to the country's development and ability to address the current and expected impacts of climate change (Gouvernement de la République d'Haïti, 2021a).

An uneven policy landscape to tackle climate change adaptation issues

At the regional level, the Caribbean Community (CARICOM) unites fifteen Caribbean member states and five associate territories in a single market and foreign policy initiative. Its decisions are non-binding until ratified by Member States (Gilbert-Roberts, 2011). The CARICOM developed the 2009-2015 Regional Framework for Achieving Development Resilient to Climate Change which was approved CARICOM Heads of Government in July 2009 (Caribbean Community Climate Change Centre, 2017). The framework is designed as a guidance for member States to follow climate resilient development pathways and comprises five strategic objectives, including the Strategic Element 1 which is to "Mainstream climate change adaptation strategies into the sustainable development agendas of the CARICOM Member States" (Caribbean Community Climate Change Centre, 2009, p.iv).

Antigua and Barbuda

Antigua and Barbuda developed several policies to address climate change mitigation and adaptation, among them: the Policy Framework for Integrated Adaptation Planning and Management in Antigua and Barbuda (2002), the National Physical Development Plan (2012), the Medium Term Development Strategy (2015), the National Comprehensive Disaster Management Policy and Strategy for Antigua and Barbuda (2015– 2017), the Environmental Protection and Management Act (2015) and the draft Building Code for the Organisation of Eastern Caribbean States (OECS), the Coastal Zone Management Plan (2016), (Department of Environment, Ministry of Health and the Environment, Antigua & Barbuda, 2017).

Belize

The Ministry of Environment defines the climate policies and plans, and the Ministry of Finance and Economic Development (MFED) is responsible for resource mobilisation and climate finance. In terms of policy, the country is quite advanced, with what Cheasty et al. (2018) refer to as "a well-articulated policy framework and sectoral strategies for resilience- building" (p.29) and "good example of effective mainstreaming of climate-related projects" (p. 47). Among those policies, the Belize's Nationally Determined Contribution (Government of Belize, 2021) refers particularly to Horizon 2030 (national development framework); the National Climate Resilience Investment Plan 2013; the National Climate Change Policy, Strategy and Action Plan (NCCPSAP) (administrative and legislative framework, 2014); the National Energy Policy Framework (2014); the Growth and Sustainable Development Strategy (2014).

Haiti

According to the draft Adaptation Communication prepared for the CoP26, the Republic of Haiti lacks specific environmental and climate change policies except the international treaties and the legal framework is weak (Gouvernement de la République d'Haïti, 2021b). The current strategic documents referring to climate change and adaptation more specifically are the *Programme Stratégique pour la Résilience Cli*matique[6] (PSRC), Haiti's Nationally Determined contribution (2015), Haiti's Revised National Adaptation Plan of Action (2017), the *Politique Nationale sur les Changements Climatiques*[7] (PNCC) and contributions from the *Schéma National d'Aménagement du Territoire*[8] (SNAT) and the *Système National de Gestion des Risques et des Désastres*[9] (SNGRD) (Gouvernement de la République d'Haïti, 2021b).

To address those challenges, Caribbean SIDS rely on climate finance, and particularly concessional grants. Readiness Grants have therefore a key role to play to strengthen institutional capacity, and Section 2 below details the methodology used to answer the research questions.

[6] Strategic Programme for Climate Resiliences (PSRC)

[7] National Policy on Climatic Changes (PNCC)

[8] National Land use plan (SNAT)

[9] National framework for disasters and risks management (SNGRD)

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Appendix B. Readiness proposals selection table

Number	Doc name	Country	Sector	Type of project	Proposing entity	Adaptation focus	Date submitted	Date Approved	Budget (USD)	Budget for adaptation/ integration/ research area	Institutional focus (Y/N/S)
AB-1	multi-year-readiness-proposal-ab-doe	Antigua and Barbuda	Energy	Multi-Year Strategic Readiness for Antigua and Barbuda: Supporting Antigua and Barbuda's NDCs implementation towards a transformation to Climate Resilient and Low-Emission Development Pathway by 2030	Department of Environment, Ministry of Health and Environment (DoE)	Capacity building to support the project pipeline and the achievement of the country's NDC's targets	30/08/2020	25/10/2021	2 836 551	1 034 220	Y
AB-2	readiness-proposals-antigua-and-barbuda-ministry-health-	Antigua and Barbuda	Governance	National Adaptation Planning in Antigua and Barbuda (NAP)	Ministry of Health and Environment	Data collection, assessment, preparation of the NAP, development of a sustainable	26/01/2017	01/11/2017	3 000 000	2 621 500	Y

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	and-environment-adaptation-planning					financing strategy					
AB-3	readiness-proposals-antigua-and-barbuda-department-environment-entity-support-strategic-framework	Antigua and Barbuda	Governance	Realizing direct access climate financing in Antigua and Barbuda and the Eastern Caribbean	Department of Environment, Ministry of Health and Environment	support the accreditation of a national direct access entity through the accreditation of the Department of Environment. Readiness funding will also support the further development and submission of an Enhanced Direct Access (EDA) funding proposal, to include project activities in Dominica and	26/10/2016	01/03/2017 completed	620 250	438 000	Y

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						Grenada and in partnership with the Organization of Eastern Caribbean States (OECS) Commission					
AB-4	readiness-proposals-antigua-and-barbuda-department-environment-entity-support	Antigua and Barbuda	Governance	Accelerating a transformational pipeline of Direct Access climate adaptation and mitigation projects in Antigua & Barbuda	Ministry of Health and Environment	National direct access entity meets all accreditation conditions and EDA funding proposal conditions; Accreditation Master Agreements (AMA) requirements are met annually and independent functions are strengthened using	30/04/2018	23/12/2018	931 000	791 200	Y

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						international best practice • Baseline gender assessment to guide transformational gender interventions in Antigua and Barbuda's country programme • Strengthened climate rationale and evidence base for adaptation and mitigation interventions • Technology needs assessments for five sectors, including feasibility analyses and					

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						risk assessment annexes, to significantly advance the Country Programme pipeline					
AB-5	readiness-proposals-antigua-and-barbuda-department-environment-nda-strengthening-and-country	Antigua and Barbuda	Governance	NDA Strengthening and Country Programming	Environment Division, Ministry of Health and the Environment	Strengthening the NDA The NDA will hire consultants and procure services to build the capacity of the Environment Division and the Debt Management Unit that will be responsible for	08/07/2015	completed	300 000	N/A	Y

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						coordinating with other ministries on the Green Climate Fund (the Fund). Strategic frameworks for engagement with the Fund, including the preparation of country programmes.					
B-3	20211231-belize-pact-proposal	Belize	Governance	Enhancing Access for Climate Finance Opportunities, through pre accreditation support to Belize Social Investment Fund (BSIF) and Ministry of Economic Development-Belize and technical support for Belize National Protected Areas	Protected Areas Conservation Trust (PACT)	to address institutional gaps identified that inhibit Belize's ability to successfully access climate finance through entities such as the GCF.	16/06/2021	31/12/2021	600 000	505 060	Y

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				System (BNPAS) Entities, Belize							
B-6	readiness-proposals-belize-5cs-nda-strengthening-and-country-programming	Belize	Governance	NDA Strengthening & Country Programming	Caribbean Community Climate Change Centre	NDA capacity to undertake Fund-related responsibilities and engage national stakeholders strengthened Strategic framework for engagement with the Fund development	14/12/2016	- completed	300 000	300 000	Y
B-7	readiness-proposals-belize-ccccc-entity-support	Belize	Governance and entity strengthening	Building Capacity for direct access to Climate Finance - Support for the accreditation of the Development Finance Cooperation and	Caribbean Community Climate Change Centre	to facilitate the preparation of nominated entities to meet GCF accreditation standards in	15/09/2018	22/12/2018	355 365	214 000	Y

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				Social Investment Fund of Belize		areas such as environmental and social safeguards (ESS), the GCF gender policy, and project development, monitoring and evaluation. This will allow for national institutions to effectively administer resources from the GCF and other resources partners, ensuring high country ownership.					
H-2	readiness-proposals-haiti-undp-adaptatio	Haiti	Governance	Integrating climate change risks into national development planning processes in Haiti	United Nations Development Programme (UNDP)	Strengthen institutional and technical capacities for iterative	23/04/2018	15/05/2019	2 856 957	2 450 040	Y

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	n-planning					development of NAP for an effective integration of CCA into national and sub-national coordination, planning and budgeting process.					
H-3	20211231-haiti-ifdd-proposal	Haiti	Governance	Strengthening NDA Capacity for greater leadership on Climate Change Adaptation	Institut de la Francophonie pour le Développement Durable (IFDD)	(a) strengthen the technical and operational capacities of the NDA and; (b) enhance stakeholder engagement mechanisms and processes	26/06/2021	31/12/2021	300 000	255 354	Y
H-5	readiness-proposals-haiti-undp-nda-strengthe	Haiti	Governance	Green Climate Fund (GCF) Readiness Programme in Haiti	United Nations Development Programme (UNDP)	to support the Government of Haiti through its GCF Focal Point in strengthening their national	16/12/2016	05/06/2017 completed	430 000	341 268	Y

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	ning-and-country-programming					capacities to effectively and efficiently plan for, access, manage, deploy and monitor climate financing in particular through the GCF.					
H-6	readiness-proposals-haiti-ccccc-nda-strengthening-and-country-programming	Haiti	Governance	Institutional Strengthening and Preparatory Support for the Republic of Haiti	Caribbean Community Climate Change Centre	to continue the strengthening of Haiti's ministerial institutions and associated services in order to enhance the country's ability to effectively manage climate risk, promote greater public/private partnerships and mobilize	23/09/2018	22/12/2018	403 390	332 750	Y

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						climate resources.					

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Appendix C: Interview questions set

Target interviewees

In order to assess the impact of GCF readiness projects on institutional adaptive capacity, it is necessary to interview people who are knowledgeable about:

- The actual projects and their implementation status;
- The policy framework and institutional arrangements regarding climate change adaptation in a given country.

For each country benefitting from GCF funds, a Nationally Designed Authority (NDA) or focal point must be appointed. The role of the NDA is, inter alia, to submit non-objection letters for each new readiness proposal, project funding proposal or entity accreditation submitted to the GCF. These key responsibilities imply the NDA must be familiar with the country's climate change policy documents, to ensure the readiness/ project proposals are aligned with the country's primary objectives relating to climate change policy.

In addition, representatives from the most active delivery partners in the region, along with the GCF regional focal point are key resources for the research. They would be able to bring insight on common successes and challenges in the region, and give some highlights or recommendations from countries outside the scope of this study.

Interview guide

The research interviews are semi-structured, using the following questions to drive the conversation. The question set was shared with participants approximately 72 hours in advance of each interview. The interview is divided in 5 sets of questions: i) General contextual questions about the interviewee his/her current role, experience in the position, and general knowledge of the matter discussed; ii) General policy questions about current policy landscape in terms of adaptation; iii) Past and ongoing readiness projects ; iv) Perception on the impact of climate finance in increasing the institutional adaptative capacity; v) Conclusion and recommendations/ suggestions.

Questions set

i) General contextual questions

Objective: Getting a sense of who the interviewee is and his/her ability to give insightful/informed answers to the following questions

1. What is your function within the <Relevant department> ?
2. You are currently acting a Nationally Designed Authority for the Green Climate Fund. What does it entail for you? How long have you been in this position?
3. How is the department organised? How many people and what is the turnover?

ii) Current climate change adaptation policy landscape

Objective: Setting a baseline for the analysis and confirming information from the document review

4. What are your country's climate change adaptation institutional priority needs?
5. What are your country's climate change adaptation policy needs?

iii) Past and ongoing readiness projects

Objective: Understanding the context of the grants and assessing quickly the expectations of the respondents towards those grants

6. There are currently XX GCF readiness projects in country. Already XX were completed.
7. What are the main focus of these projects? Do they target your institutional priority areas and needs?
8. What was your role in designing these projects? Did you take an active part in their development?

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iv) Perception on the impact of the readiness projects – Would you say the Readiness Grants (Asking to rank from 0 to 10 and to justify?):

Objective: Assessing the institutional adaptive capacity potential of the grants within the framework of the adaptive capacity wheel. Getting a sense of change (before/after) and sustainability (temporary improvement or lasting change) through poking the type of impact (normative, organisational/procedural, political, resources/capacities…)

9. Promoted a diversity of approaches and favoured the intervention of a variety of actors in defining core adaptation policies?
10. Helped develop a culture of learning and knowledge sharing in the targeted institutions?
11. Led to the development of agile adaptation plans?
12. Adequately and sustainably developed the capacities of teams and their ability to reach for more resources?
13. Improved the accountability, transparency, legitimacy on climate change issues of relevant institutions?
14. Favoured a collaborative leadership and more processes of exchanges between the Ministries?
15. Increased the belief of the efficacy of adaptation actions and the overall motivation to implement adaptation policies?

v) Conclusion and close

Objective: Drawing on from the previous section, getting a sense of what really works well or what is needed to improve

16. Overall, your assessment would be that those grants helped your country to better adapt, at least in your institutional priority areas?
17. What would you suggest is needed for climate finance to be more impactful in your country at the policy level?

Grid analysis

	Criterion	
Variety/ Diversity	Variety of problem frames	
	Multi-actor, multi-level, multi-sector	
	Redundancy	
Learning capacity	Trust	
	Single/double loop learning	
	Discuss doubts	
	Institutional memory	
Agile planning	Continuous access to information	
	Act according to plan	
	Capacity to improvise	
Leadership	Visionary	

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	Entrepreneurial	
	Collaborative	
Resources	Authority	
	Human resources	
	Financial resources	
Fair governance	Legitimacy	
	Equity	
	Responsiveness	
	Accountability	
Psychological	Belief	
	Motivation	

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Appendix C: List of Acronyms

CARICOM : Caribbean Community 3
CCA : Climate Change Adaptation 4
CPI : Climate Policy Integration 5
CSOs : Civil Society Organisations 11
DCC : Direction of Climate Change 11
DoE : Department of Environment (Antigua and Barbuda) 12
EPI : Environmental Policy Integration 5
GDP : Gross Domestic Product 1
MFED : Ministry of Finance and Economic Development 3
MoE : Ministry of Environment 11
MRV: Measurement, Reporting and Verification 14
NAP : National Adaptation Plan 7
NCCPSAP : National Climate Change Policy, Strategy and Action Plan 4
OECS : Organisation of Eastern Caribbean States 3
PNCC : Politique Nationale sur les Changements Climatiques 4
PSRC : Programme stratégique pour la résilience climatique 4
Readiness grants: Green Climate Fund Readiness Preparatory Support Programme 2
SNAT : Schéma National d'Aménagement du Territoire 4
SNGRD : Système National de Gestion des Risques et des Désastres 4

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