

ACCOUNTABILITY

REGIMES AND CLIMATE CHANGE
FINANCING IN DEVELOPING COUNTRIES



RISHI BASAK

Propositions
belonging to the thesis, entitled

Accountability regimes and climate change financing in developing countries

1. Performance is key to the legitimacy of international climate finance. (this thesis)
2. When they take their mandate seriously, actors in international climate finance accountability webs reinforce each other's role. (this thesis)
3. Means are often confused as ends in public policy (and in life in general!).
4. Information has the ability to both create and resolve the world's problems.
5. Lower-risk options end up being irrelevant solutions when actors involved in decision-making are too risk averse.
6. Corruption is the primary cause of the lack of substantive climate action.

Rishi Basak
Wageningen, 30 May 2023

Accountability regimes and climate change financing in developing countries

Rishi Basak

THESIS COMMITTEE

Promotor

Promotor

Prof. Dr Katrien Termeer
Personal chair, Public Administration and Policy Group
Wageningen University & Research

Co-promotors

Dr Sylvia Karlsson-Vinkhuyzen
Associate Professor, Public Administration and Policy Group
Wageningen University & Research

Dr Edwin van der Werf
Scientific Staff Member, PBL Netherlands Environmental Assessment Agency,
the Netherlands

Other members

Dr Liesbeth Dries, Wageningen University & Research
Dr Pieter Pauw, TU Eindhoven, the Netherlands
Dr Dil Rahut, Asian Development Bank Institute, Japan
Dr Harro van Asselt, University of Eastern Finland, Finland

Accountability regimes and climate change financing in developing countries

Rishi Basak

Thesis

submitted in fulfilment of the requirements for the degree
of doctor at Wageningen University
by the authority of the Rector Magnificus
Prof. Dr A.P.J. Mol,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
on Tuesday, May 30, 2023
at 13:30 in the Omnia Auditorium

Rishi Basak
Accountability regimes and climate change financing in developing countries,
228 pages.

PhD thesis, Wageningen University, Wageningen, the Netherlands (2023)
With references, with summary in English

ISBN: 978-94-6447-697-2
DOI: <https://doi.org/10.18174/630172>

Cover design by Luis Rodrigo Pavon Valdez
Lay-out: RON Graphic Power | www.ron.nu
Printing: ProefschriftMaken | www.proefschriftmaken.nl

Copyright © 2023 Rishi Basak. All rights reserved. No part of this thesis may be reproduced or transmitted in any way or by any means, without the prior permission of the author.

Table of contents

1	Introduction	9
2	The Green Climate Fund – History, status, and legitimacy	25
3	Accountability mechanisms in international climate change financing	59
4	Information for climate finance accountability regimes: Proposed framework and case study of the Green Climate Fund	77
5	Performance Information in a Complex Climate Finance Accountability Web	97
6	Synthesis, reflections and conclusions	127
	References	155
	Supplementary materials	179
	Summary	219
	About the author	225

List of Acronyms

Acronym	Definition
AE	Accredited Entity
AF	Adaptation Fund
AIAF	Accountability Information Assessment Framework
CBDR-RC	Common But Differentiated Responsibilities and Respective Capabilities
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CGIAR	formerly the Consultative Group for International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Center
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
CRP	CGIAR Research Program
CSO	Civil society organisations
DAE	Direct Access Entity
GCF	Green Climate Fund
GEF	Global Environment Facility
IPCC	Intergovernmental Panel on Climate Change
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
NDA	National Designated Authority
OECD	Organisation for Economic Co-operation and Development
PA	Paris Agreement
SCCF	Special Climate Change Fund
SIDS	Small Island Developing States
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organisation



Chapter 1

Introduction

1.1 BACKGROUND AND PROBLEM DEFINITION

Anthropogenic greenhouse gas emissions are causing climate changes with unprecedented impacts on humans and natural systems (IPCC 2014a). According to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, developing countries will face disproportionately more of the negative impacts of climate change (IPCC 2014a). Significant efforts towards reducing greenhouse gas emissions (i.e., climate change mitigation) will be required to avoid widespread and irreversible climate change impacts (IPCC 2014a). Many developing countries are ill-equipped to adapt to existing climate changes, let alone the climate change impacts they will face in the coming decades (Fankhauser and McDermott 2014). With historical greenhouse gas emissions stemming from developed countries since the industrial revolution, developing countries have argued that they should receive new funding to address climate change, in addition to and separate from development assistance (Smith et al. 2011).

As such, the Long Term Financing under the United Nations Framework Convention on Climate Change (UNFCCC) had set a goal of raising USD 100 billion per year in climate change financing by 2020 (UNFCCC 2014a). The term “climate change financing” is used in this context to describe funds provided by donors to address the needs of developing countries in responding to climate change, as per the pledge made by developed nations at the 15th session of the Conference of the Parties to the UNFCCC (COP 15) in 2009 (as part of the Copenhagen Accord). This includes funds towards mitigating and adapting to climate change.

At its twenty-first session, held in Paris in 2015, the Conference of the Parties of the UNFCCC (COP 21) decided that developed countries would continue their efforts to mobilise USD 100 billion per year through 2025 and would set a new, more ambitious financing goal prior to 2025 (UNFCCC 2016). In March 2022, formal discussions were launched for the setting of the post-2025 financing goal via the Technical Expert Dialogue under the Ad hoc Work Programme on the New Collective Quantified Goal on Climate Finance (United Nations Climate Change Secretariat 2022).

In order to allocate these large sums, developed countries advocated for the use of established organisations (e.g., multilateral development banks, United Nations agencies), whereas developing countries favoured the creation of purpose-built organisations that would be less influenced by donor countries (Ballesteros et al. 2010). Through the Copenhagen Accord, developing countries managed to have their demand met with the agreement to establish the Green Climate Fund (GCF). At COP 21, 195 nations signed the Paris Agreement and the COP recognised the *“importance of adequate and predictable financial resources, including for results-based payments...encouraging the coordination of support from, inter alia, public and private, bilateral and multilateral sources, such as the*

Green Climate Fund" (UNFCCC 2015, p.8). Accordingly, many climate change mitigation and adaptation projects have been funded since 2013. The latest data indicate that almost USD 29 billion in projects have been funded bilaterally (i.e., funds going directly from the donor country to the recipient developing country), whereas over USD 34 billion were funded via multilateral channels (i.e., contributions from a donor country to international organisations), of which, USD 3.8 billion went to multilateral climate funds (OECD 2021a).

Climate finance differs from development aid in its motivation, although both entail financial transfers and technical assistance from wealthy countries to poorer nations. Whereas development aid is provided as part of a moral responsibility to improve the welfare of the poor, as well as for strategic reasons, climate finance stems primarily from demands from developing countries to receive assistance to tackle a problem created by wealthy countries in the first place (Roberts 2009; Stern 2014). Aid funding, which stood at USD 157 billion in 2020 (OECD 2021b), has evolved from broad budgetary support to developing country governments to the current project-based aid that ties funding to specific activities, outputs and outcomes (Freeman and Schuller 2020). Climate finance builds on this project-based approach, with the spelling out of specific financial commitments and performance targets. For instance, climate finance has a more formalised and open process to establishing commitments via the UNFCCC COP, compared to development aid (UNFCCC 2009).

Although billions of dollars are being spent (with more being committed) by donors on climate change financing, little academic analysis has been undertaken on the accountability regimes within these new climate change financing organisations, how these accountability regimes may create incentives that can impact the effectiveness of various projects being financed and whether the performance of these projects can be measured appropriately to ensure accountability. Public organisations face high expectations in terms of ensuring accountability and performance for the services they provide (Hwang and Han 2020). In the case of international climate finance, the international public organisations involved in providing funding towards climate change projects in developing countries face such expectations from a broad range of stakeholders ranging from donor countries who fund them, developing countries who are the ultimate recipients of these funds, as well as civil society organisations and a plethora of other interested parties. Failing to meet such expectations stands to reduce the legitimacy of organisations involved in climate change financing.

Much attention has been given to international climate change financing by academics, however, little of this attention has been on what factors lead to strengthened accountability in that context. Instead, the literature has covered issues such as how international climate change financing organisations allocate their funding, on how they are endowed, on their governance, on the barriers to, and the transaction costs associated with, the

implementation of successful climate financing, and various other issues (Remling and Persson 2015; Siedenburg et al. 2015; Ward et al. 2015; Zamarioli et al. 2020). The academic literature more directly related to climate finance and accountability is relatively scant and narrowly focused on specific accountability tools and data, on accountability challenges faced by international organisations involved in climate change financing, or the role of specific account holders in climate change financing accountability regimes (Ciplet et al. 2013; Madison 2007; Benito Müller 2011; Stadelmann et al. 2013; Zadek 2011). As such, I address these gaps by applying the broader public sector accountability literature to gain insights relevant in the context of climate change financing, with its own set of actors and accountability measures. This provides theoretical and empirical grounding to build a deeper understanding of the accountability regimes involved in international climate change financing, what factors lead to strengthened accountability in the complex accountability webs they form and how these webs impact the legitimacy of climate change financing organisations.

The following sections in this chapter provide a brief overview of the research strategy used for this thesis. In section 1.2, key concepts for the analysis of accountability are outlined. Section 1.3 describes the aims of my research, as well as my research questions, which is then followed by a description of the theoretical framework and methodological design used to answer those questions in section 1.4. The final section of this chapter outlines the overall structure of the thesis.

1.2 KEY CONCEPTS AND THEORETICAL FRAMEWORK

In this section, I introduce key concepts for analysing accountability, as well as the overarching theoretical framework for my thesis. Below, I will discuss six concepts, namely: accountability; accountability regimes; principal-agent problems; performance; performance information; and legitimacy. These concepts are crucial to the research I undertake for this thesis, as they help build an understanding through an overarching theoretical framework of what factors lead to strengthened accountability in complex accountability webs in international climate change financing.

1.2.1 Accountability and accountability regimes

Accountability is an important concept in public administration, as it seen as a tool that can improve public governance (Mark Bovens 2007). This makes it a crucial concept to improve our understanding of international climate finance, which entails public organisations that manage funds on behalf of citizens. The unpacking of accountability into components that can be analysed and compared across governance contexts has led scholars to use an abundance of more or less overlapping definitions and approaches, partially linked to diverse disciplinary lenses (e.g., public administration, organisational science, law).

The empirical and analytical understanding of accountability varies considerably in the literature, with some referring to the concept as “remarkably plastic” (Koppell, 2010, p.31). Empirically, accountability has come to be understood as being akin to ‘good governance’ across different contexts (McNeil and Malena 2010; Said et al. 2015). For the purposes of my analysis, I use a widely used definition in the public administration literature where accountability is understood as being “[A] relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences” (Bovens 2007, p. 450). The involved actors, the specific relationships amongst the actors, as well as the other formal and informal elements that exist to ensure accountability (i.e., commitments, process, standards and effects), together make up “accountability regimes” (Mashaw 2006; Wolfe 2015). The actors involved play the role of account giver and/or account holder, with the ‘account giver’ being the actor required to provide an account to a given forum and the ‘account holder’ the one holding others to account.¹ The informal elements can pertain to, for example, the perceived responsibilities for being account givers or account holders, as well as implicit social norms that can serve to incentivise actors to behave appropriately (Wolfe 2015). Multiple interconnected regimes in turn make up complex accountability webs (Page 2006; Romzek 2015a).

1.2.2 Principal-Agent problems

A key theoretical underpinning of my research (across my four research chapters) is framing the accountability relationships amongst actors in international climate change financing as principal-agent problems. This is in line with other authors who have looked at accountability relationships using principal-agent theory, such as Bishop (1990), Soudry (2008), Steinberg (2010) and Haque (2014). Principal-agent problems occur whenever a person, organisation or other entity uses some other person, organisation or entity to fulfil an action on their behalf. A dilemma occurs when the agent (the one with delegated responsibility), who acts in self-interest, has motivations that are not well aligned with those of the principal (the one that has used an agent to fulfil an action on their behalf) and the principal cannot directly observe the actions of the agent. Principal-agent problems are widespread in various delegation and contracting contexts, including public sector service procurement, in aid and international organisations (Hawkins et al. 2006; McAfee and McMillan 1986; Soudry 2008).

I posit that principal-agent problems are present in the accountability relationship between all account holders and account givers within complex accountability webs in the context of international climate change financing. Principal-agent theory offers “a flexible framework for modelling innumerable variations in institutional arrangements,

1. Some authors employ terminology that can lead to confusion, sometimes using the terms ‘accountee’ and ‘accountor’ for the account holder (Auel 2007; Kluvers and Tippet 2010).

and comparing their potential for inducing desirable behaviour by agents.” (Gailmard, 2014, p. 2). I use principal-agent theory across each of my four research chapters to analyse the relationship between the actors in the many accountability regimes that exist in international climate finance.

1.2.3 Performance

The link between accountability and performance is of key importance in reaching the goals of public organisations (Christensen and Lægreid 2007; Han 2020; OECD 2008; Quayle et al. 2020; Romzek 2015b; Schillemans 2015). Improving performance is one of the major expectations for accountability (Dubnick 1998; Dubnick and Frederickson 2010; Schillemans and Busuioc 2015). Indeed, there is some empirical evidence in the governance literature that performance (i.e., output legitimacy, or the achievement of pertinent results) is the main concern of citizens when they evaluate governance arrangements (Arnesen 2017; Strebel et al. 2019).

The influence of accountability on performance has been documented in the literature on international aid and public organisations more broadly. The World Bank (2004) found that weak accountability was to blame for service delivery failures in developing countries. Similarly, Winters (2010) found that aid allocated to developing countries with stronger accountability regimes was more effective. More recently, Han and Hong (2019) determined that increased accountability had a positive and significant effect on the performance of public organisations.

1.2.4 Performance information

Performance information comprises data pertaining to organisational outputs and outcomes, including efficiency and effectiveness (Kroll 2015). Performance information goes beyond financial data to focus on organisational results, being accompanied by indicators that facilitate measuring against the achievement of goals and is intended to be used for decision-making (Kroll 2015; Pollitt and Bouckaert 2011). Enacting accountability requires information about the account giver’s actions in order to hold actors to account (Mark Bovens 2007; Ebrahim 2019). As Cameron (2004) suggests: “access to information is an essential characteristic of accountability — virtually all accountability relies on the availability of relevant and timely information” (p.59). This is echoed by several others who see performance information as being an integral part of accountability regimes of organisations, including public sector institutions, as it allows account holders to determine whether these institutions are achieving their objectives (Ebrahim 2019; Mack and Ryan 2007; Romzek 2015b). When donors make investments in a project they usually require specific types of information about the performance of their investment, using various performance indicators and corresponding metrics (Adam and Gunning 2002; Morra-Imas and Rist 2009). The quality of the performance information, including performance indi-

cators, will have a bearing on the decisions made by the various actors involved (Brignall and Modell 2000; Adam and Gunning 2002; McGillivray 2003; Mosley, Hudson, and Verschoor 2004; Holzapfel 2016).

1.2.5 Legitimacy

Legitimacy can be defined as justified authority (Bodansky 1999). In the context of providing political legitimacy, the idea that the “people with power ought to be accountable to those to those who are affected by their decisions ... (and) to those who have entrusted them with it” is key (Keohane and Grant 2005, p.31 and p.32). Similarly, in the context of organisational legitimacy, a core idea is that an implicit agreement or ‘social contract’ exists between an organisation and its stakeholders, which justifies the organisation’s existence and ensures its successful operation (Samkin and Schneider 2010; Suchman 1995; Yasmin and Ghafran 2021).

Scharpf sees legitimacy as having two components: input and output legitimacy. Input legitimacy is built via the governance process, whereas output legitimacy is built by achieving organisational performance (Scharpf 1997). In other words, input legitimacy pertains to how things get done, whereas output legitimacy pertains to what gets done. Both how things get done and what things get done are important to legitimacy (Allen Buchanan 2002). Accountability is considered essential for the legitimacy of international organisations, as these need particularly good justifications for their authority (Keohane and Grant 2005; Koppell 2010a). Chapter 2 goes into further detail on legitimacy and its sub-components, as well as how these link to accountability.

1.2.6 Overall theoretical framework

Figure 1.1 depicts the overall theoretical framework for the thesis. Figure 1.1 shows how the make-up of an accountability regime (i.e., its actors and accountability elements) contributes to input legitimacy and how what gets done or accomplished by the regime actors increases performance, which in turn leads to output legitimacy (Koenig-Archibugi, 2011; Lebel et al., 2017; Leung et al., 2011).² The principal imposes accountability elements upon her agent and the role of performance information is for the agent to give account to his principal. External factors also have a bearing on the accountability regime and the performance achieved.

2. It must be noted that some other authors have recently considered another link between accountability and legitimacy, namely that of a given account holder’s legitimacy to hold others to account, or so-called “felt accountability” (Baldoni et al. 2021; Overman et al. 2020). This is outside the scope of my thesis.

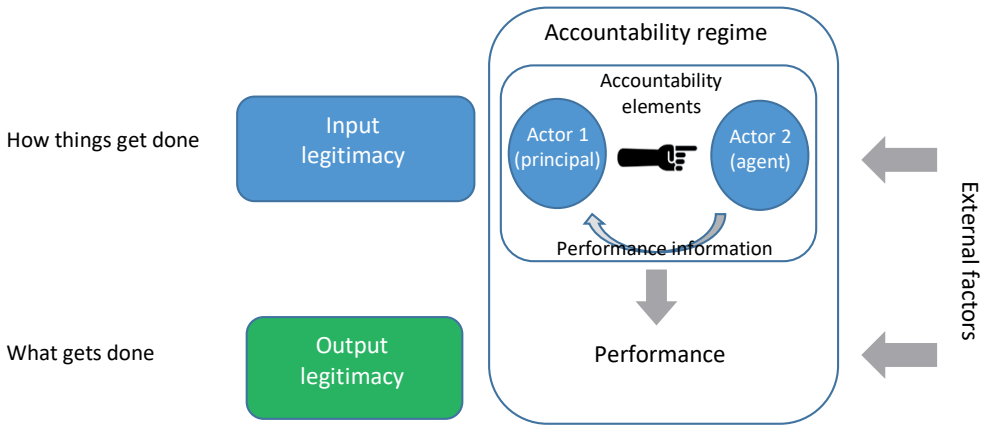


Figure 1.1: *Accountability regime and legitimacy. The accountability regime comprises one principal, who imposes elements upon one agent (as shown by pointing hand from principal to agent). Performance information flows from agent to principal (as shown by arrow). The make-up and functioning of the regime leads to project performance, but external factors can influence both the regime and project performance. How things get done (i.e., the make-up and functioning of the regime) leads to input legitimacy, whereas what gets done (i.e., project performance) leads to output legitimacy.*

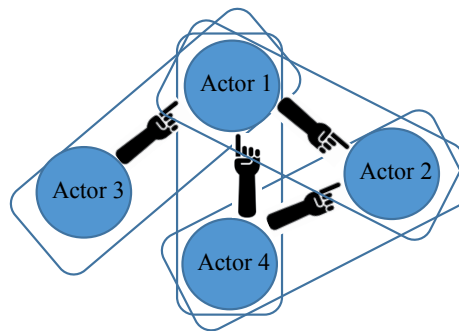


Figure 1.2: *Accountability web comprising multiple actors and regimes. An accountability web comprising four actors, with pointing hand from principal to agent.*

Figure 1.2 shows how standalone accountability regimes (made up of one principal and one agent) relate to other regimes. A principal in a given accountability regime can play the role of agent and/or principal vis-à-vis another actor in the accountability web.

Actor 1, for instance, is principal to actor 2, but also agent to actors 3 and 4. Actor 4 is principal to actors 1 and 2. Each accountability regime within the web has its own accountability elements (illustrated by the pointing hand) and associated performance information used by the agent to give account to his principal. The greater the number of actors and regimes, the more complex the accountability web and the greater the project risk, including challenges in the monitoring of performance (Upton 2000).

1.3 AIM, QUESTIONS AND RELEVANCE

1.3.1 Aim of the research

The research undertaken for this thesis aims to gain a better theoretical and empirical understanding of what factors lead to strengthened accountability in complex accountability webs in international climate change financing. This understanding should provide insights that bring about lessons for the design and strengthening of accountability regimes that in turn increase the performance and legitimacy of organisations involved in international climate change financing.

The overarching research question of this thesis is:

What factors lead to strengthened accountability in the complex accountability webs of international climate change financing?

This question is answered through four sub-questions, each of the sub-questions being addressed in separate chapters in this thesis. By answering the sub-questions, my research provides theoretical and empirical grounding to build a deeper understanding of the accountability regimes involved in international climate change financing and helps gain insights into what factors lead to strengthened accountability in complex accountability webs. With its conceptual and empirical novelty, my thesis contributes to the literature on climate finance and accountability more broadly.

1.3.2 Research questions and relevance

Question 1: What are the main elements of the many accountability regimes of the Green Climate Fund and how can these elements impact the legitimacy of the Fund?

In order to answer my first research question, I undertake a systematic mapping of the actors, their relationships and accountability measures involved in the GCF accountability regimes (Chapter 2). This improves the understanding of how this complex accountability web functions and how web elements can impact legitimacy. This mapping establishes the roles the many accountability regime actors play in enacting accountability within and across regimes, whether giving account or holding others to account, what measures they have at their disposal to play their role, as well as the accountability processes and impacts, which in turn drive or hinder the organisation's legitimacy. Focusing on the GCF is relevant in itself, as it is the largest source of climate finance available to developing countries to help them mitigate greenhouse gas emissions and adapt to climate change. But insights gained in the context of the GCF are also relevant for climate finance more broadly, as similar arrangements exist across most international funds and organisations involved in the transfer of funds and the delegation of responsibilities for climate change project implementation. This type of analysis has been undertaken in the con-

text of national governance networks (Koliba et al. 2011), public-private multilateralism (Bäckstrand 2008a) and global governance organisations (Koppell 2010b; Wolfe 2015). The novelty of my research in chapter 2 is that it is the first descriptive mapping of climate finance-related accountability regimes and is the first such mapping that integrates a systematic evaluative approach of legitimacy impacts.

Question 2: What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing?

The analysis undertaken in chapter 3 uses principal-agent theory to study accountability in international climate change financing institutions. Although the principal-agent literature addresses issues related to international aid, international environmental assistance and climate finance, the literature does not address specific accountability measures relevant to climate financing, which is the focus of my thesis. Some authors have analysed the relationship between foreign aid and development results and determined that successful foreign aid required country ownership and strong results monitoring (Bourguignon and Sundberg 2007); others focused on how transaction costs and delegation can reduce the effectiveness of climate finance (Brunner and Enting 2014). Delegation of foreign aid via international organisations has also been found to be beneficial by reassuring voters in donor countries that money is being well spent (Milner 2006). Others yet have studied how politico-economic factors influence the reporting of flows of aid funding towards climate change projects (Michaelowa and Michaelowa 2011). My research builds on the extant principal-agent literature by offering insights into how performance information and the specific accountability measures found in international climate change financing organisations can help strengthen (or hinder) accountability. This includes measures such as the use of performance indicators to track implementing agents, or penalties for poor performance. This provides insights relevant to climate finance more broadly, as many of the organisations involved in funding climate change projects employ such measures to incentivise the agents they employ to implement their projects.

Question 3: What performance information should be produced and how should it be used to strengthen the accountability regimes of international climate change financing institutions?

The importance of information in the enacting of accountability is acknowledged in the literature (Boyne et al. 2002; Connolly and Hyndman 2004), yet there is a dearth of comprehensive normative guidance on what information needs to be produced and how it needs to be used for accountability regimes to function as intended (i.e., including increasing performance). The development of a framework to assess information produced and used in accountability regimes (chapter 4) fills this important gap in the literature. By drawing on findings from a broad set of literatures from different disciplines (e.g., accounting,

management, organisational behaviour, public administration), I build a framework with components that comprehensively capture the role of information in enacting accountability, and develop evaluative criteria to assess this information.

Question 4: How does the performance information produced and used in a local climate finance project meet the needs of the actors in the project's complex accountability web?

In chapter 5, I analyse how performance information meets the needs of the actors in a complex international climate finance accountability web. Using a case study approach, I apply the Accountability Information Assessment Framework (developed in chapter 4) and collect data through a document review and interviews with key actors across the complex international climate finance accountability web of an internationally-financed climate-smart agriculture project in India. The application of the framework to assess information produced and used in accountability regimes allows me to make positive statements about actual information production and use practices in this complex accountability web.

1.4 METHODOLOGICAL DESIGN

This section outlines the methodological design and data collection methods used in this thesis. The research methods for each of my research questions are described below, Table 1.1 providing a summary of the research questions and methods for each corresponding chapter of the thesis. I also justify my selection of the various case studies used for my research.

1.4.2 Research methods

I have adopted a multi-method approach in order to address each of my four research questions, as described below.

Addressing research question 1 (i.e., "What are the main elements of the many accountability regimes of the Green Climate Fund and how can these elements impact the legitimacy of the Fund?")

The second chapter of the thesis addresses my first research question and uses a case study of the Green Climate Fund (GCF), the largest international climate financing organisation. Mashaw (2006) suggests six questions the answers to which determine the contour of an accountability regime: Who is accountable? To whom? For what? What is the process of account giving? What standards can be used to judge the account giver? What is the effect of poor (or strong) performance? The answers to these six questions provide a comprehensive understanding of what an 'accountability regime' looks like for a

particular institution, whether it is in political, market-based or social settings. A description of each of the elements of the accountability regimes for the GCF is provided, which is achieved by undertaking content analysis of GCF institutional documents as well as through key informant interviews. I use Mashaw's framework (Mashaw 2006) to guide the content analysis of key informant interview transcripts and of documents that contain information about the organisation's accountability regimes and requirements. Conducting content analysis of documents and interview transcripts allows to capture formal and informal accountability elements, and how such elements are enacted (Best 2012). A directed approach (Hsieh and Shannon 2005) was used for the coding and quantification of relevant descriptive text and statements related to accountability. The directed approach entailed developing initial coding categories based on my analytical framework and key theoretical concepts in the literature. The document analysis also had a pragmatic co-benefit, as it enabled the identification of key informants for the interviews to be carried out. I used the Atlas.ti software to undertake the qualitative and quantitative content analysis. In addition to the descriptive mapping of accountability regimes, in chapter 2 I employ an evaluative approach based on theory-derived legitimacy criteria to determine how the composition of accountability regimes can impact legitimacy.

Addressing research question 2 (i.e., "What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing?")

In chapter 3, I analyse the impact of key ex-ante and ex post accountability measures, as well as the role of performance information in international climate change financing relationships. The analysis I undertake focuses on a hypothetical relationship between a principal (representing an international climate change financing institution) and an agent (representing a grant recipient for a climate change project in agriculture in a developing country). Desk research and the document analysis undertaken in chapter 2 are used to gather information on specific accountability measures relevant to the GCF and its grant recipients. This provides insights into how accountability measures that are put in place can create incentives or disincentives, which in turn motivate the agent to put in a level of effort towards the project, and ultimately drives project performance. Although chapter 2 takes a comprehensive look at the various accountability relationships in the GCF, chapter 3 is more narrowly focused on the "donor-recipient" relationship. The "donor-recipient" relationship can represent any relationship between a donor (bilateral or multi-lateral) and a recipient (developing country, implementing agency), and as such, provides broad-ranging insights. Focusing on the "donor-recipient" relationship also simplifies the analysis so that it is not encumbered by a "cascade" of accountability relationships (e.g., countries funding the GCF, the GCF funding implementing agents, which in turn transfer money to sub-grantees, and so on).

Addressing research question 3 (i.e., "What performance information should be produced and how should it be used to strengthen the accountability regimes of international climate change financing institutions?")

Chapter 4 builds on the insights from the theoretical analysis undertaken in chapter 3 on the role of information in strengthening accountability and takes an in-depth look at what performance information should be produced and used in accountability regimes. Because little guidance exists on the specific information requirements for properly functioning accountability regimes (Boyne et al. 2002; Connolly and Hyndman 2004), developing a theory-based framework allows to more systematically determine such requirements. In this chapter, a developmental literature review (Templier and Paré 2015) is used to develop the framework. The iterative review began with a broad search that included empirical and conceptual studies, and was then refined based on evidence from the initial set of papers found. The search spanned several literature streams across different disciplines (e.g., accounting, management, organisational behaviour, public administration). As is common in developmental literature reviews, I identified key research pertaining to information and accountability in these different disciplines and then refined my search using referenced work within the initial set of publications (Webster and Watson 2002). The framework I develop in chapter 4 aims to facilitate the identification of informational gaps in accountability regimes. I test the framework by systematically mapping the accountability relationships between actors in a key accountability regime of the GCF, that is, the relationship between the GCF board (acting as principal) and an organisation receiving funding from the GCF to implement a climate change project (acting as an agent). The framework allows to assess the informational coverage within that principal-agent relationship.

Addressing research question 4 (i.e., "Does the performance information produced and used in local climate finance projects meet the needs of the actors in complex accountability webs?")

For chapter 5, a case study was undertaken to analyse the performance information currently in use in a "complex accountability web", as the term is understood in the literature (Page 2006; Romzek 2015a).³ The case study uses a local climate finance project, namely a climate-smart agriculture project in India. Project documents were reviewed and coded to assess the information used to manage the project on the ground and to meet accountability requirements. This was followed by several key informant interviews across the various account givers and account holders within the project's complex accountability web (i.e., from international donors and national government officials to local actors). The document review and interviews allowed to gather credible evidence on the performance

3. Other authors have referred to the phenomenon as "fragmented accountability" (Taşan-Kok et al. 2021), although it may be argued that accountability regimes may form a complex web without fragmentation per se.

Table 1.1: *Research questions and approaches in various chapters*

Research question	Methods	Chapter
What are the main elements of the many accountability regimes of the GCF and how can these elements impact the legitimacy of the Fund?	- Literature review - Qualitative case study - Content analysis - Key informant interviews	2
What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing	- Literature review - Principal-agent analysis	3
What performance information should be produced and how should it be used to strengthen the accountability regimes of international climate change financing institutions?	- Developmental literature review - Framework development - Qualitative case study - Content analysis - Key informant interviews	4
Does the performance information produced and used in local climate finance projects meet the needs of the actors in complex accountability webs?	- Qualitative case study - Content analysis - Key informant interviews	5

information being used within the accountability web, as well as the systems that are in place to share the information from account giver to account holder (e.g., monitoring, evaluation and learning system). As in the case of chapter 2, qualitative and quantitative content analysis was performed on the documents gathered and interview transcripts, using Atlas.ti. The content analysis was guided by the normative criteria and framework developed in chapter 4, which forms the basis for my evaluative approach.

Table 1.1 summarises the research questions and methods for each corresponding chapter of the thesis.

1.4.3 Case study selection

Three case studies are used to gain further insights into accountability regimes. In chapter 2, an in-depth case study of the GCF is used to determine the potential impact of its emerging accountability regimes on the legitimacy of the organisation. The GCF was chosen due to its importance as a flagship organisation that the international community is looking towards for the mobilisation and disbursement of the lion's share of climate finance. In chapter 4, the GCF is used once again as a case study to test the theory-based framework I developed to analyse information produced and used in climate finance accountability regimes. Finally, chapter 5 uses a case study of an internationally-financed climate-smart agriculture project in India. The project is funded through the CGIAR⁴ and is led by the International Maize and Wheat Improvement Center, which has a longstanding history of managing smallholder agriculture projects in developing countries since the *Green Revolution* (Glaeser 2010; Rajaram 1994). A project funded by the CGIAR was chosen

4. Formerly known as the Consultative Group for International Agricultural Research, and now simply known by its acronym "CGIAR."

as it qualifies as a complex accountability web, due to the plethora of actors playing the roles of account holder and account giver (and often both).

1.5 STRUCTURE OF THE THESIS

Following this general introduction (Chapter 1), the main body of the thesis comprises four research articles (chapters 2 to 5) and a synthesis (Chapter 6). Chapter 2 consists of a case study that focuses on a global climate change financing institution, the GCF. A description of the formal accountability mechanisms and how they are enacted is provided, as well as an analysis of how the accountability regimes impact the organisation's legitimacy.

In chapter 3, a principal-agent analysis is undertaken to gain insights into the incentives at play and the role of information in the accountability relationship between the donor and recipient in climate change financing. Chapter 4 analyses in more detail the role that information can play in accountability relationships, with a framework developed to determine the informational requirements in accountability regimes.

Chapter 5 focuses on accountability information across a complex accountability web. In chapter 5, the framework developed in Chapter 4 is applied to a climate-smart agriculture project in India to assess how information is produced and used in the project's accountability web and determine how this impacts accountability. Finally, in chapter 6, a synthesis of my research is provided, including some reflections and conclusions. Key limitations and areas of further research are also discussed, as well as policy implications for international climate change financing.



Chapter 2

The Green Climate Fund – History, status, and legitimacy

This chapter is published as:

Basak, R., & Karlsson-Vinkhuyzen, S. (2022). The Green Climate Fund: history, status and legitimacy. In *Handbook of International Climate Finance* (pp. 135-166). Edward Elgar Publishing.

2.1 INTRODUCTION

The Green Climate Fund (GCF) is relatively young multilateral funding institution. The GCF was formally conceptualised as the main funding institution for the United Nations Framework Convention on Climate Change (UNFCCC) in 2009 where Parties collectively promised to mobilise climate finance of USD 100 billion a year by 2020 onwards. Parties further agreed at COP16 in Cancun (2010) that ‘a significant share of new multilateral funding for adaptation should flow through the Green Climate Fund’ (UNFCCC 2011a). The GCF’s birth process, however, was a long one. International negotiations on climate financing have been fraught with diverging views about equity, accountability and legitimacy (Lange et al. 2007; Abbott and Gartner 2011; Bird et al. 2011; Schalatek 2012). On the one hand, developing countries and civil society organisations (CSOs) have been advocating for a greater role in decision-making, as well as pushing for increased focus on achieving on-the-ground results that benefit the most vulnerable (Ballesteros et al. 2010; Abbott and Gartner 2011; Schalatek 2012). On the other hand, developed countries have focused on ensuring value-for-money for their financing (Abbott and Gartner 2011; Basak and van der Werf 2019). All these actors, however, share high expectations for the new fund’s accountability (Abbott and Gartner 2011; Bird et al. 2011; Schalatek 2012; Omukuti et al. 2021).

This chapter situates the GCF within the broader political context of international climate finance and provides a brief history of the organisation, including how it relates to key global fund predecessors. Building on the academic literature on the GCF that mostly predates its birth, see for instance Bird et al. (2011), this chapter describes the history of the GCF, its status and its legitimacy. Using document analysis and key informant interviews we determine the main elements of the many accountability regimes of the GCF and how these elements impact the legitimacy of the Fund. Accountability is considered in many frameworks to be an important source of legitimacy in governance (Buchanan and Keohane 2006; Bernstein 2011; Biermann and Gupta 2011), making it an important dimension to analyse in the formative years of such an important institution. With the GCF being in its early stage of development it has to earn its legitimacy to gain stakeholder confidence (Bracking 2015; Lebel et al. 2017; Bertilsson and Thörn 2021).

The chapter is organised as follows: the next two sections outline how accountability and legitimacy of climate funds can be analysed, as well as the methods used to that effect. This is followed by a description of the political context of global climate finance and a historical overview of the GCF and its predecessors. This includes a description of the organisation’s progress with respect to resource mobilisation, funding allocation and disbursement rate, as well as its investments in capacity building. In section 3, an overview of the GCF’s core actors and responsibilities is provided, followed by an analysis of the

accountability and legitimacy of the organisation. The concluding remarks and outlook section provides recommendations for improvement to make the GCF more legitimate in the eyes of its many stakeholders.

2.2 ANALYSING ACCOUNTABILITY AND LEGITIMACY OF CLIMATE FUNDS

The weak accountability of diverse actors in global governance has been analysed and criticised from various scholarly perspectives (Keohane and Grant 2005; Steffek 2010; Goodhart 2011; Klabbers 2013; Wolfe 2015). In parallel this weakness has led to a variety of responses from civil society, from demonstrations and lobbying to engagement in reform initiatives (Benner et al. 2004; Blagescu et al. 2005; Bäckstrand et al. 2010). A few studies have put closer scrutiny toward accountability issues pertaining to climate finance. For example, Zadek (2011) looked at climate finance through the lens of accountability and productivity and outlined a series of challenges and organisational flaws (i.e., political leakage, gaming, rent-seeking, bureaucratisation and corruption); and Stadelmann et al. (2013) and Cipler et al. (2013) focused on transparency with regard to financial flows. This chapter contributes to the as yet limited scholarly analysis of accountability in intergovernmental climate finance organisations. Earlier studies include Ballesteros et al. (2010), who discussed accountability issues pertaining to climate finance organisations that pre-date the GCF, while Müller (2011) discussed the GCF's origin and accountability vis-à-vis the COP. Bird et al. (2011), on the other hand, discussed the accountability of the GCF in the context of its design, prior to the Fund having been setup. This chapter builds on their efforts and undertakes a first analysis of accountability in the early operating phase of the GCF, where rules and practices were in their initial adoption and implementation phase.

For the purposes of the analysis in this chapter we use a widely used definition in the public administration literature where accountability is understood as being '[A] relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences' (Bovens 2007, p. 450). In order to be able to analyse accountability in the GCF in a comprehensive way, including the diversity of actors involved at both global and national levels, we use Wolfe's concept of accountability regimes (Wolfe 2015). An individual accountability regime is composed of the involved actors and their specific account giver and account holder relationships and the elements (formal and informal) that are in place to ensure accountability. The term 'account giver' is used to refer to the actor who is required to provide an account to a given forum and use 'account holder' for the actor that holds others to account.⁵ Mashaw (Mashaw 2006) identifies six questions that enables outlining the contour of an accountability regime across diverse governance

5. The terminology in the literature can be confusing, as some authors use the term 'accountee' for the account holder, while others use the term 'accountor' (Auel 2007; Kluvers and Tippett 2010).

contexts: Who is accountable? To whom? For what? What is the process whereby account can be given? Against what standards is the account giver to be judged? What are the effects of poor (or strong) performance? In using Mashaw's questions, we follow Wolfe (2015), who has used these questions to describe the accountability regimes of the WTO and Kramarz and Park (2016) who used them in their analysis of accountability in global environmental governance.

Accountability has a particular instrumental value for international organisations as it contributes to the legitimacy, and thereby the effectiveness of such organisations (Bäckstrand 2008; Karlsson-Vinkhuyzen and Vihma 2009; Biermann and Gupta 2011). International organisations operate 'above' the level of the sovereign nation states and therefore need particularly good justifications for their authority (Keohane and Grant 2005). Legitimacy, defined as justified authority (Bodansky 1999), 'prevails when authority has the consent of those who are subject to it' (Scholte 2011, p. 111). Accountability provides organisational authority and thus the ability to achieve organisational goals and objectives (Koppell 2010a). Scharpf (1997) observed that accountability can contribute to both input (relating to the governance process) and output (relating to the performance of the organisation) legitimacy. Drawing on Scharpf (Scharpf 1997), Karlsson-Vinkhuyzen and Vihma's review of sources for the legitimacy of international norms (Karlsson-Vinkhuyzen and Vihma 2009), as well as additional literature on organisational accountability and legitimacy (Koenig-Archibugi 2011; Leung et al. 2011; Lebel et al. 2017), the sub-components of legitimacy that are related to accountability regimes are described in Table 2.1.

Some of these sub-components are similar to the criteria used to evaluate climate finance policy developed by Bhandary et al. (2021), although the scope of our sub-components is broader and we use them to make explicit links between accountability and legitimacy within a given organisation.

The framework in Table 2.1 allows the unpacking of which specific elements of accountability regimes may contribute to providing legitimacy to the GCF. Openness and transparency practices can enable stakeholders to monitor and scrutinise organisations and can reflect an organisation's willingness to be subjected to such scrutiny, thus enhancing the potential for accountability and thereby legitimacy (Karlsson-Vinkhuyzen and Vihma 2009; Bunea 2018). Encouraging participation and more inclusive decision-making also contributes to increased accountability and legitimacy (King Simrell et al. 1998; Mascarénhas and Scarce 2004; Panel on Public Participation in Environmental Assessment and Decision Making 2008). Combined with increased openness and transparency, participation offers the possibility to hold decision-makers to account for the content of policies for those who may have rightful expectations of being able to play that role (Groff and Karlsson-Vinkhuyzen 2018). Robust management processes and practices are a key ingre-

Table 2.1: *Components and sub-components of legitimacy linked to accountability*

Components of legitimacy	Sub-components of legitimacy related to accountability regimes
Input legitimacy	Openness and transparency Inclusive decision-making Management processes and practices
Output legitimacy	Problem solving effectiveness Fairness and equity

Source: Adapted from Karlsson-Vinkhuyzen and Vihma (2009)

dient to building the legitimacy of an organisation and are integral to the functioning of accountability regimes, including putting in place strong oversight roles, establishing monitoring and evaluation functions and exercising due diligence (Wilmshurst and Frost 2000; Blagescu et al. 2005; Bemelmans-Vidéc et al. 2007).

Problem solving effectiveness improves legitimacy, as it provides substantive positive impact by contributing to addressing specific challenges and achieving concrete results (Scharpf 1998; Karlsson-Vinkhuyzen and Vihma 2009). Accountability measures that are linked to effectiveness and the achievement of results (Dubnick 2005) can therefore increase legitimacy, but can still be perceived as illegitimate and unfair if these maintain or reinforce inequity (Karlsson-Vinkhuyzen and Vihma 2009). Therefore, accountability measures that may disadvantage some or that are not applied equitably could reduce output legitimacy.

2.3 METHODS

For the history and political context of global climate finance, UNFCCC and GCF documents were reviewed, as well as literature focusing on the GCF's inception and challenges. For the assessment of accountability and legitimacy of the GCF, Mashaw's questions (Mashaw 2006) were used to guide the content analysis of documents and key informant interviews. The content analysis of documents, supported by qualitative analysis software, enabled the identification of formal accountability elements, whereas interviews provided a picture of how those formal elements were enacted (Best 2012) and identified elements of an informal nature. The two main document types reviewed were UNFCCC and GCF organisational documents and project proposals submitted to the GCF. All documents were collected during the period of March 2016 and May 2021, with a total of 41 documents subjected to content analysis. Coding and quantification of relevant descriptive text and statements related to accountability was undertaken using a directed approach (Hsieh and Shannon 2005) by applying the analytical framework to identify key concepts as initial coding categories. The document analysis also enabled the identification of key informants for the interviews that were carried out.

In total, 17 key informant interviews were conducted, which is a relatively large sample, considering the limited pool of potential interviewees in this new field. The key informants were selected based on the relevance of their current or past role vis-à-vis the GCF and included GCF Board members, UNFCCC and GCF Secretariat officials, National Designated Authorities (NDAs) from developing countries, officials from GCF Accredited Entities (AEs) and CSOs. The interviews were conducted between March 2016 and January 2021. The respondents all play, or have played, important roles in the GCF accountability regimes as account holders or account givers. The interviews were semi-structured and mostly used ‘mini tour’ questions, that is, questions requiring respondents to provide details on particular or more specific issues or experiences (Spradley, 1979). Closed questions were also used to probe and obtain additional details from respondents, as suggested by Holstein and Gubrium (1995). The semi-structured interviews with very knowledgeable respondents made it possible to obtain in-depth knowledge required for this within-case analysis (George and Bennett 2004; Paterson 2010). Then, we systematically assessed the impacts of the elements of the accountability regimes on the legitimacy of the GCF, via the sub-components of sources for legitimacy listed in Table 2.1.

2.4 THE HISTORY AND POLITICAL CONTEXT OF GLOBAL CLIMATE FINANCE

The central intergovernmental arena for cooperation on climate change is the UNFCCC adopted in 1992 and its related agreements - the Kyoto Protocol (1997) and the Paris Agreement (PA) (2015). In each of these agreements there are provisions that commit countries with more financial resources (developed countries) to support those countries with fewer resources (developing countries) for implementing the agreements. This includes support in the field of mitigation and adaptation actions, as well as various procedural obligations, such as transparency requirements under Article 13, paragraph 4 of the PA (UNFCCC, 2015a). This commitment to provide financial resources reflects one of the underlying principles for the UNFCCC at its adoption, namely the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC), as described in Article 3, paragraph 1 of the Convention text (UNFCCC 1994), see also Ratajczak-juszk and Nyka (2022). This principle was the condition for developing countries to join the UNFCCC in the first place, as they saw developed countries having both a higher historical responsibility for contributing to climate change and having built up more financial and technical capacity, partially as a result of their access to cheap fossil fuels. For the UNFCCC and the Kyoto Protocol, the division of countries with obligations to provide resources – and those entitled to receive said resources – were specified in an annex. Over time this strict division evoked criticism from developed countries as the economies of many developing countries have grown considerably since the 1990s. The PA no longer provides a definition

of the two categories through a list and also explicitly invites developing countries who have the capacity to do so to also contribute to international climate finance, as stated under Article 9, paragraph 2.

International negotiations on climate financing have centred around not only the CBDR-RC principle but also equity, accountability and legitimacy (Lange et al. 2007; Abbott and Gartner 2011; Bird et al. 2011; Schalatek 2012). Developing countries and CSOs have been jostling for more decision-making power, as well as advocating for strong actions to help the world's most vulnerable, whereas developed countries have been concerned with value-for-money and financial due diligence (Ballesteros et al. 2010; Abbott and Gartner 2011; Schalatek 2012; Basak and van der Werf 2019).

The GCF has taken centre stage in the goal of mobilising climate finance since its formation, with the organisation's funding replenishment being endorsed at COP24 in Katowice in 2018 (Cui and Huang 2018; UNFCCC 2018a). The resources mobilised for climate finance have come from the public and private sectors, with the majority of private sector funds going towards mitigation, as opposed to adaptation (Bracking 2015; Climate Policy Initiative 2019). For countries in the Global South seeking support for their adaptation efforts, the GCF is seen as an attractive source of funds. The next section provides a brief history of the GCF and its relationship to international climate fund predecessors.

2.4.1 GCF predecessors

The first dedicated international climate financing institution came into being when the Global Environmental Facility (GEF) was established as a standalone entity at the 1992 United Nations Conference on Environment and Development where also the UNFCCC and Convention on Biological Diversity were adopted. Two years later, the GEF became an operating entity of the financial mechanism for the UNFCCC (UNFCCC 2019a; GEF 2020a). Since its inception, the GEF has mobilised USD24.75 billion in financial contributions from 40 donor countries through seven replenishment cycles (GEF 2020b). However, developing country Parties expressed their frustration with the difficulty to access funding from the GEF due to the onerous requirements and administrative burden (UNFCCC 1996). Nevertheless, in 2001 the GEF was entrusted by the COP with managing three additional funds, namely the Special Climate Change Fund (SCCF), the Least Developed Countries Fund (LDCF) and the Adaptation Fund (AF) (UNFCCC 2001; UNFCCC 2019a). The AF was created to finance concrete adaptation actions in vulnerable developing countries that were parties to the Kyoto Protocol, with part of its budget being financed via a 2% share of proceeds from sales of Clean Development Mechanism project certified emission reductions (Adaptation Fund 2019). The LDCF's focus was to support Least Developed Country Parties with their national adaptation programmes of action, whereas the SCCF was created to complement other funding mechanisms (UNFCCC 2019a).

Developing countries and CSOs have historically been frustrated with these funds' complex designs, poor implementation of the guidance received from the COP and the control that donors exercise on decision-making and funding allocation (Möhner and Klein 2007; Halle et al. 2012; Wolfe 2015). These frustrations were the impetus for the creation of the GCF.

2.4.2 GCF inception

The GCF was conceptualised as part of the Copenhagen Accord of December 2009 (UNFCCC 2009) and formally established in 2010 by COP16 (UNFCCC 2011a). This created the GCF as a new operating entity of the UNFCCC Financial Mechanism. A 40-member Transitional Committee was put in place to develop and recommend to the COP operational documents describing the finer elements of the design for the GCF (UNFCCC 2011a, 2011b). This culminated in the governing instrument of the GCF, which was approved in 2011. The governing instrument established the GCF Board as being accountable to and functioning under the guidance of the COP (UNFCCC 2012). Parties to the UNFCCC were also invited to nominate members of the Board and submit expressions of interest to host the organisation's offices (UNFCCC 2012). Board nominees were welcomed by COP18 in 2012 where the selection of Songdo, Republic of Korea, as the host city for the GCF was made (UNFCCC 2013). In 2013, the formal operating arrangements were agreed upon between the GCF Board and the COP and the GCF offices officially opened in Songdo (UNFCCC 2014b).

2.4.3 Resource mobilisation

The GCF's initial resource mobilisation efforts began in 2014 and continued until 2018 (GCF 2020a). Only in 2015 did the GCF manage to meet the threshold of USD 5.5 billion in pledges, which was required for the Fund to begin allocating funding towards projects and programs in developing countries (Antimiani et al. 2017). In total, the initial round of resource mobilisation led to pledges from 45 countries, with USD 8.3 billion mobilised (GCF 2020b). In October 2018, the GCF's first replenishment was launched (referred to as 'GCF-1'). This led to 30 countries pledging to make financial contributions, with USD 9.5 billion in confirmed pledges as of December 2020 (GCF, 2020b). As of September 2021, the total pledged amount for GCF-1 reached USD 10.3 billion, with over 70% of countries increasing their contribution. This replenishment represents a small percentage of the USD 100 billion per year in overall climate finance that was committed to be mobilised by 2020 onwards and a slight increase compared to the initial round of GCF resource mobilisation from 2014. More importantly, it is a far cry from what is needed to meet the PA and the requirements of developing nations to adapt to climate change (Kawabata 2019; J. T. Roberts et al. 2021).

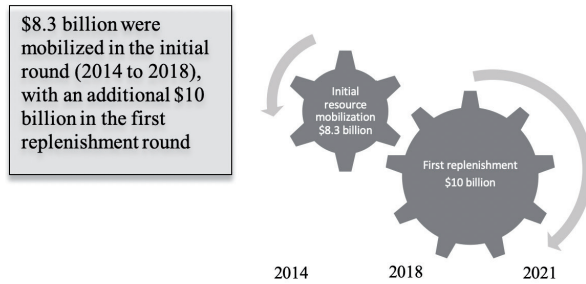


Figure 2.1: Resources mobilised from inception to 2021. The initial resource mobilisation helped leverage the first replenishment. \$8.3 billion were mobilised in the initial round (2014 to 2018), with an additional \$10 billion in the first replenishment round.

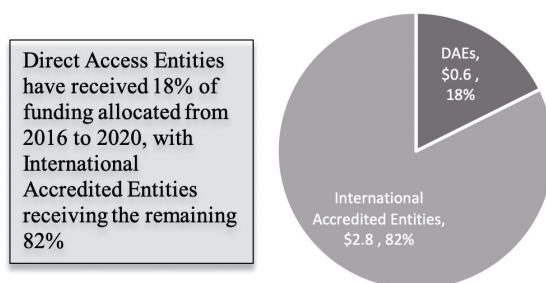
Some notable countries that were absent from the list of funders include the US, who under President Trump had reneged on their previous commitment made by the Obama Administration, and Russia, which has not pledged any funding. Some other countries have chosen to reduce their contribution, such as Canada, who had contributed USD 277 million to the initial round of resource mobilisation, but as of December 2020 had only confirmed USD 37.6 million in funding. Similarly, Australia, who had contributed USD 187.3 million in the initial round, has not pledged any money for the replenishment. These shortcomings have been highlighted in the media and fall short of expectations from think tanks active in the climate finance debate (Farand 2019; WRI 2019). It must be noted that US President Biden has requested the U.S. Congress to allocate USD 1.2 billion to the GCF (Scott 2021).

2.4.4 Funding allocation and disbursement rate

The GCF Board has established a demanding accreditation process to ensure that project implementation agents meet fiduciary and other standards, similar to that used by the GEF and the Adaptation Fund (GEF 2012; GCF 2017a; Adaptation Fund 2018; Basak and van der Werf 2019). Interviews indicate that the stringent accreditation requirements can represent a barrier to entry for smaller agents in developing countries who may be well-poised to implement projects.⁶

As of November 2021, 113 entities have been approved for accreditation by the GCF Board, with direct national and regional entities representing the majority of AEs (GCF, 2020c). This is a significant change, as the first few years after the GCF's inception saw almost exclusively the accreditation of international organisations (e.g., UN agencies, regional development banks). However, the number of projects being implemented by interna-

6. This bureaucratic burden has been reported in the mass media as well. See for example <https://www.theguardian.com/global-development-professionals-network/2016/feb/15/small-island-states-green-climate-fund>



Adapted from (GCF 2020e)

Figure 2.2: *GCF Funding Allocation Towards Direct Access Entities versus International Access Entities. Direct Access Entities have received 18% of funding allocated from 2016 to 2020, with International Accredited Entities receiving the remaining 82%.*

tional organisations still accounted for the vast majority (72%) of projects under implementation in 2019 and the value of the projects being implemented by DAEs is only USD 0.6 billion (18%), compared to USD 2.8 billion (82%) for their international counterparts (GCF, 2020d). Müller and Bhandary (2022) discuss how direct access could be further enhanced.

Another potential issue is that 45% of the Direct Regional and Direct National Entities are financial institutions. While this may be helpful in mobilising non-grant financing, it comes with risks to have many AEs without much expertise in climate change project implementation. This in turn may require such entities to make use of third party delivery agents, thus increasing the length of the delegation chain, which can lead to greater transaction costs and the creation of complex accountability webs (Page 2006; Romzek 2015a). This also risks leading to further financialisation of support to developing countries (Bertilsson and Thörn 2021).⁷ Similarly, a recent evaluation of the GCF's investment in SIDS found that only four out of 40 SIDS had a national DAE (GCF Independent Evaluation Unit 2020a).

The GCF had its first round of projects approved in November of 2015 (GCF 2015a). Since that first round [as of October 2021], the GCF Board has approved USD 10 billion for 190 projects to be funded across the Global South (GCF 2021a). However, the organisation has only disbursed USD 2.1 billion to date (21% of approved allocation) (GCF 2021a).

The slow approval and disbursement rate in the GCF's early years aligns with the historical precedent set by the GCF's predecessors, which were heavily criticised for their slow progress (Fenton et al. 2014). Similarly, the AF, established in 2001, only set up its Board

7. Financialisation, for Bertilsson and Thörn (2021) is the increased use of financial products in climate finance. For many authors, financialisation implies the increasing dominance of the finance industry in a country's economy and increasing debt-to-equity ratios (Dore 2000).

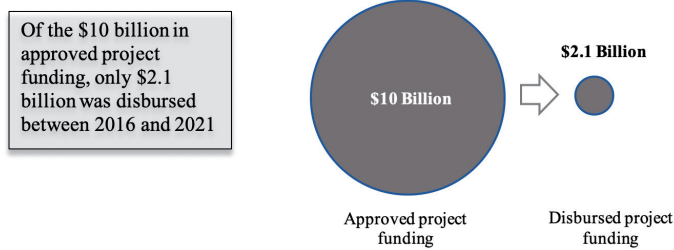


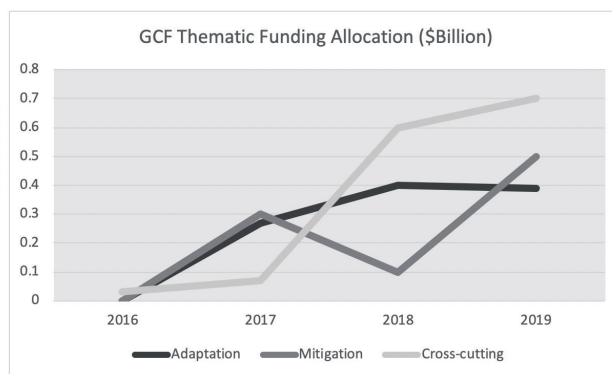
Figure 2.3: *Approved versus disbursed project funding. Of the \$10 billion in approved project funding, only \$2.1 billion was disbursed between 2016 and 2021.*

and other operational processes by 2007 and had only approved USD 14 million in project financing by 2010 (Adaptation Fund 2021a, 2021b). In contrast, the World Bank Climate Investment Funds, established in 2008, had disbursed USD 1 billion after only one year of operation and had allocated USD 7.7 billion across 49 countries by 2012 (CIF 2021). The GCF's slow approval and disbursement rate was, according to interviewed key actors, in large part due to the heavy bureaucracy that has been put in place within the GCF – from the onerous accreditation process to the burdensome requirements for proposal submissions to the Board.⁸ Compliance with the many bureaucratic requirements consumes time that could be otherwise used to improve project implementation, as has been claimed by authors looking at other donors and the public sector in general (Osborne and Plastrik 2000; Ebrahim 2005; Leite 2021). Encouraging to note, however, is that the speed at which projects have been approved by the Board has increased since 2018, compared to the first few years of operation. The number of new projects under implementation was only 34 and 36 for 2019 and 2020, respectively (GCF 2020d, 2020e), but as of October 2021, 134 projects were under implementation, amounting to 76% of the total portfolio (GCF 2021b). It must also be noted that the GCF has had to make such progress in the challenging context of the creation of an entirely new organisation, as opposed to simply a new fund being setup within a long-standing organisational structure (e.g., the Climate Investment Funds within the World Bank, see Michaelowa et al. (2020) for a discussion of the World Bank's processes).

Much pressure has been put on the GCF to ensure that it balances its funding allocation between mitigation and adaptation projects (UNFCCC 2011b). In 2017, adaptation projects represented only 18% of total disbursements and as late at 2018, the GCF disbursements towards adaptation were still less than half of those going towards mitigation (GCF 2018, 2019a). As of November 2020, the GCF portfolio had finally managed to reach 50% of funding towards adaptation projects, (GCF 2020e). A significant proportion of funding (USD 1.4 billion) has gone towards 'cross-cutting' projects (i.e., projects that have mitigation

8. This is also validated through personal experience from one of this chapter's authors, who has undertaken many consultancies to help NDAs and AEs with GCF accreditation and the development of project proposals.

Adaptation funding has steadily increased since 2016



Adapted from (GCF 2020e)

Figure 2.4: GCF thematic funding allocation. Adaptation funding has steadily increased since 2016.

and adaptation components) since the GCF's inception, with the mitigation component of such projects representing 64% of the resources allocated.

Unfortunately, no criteria or specific numerical targets have been set by the UNFCCC for measuring allocation equity (Pauw et al. 2020, Barrett 2022 for adaptation). However, the GCF's Governing Instrument states that the Board's allocation decisions should particularly take vulnerable countries into consideration, such as Least Developed Countries (LDCs), Small Island Developing States (SIDS) and African States (GCF 2011). As per the GCF's 2019 Annual Portfolio Performance Report, 61% of resources allocated by the Board have gone towards projects being implemented in vulnerable countries (GCF, 2020d). Similarly, in 2017, 63% of projects targeted vulnerable countries and in 2018, 56% of the project approved focused on vulnerable countries (GCF 2018, 2019a). This aligns with equity arguments raised in the literature that favour the allocation of resources from developed countries towards adaptation in most vulnerable countries (Grasso 2010; Cipler et al. 2015; Michaelowa and Namhata 2022). It also avoids antagonising those who have made strong arguments for allocating resources towards the countries where the most cost-effective mitigation can be achieved (Castro et al. 2020). Important to note is that lower income countries have been less effective at leveraging co-financing for their GCF-funded projects than their counterparts from emerging economies (Cui et al. 2020).

2.4.5 Investing in capacity-building

The Readiness and Preparatory Support Programme was put in place in 2014 by the GCF Board and Secretariat in order to build capacity in countries eligible for GCF financing, as per the Governing Instrument of the GCF (GCF 2011, 2014a). Over USD 252 million in grants for 380 readiness initiatives have been approved as of 31 May 2020 (USD 108 million disbursed), going towards low-emission development and adaptation planning, as

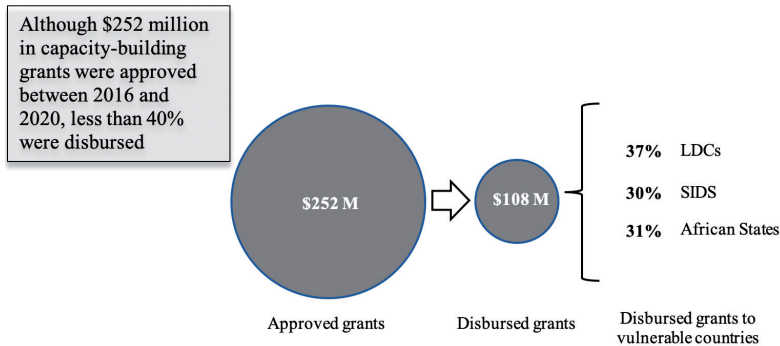


Figure 2.5: *Readiness and Preparatory Support Programme grants approved and disbursed. Although \$252 million in capacity-building grants were approved between 2016 and 2020, less than 40% were disbursed.*

well as strengthening the capacity of NDAs, for instance (GCF 2020f). This readiness funding has reached 80% of vulnerable countries, with 30% allocated to SIDS, 37% to LDCs and 31% to African States (GCF, 2020e).⁹ This compares very favourably with the overall climate finance provided and mobilised via bilateral, multilateral, export credits and private sources. According to the latest OECD compilation, of the USD79.6 billion in climate finance in 2019, only 1.9% went towards SIDS, 19% to LDCs and 23% to Africa (OECD, 2021).

Respondents differed in their views regarding the wisdom of such investments, with some stating that too much had to be spent on building capacity simply to be able to access the funds, and not enough on building capacity to deliver mitigation and adaptation results. In other words, some questioned whether fewer resources would have been required if access to GCF funds could have been made easier. A recent evaluation concluded that national entities in SIDS seeking GCF accreditation lacked the capacity to develop accreditation applications. The same evaluation also identified a lack of a systematic and efficient process at the GCF to build capacity beyond accreditation, leaving weaknesses on the ground for the preparation and implementation of projects (GCF Independent Evaluation Unit, 2020a). For a discussion of the generic capacity challenges in recipients of international climate finance and ways to overcome them, see Munyazikwiye and Michaelowa (2022) for the case of Rwanda.

This may very well change shortly, as the GCF recently set new strategic priorities in order to increase the value-added its Secretariat can bring to help developing countries build capacity and deliver climate results (GCF 2020g). By shifting the GCF's role from a simple 'financial pass-through entity' towards a more hands-on service delivery model, whereby the GCF can act as a 'convenor, capacity-builder and adviser through effective partner-

9. As the GCF notes in its Annual Portfolio Performance Report, there is overlap between the categories of LDCs, SIDS and African States (e.g., Madagascar belongs in all three categories).

ships,' this stands to address many of the challenges faced by some of the poorest nations faced with a changing climate. A recent review of the GCF Secretariat's capabilities to deliver on its strategic plan even suggests establishing regional offices that could provide hands-on support to developing country partners (GCF 2021c). In this context, the collaboration of the GCF with national climate funds (Gomez-echeverri 2022) could become important. This shift in vision for the organisation will require appropriate resources for the Readiness and Preparatory Support Program, the Private Sector Facility and for the GCF staff, which the GCF Board has recently approved (GCF 2021c).

2.5 ACCOUNTABILITY AND LEGITIMACY

In this section the core GCF accountability regime actors and their responsibilities are described. The section also provides answers in consecutive order to the key Mashaw (2006) questions laid out above.

2.5.1 Core actors and responsibilities

The GCF entails a complex set of actors that play formal and informal roles in the decision-making process, as is summarised in Table 2.2. The relationships between the GCF and its many stakeholders are construed as a set of principal-agent relationships to help analyse the interactions. Framing the interactions between the GCF and its stakeholders as principal-agent problems (i.e., when a 'principal' requires an 'agent' to undertake actions on her behalf) allows for a more systematic approach to unpack issues of motivation and incentives among the many actors that are involved and it also supports the analysis of accountability (Basak and van der Werf 2019). This approach also allows the analysis of how these actors may react to various mechanisms that principals can put in place to ensure agents perform in accordance with the principals' objectives. As can be seen in Table 2.2, some actors play the role of principal, while others are agents, or both.

2.5.2 Who is Being Held Accountable and by Whom?

Mashaw's first two questions focus on who is being held accountable and by whom. We briefly describe the answers to these two key questions as pertaining to the GCF's accountability regimes.

The UNFCCC COP plays the role of key principal to the GCF. The COP provides guidance to the GCF Board and plays an oversight role to ensure GCF policies and funding allocation align with the priorities and positions of the Parties to the UNFCCC. Since the PA has been in place, the GCF Board is also indirectly accountable to the Conference of the Parties serving as the meeting of the Parties to the PA (the 'CMA'). The CMA, which is a subset of the COP, plays an oversight role for the implementation of the PA, with the GCF being a key organisation for the its successful implementation (UNFCCC 2021). The UNFCCC Sec-

Table 2.2: *The main actors in the GCF's governance and operationalisation*

Actor	Role
Conference of the Parties of the UNFCCC	Provide guidance to the GCF Board on matters related to policies, funding priorities and criteria [principal vis-à-vis the GCF Board as its agent]
COP serving as the meeting of the Parties to the PA (CMA)	Plays an oversight role for the implementation of the PA.
UNFCCC Secretariat	Supports the COP. Responsible for the day-to-day operations of the GCF prior to the setup of the GCF Secretariat [agent vis-à-vis the COP as its principal]
Donor countries	Provide financial contributions to the GCF [principal vis-à-vis the GCF Board as its agent]
World Bank	Acts as interim trustee [agent vis-à-vis the GCF Board as its principal]
GCF Board	Responsible for designing, approving and overseeing the implementation of the organisation [agent vis-à-vis the COP as its principal; principal vis-à-vis AEs as their agents]
GCF Secretariat	Responsible for the day-to-day management of the GCF and implementation of the decisions approved by the GCF Board [agent vis-à-vis the GCF Board as its principal; principal vis-à-vis AEs as their agents]
GCF Accountability units (Independent Evaluation Unit, Independent Investigation Unit; Independent Redress Mechanism)	Ensure accountability, manage risk, and to evaluate the performance of GCF activities [principal vis-à-vis the GCF Secretariat]
Independent Technical Advisory Panel	Conducts independent technical assessments of funding proposals against the GCF's investment criteria [advisory role to the GCF Board]
Accreditation Panel	Review applications for accreditation and assess applicant ability to meet the standards set by the Board [advisory role to the GCF Board]
Accredited Entities	Receive funding for and implement projects approved by the GCF Board [agent vis-à-vis the GCF Board and Secretariat as its principals]
National Designated Authorities	Responsible for the coordination of individual developing countries' access to GCF financing [principal vis-à-vis AEs as their agents; agent vis-à-vis the GCF as their principal; agent vis-à-vis their national government as their principal]
Civil society organisations	Observers and commentators that exert informal pressure on the GCF Board to influence decisions [principal vis-à-vis the GCF as their agent]
Project beneficiaries	Those who ultimately benefit from projects funded by the GCF.

retariat supports the COP as its agent, and at the GCF's inception, was responsible for the day-to-day operations of the GCF until the GCF Secretariat was put in place. The role of the COP of the UNFCCC as account holder of the GCF Board was much emphasised by developing country board members, as well as CSO respondents and officials from the UNFCCC Secretariat.

‘Well, to me the Green Climate Fund is accountable to the COP, and it also should be accountable to its donors and contributors. And more importantly in my view, it’s more accountable to the recipient countries.’ – Developing country board member

The COP’s role in holding the GCF Board to account was not emphasised as much by developed country board members, who mentioned donor and recipient countries as account holders more often. Country delegates to the COP are account givers to their governments and ultimately their citizens.

The relationship between national donor agencies and the citizens from the country they represent, is another, albeit indirect formal accountability relationship, via the electoral process.¹⁰ Donor countries play a role of principal by providing financial contributions to the GCF (as agent) based on the terms outlined in their individual Contribution Arrangements, which are between the donor, the GCF and the World Bank as trustee (GCF and World Bank 2013).¹¹

The GCF Board comprises 12 members from developing countries and 12 members from developed country Parties to the UNFCCC, with one co-chair from a developed country Party and the other from a developing country Party. Board members are selected to serve for a three-year term. The make-up of the Board was intended to address criticism from developing countries and CSOs regarding donors’ control of the decision-making and funding allocation in other international climate funds (Halle et al. 2012; Wolfe 2015). Further addressing this criticism is the requirement that the Board take consensus-based decisions. At the time at which the key informant interviews were conducted (March 2016 - January 2021), there were several GCF Board members who were, in addition to having a formal decision-making role at the Board table, also either their country’s NDA or members of the of their country’s delegation to the UNFCCC COP meetings (or both). The reasons can be found in the lack of capacity and resources in developing countries. Individuals who have climate change experience tend to be sought after to play various roles, and often, multiple roles at the same time. However, when individuals are both delegates to the COP (who is supposed to oversee the GCF or play the role of principal) and GCF Board members, this can raise perceptions of conflict of interest. Similarly, a Board member who is also an NDA might not seem objective when project proposals are considered for funding by the Board (considering NDAs often play a role in developing project proposals and are therefore agents vis-à-vis the GCF Board).

10. This relationship was not mentioned in the documents reviewed, nor during the interviews conducted.

11. As trustee, the World Bank is tasked with the administration of the GCF’s financial resources and has a legal obligation to administer these funds solely for the purposes specified by the GCF and its funders.

The GCF Secretariat is responsible for the day-to-day management of the GCF and the implementation of the policy decisions approved by the GCF Board (i.e., it is agent to the GCF Board), whereas the AEs are the ones tasked with project implementation per se, based on funding allocation decisions of the GCF Board, as their principal. AEs can be 'International Access Entities' or 'Direct Access Entities' (DAEs). Many of the International Access Entities are international organisations also involved in international development more broadly, such as UN organisations, multilateral and regional development banks (MDBs). DAEs include sub-national, national or regional organisations that need to be nominated by developing country NDAs or focal points (GCF, 2017a). AEs receive funding from the GCF and while they can further delegate project implementation to third parties, they need to put measures in place to ensure adequate performance of sub-grantees, as AEs are ultimately accountable to the GCF for project performance (GCF 2015b, 2016a). Developed country board members emphasised the importance of holding AEs to account, more so than their developing country counterparts. AE respondents, on the other hand, mentioned recipient countries as account holders, as AEs often work closely with recipient country government organisations to develop projects and as project implementation partners.

The GCF Board has put in place three separate 'accountability units', namely the Independent Evaluation Unit, Independent Investigation Unit and Independent Redress Mechanism. These three units serve to ensure accountability, manage risk, and to evaluate the performance of GCF activities (GCF, 2020c). An Independent Technical Advisory Panel was also setup to conduct independent technical assessments of funding proposals against the GCF's investment criteria and the GCF Accreditation Panel was established to review applications for accreditation and assess applicant ability to meet the standards set by the Board (GCF 2015c, 2017a).

NDAs play a key coordination role in individual developing countries' access to GCF financing and ensure project proposals brought forward to the GCF Board for approval align with country priorities. NDAs are therefore agents, acting on behalf of their national government. NDAs are mentioned in the GCF's Governing Instrument (UNFCCC 2012), but the language used does not suggest they are accountable to the GCF.¹² According to respondents, the role of NDAs varies from country to country (i.e., based on capacity and resources) and no standardised or formal set of roles and responsibilities for NDAs exists, apart from 'Best-Practice Guidelines' (GCF 2014b), which are not mandatory. As per NDA respondent feedback, NDAs are being held accountable by the governments they represent, as most NDAs are housed within government ministries in their home country and have a hierarchical reporting relationship to a minister or agency head. However, this account giving process is not transparent.

12. This is similar to the combined role of GEF political focal points and GEF operational focal points (GEF 1996).

CSOs play a role as official observers at GCF Board meetings, as well as exerting informal pressure on the GCF Board to influence decisions that meet the needs of the constituencies for whom they speak. There is one representative from a developing country CSO and one from a developed country. Similarly, two observers from the private sector attend GCF Board meetings, one from a developing country and the from a developed country. These observers are identified through a self-selection process and serve a term of two years, with a maximum of two consecutive terms (GCF 2013). The CSO respondents saw themselves as account holders vis-à-vis the GCF and mentioned the GCF Board as being ultimately accountable to them, but there is no mechanism that formally gives them this role. They rely entirely on informal means of account holding (e.g., public criticism). When CSO informants were asked who they saw themselves ultimately accountable to, all respondents stated they were accountable to other CSOs in their network and to the constituency they represent, including direct GCF project beneficiaries.¹³

2.5.3 Accountable about what?

In terms of what account givers are likely to be called upon to answer for (i.e., Mashaw's third question), the most frequently mentioned items in the documents reviewed were: management, performance, reporting and evaluation. Other items mentioned include: oversight, engagement, audits and information sharing, although these were mentioned much less frequently. Respondents in all categories mentioned that, in their view, the account givers are accountable for management, reporting, evaluation, monitoring and performance.

During the course of the interviews, one of the developed country board members mentioned that the expectation at the ministerial level in their country was that the GCF be assessed with respect to development and organisational effectiveness, expected outcomes, as well as financial performance. One developed country board member mentioned their responsibility for playing an oversight role vis-à-vis the GCF and for reporting back to their minister on the GCF's progress, while another board member discussed the role of the GCF Board in funding capacity building or 'readiness' in developing countries, so they can be better prepared to access funding.

Some of the respondents mentioned the lack of formal requirements for the role of NDAs, which is seen as a gap that should be filled to ensure all potential recipient countries are at a similar state of readiness in terms of being able to produce well-coordinated and robust funding proposals. Since 2020, the GCF Secretariat has made significant efforts via its Readiness Program to build NDA capacity (GCF 2021d).

13. CSOs have formed an independent constituency comprising national, regional and international organisations from across the globe in order to coordinate interactions with the GCF (Germanwatch 2019). This is similar to the GEF-CSO Network, which dates back to 1995 (GEF-CSO Network 2018).

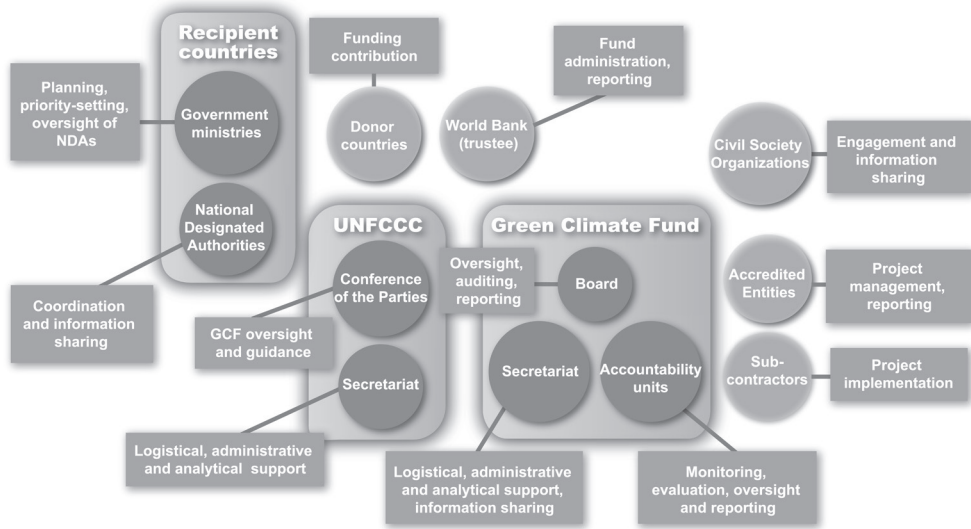


Figure 2.6: What account givers are considered to be accountable for in the GCF's accountability regimes.

2.5.4 What does the accountability process look like?

This section focuses on Mashaw's (2006) fourth question: 'By what process is accountability to be enacted?' The GCF is to report back annually to the COP and receive formal guidance from the COP through decisions, which are contained in the addenda to the COP reports (UNFCCC 2012, 2015c). Some respondents stated that this was not a satisfactory process in the early years of the GCF's inception, as the COP was having difficulty ensuring the GCF indeed implement the guidance the COP provided. The issue of having board members also being COP members was raised as a hindrance to effective account holding. Similarly, some respondents have alluded to performance management issues in the relationship between the GCF Board and Secretariat in the organisation's early years:

'What the board can do is just request... I can state an example about the Readiness Program which, was established at the end of 2014. But, things have not moved as quickly as it should be.' – Developing country board member.

Since 2020, much progress has been made to better address COP recommendations and towards continually improving how the GCF Secretariat gives account to the COP and the GCF Board, including the Report on the activities of the Secretariat (GCF 2021b) and Annual Portfolio Performance Reports (GCF 2018, 2020d), for instance.

As GCF Board members are public servants in their respective countries, they are subject to hierarchical relationships and an annual performance review process within their home ministry, which ensures a level of accountability. Board members also make use of

informal means to receive feedback from and give account to officials from other countries that are part of their ‘constituency’. They interact based on trust and reciprocity, as Romzek et al. (2012) and other authors have argued is the case in informal accountability relationships. At least one respondent mentioned what consequences this informal approach can lead to:

It has taken the Board quite some time to become that truly collective entity that focuses on the almost sacred responsibility that they have. This has been related to lack of clarity on accountability of individual board members. And many of them have actually operated almost like they were there in their personal capacity. And, have articulated positions that have not necessarily been seen by everyone as being in the best interest of their constituencies. – UNFCCC Secretariat respondent

There is also the review process for the overall Financial Mechanism of the UNFCCC, which takes place every four years. This review serves to ensure that entities under the Financial Mechanism, including the GCF, conform to the guidance provided by the COP, fund effective climate change projects, as well as provide financing and facilitate the transfer of technology in an effective manner (UNFCCC 1998).

The account giving process for AEs is well formalised and seems robust, as it involves multiple mandatory monitoring, evaluation and reporting requirements (GCF 2015b, 2016a). This includes ongoing performance monitoring, annual reporting to the GCF, annual reviews, mid-term accreditation reviews and ad hoc checks or periodic reviews. However, it must be noted that a recent assessment of the GCF’s portfolio of projects uncovered inconsistencies in the application of the indicators used by AEs (GCF Independent Evaluation Unit, 2020b). The GCF Board has a strong focus on ex ante accountability of AEs.¹⁴ The keystone ex ante accountability mechanism used by the GCF Board is the accreditation process for potential implementing agents. A stringent system has been developed to ensure entities funded by the GCF are well-positioned to implement projects and to report on their results. To receive funding, these entities must first gain accreditation from the GCF, with details of their roles and responsibilities formally set out in several documents (GCF 2014a; GCF 2015b; GCF 2016).¹⁵ Although the GCF has instituted a ‘fit-for-purpose’ accreditation system whereby entities representing a greater risk (e.g., due to the size or complexity of projects they would be eligible to manage) face more scrutiny

14. Certain accountability mechanisms are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient (e.g., processes and controls), which is termed ‘ex ante’ in this chapter, whereas others take effect only after the transfer of money and the expending of effort by the recipient as taken place (e.g., penalties, oversight), which is termed ‘ex post’. This terminology is used by various other authors (Mark Bovens 2007; Broadbent et al. 1996; Soudry 2008).

15. A similar process is in place for the accreditation of Global Environmental Facility Project Agencies (GEF 2012) and Adaptation Fund Implementing Entities (Adaptation Fund 2018).

than lower-risk ones, feedback received from some informants, including GCF Secretariat staff, indicated that accreditation still presents a significant burden for many smaller local implementing agents. This may in turn have impacts with respect to sustainability and country ownership if mostly larger foreign entities get accredited.¹⁶

The role of the three independent accountability units is focused on undertaking evaluations of the performance of the GCF, to investigate allegations of fraud and corruption and to receive complaints related to the GCF's operations. These units were not in place when the initial round of interviews was conducted. Since then, the units have been fully staffed and resourced, giving them the ability to fulfil their mandate. Since its inception, the Independent Evaluation Unit has produced over a dozen evaluations for the GCF Board, with the Board addressing evaluation findings via formal management responses (GCF Independent Evaluation Unit 2021). The Integrity Unit has established an 'Integrity Hotline' and has completed the GCF integrity policy framework, with key policies and implementation procedures (e.g., on anti-money laundering and the financing of terrorism, prohibited practices and the protection and prevention from sexual exploitation, sexual abuse and sexual harassment) (GCF Independent Integrity Unit 2020a). For each of its policies, the unit plans to produce annual implementation reports to give account to the Board on its progress. The unit has already produced two such implementation reports, namely the 2020 Annual Implementation Report on the Policy on Prohibited Practices and the 2020 Annual Implementation Report on the Policy on the Protection of Whistleblowers and Witnesses (GCF Independent Integrity Unit 2020b, 2020c).

The Independent Redress Mechanism assesses compliance with policies and procedures and undertakes investigations of the projects and programmes the GCF finances, then makes recommendations to the GCF Board so that compliance and redress can be achieved (GCF 2017b). As of November 2021, the unit had received seven and addressed six complaints from parties that felt that they had been negatively impacted by the GCF and the projects it has financed (GCF Independent Redress Mechanism 2021).

No formal account giving role for NDAs was found in the documents reviewed, with National Designated Authorities Best-Practice Guidelines (GCF 2014b) not mentioning reporting to the GCF as a being part of the NDAs' mandate. However, NDA respondents mentioned the important role of hierarchy and reporting structures within their home ministry.

There are only informal and ad hoc means of account giving by CSOs. CSOs participating at board meetings coordinate informally to ensure the views from their constituencies are

16. Here, sustainability is used to mean the ability of the project to self-sustain once the initial funding has sunset.

brought forward. CSO's use of tools such as Twitter, and the webcasting of board meetings, play a role in increasing transparency, and in turn, create an informal accountability mechanism by way of public pressure vis-à-vis the GCF Board.¹⁷ As for direct project beneficiaries, the only formal process available to them is lodging a complaint via the Independent Redress Mechanism, or using the Integrity Hotline to report fraud, corruption, or misconduct, as described above.

2.5.5 Accountability criteria and standards

Mashaw's fifth question pertains to the standards or criteria used by account holders to judge the performance of account givers. The GCF's Governing Instrument (UNFCCC, 2012) and several other documents lay out expectations and criteria that the GCF Board and Secretariat should meet – for management, monitoring and reporting, information disclosure, auditing and priority-setting. These criteria and standards are publicly available. Similarly, criteria have been set for the four-year review of the effectiveness of the Financial Mechanism of the UNFCCC, which include transparency of funding decisions and timeliness of disbursement of funds, for example (UNFCCC 1998).

The criteria and standards against which AEs are judged by the GCF are also well defined and publicly available. These standards and criteria seem to be well understood and taken seriously by respondents from AEs, CSOs and board members.

Another key area where performance criteria are in place is in the context of individuals' performance reviews. This was found for employees within AEs, as well as NDAs and board members reporting to their minister or agency head. Although the GCF guidelines for CSO observers (GCF 2013b) set out roles and responsibilities of active observers, no specific standards have been established for the broader role CSOs play outside board meeting attendance. Similarly, no common standards exist for the role of NDAs, except for the voluntary best practices guidelines that have been developed (GCF 2014b). CSO respondents and one board member mentioned that the uneven capacity amongst NDAs is leading to certain countries being poorly served and thus reducing their chances of obtaining funding from the GCF. As for criteria for negative impacts on those affected by GCF projects, these are laid out in the various policies and implementation procedures developed by the Independent Accountability Units.

17. The COP and many of its subsidiary bodies have been using webcasting as a transparency tool for many years (see <http://unfccc.int/press/multimedia/webcasts/items/2777.php>). For instance, the Clean Development Mechanism Executive Board meetings have been webcasted since the early 2000's (see <http://unfccc.int/press/multimedia/webcasts/items/5859.php>). The World Bank's Climate Investment Funds have been selective in their disclosure, opting to webcast only certain events, such as its Partnership Forum (see <https://www-cif.climateinvestmentfunds.org/partnership-forum>). Other institutions involved in international climate financing, such as the GEF, have opted not to webcast their council meetings, nor their Expanded Constituency Workshops, although they do publish a significant number of documents for these meetings (see <https://www.thegef.org/council-meetings/>).

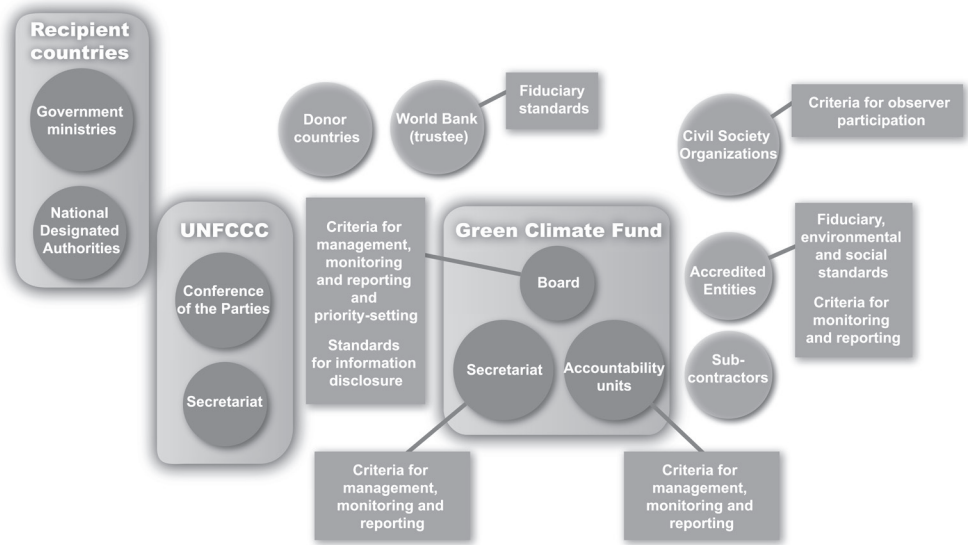


Figure 2.7: Criteria and standards within the GCF accountability regimes.

2.5.6 Effects of Accountability Mechanisms

The last of Mashaw's questions is focused on understanding the consequences or effects of surpassing or failing to meet the existing criteria or standards. Formal penalties are an ex post mechanism applicable only to a few account givers. Although the COP provides 'guidance' to the GCF, and the GCF reports back to the COP on an annual basis, the GCF's Governing Instrument makes no mention of the COP's ability to impose any type of formal penalty to incentivise the GCF to follow the COP's guidance.¹⁸ The interviews indeed revealed that COP delegates are more likely to use informal diplomatic channels and pressure to coax the GCF Board into improving its performance and acting more in-line with the expectations of the COP. The COP also possesses the option of terminating the existence of the GCF altogether. This ultimate penalty incentivises the GCF Board and Secretariat to show compelling progress and results, although the political ramifications of terminating the GCF reduces the likelihood of this taking place, barring extreme circumstances.

The GCF documentation describes several types of formal penalties that can be imposed, but this is only with respect to AEs. These include the downgrading of their accreditation status (i.e., giving them access to projects of narrower scope or of a lesser budget), payment stoppage (i.e., ceasing to pay until a given issue is resolved), payment 'clawbacks' (i.e., requesting funds be returned to the GCF), non-renewal (i.e., not providing funding for future projects) and blacklisting (i.e., informing other organisations of an entity's poor performance or inadequacy) (GCF 2015b).

18. The Global Environment Facility is also under the guidance of the COP (GEF 2014).

These penalties seem to be a credible threat to the actors in the regimes, as this quote illustrates:

'...if the project, for one reason or the other is not performing, that it can be cancelled or suspended. There are certain triggers which are put in some of the procedures in the documents which have been developed.' – Developing country board member

Other informants argued that the penalties most likely to be used are of an informal nature. This includes reputational risk, peer pressure, non-renewal of membership (i.e., for board members, CSO representatives), and the threat of cessation of GCF funding by a donor. According to some respondents, penalties can also be imposed via hierarchical reporting relationships. These apply mainly to individuals working within large organisations, such as board members and NDAs who work within government ministries, or individuals working for large AEs. In those instances, the penalties can take the form of a bad performance review, loss of reputation, or even dismissal, which are all strong incentives to improve their performance.

Some of the penalties, such as suspending, downgrading, or revoking the accreditation of an AE and reclaiming funds due to poor performance, although available in theory, may not be used to the fullest extent in practice due to the nature of the accountability relationship between the GCF and certain AEs. As CSO and board member respondents mentioned, many of the entities accredited or currently seeking accreditation are government ministries in recipient countries, which makes the use of penalties diplomatically awkward. Similarly, these respondents mentioned the possible hesitance to use drastic penalties with AEs headquartered in donor countries (e.g., Deutsche Bank, HSBC) to avoid political embarrassment and diplomatic faux pas. There is no formal penalty or 'remedy' scheme to incentivise CSOs to change their behaviour if they are seen as not performing adequately, apart from the possibility of losing their accreditation as observers. According to interviews, however, if a CSO observer were to poorly represent its constituency, it could lose the trust of those he or she represents and this could lead to a vote of non-confidence to represent them as Active Observers.

Although none of the respondents made any reference to rewards, nor output-based funding, some of the documents reviewed did mention such mechanisms, which may motivate AEs to strive for higher performance (Basak and van der Werf 2018).

2.6 DISCUSSION

Based on the analysis of the key elements of GCF's accountability regimes outlined above, it is possible to assess how these can affect the GCF's legitimacy, using the subcomponents for input and output legitimacy in Table 2.1.

2.6.1 Openness and transparency

Openness and transparency were found to be uneven across accountability regimes. Reports for the four-year reviews of the Financial Mechanism of the UNFCCC are made available on the UNFCCC website (see for instance UNFCCC Standing Committee on Finance (2014)) and so are the reports of the GCF to the COP and the guidance to the GCF (see for instance UNFCCC (2013, 2018, 2019). The fiduciary principles and standards of the Board (GCF 2014c), as well as environmental and social safeguards (GCF 2014d) are clearly laid out and available to the public, which strengthens the input legitimacy. Board meeting agendas, minutes and decisions are available on the GCF website, as are all documents approved by the Board and proposals submitted for review.¹⁹ In addition, the webcasting of board meetings also serves to strengthen transparency and thereby input legitimacy. On the other hand, although NDAs are being held accountable by the governments they represent, this account giving process is not transparent. Similarly, no formal forum exists where CSOs could be held accountable; only informal and ad hoc means for account giving are in place. This lack of a transparent process for assessing CSOs' performance undermines input legitimacy. Allowing CSOs to participate at GCF Board meetings as observers and CSOs' interactions with NDAs serves to increase input legitimacy (i.e., by increasing openness and transparency).

2.6.2 Inclusivity of decision-making

The inclusivity of decision-making could be improved across most accountability regimes. An area of relatively weak accountability is that of country delegates to the COP, who are account givers to their governments and ultimately their citizens. As Przeworski et al. (1999) have noted, the electoral process is not an adequate means of account holding, as it is too far-removed from the decision-making process. This is particularly the case for issues of an international nature that are often in the hands of the executive (Zürn 2004). Similarly, the relationship between national donor agencies and the citizens from the country they represent is another accountability relationship that relies on the electoral process, which does not offer much opportunity for inclusive decision-making. Although CSOs are observers at GCF Board meetings and participate in various ways, they have no formal role in the decision-making process, which reduces input legitimacy. The COP's formal oversight role of the GCF builds input legitimacy because it represents all the Parties to the UNFCCC, including developed and developing countries (as opposed to only giving control to donor countries). However, having GCF board members 'overseeing themselves' as members of the COP could erode legitimacy if the perceived or real

19. However, unlike the stakeholder consultations process under the Kyoto Protocol Clean Development Mechanism, GCF project proposals are not made publicly available for comments (Schade and Obergassel 2014). Individual NDAs and AEs may choose to make such documents available for public comments, but this process is not being facilitated by the GCF via its website, for example.

conflict of interest becomes a broader concern across the accountability web's actors. The GCF's recent pivot away from being a flow-through funding organisation towards efforts to co-develop projects and programs in partnership with developing countries also offers a significant opportunity to increase the organisation's input legitimacy via joint decision-making at the inception phase.²⁰

2.6.3 Management processes and practices

The management processes and practices are strong across most accountability regimes. The creation of the GCF Accountability Units signals that the Board takes accountability seriously and thus increases input legitimacy. The GCF Board and Secretariat have instituted a strong system for monitoring, evaluation and reporting, as well as established criteria and standards for assessing AEs, which increases input legitimacy. Most funding proposals lay out clearly how sub-grantees are to be monitored and evaluated, which also increases input legitimacy. However, the lack of formal process for the monitoring and evaluation of NDAs and CSOs weakens input legitimacy.

Other management systems and practices serving to increase input legitimacy include: the stringent accreditation system; the fiduciary, environmental and social standards for the GCF's operations; and the system of penalties and rewards for AEs. The Board's efforts to encourage the development of strong NDAs to help coordinate project proposals also increases input legitimacy. In addition, NDAs are being held accountable by the governments they represent through a hierarchical reporting relationship to a minister or agency head, thus increasing input legitimacy. Similarly, for individuals working within large organisations (e.g., board members and NDAs who work within government ministries, or individuals working for large AEs), penalties can be imposed via hierarchical reporting relationships, which builds input legitimacy.

Although the guidelines for observers to the GCF set out roles and responsibilities of active observers, no specific standards have been put in place against which CSOs could be consistently and objectively judged with respect to the broader role they play outside of board meeting attendance. Similarly, no common standards exist for the role of NDAs, which may reduce the input legitimacy. However, the Independent Accountability Units have established clear processes to address negative impacts on those affected by GCF projects, including the Integrity Hotline and the Redress Mechanism, which bolsters input legitimacy.

20. The recently approved ASEAN Catalytic Green Finance Facility (ACGF): Green Recovery Program (April 2021) is a prime example of the GCF's efforts to work with partners to co-develop country-owned programs via innovative blended financing (ADB 2021).

2.6.4 Problem-solving effectiveness

It is too early to determine with certainty if there is strong problem-solving effectiveness across regimes. AEs' implementation of output-based funding to incentivise implementing partners to perform well may build output legitimacy if it leads to improved performance once projects are implemented. In countries where NDAs do not meet performance expectations of stakeholders, this may lead to decreased output legitimacy. However, the GCF Secretariat has recently setup the Office of Portfolio Management, which will have a role to play in terms of accountability and perhaps increase problem-solving effectiveness in the medium term.

The processes established by the Independent Accountability Units have also started to bear fruit, with four complaints already addressed satisfactorily by the Independent Redress Mechanism, for instance (GCF Independent Redress Mechanism 2021). If the Independent Accountability Units continue to focus on problem-solving as they have since their inception, this should help increase output legitimacy.

2.6.5 Fairness and Equity

Fairness and equity is another area of relative strength across the GCF accountability regimes. The GCF Board composition is perceived as being fairer than a system where larger donors would hold more sway like in the MDBs.

The accreditation system for AEs is perceived by some as disadvantaging smaller local implementing agents. If mostly larger foreign entities get accredited, this may in turn have impacts with respect to sustainability of the projects and country ownership, which could lead to a degradation of output legitimacy, as this could be perceived as unfair. The accreditation process aims to reduce adverse selection, which is, as Akerlof (1970) explained, when an agent (e.g., implementing entity) hides the fact that it may not be qualified to deliver results as per the principal's (e.g., the financing institution) expectation. Pre-screening is used by many climate change financing institutions to ensure implementing agents are equipped for sound project and financial management. The GCF's formal accreditation process requires interested agents to put together a package that describes in detail how the applicant will contribute to GCF objectives; the scope of its intended activities; and how it meets GCF fiduciary criteria, environmental and social safeguards and the GCF's gender policy (GCF 2015d). Accreditation therefore gives GCF officials a greater assurance that implementing agents are suitable to undertake the tasks at hand, which in turn can reduce the likelihood of project failure.

Such a pre-screening and accreditation process has the advantage of revealing additional information to the climate change financing institution, as it serves as 'signalling'. The implementing agents that are likely to offer a higher quality 'product' (i.e., those that are

offering their climate change project implementation services knowing that they are equipped and qualified to reduce the likelihood of project failure) should be more willing to undergo the pre-screening process. This is similar to the case of high-quality used car owners who are willing to provide buyers a warranty in the ‘market for lemons’ paper by Akerlof (1970). Of course, this also creates an incentive for ‘low-quality’ agents to send a false signal by undergoing the pre-screening process and falsifying the required documentation. However, the consequences of being caught with fraud are quite serious, which incentivises submission of truthful information for accreditation purposes.

In practice, the additional advantage of the pre-screening and accreditation process is that it also provides officials in the climate change financing institution a paper trail showing that they indeed went through a due diligence process prior to providing funding.²¹ This is especially critical in the case of the GCF, which is also required to give account to other parties, such as its trustee, other donors, elected officials and the general public. However, undergoing accreditation entails a significant cost. Accreditation for the GCF can take several months to complete and requires a review by the GCF Secretariat, an Accreditation Panel and the GCF Board, as well as the payment of accreditation fees (GCF 2017a). The implementing agents need to go through accreditation prior to knowing if they will even receive funding from the GCF for any proposals the AE may develop. In other words, the accreditation cost is borne ex-ante, based on the implied probability that a contract will indeed be offered.

There has been an increased number of national and regional entities that have received accreditation from the GCF in recent years, which can be construed as increasing input legitimacy because it broadens participation (Colenbrander et al. 2018). However, the accreditation process, which controls for adverse selection, risks creating a barrier to entry for entities that are unable to meet or unwilling to go through the accreditation process imposed by the GCF.²² Indeed, this has been mentioned as an important concern by many key informants interviewed in the context of our research, and many organisations (public, private and not-for-profit), which the first author has interacted with in the context of various climate finance consultancies. As mentioned in the Status and Challenges section, 45% of the organisations that have been accredited as Direct Regional and Direct National Entities are financial institutions. This is not surprising, considering that a key component of the GCF accreditation process is meeting fiduciary standards, something financial institutions, by their very nature, are well-positioned to do. If accreditation creates a barrier that limits the number (and type) of players who can apply for climate change project

21. Due diligence for legal and accountability purposes, that is, exerting an appropriate level of caution and investigation prior to extending financing to satisfy contractual, legal and reputational requirements or expectations (Asenova and Beck 2010).

22. More specifically, as some have argued, it could represent an antitrust, primary or ancillary barrier (McAfee et al. 2004).

funding (as only AEs can apply for funding) this risks giving AEs oligopoly power. This could in turn drive up the payment AEs can fetch (compared to a fully open system without this barrier to entry) and even have impacts with respect to sustainability and country ownership if mostly larger foreign entities get accredited. Another impact of this barrier to entry and of having mostly larger international organisations and local financial institutions successfully accredited is that it can lead to accountability challenges and greater transaction costs. If the entities who are successful at obtaining GCF accreditation do not possess the required project design and implementation expertise, this will require more involvement of third party delivery agents, as discussed above, and related agency problems (Basak and van der Werf, 2019).

In order to avoid such a barrier to entry, this calls for increased investments in capacity building for DAEs. The GCF's Readiness and Preparatory Support Programme, as of July 2020, was indeed planning to strengthen readiness support for the pre-accreditation stage of DAEs (GCF 2020f). The Updated Strategic Plan for the Green Climate Fund: 2020-2023 also recognises the need for the organisation to take a second look at the types of entities it needs to accredit and to further simplify the accreditation process (GCF 2020g). However, as others have noted, capacity-building efforts need to go beyond increasing the number of DAEs, but also improving their ability to effectively deliver projects that are country-owned and bring concrete results to targeted beneficiaries (Zamarioli et al. 2020, Müller and Bhandary 2022). The GCF Secretariat, as part of its new strategic priorities, indeed hopes to increase its value-added to help developing countries build capacity and deliver climate results (GCF, 2020g). If this shift in vision for the GCF can be accompanied with the adequate resources to make the vision a reality, this stands to accelerate dramatically the climate results that can be achieved in developing countries. The GCF Board's recent decision to allocate new resources to the GCF Secretariat in order for it to grow its staff to provide this additional support to developing countries is no doubt a step in the right direction.

As Duus-Otterström (2016) reminds us, the COP has held as a key principle that climate finance should be allocated to countries that are most vulnerable and has instructed the GCF to do so. Pressure to ensure that GCF funds go towards the most vulnerable countries has also been present from the beginning. In particular, climate finance going towards adaptation has been considered by many as a just approach to provide financial support (from rich countries who have mostly created global warming) to the developing countries who will face the brunt of the climate change impacts (Colenbrander et al. 2018). GCF funding allocation to date has focused on many of the most vulnerable countries, as measured by the Germanwatch Climate Risk Index (D. Eckstein et al. 2018), therefore contributing to output legitimacy. With a majority of projects under implementation being in vulnerable countries from the outset, this shows that the GCF is responsive to such

concerns and helps with output legitimacy. However, the fact that the vast majority of projects are being implemented by international organisations, as opposed to national or regional entities, can be seen as hindering output legitimacy. Again, the GCF's new vision and strategic priorities, with increased focus on hands-on support for project development and DAEs should decrease this output legitimacy gap over time. Another concern is whether there is an underinvestment in projects where country conditions might make the project riskier (Basak and van der Werf 2019). For instance, weak institutions in many fragile states might prevent the achievement of GCF accreditation for DAEs and could also make project proposals in such countries less attractive to the Board, leading to the 'darlings and orphans' as is often the case for international aid (Carment and Samy 2016). This is an area where more transparency on the part of the GCF would be welcome, so that third party analysis of allocation decisions can be more comprehensively undertaken. This is also an area that the GCF may find challenging to address, even with its increased focus on hands-on support and the potential regional offices in such locations.

Finally, there are areas where it is too early to assess how legitimacy might be affected: will there be a willingness to impose penalties upon AEs if their performance is unsatisfactory? If penalties are not imposed equally across AEs (e.g., due to diplomatic reasons), this could be perceived as unfair and would reduce output legitimacy. Similarly, funding allocation has an impact on perceived fairness (Pickering et al. 2017). Perhaps more importantly, only time will tell if the various mechanisms in place (e.g., output-based funding, CSO pressure) in the accountability regimes will in turn lead to improved project performance.

2.7 Conclusions and Outlook

In the GCF's short history, the organisation has faced multiple challenges since its inception and has continually been closely scrutinised as a flagship institution at the centre of efforts to mobilise international climate finance. Understanding the GCF's accountability regime actors and elements is of key import to assessing the legitimacy of the Fund. Through a detailed document review and key informant interviews it was possible to describe the key elements of the accountability regimes of the GCF, which we then assessed for their contribution to input and output legitimacy.

Several elements of GCF regimes may have positive impact on the input legitimacy, including the COP's formal oversight role of the GCF, the creation of the GCF Accountability Units and the stringent accreditation system for AEs. The GCF's shift towards partnerships and co-development with developing countries also bodes well for building input legitimacy as this offers opportunities to for joint decision-making at the inception phase.

Similarly, output legitimacy is bolstered by the Board's composition (i.e., equal number of developing and developed country board members), the GCF's funding allocation

towards countries most vulnerable to climate change impacts and the successful resolution of complaints by the Independent Redress Mechanism and the Independent Integrity Unit. The GCF, like its predecessors, has been seen as showing slow progress in mobilising, allocating and disbursing funds in its early days. With progress accelerating at a much greater pace since 2020, we may see such criticism abate.

The GCF's significant efforts to ensure that a large number of national and regional entities obtain their accreditation fosters output legitimacy. The GCF's responsiveness to the need for funding to go towards the most vulnerable countries increases its output legitimacy, although implementing most projects via international organisations does not. The possibility that the GCF might be underinvesting in projects where country conditions might make the project riskier could lead to decreased output legitimacy. Increasing transparency about specific allocation decisions, perhaps via a database (as opposed to via annual reports and dispersed information on the organisation's website), would allow external parties (and indeed the GCF's many account holders) to undertake impartial analysis of the organisation's portfolio of projects.

Other elements of GCF accountability regimes that may negatively impact the Fund's output legitimacy include the lack of formal role for CSOs in the GCF decision-making process and the accreditation system for AEs potentially disadvantaging smaller local implementing agents. The GCF has put in place a stringent accreditation process, which is a key accountability measure. Accreditation of the entities it provides funding to ensures that such entities are well-positioned to implement projects, report on their results and achieve good climate change outcomes for mitigation and adaptation. Accreditation serves as a signal for those that are offering their climate change project implementation services and provides GCF officials a due diligence defence of sorts in the event that a project should fail. However, if accreditation is too onerous, it risks creating a barrier to entry for some entities. This could be especially problematic for smaller, developing country implementing entities. Proper balance therefore needs to be struck between controlling adverse selection and ensuring there is an adequate level of competition in the market for climate change project implementation. Failing to achieve such balance threatens sustainability and country ownership of climate change actions in the countries most at risk. The GCF could increase the number and diversity of AEs if it further simplified its accreditation process. The GCF's efforts to support entities at the pre-accreditation stage and the organisation's new vision to bring value-added support to developing countries via greater partnership and co-development are significant steps in the right direction.

The GCF should continue to simplify the accreditation process and perhaps also increase its willingness to take on some calculated risks in order to increase the diversity of AEs and country ownership. Similarly, there is a need for the GCF and donors more broadly to

continue their support in building capacity and ‘readiness’ in developing countries. This should include support to local AEs to meet the stringent accountability measures associated with access to GCF financing.

The GCF could also reduce uncertainty about project approval for its AEs (agents) if streamlined processes could be established for certain types of projects. For instance, the GCF could develop clearer guidance, criteria and templates for projects that are known to be essential and effective for adaptation (e.g., coastal protection via grey and green infrastructure, early warning and emergency response systems). Proponents for such projects should not have to conduct in-depth studies to justify their economic benefits (as such projects have been deemed essential and effective to adaptation), but should rather be supported by the GCF Secretariat so that they can integrate lessons learned from similar projects that have already been approved by the GCF Board over the past few years. Indeed, the GCF has already started to do this through its sectoral guides (and intends to produce more of such guidance), which is a move in the right direction. There are now even plans for the GCF Secretariat to conduct training sessions on its integrated results management framework, to ensure that proposals meet requirements, as well as new dedicated funding for DAEs to support the implementation of GCF policies (GCF 2021d).

If accessing funds from the GCF can be further simplified, fewer resources would have to be expended towards building capacity to navigate the organisation’s bureaucracy. Resources could then instead be allocated towards building capacity for new talent to take on the roles of NDA and developing country Board members, for instance, thus alleviating the potential for conflicts of interest when a single person has to play multiple account holding roles.

Overall, the GCF, since its inception, has put in place many elements that stand to lead to accountability and legitimacy improvements compared to many of its predecessors. The GCF’s new vision of going beyond being a mere ‘financial pass-through entity’ and its track record of continually improving its practices, stand to build its input and output legitimacy even further over time. Although it is too early to assess, once successful projects start bringing about measurable impacts, this should also lead to increases in output legitimacy of the fund. With the work of the Taskforce on Access to Climate Finance (UK Government, 2021) and the Climate Finance Delivery Plan (UK COP26 Presidency, 2021), this may help mobilise additional resources for the GCF and in turn further legitimise the fund.



Chapter 3

Accountability mechanisms in international climate change financing

This chapter is published as:
Basak, R., & van der Werf, E. (2019). Accountability mechanisms in international climate change financing. *International Environmental Agreements: Politics, Law and Economics*, 19(3), 297-313.

3.1 INTRODUCTION

The work program for long-term climate finance under the United Nations Framework Convention on Climate Change (UNFCCC) has set a goal of raising at least \$100 billion per year by 2020 (UNFCCC 2014a). This goal was reiterated at the 21st Conference of the Parties of the UNFCCC (COP 21) held in Paris in December 2015, where 195 nations signed the Paris Agreement. In the accompanying COP decision, it was decided that "... prior to 2025 the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries..." (UNFCCC 2015, p.7). The Green Climate Fund (GCF) was established by the UNFCCC Conference of the Parties at its sixteenth session held in Cancun in 2010 (UNFCCC 2011a) with the intent that it play a key role in mobilising and allocating climate finance to developing countries so that they can mitigate and adapt to climate change. The GCF received a vote of confidence in Katowice at COP 24, as its funding replenishment was endorsed by conference attendees (UNFCCC 2018b).

Expectations about the implementation of the Paris Agreement are high, especially with respect to the financing mechanisms for climate change mitigation and adaptation in developing countries.²³ One of these "great expectations" is that a strong set of accountability regimes be put in place to manage the allocation of these significant sums (Abbott and Gartner 2011; Bird et al. 2011; van Kerkhoff et al. 2011). The term "accountability regimes" is used here to describe the systems of management that are put in place to ensure accountability, where accountability is construed as: "(A) relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences." (Bovens 2007, p. 450). Ultimately, accountability regimes serve to legitimise the institutions involved (Kersbergen and Waarden 2004) and are often taken as a proxy for good governance (Dubnick 1998).

Similar and related to the role of the enforcement of property rights, accountability regimes allow economic actors to transact in a way that better satisfies all actors involved and help provide added certainty to transactions by spelling out expectations, roles and responsibilities, as well as mechanisms to give account and face consequences for not complying with agreed-upon objectives. The impact of accountability regimes on achieving desired objectives has been documented in studies in various fields, with varying results. For instance, Anderson and Feder (2004) looked at accountability issues pertain-

23. For an overview of international climate finance, see the Special issue of *International Environmental Agreements: Law, Politics and Economics* titled "Managing fragmentation and complexity in the emerging system of international climate finance" (Pickering et al. 2017).

ing to agricultural extension workers in developing countries. They found that extension workers were held accountable for the budget they spent and other activity-level indicators, but were not accountable for making sure that their programs benefited farmers, leading to poor program performance. Similarly, the World Bank (2004) found that service delivery failures in developing countries were related to weak accountability and that this was negatively impacting the poor, while Winters (2010) provides evidence that aid allocated to developing countries with stronger accountability regimes is more effective.

In this paper, we study the incentives that donors and recipients face in the financing and implementation of climate change mitigation and adaptation actions in developing countries as actors in an accountability regime. The “donor-recipient” relationship analysed in this paper is focused on the relationship between the GCF and one of its so-called “Accredited Entities” responsible for implementing climate change adaptation and mitigation projects on the GCF’s behalf.^{24,25} Key in the relationship between the donor and the recipient is that the former cannot directly observe the latter’s actions; it can only observe the project outcome. As a result, the recipient may try to follow his own objectives, which may not be aligned with the objectives of the donor.

This paper therefore addresses the following question: What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing? In order to answer the question, we use the framework of principal-agent theory (see e.g. Laffont and Martimort 2009; Mas-Colell et al. 1995) to describe the relationship between the donor (principal) and the recipient (agent), how their incentives are misaligned, and to assess the impact of various accountability measures introduced in climate change financing modalities. We will argue that such measures come at a cost and may create adverse outcomes. The principal-agent framework also allows us to determine the potential impact of certain agent characteristics, such as their prudence and risk preferences, on the donor-recipient relationship. This is in keeping with other authors, such as Steinberg (2010), Kluvers & Tippett (2010) and Haque (2014), who have looked at accountability relationships in public administration using agency theory.²⁶ Although other authors

24. In order to receive project implementation funding, interested agents are required to undergo an accreditation process to ensure they meet fiduciary and other standards (GCF 2017a). A similar process is in place for the accreditation of Global Environmental Facility Project Agencies (GEF 2012) and Adaptation Fund Implementing Entities (Adaptation Fund 2018). Accredited Entities can be small developing country private sector firms or non-profit implementers, as well as large international organisations. The latter represent the majority of entities that have received GCF accreditation to date.

25. Examples of projects that could be financed by the GCF include: improving fertilizer management practices (to reduce GHGs) and adopting drought-resistant wheat varieties (increasing resilience to climate change); reforestation of marginal lands to sequester carbon dioxide, foster groundwater recharge and reduce soil erosion; climate-proofing roads (i.e., to reduce erosion and impacts from heavy rains and floods) and reducing the carbon footprint of the transportation sector (e.g., via fuel efficiency, electric vehicles and various traffic management strategies).

26. For an overview of the contribution of principal-agent modelling to the study of accountability see Gailmard (2014).

have used agency theory to describe issues related to international aid, international environmental assistance and climate finance, the focus of their research differs from that of this paper: some have looked at the relationship between aid flows and development outcomes and found that country ownership and aid allocation based on monitorable results are key ingredients of success (Bourguignon and Sundberg 2007); others put their attention to transaction costs and found that these can potentially reduce the effectiveness of climate finance, especially when project implementation is delegated to third parties via multilateral organisations (Brunner and Enting 2014). Similarly, donor country delegation of foreign aid distribution to international institutions has been analysed and it was found that the approach can be beneficial to reassure voters in the donor country that money is being spent judiciously (Milner 2006). Another study analysed the allocation of aid funding towards climate change projects and found that politico-economic factors play an important role in how such flows are reported (Michaelowa and Michaelowa 2011). Our paper builds on the extant literature by offering insights into the specific accountability measures found in international climate change financing institutions.

The remainder of the paper is organised as follows: The next section elaborates on the concept of accountability as a principal-agent relationship and describes the accountability issues stemming from the relationship between donor and recipient in international climate change financing. In the subsequent sections we analyse three sets of measures that serve to align the interests of donors and recipients: in section 3.3 we analyse the use of performance indicators as an accountability measure, in section 3.4 a system of penalties, and in section 3.5 the use of informal accountability stemming from pressure from civil society organisations (CSOs). In section 3.6 we provide concluding remarks, suggestions for policymakers to improve the accountability relationship between donors and recipients in climate change financing, as well as areas for further research.

3.2 ACCOUNTABILITY AS A PRINCIPAL-AGENT RELATIONSHIP

In the following sections we use agency theory to analyse the accountability issues stemming from the relationship between a donor and a recipient in international climate change financing, where the principal wants to ensure that the agent works towards the objectives that she sets out. In this section, we show how accountability between a donor and a recipient in climate change financing can be described as a principal-agent relationship. We first describe the role of asymmetric information in this relationship. We then use agency theory to describe the characteristics of the donor as a principal and of the recipient as an agent. We subsequently describe the role of project risk and risk preferences in the relation between a donor and a recipient.

3.2.1 Asymmetric information in climate change financing

As the definition from Bovens (2007) above shows, accountability is a relationship between at least two parties – one giving account to the other. Principal-agent problems (also known as agency dilemmas and agency theory) occur when a “principal” (i.e., any person, organisation or other entity) uses an “agent” (again, any person, organisation or entity) to fulfil an action on her behalf. The dilemma occurs when the agent, who acts in self-interest, has motivations that are not well aligned with those of the principal and the principal cannot directly observe the agent’s actions. Importantly, the agent’s actions cannot be deduced from observation of an outcome (Laffont and Martimort 2009; Mas-Colell et al. 1995). These agency problems arise in multiple contexts where responsibility is delegated and are very likely to be present in the accountability relationship between donors and recipients in the context of international climate change financing, such as the GCF, Global Environment Facility (GEF) or Adaptation Fund providing project funding to an implementing agency.²⁷ Principal-agent theory is a useful framework to analyse public accountability as it offers “a flexible framework for modelling innumerable variations in institutional arrangements, and comparing their potential for inducing desirable behaviour by agents.” (Gailmard, 2014, p. 2).

For the purposes of this paper, we assume that the principal is an international climate change financing institution, such as the GCF, and that the agent is an external implementing entity operating in the developing country where the project is to be implemented. Principal-agent relationships are characterised by delegation of responsibility by the principal to the agent and the problem of asymmetric information: the principal cannot observe the level of effort put into the project by the agent (i.e., a case of hidden action). In the case of international climate financing this is not only because the project takes place in another country, but in general perfect monitoring of the recipient’s actions by the donor is too expensive or technically unfeasible. One can postulate, as is done in most of the agency literature, that the incentives of the agent are not perfectly aligned with those of the principal. For example, a GCF Accredited Entity typically has multiple projects to work on, limited resources (staff, money) and may even have its own objectives (e.g., high salary levels for its staff or a large office building). Since the donor cannot perfectly observe how the recipient spends his resources, the recipient may want to put fewer resources in the project, and more in its other projects or objectives, than the donor would like. We must note that our analysis may not necessarily apply to climate change financing cases such as bilateral funding directly from a donor country to a developing country, as incentives and motivations may differ.

27. Agency problems are widespread in various delegation and contracting contexts, including public sector service procurement, in aid and international organisations (Hawkins et al. 2006; McAfee and McMillan 1986; Soudry 2008).

3.2.2 Climate finance donors as principals

In a traditional principal-agent model (Laffont and Martimort 2009; Mas-Colell et al. 1995), the principal uses a compensation scheme to incentivise her agent in achieving the principal's interests. For simplicity, and without loss of generality, we assume that the objective of the principal (donor) is successful completion of a project at lowest possible cost, and that the project can end up in only one of two states: success or failure. The principal aims to develop a compensation package that will maximise her expected utility. The principal's utility depends on the success of the project and the payments made to the agent (which is a cost to the principal). In turn, the success of the project is described by a probability distribution of external factors (which we describe below) and the level of effort of the agent. This principal-agent relation applies to many cases in the climate change financing context, where the donor has a pre-established amount for grants.²⁸ The principal therefore needs to design an offer to the agent in a way that motivates him to exert a high enough level of effort to successfully complete the project, at a low level of compensation.

3.2.3 Climate finance recipients as agents

The agent is willing to undertake work for the principal if the expected utility from the work is at least equal to his reservation utility level. In the context of climate change financing this means that a project should be financially feasible for a recipient and be more interesting than possible alternative projects – this is known as the 'participation constraint' in principal-agent theory.²⁹ As is well known in the literature on principal-agent theory, if the principal were able to directly observe the agent's level of effort, then a first-best incentive scheme could be put in place, whereby she could simply offer him a payment for the effort that maximises her expected utility, even when there is uncertainty about external factors affecting project outcomes (Laffont and Martimort 2009; Mas-Colell et al. 1995). However, it is difficult to imagine a set of circumstances in international climate change financing where the donor would have the ability to directly and perfectly observe the recipient's level of effort. This is indeed the crux of the principal-agent problem.

As noted above, we assume that the principal wants the agent to put in a high level of effort as this increases the probability of success of the project. The agent, on the other hand, will put in a level of effort that will maximise his own expected utility, which depends on the compensation package, the cost of his effort, and the probability distribution of local external factors (which we describe below). In addition to the contract having to be sufficiently interesting for the agent to accept it (the participation constraint described above),

28. It must be noted that there are also many instances where donors publish open calls for proposals with no specified grant amounts. In those cases, the initial compensation payment is proposed by the agent.

29. One can also think of the expected utility as being at least equal to the agent's opportunity cost and as having pecuniary and non-pecuniary aspects, as has been portrayed in the literature, such as Jensen and Meckling (1976).

the contract should hence also induce the agent to put in a sufficiently high level of effort. This is the ‘incentive compatibility constraint’ in principal-agent theory and affects the payments the agent receives (as specified in the contract) in case of a successful project and in case of project failure.

3.2.4 The role of risk in the principal-agent relationship

Climate change projects can be (and often are) influenced by outside factors such as political instability, safety and security; economic deterioration; natural disasters; humanitarian crises; cross-border tensions; quality of legal institutions and business norms; and corruption (OECD Development Assistance Committee 2014). These external factors can have a positive or negative impact on project outcomes and the agent’s level of effort cannot fully control these external factors. In the remainder of this paper we denote these factors as project risk or background risk. As in much of the agency literature (e.g. Laffont and Martimort 2009; Mas-Colell et al. 1995), we assume that the agent’s increased level of effort decreases the likelihood of project failure, but that the external factors can nonetheless bring about failure, even at high effort levels. Conversely, low levels of effort increase the likelihood of failure, but external factors can bring about success, even at low effort levels. Due to asymmetric information, the agent can blame external factors for poor performance and take credit for good performance when external factors are responsible (see e.g. Gundimeda and Guo 2003; Mitchell and Parson 2001). Following the literature, we assume that the uncertainty about such external factors has a known probability distribution and that the expected utility of the principal and the agent are functions of this probability distribution.

The expected utility level an agent gets from a particular contract and probability distribution of external factors is determined by the risk preferences of the agent. Hence, risk preferences have an impact on the types of contracts that can be put in place between the principal and the agent (Laffont and Martimort 2009; Sinclair-Desgagné and Spaeter 2017). Agents differ in the amount of downside risk they are willing to bear (Kimball 1990). The level of downside risk aversion determines how much the agent will require in compensation to be subjected to an increased downside risk – the higher downside risk aversion, the higher the amount the agent will demand (Crainich and Eeckhoudt 2008; Modica and Scarsini 2005). As such, if an agent is highly downside risk averse, he will not be willing to accept a contract that includes a very low level of payment (or perhaps even a penalty) in case of project failure, as the downside risk is too much for him to bear, *ceteris paribus*. With an agent that is highly downside risk averse, the principal will be required to offer a very large compensation level to convince the agent to participate (i.e. the participation constraint has to be satisfied) and the resulting contract may contain little difference in compensation whether the project was a success or failure (Ligon and Thistle 2013). As such, it can be anticipated that the risk preferences of agents will be important in the con-

text of climate change financing, where mitigation and adaptation outcomes are subject to significant background risk. Some agents would prefer not having too large a portion of their compensation payment contingent upon the achievement of success. This may have more severe consequences for smaller grantee organisations, as they are more likely to be risk averse (Audia and Greve 2006; Dobrev 2001), which could lead international climate change financing institutions such as the GCF to disproportionately fund larger, less risk-averse organisations. In cases where significant background risk is present (e.g., if a project is to be implemented in a fragile state with poor institutions and weak macro-economic conditions), it may lead even large grantees to prefer contracts where there is little difference in compensation whether poor or high performance is achieved.

Throughout our analysis we assume that the principal is risk neutral and that the agent is risk averse. A person who is risk neutral is indifferent between choices that have the same expected payoff, but different riskiness, whereas a risk averse person would opt for the less risky option. Risk neutrality for the principal is a defensible assumption in the context of international climate change financing, as the institutions financing climate change projects, such as the GCF, are very large and well-capitalised. They also finance large project portfolios to hedge against individual project risks. Agents, on the other hand, can include small, medium and large players that may have much more limited resources to “insure” against project failure. As such, they are more likely to be risk averse.³⁰

3.2.5 The role of accountability measures

We have argued that a donor in climate financing can observe whether a funded project is a success or a failure, but typically cannot observe the actions of the recipient, and that a recipient may have objectives that are not fully aligned with the objectives of the donor. Furthermore, climate finance projects are typically subject to project risks, so a project can be a failure (success) despite high (low) levels of effort by the recipient. In order to create incentives and influence the agent’s behaviour in accordance with the objectives of the donor, the donor puts in place accountability measures. Section 3 will discuss the role of information and performance indicators as accountability measures in the principal-agent relationship between the climate change financing institution and the agent who implements the project. In Section 4 we discuss the role of penalties.

3.3 PERFORMANCE INDICATORS AS AN ACCOUNTABILITY MEASURE

An important consideration in accountability relationships is that of the information available to the principal to ensure that she can hold her agent to account (Bovens 2007). When a donor makes an investment in a grant project or program, she requires informa-

30. Audia and Greve (2006) find evidence supporting the economic intuition that smaller firms are more risk averse. Similarly, individual risk aversion has been found to decrease as wealth increases (Shaw 1996).

tion about the performance of her investment, using various performance indicators and corresponding metrics (Adam and Gunning 2002; Morra-Imas and Rist 2009). The quality of the performance information, including performance indicators, will have a bearing on the decisions made by the various actors involved (Mosley, Hudson, and Verschoor 2004; Holzapfel 2016), including the ability to hold actors to account.

If the principal cannot continuously look over the agent's shoulder to see how much effort he is expending (either because it is cost-prohibitive, or technically unfeasible), she needs to include some type of accountability measure to incentivise her agent to put in high effort, as the asymmetric information creates an opportunity for the agent to reduce his level of effort without the principal knowing. One way to indirectly gauge the agent's level of effort is via the imposition of a Monitoring and Evaluation System (MES). A MES would require the agent to develop performance indicators before signing the contract (and hence the start of the project) and the agent to report on these performance indicators to the principal during the project. The payment scheme for the agent is then based on the performance indicators. Based on the performance reports, the principal can adjust her expectations about successful completion of the project during the project implementation phase and decide to terminate the project if her expected utility after processing the information in the performance reports becomes negative.³¹

The project performance indicators could be at the activity, output and outcome levels, which is reflective of modern donor requirements and grant management practices (Adam and Gunning 2002; Crawford and Bryce 2003). The activity indicator represents a set of activities that the grantee has completed in the context of the implementation of the project financed by the donor (e.g., number of events organised, number of collaborations with partners, policy dialogues undertaken). The output indicator can be thought of as including items such as the number of people trained, or number of publications produced by the grant recipient.³² The outcome indicator could be composed of a metric for greenhouse gas mitigation (e.g., tons CO₂-equivalent reduced) and adaptation (e.g., composite resilience index) and will most likely be construed as an imperfect indicator, as many authors have shown that climate change indicators, especially adaptation metrics, are difficult to obtain (Adger et al. 2005; Branca et al. 2012; Burton et al. 2004; Engle 2011; Hall 2017)³³

31. Here it is assumed that the reports are truthful, although there is evidence that this may not always be the case (Ebrahim 2003b). False claims can be verified via audits, which incentivize the agent to be truthful (Dixit 2002).

32. For further examples of activity-level and output-level indicators, as well as a good discussion on their appropriate design and use, see Bourne et al. (2000); Feltham and Xie (1994); Morra-Imas and Rist (2009); Schiavo-Campo (1999). It is important to avoid falling into the trap of choosing easily measurable (but not necessarily appropriate) indicators in order to please donors (Ebrahim 2003a).

33. Of course, as Gundimeda and Guo (2003) rightly point out, some climate change mitigation projects actually do not even require monitoring of greenhouse gas emissions once the project is in its implementation phase, such as solar photovoltaic or wind power projects.

In modern aid project management, grantees are required to develop MESs that usually set out what indicators are to be used for project monitoring. In the case of the GCF, for example, this is set out in the Monitoring and Accountability Framework for Accredited Entities (GCF 2015b). Once the MES is approved by the donor, the agent begins project implementation and collects data on the indicators. This information is then put into a progress report and shared with the donor, who in turn reviews and scrutinises the information therein.

The development and implementation of the MES, including data collection and reporting is costly to the agent, and the review and verification of the performance information is costly to the principal. In practice, in organisations such as the GCF, the principal faces the cost to undertake periodic evaluations, spot checks and audits to assess performance more thoroughly (GCF 2015b). The principal is facing a trade-off when deciding on the set of performance indicators to be included in the contract. An additional indicator means more information for the principal about the project's progress, yet it also means higher costs for the principal as she will have to review more performance data. Furthermore, an additional indicator may imply higher costs for the agent (who has to provide the data and may adjust his effort level in response to an additional indicator), who in turn may demand more compensation.

It should be noted that the performance indicators may not be perfectly correlated with successful completion of the project (Feltham and Xie 1994). As noted, the payment scheme is based on the performance indicators. If an indicator is only weakly correlated with successful project completion, but gets high rewards in the payment scheme, the agent has incentives to put disproportional effort in this performance indicator, at the expense of indicators that have a stronger correlation with successful completion of the project. Hence, when designing the payment scheme, the principal should make sure that financial incentives are aimed at indicators that measure the biggest contribution to the project (Feltham and Xie 1994).

In sum, the principal needs to carefully balance the costs, benefits and quality of an indicator when deciding whether to include it in the payment scheme of the contract. Furthermore, as discussed in section 3.2, the amount of risk sharing between the principal and agent is also contingent upon the risk preferences of the agent, which has implications for indicator selection. Feltham and Xie (1994) show that the more risk averse the agent, the more important it is to align indicators and the project outcomes, as indicators that are poorly related to a successful project outcome fail to incentivise the risk averse agent to expend higher effort levels.

3.4 PENALTIES AS AN ACCOUNTABILITY MEASURE

In addition to the MES, donors can impose penalties on grant recipients with unsatisfactory performance (Binnendijk 2000; Collier et al. 1997). Penalty schemes, especially of a financial nature, are more commonplace in climate finance, compared to traditional aid, as they have been “normalised” under the Kyoto protocol (Heal 2000) and perhaps because there is a larger number of non-traditional players involved (e.g., commercial banks). For instance, when the GCF funds projects, it has the ability to withhold payments, downgrade or withdraw an entity’s accreditation status, or “blacklist” poor performers (i.e., rendering them ineligible for further funding and informing other donors of their poor performance) (GCF 2015b). In certain cases, “claw-backs” on the grant payment can be exercised, that is, the donor may ask for a certain amount of money back if performance is judged to be unsatisfactory (based on the performance indicators mentioned in the previous section).³⁴

Having a penalty scheme in place increases the principal’s expected utility because she can use it to motivate the agent to expend a higher level of effort, thus reducing the risk of project failure and thus shifting some of the risk associated with project failure to the agent. However, the prospect of facing a penalty reduces the agent’s expected utility. The agent now can face a reduction in overall compensation via the penalty, even if he expends a high level of effort, if his effort is supplanted by external factors. In the case of claw-backs, these could deter agents that are smaller and less well-capitalised (and therefore are more likely to be risk averse, as discussed in section 2), as they may not be willing to take on the risk of having to reimburse the donor if the project is not performing well, as a large claw-back could jeopardise their ability to remain a going concern.

Although the implementation of penalties (or the fear of facing them) incentivises greater performance by the agent, the principal needs to be careful with the amount of risk it transfers to her agent via such penalties, as it may lead him to refuse the contract (Laffont and Martimort 2009; Shavell 1979). The principal needs to structure the contract so that the agent’s expected utility is still at least as high as his reservation utility (participation constraint). The contract must also ensure that the agent is motivated through a higher compensation received when he expends a high level of effort while facing a penalty (incentive compatibility constraint).

34. It must be noted that the GEF addresses issues of non-compliance by requiring action plans to achieve compliance, as opposed to penalties per se, with implementing agencies being able to continue to seek GEF financing while implementing the action plan (GEF 2017). The Adaptation Fund, on the other hand, has similar measures as the GCF, such as project/program suspension for poor implementation performance, agreement termination and accreditation cancellation (Adaptation Fund 2018).

3.5 PRESSURE FROM CIVIL SOCIETY ORGANISATIONS

In addition to the formal accountability measures described above, informal accountability can also influence the behaviour of the principal and agent. As Romzek and Dubnick (1987) mention, sources of control for accountability can also stem from informal sources, such as pressure from CSOs. Newell (2015), for instance, explored accountability and the pressure exerted by various civil society groups on key international climate change actors and found that they play an underestimated role in holding organisations to account, although this cannot be considered a substitute for formal oversight. Basak and Karlsson-Vinkhuyzen (2018) studied accountability issues related to the Green Climate Fund and found that CSOs exert informal pressure using various means, including via public and social media, in addition to their formal role as Active Observers at GCF board meetings. In the case of large international organisations providing climate change financing, such as the GCF, it is easy to imagine that CSOs target them via various means to pressure these institutions into financing projects that align with the CSO's values and objectives. In a study of environmental performance of projects funded by the World Bank, it was found that CSO pressure changed the institution's lending patterns (Buntaine 2015).

In the principal-agent relationship described in the previous sections, adding pressure from CSOs in the form of negative press and public embarrassment would provide disutility to the principal. This pressure could be due to project failure, but also due to negative side-effects of the project, such as impacts on local communities or the local environment. We assume that the principal anticipates, *ex-ante*, that the CSOs will exert pressure (even though the said pressure will only be exerted *ex-post*), therefore providing a reduction in her expected utility. For the principal to reach the same expected utility level, as compared to the case without CSO pressure, she has several options available.

In the face of CSO pressure, the first option the principal can take to retain her expected utility is to reduce the probability of project failure, which in this case includes negative local side-effects of the project. She can do this by decreasing the project's exposure to negative external factors by funding a less risky project instead, thus increasing the likelihood of achieving better project results. However, CSO pressure could then lead to perverse outcomes: the new project may not provide the same benefits in terms of climate change mitigation or adaptation, or the project may offer fewer economic, social, health or environmental co-benefits (Briggs 2017). Indeed, there is a risk that CSO pressure leads to the funding of projects in areas that need it least (Birdsall and de Nevers 2012). Alternatively, she could also get the agent to put in a higher effort level by offering him a larger payment *ex-ante* (for each unit of mitigation and/or adaptation performance he delivers, as measured by the performance indicator), which may reduce her utility if the agent's effort does not increase performance to a large enough extent *ex-post*. This would also

lead to costlier overall project implementation. Another way to reduce the risk of project failure (in response to possible CSO pressure) is to adjust the MES, for example by including indicators that would measure the anticipated negative side-effects on the local environment and communities, or use indicators that have a stronger correlation with project outcomes but may be costlier to generate. Increasing the penalty for the agent's poor performance could also be used to incentivise the agent to perform better. However, the higher penalty may reduce expected utility for the agent, who may wish not to participate, as found in Shavell (1979).

The second option available to the principal is reducing the implementation cost of the project. This can be achieved by decreasing the payment offer to her agent, or by reducing the MES cost for review and verification. The lower payment offer, as discussed above, may lead the agent to refuse the contract. It could also lead him to accept the contract, but to reduce his effort level, which could in turn increase the likelihood of project failure. If the principal chooses to reduce the MES review and verification cost, this may lead to insufficient project oversight.

In the case of the agent, we assume that CSO pressure will depend on the agent's size. If the agent is a smaller entity, such as a local non-governmental organisation, it may "fly under the radar" and avoid attention from CSOs, which would mean that CSO pressure would not be part of the agent's utility directly. However, if the agent is a larger or more visible organisation, it may be pressured by CSOs. This is a plausible scenario, especially for certain accredited entities under the GCF, such as HSBC, Deutsche Bank and UNDP. This assumption therefore relates to the risk preferences discussed in section 2 – as CSO pressure is assumed to only affect larger agents (who are assumed to be less risk averse), this pressure is not as consequential in terms of the participation constraint. In other words, anticipated CSO pressure is less likely to cause larger agents to refuse the principal's contract.

We assume that the agent anticipates, ex-ante, that the CSOs will exert pressure in case of project failure or negative side-effects, therefore providing a reduction in his expected utility. The agent's options to retain his expected utility in the face of increased CSO pressure (to compensate for the disutility generated by the CSO pressure) include getting paid more by the principal, reducing his cost of project implementation, or reducing the penalty he could face. To get paid more, the agent could ensure to put in a high level of effort to reach high performance and therefore get paid more ex-post, which would also reduce the likelihood of project failure. Alternatively, the agent could ask for a higher payment in case of success or in case of failure (or both) to increase expected utility. Of course, the contract should still encourage the agent to put in a high level of effort. To reduce his cost of project implementation, the agent could decide to lower his cost of

MES implementation via efficiency improvements or by ‘cutting corners’ but when certain targets laid out in the MES are missed the principal could consider this to be violation of the contract.

3

We have shown in this section that CSO pressure can have positive as well as negative effects on project outcomes. Donor and agent become more aware of potential negative side-effects and the agent may choose to improve his effectiveness. However, CSO pressure may also lead to perverse outcomes as the donor may decide to fund less risky projects that have lower climate benefits. This raises issues of fairness in terms of where climate finance should be allocated, with many advocating for resources to be focused on the most at-risk and poorest countries (Pittel and Rübhelke 2013). In addition, if the agent chooses to reduce the cost of implementation by cutting corners, then CSO pressure could perversely lead to an increased risk of project failure. As such, it behoves donors to structure contracts and impose accountability measures that avoid such perverse outcomes.

3.6 CONCLUSIONS AND DISCUSSION

In this paper, we have analysed the accountability relationship between a donor and a grantee in the context of financing international climate change adaptation or mitigation projects using the framework of principal-agent theory. As the donor (principal) cannot observe the actions of the grantee (agent), formal and informal accountability measures can be used to align the interests of the two parties.

As a first formal measure, the donor can implement a Monitoring and Evaluation System in which the recipient has to report on various indicators and payments are linked to the progress on these indicators. While the MES can serve to align the interests of the donor and grantee, such a system is also costly to both parties and may thereby induce an agent to turn down the contract on offer. Furthermore, the indicators should be strongly correlated with mitigation and adaptation benefits as otherwise the agent will spend disproportionate effort on actions with little relevance for the project. Poorly correlated indicators are especially problematic when the agent is highly risk averse as they may fail to incentivise him to put in a high level of effort. This makes the case against donor imposition of MESs that comprise arbitrarily selected performance indicators and supports arguments for project management approaches such as the development of “logic models” or “theories of change” to ensure there is a good match between performance indicators and project objectives (Chen 2015; Mayne 2015).

As a second formal accountability measure, penalties can influence recipient behaviour and have a positive impact on project outcomes. The penalties, which are commonplace in climate finance, were shown to help shift the risk of poor project performance from the

donor to the recipient. The penalties mean that the recipient has a personal stake in the achievement of climate change mitigation and adaptation results, and this risk-sharing arrangement therefore requires a larger compensation payment in order for the agent to be willing to participate. Moreover, we have seen that this hinges upon the risk profile of the project (including the overall risk environment, which can include macroeconomic trends, fragility of the country and the strength of the institutions that the project proponent needs to work with) and the level of risk the grant recipient is willing to tolerate. As such, the donor needs to carefully consider the amount of risk she intends to impose upon her agent in the form of accountability requirements, including penalty schemes, to ensure that there is indeed a diverse set of entities willing to bid for the delivery of projects. This is especially important for projects that are to be implemented in countries where it is more difficult to operate. In those instances, donors who want to ensure diversity in implementing entities may want to consider reducing the grantee's risk exposure by imposing penalties and Monitoring and Evaluation Systems that do not scare off smaller agents.

CSO pressure can bring about informal accountability by modifying the behaviour of the principal and agent. CSO pressure can induce the principal and the agent to keep an eye on negative side-effects of the project, for example on local communities or the local environment. It can also lead to increased effort by the agent. However, CSO pressure can also lead to perverse outcomes. CSO pressure on the donor can lead to the funding of projects with less risk of CSO pressure, yet with lower adaptation or mitigation benefits, and lead to the funding of projects where money is least needed, raising issues of fairness. Furthermore, it can increase the cost of project implementation, can decrease participation by smaller agents, and can increase the likelihood of project failure. CSO pressure towards the agent can increase the risk of project failure through contract violation as the agent tries to reduce costs of MES implementation.

Putting more risk on the grantee through a penalty or CSO pressure can imply that more risk averse agents may decide not to apply for particular projects. As larger, more capitalised parties can bear more risk from individual projects than small agents, accountability regimes have to carefully balance the amount of risk shifted from the donor to the potential recipients. As more risk for the agent may cause self-selection amongst potential recipients, the final pool of potential project implementers may eventually consist of a limited group of large organisations that could exploit its market power towards donors by asking higher fees. This also points to another recommendation: the GCF could differentiate contracts between large and small entities because larger entities can bear more risk. One could envisage offering contracts with a larger fixed wage, relative to the risk-sharing part of the contract for smaller, more risk-averse Accredited Entities.

The analysis and discussion above describe the relationship between a single principal and a single agent. This relationship is representative of the contracting between the GCF and one of its Accredited Entities. The donor-recipient relationship is in reality much more complex and subtler than what is described in the simplified analysis above. The use of the simplified relationship serves only to isolate the specific accountability measures that we set out to analyse in order to more easily assess their potential impact. In reality, there is a “cascade” of accountability relationships in international climate change financing, with donor countries funding multilateral institutions, who in turn fund implementing partners, who then sub-contract all or parts of the implementation. Other actors involved, such as project evaluators, auditors and trustees also play an account holding role and can be influenced by CSO pressure. An area for future research would be to model such complex accountability webs using a multi-principal, multi-agent model, following Attar et al. (2010), for instance.

Our analysis also takes for granted that the principal takes her role of account holder seriously and does not hesitate to impose penalties for poor performance, for instance. This has been shown to often not be the case in practice and is one of the criticisms of using agency theory to analyse accountability issues (Schillemans and Busuioc 2015). The credibility and willingness of the principal to impose the accountability measures at her disposal are no doubt essential to the well-functioning of accountability regimes. Indeed, in a study of the accountability regimes around the GCF, Basak and Karlsson-Vinkhuyzen (2018) report that some respondents doubt whether the GCF board will be willing to impose penalties on agents from large donor countries.

Another area for future research would be to analyse how donors could further incentivise their grant recipients for the achievement of individual outcomes (e.g., carbon sequestration, climate resilience), using an approach similar to Thiele (2010), who used a multi-task principal-agent model to analyse how the varying abilities of an agent to deliver on certain tasks require different incentive contracts. Also, analysing the role of trust as an element that has an influence on the principal and agent over the longer term would allow us to see how agents can behave to increase their chances of receiving future funding, which is likely a strong incentive for agents to perform. As Broadbent et al. (1996) argue, trust and the building of long-term relationships can lead agents to better align their interests with those of the principal. Empirical study of principal and agent objectives and the effectiveness of the measures used to align incentives should be undertaken to verify whether such extrinsic measures conflict with intrinsic motivations, as is discussed in some of the literature (Kreps 1997).



Chapter 4

Information for climate finance accountability regimes: Proposed framework and case study of the Green Climate Fund

This chapter is published as:

Basak, R., Karlsson-Vinkhuyzen, S. I., & Termeer, C. J. A. M. (2022). Information for climate finance accountability regimes: Proposed framework and case study of the Green Climate Fund. *Public Administration and Development*, 42, 261–280. <https://doi.org/10.1002/pad.2000>

4.1 INTRODUCTION

Climate change financing is necessary to help developing countries mitigate greenhouse gases and adapt to climate change. The specific requirements and particular circumstances of the Global South concerning funding are widely recognised, including in the Solidarity and Just Transition Silesia Declaration at the United Nations climate conference in Katowice in 2018 (UNFCCC 2018a). To meet the financial needs of developing countries, resources are being mobilised by donors and put towards large multilateral funds, such as the Green Climate Fund (GCF). In turn, these multilateral funds allocate the resources to projects executed by entities such as regional development banks and United Nations organisations, who often hire third-party implementers accountable for results. This delegation chain forms a set of accountability regimes, or accountability ‘webs’ (Romzek 2015a). For instance, there is evidence that financial instruments, such as green bonds, are being issued in part to finance climate action and for the achievement of Nationally Determined Contributions (Tolliver et al. 2020). Such financial instruments are associated with accountability webs and have post-issuance reporting requirements (environmental and otherwise) to satisfy actors in capital markets (Ng 2018). Reporting on performance is an essential component of accountability (Gomes 2017).

Throughout this paper, the term accountability will refer to: “[A] relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences” (Bovens 2007, p. 450). Accountability regimes are the actors involved in giving account and holding others to account, combined with the management systems in place to foster accountability. Each set of account giver and account holder (and associated management systems) therefore represents an individual accountability regime (Wolfe 2015). In this paper, each accountability regime is approached as a standalone “principal-agent” relationship (Basak and van der Werf 2019; Brett 1993).

As previous research has shown (see, for example, Goldsmith and Basak (2001)), a key impediment to resolving the principal-agent problem in accountability relationships is the lack of appropriate performance information for accountability purposes. Asymmetric information exists whenever the agent possesses information not available to the principal (Grossman and Hart 1983; Sappington 1991). Asymmetric information increases the likelihood of the agent not providing the maximum level of effort towards project implementation and risks reducing project performance (Grossman and Hart 1983; Sappington 1991; Spence and Zeckhauser 1971). Improving performance is one of the major expectations of a diverse set of account holders and a reason for the rising importance of accountability in ‘good governance’ (Dubnick 1998). Information asymmetry also invites the embellishment of environmental performance and what some have called “green-

washing” (Laufer 2003; Milne and Patten 2002) and can reduce the amount of capital that can be raised (El Ghoul et al. 2011, 2017; Meyer et al. 2009).

A growing body of literature recognises that the quality of the information for projects financed by public and private sources, as well as how this information is used, have a bearing on the decisions made by the various actors involved in accountability regimes (Adam and Gunning 2002; Holzapfel 2016; McGillivray 2003). For instance, deciding whether to penalise or reward an agent for their performance will be influenced by the quality of information (Basak and van der Werf 2019). The reduction of informational problems in political accountability relationships can reduce corruption (Lederman et al. 2005). However, although performance information is acknowledged as fundamental to accountability regimes, few authors guide the specific information requirements for a properly functioning accountability regime (Boyne et al. 2002; Connolly and Hyndman 2004). This lack of guidance in the literature is the gap that this paper attempts to fill. We do so by developing a theory-based framework to systematically determine the information requirements and how such information is best used for account giving and account holding purposes in climate finance accountability regimes. The research question addressed in this paper is: What performance information should be produced, and how should it be used to strengthen the accountability regimes of international climate change financing institutions?

The remainder of the paper is organised as follows: the next section outlines the accountability information framework for international climate change financing and how it was developed. Then, in section 3, the framework is applied to the GCF. This is followed by a discussion section, where considerations are raised regarding the framework’s improvement and application. Finally, conclusions are provided, and areas for further research are suggested.

4.2 ASSESSMENT FRAMEWORK

The framework described in this section is an assessment tool to systematically determine the information requirements in accountability regimes and how such information is best used for account giving and account holding purposes. The literature on the role of information in accountability regimes was reviewed to identify framework components and evaluative criteria. The literature review was undertaken as a developmental review (Templier and Paré 2015). As such, the review was iterative, with an initially broad search that included empirical and conceptual studies, which was then refined based on evidence from the initial set of papers found. The initial search covered several streams in different disciplines (e.g., accounting, management, organisational behaviour), emphasising the public administration literature. Public administration literature is particularly relevant for this paper as most climate finance is managed by public sector

organisations (UNFCCC Standing Committee on Finance 2018). The review was not time-bound to the most recent articles, as the literature from the last few years is scant on the topic. The emphasis was on peer-reviewed journal articles, but other sources (e.g., book chapters) were included when relevant. The main search terms were “accountability and information,” “information for account holding,” as well as “performance information and accountability.” The search was limited to English language literature and was undertaken via the Wageningen University online library, which includes the Web of Science and Scopus databases.

The literature review helped identify the three main components of the framework: the nature of accountability relationships; the timeline of accountability, and several evaluative criteria for accountability information. Once initial criteria were identified and defined, these were evaluated to ensure they added analytical value to the framework and that criteria were distinct and not overlapping. This evaluation was undertaken iteratively by the authors with expert consultation. The criteria were then tested by applying them to a case study through document analysis to see if the criteria captured key aspects of accountability information. This resulted in merging certain criteria and clustering under two categories: attributes of information and attributes of the performance information utilisation process. The components of the developed assessment tool, called the Accountability Information Assessment Framework (AIAF), are described in further detail below.

4.2.1 Component 1: Nature of the accountability relationship

The nature of the relationship between the main actors in a given accountability regime, that is, the account giver (agent) and account holder (principal), plays a crucial role in determining the information flow between them (Mark Bovens 2007). Accountability relationships can be of a vertical, horizontal, diagonal and social nature, as described in Table 4.1. Depending on the nature of the relationship, information requirements and how the principal best uses such information to hold the agent to account may differ (Kloot & Martin (2001).

A key issue in the relationship between account holder and account giver is the length of the delegation chain in the accountability relationship. As Nielson & Tierney (2003) point out, the longer the chain, the greater the risk of dissonance between the expectations of the principal and those of the agent at the first and last levels in the chain. In many international climate change financing projects, the long accountability chain involves vertical, horizontal, diagonal and social relationships between principals and agents, creating what other authors have called a complex web of accountability (Page 2006). It is difficult in such cases to monitor performance due to the large number of agents and the diffusion of projects across the globe (Upton 2000). These accountability webs face asymmetric information between the many principals and agents. AIAF facilitates the systematic

Table 4.1: *Nature of the accountability relationship*

Nature of accountability relationship	Description of relationship	Climate finance example
Vertical	Principal has formal, hierarchical or contractual authority over the agent (Mark Bovens 2007; O'Donnell 1998).	Project implementing entity (agent) and donor agency (principal).
Horizontal	Relationship of 'equals' between account holder and account giver (O'Donnell 1998), with no hierarchical authority, although the principal has expectations of the agent.	Multilateral organisation (agent) and a member country (principal).
Diagonal	No hierarchical relationship exists, but an indirect line of authority is present via another party that has hierarchical relationship to account giver (Pereira, Horochovski, Cruz, & Rodrigues, 2017).	Project implementing entity (agent) and evaluator or auditor (principal).
Social	Neither a hierarchical relationship nor a relationship of equals between account holder and account giver exists. The principal can be a single organisation representing a set of actors (e.g. Civil Society Organisations) or can be diffused (e.g., "the electorate") (Pereira, Horochovski, Cruz, & Rodrigues, 2017).	Multilateral organisation (agent) and Civil Society Organisations (principal).

mapping of the information requirements and information utilisation process across the relationships between principals and agents.

4.2.2 Component 2: Timeline of accountability

The other key consideration for this framework is how accountability relates to time, or what Lindberg (2013) calls the timeline of accountability. The point in time in the climate change financing lifecycle will affect the type of information required for account holding purposes. For this framework, the term "ex-ante" is used for any information used prior to project implementation (i.e., at the project concept or planning phase) and "ex-post" for information used thereafter (i.e., in early implementation, at closeout and post-implementation). Much of international climate finance is undertaken via what Boyne et al. (2002) call accountability through contracts. In this contracting context, ex-ante relates to the period when the principal puts in place the contract, whereas ex-post pertains to the period for the agent's contract execution. This terminology aligns with Broadbent, Dietrich, & Laughlin (1996). See Figure 4.1 for a graphical representation of the project lifecycle.

4.2.3 Component 3: Evaluative criteria

The main point of interest is determining what information is pertinent to help the account giver (or agent) and account holder (or principal) effectively play their respective role as actors in the accountability regime. Also of interest is determining the appropriateness of the process whereby these actors can use the information. This allows answering

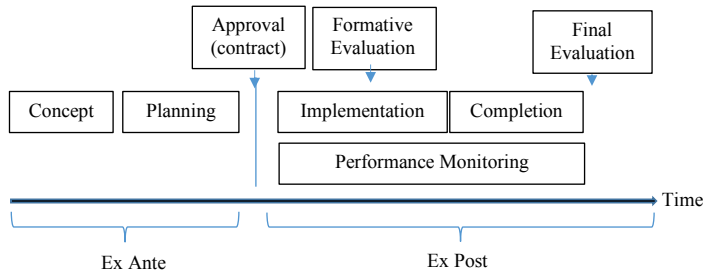


Figure 4.1: *The project lifecycle. The project lifecycle, from concept to final evaluation. Adapted from multiple sources (Anandajayasekaram et al. 2004; Khang and Moe 2008; Ward and Chapman 1995).*

the question: “What performance information should be produced, and how should it be used to strengthen the accountability regimes of international climate change financing institutions?”

4.2.3.1 Evaluative criteria for the attributes of information

Comprehensiveness of rationale for input (re)allocation: Information on how funding decisions were made, that is, the evidence used and rationale for allocation or reallocation of project resources have been highlighted as important for accountability (Nelson 2001).

Ability to measure performance against standards: Woods & Narlikar (2001) mention the importance of information about compliance with given standards, as set through commitments, rules and procedures in the horizontal accountability relationship between the World Trade Organisation and its member countries (Woods and Narlikar 2001). Similarly, in the diagonal accountability relationship involving evaluators and auditors, specific standards and methodologies guide their work (Donaldson 2001; Moizer 1997). In the context of social accountability relationships, Devas and Grant (2003) found that the citizenry needs information about service standards, such as service availability, how to use such services and how these services are being provided (i.e., service quality).

Alignment of indicators with program goals: Information on the extent to which indicators chosen to measure performance align with program goals is crucial for accountability. Heckman & Smith (1995) warn that poorly aligned performance measures chosen to monitor projects or programs risk creating the wrong incentives for managers and employees. Similarly, Ebrahim (2002) suggests that efforts should be made to avoid positivist and easily quantifiable (and therefore likely inadequate, erroneous or even misleading) measures of success and failure. To that end, tools such as “logic models” and “theories of change” can ensure there is a good match between performance measures and project objectives (Chen 2015; Mayne 2015). Such tools can also improve the understanding of how the program or project will likely achieve program goals (Kneale et al. 2015).

Quality and credibility of evaluation data: The quality and credibility of the evaluations for the projects and programs funded play an essential role in accountability. Evaluators and auditors are guided by specific standards and methodologies to undertake their work and have their professional reputations at stake regarding the quality of their work (Donaldson 2001; Moizer 1997). Some authors have recommended independent evaluations and inspections to improve accountability (Woods 2001).

4.2.3.2 Evaluative criteria for the attributes of the performance information utilisation process

Comprehensiveness of performance measurement and management system: A performance measurement and management system that makes use of performance information enables to track compliance with rules and procedures, as well as measuring against standards, which has been identified as being key to accountability (Frink and Ferris 1998; Woods and Narlikar 2001). This assessment against standards facilitates passing judgment (Wheeler et al. 1993) and is crucial for effective performance management via sanctions and rewards (Starbird 2001). In addition, Ebrahim (2002) has argued that information chosen for account giving should be helpful for internal management and decision-making needs of implementing entities, as opposed to solely focusing on donors' expectations. As such, projects and programs should therefore strive to have a process to use performance information to improve internal decision-making.

Diligence of evaluation follow-up: For evaluators to play an effective role in accountability regimes, evaluation findings must be shared with program implementers so that successes can be celebrated and improvements can be made, but also with funders and other stakeholders to increase their understanding of the program's performance (Hoefer 2000). Some authors have suggested that a process of follow-up on evaluations be put in place to ensure evaluation recommendations are effectively addressed to avoid a vital accountability gap (e.g., Woods & Narlikar, 2001).

Breadth of disclosure approach: Monfardini (2010) points out that increasing the disclosure of information to the public can help regain (or increase) civil society's confidence in given institutions. In terms of specific documents that are suggested for disclosure, some have argued that all internal review documents and documents produced by evaluators be made public, while other authors have even suggested that all documents produced by intergovernmental organisations should be disclosed to ensure account holders can effectively play their role (Roberts 2004).

Level of engagement of civil society via performance reporting: Civil society participation is seen by many scholars are being essential to accountability (Box 1998; Ostrom 1997). Citizen participation in performance management is increasingly being used to improve

accountability (Heikkila and Isett 2007). The primary means of disseminating accountability information from a public institution to the general public is the institutional annual report (Cameron 2004), although the literature shows that target audiences (or account holders) tend to underuse such reports (Mayston, 1992; Steccolini, 2004). Alternate forms of accountability dissemination tools need to be developed and used to serve better the needs of social accountability relationships, such as social audits, community scorecards and participatory performance monitoring (Sharma 2011). Cohen & Karatzimas (2015) suggest a new model coined “Integrated Popular Reporting,” which, they argue, is more suitable for the public sector. Integrated Popular Reporting combines the user-friendliness of popular reporting with the greater scope of integrated reporting, which goes beyond narrow financial information. Others highlight the potential of participatory online platforms as means to use citizens in the account holding process (Linders 2012). For citizen-centred account giving, reporting needs to go beyond financial information, be user-friendly and use more participatory approaches.

4.2.4 Overall framework

The overall framework is presented in Table 4.2. It is organised by attributes of information and processes in place to use performance information. The table also includes separate cells where one can indicate if criteria are applicable ex-ante and ex-post. Several evaluative criteria are applicable across the four types of accountability relationships, while others are unique to a given type of relationship. In certain instances, a given criterion may have been mentioned in the literature in the context of a given type of accountability relationship, yet it arguably applies to other relationships, as per practitioner common knowledge (as Milgrom (1981) defines it). For instance, “Ability to measure performance against standards” applies across all types of relationships (as it is pertinent to all principals), whereas “Level of engagement of civil society via performance reporting” is of sole interest to principals involved in social accountability relationships. Similarly, the evaluative criteria may apply ex-ante or ex-post, depending on the situation. For instance, for the criterion “Alignment of indicators with program goals,” it is often the case that indicators are set ex-ante (i.e., before contracts are signed) but can be adjusted during implementation (i.e., ex-post).

In Table 4.2, the evaluative criteria for the attributes of information and the processes in place to utilise performance information are found on the left-hand side. The right-hand side of the table includes the different types of accountability relationships (from vertical to social), indicating whether a given criterion is applicable ex-ante or ex-post (the areas shaded in the table show instances where a given criterion is not applicable).

Table 4.2: Accountability Information Assessment Framework

	Nature of relationship							
	Vertical		Horizontal		Diagonal		Social	
	Ex ante	Ex post	Ex ante	Ex post	Ex ante	Ex post	Ex ante	Ex post
Attributes of information								
<i>Comprehensiveness of rationale for input (re)allocation</i>								
<i>Ability to measure performance against standards</i>								
<i>Alignment of indicators with program goals</i>								
<i>Quality and credibility of evaluation data</i>								
Attributes of performance information utilization process								
<i>Comprehensiveness of performance measurement and management system</i>								
<i>Diligence of evaluation follow-up</i>								
<i>Breadth of disclosure approach</i>								
<i>Level of engagement of civil society via performance reporting</i>								

4.2.5 Protocol for applying AIAF

The first step in applying AIAF is preparing for the research. This step entails reaching a clear understanding and internalising the meaning of each framework component, including individual evaluative criteria. This is followed by identifying a clear research focus: which accountability regime(s) is to be studied.

Next, data must be collected for each framework component, filling the cells with either “yes/no” and supporting evidence (e.g., statistics, narrative form). Data collection can be undertaken through various means, including document analysis, interviews and observations. The choice of data collection approach will be influenced by the regime under study, resource availability and the researcher’s access to documents and key informants.

The data are then analysed to produce an assessment that is documented, in qualitative terms, in the AIAF table. The documentation of the scope of (and gaps in) attributes of information and attributes of processes that are in place for the utilisation of performance information effectively requires the researcher to fill out the relevant cells within the AIAF

table, depending on the accountability regime(s) studied. This requires the researcher to communicate the strengths and weaknesses of the regime(s)'s information and the processes to use such information. The researcher should then draw conclusions in terms of the areas that need to be improved for the agent(s) and principal(s) to effectively play their respective roles as actors in the accountability regime(s).

The focus of the next section is on the application of AIAF to one of the GCF's accountability regimes.

4.3 APPLYING AIAF: THE GREEN CLIMATE FUND AND ITS ACCREDITED ENTITIES AS AN EXAMPLE

In this section AIAF is applied to a key accountability regime of the GCF – the relationship between the GCF and its Accredited Entities (AEs). The GCF accountability regime actors are first described, followed by an explanation of how the framework was applied. The attributes of information and processes in the GCF regime are then documented, with strengths and weaknesses clearly identified.

4.3.1 Describing the GCF accountability regime actors

For this study, the framework was applied to the vertical accountability relationship that exists between the GCF and its AEs. AEs are implementing agents that can receive GCF funding once they have gone through a stringent accreditation process to ensure they are well-positioned to manage projects and report on results. GCF AEs range from small developing country private sector firms or non-profits to large international organisations. AEs are one of many actors in the GCF accountability web, as Figure 4.2 shows.³⁵ AEs are accountable to the GCF Board for project performance (GCF 2015b, 2016a). The choice to focus on that specific relationship is because it can be argued to be the most important accountability relationship within the GCF's accountability web (Basak and Karlsson-Vinkhuyzen (2022)).

4.3.1 How the framework was applied

To assess the accountability regimes of the GCF, content analysis of documents and key informant interviews was conducted. All documents were collected during the period March 2016–December 2019. The key informant interviews, conducted between June 2016 and April 2020, were semi-structured and mostly used 'mini tour' questions. Mini tour questions require respondents to provide details on particular or more specific issues or experiences (Spradley 1979). The key informants interviewed are representative of the target population, as they all play, or have played, important roles in the GCF accountability regimes as account holders or account givers. The semi-structured interviews with very

35. This is a simplified representation. For instance, some countries are both donors and recipients (e.g., Peru, Vietnam).

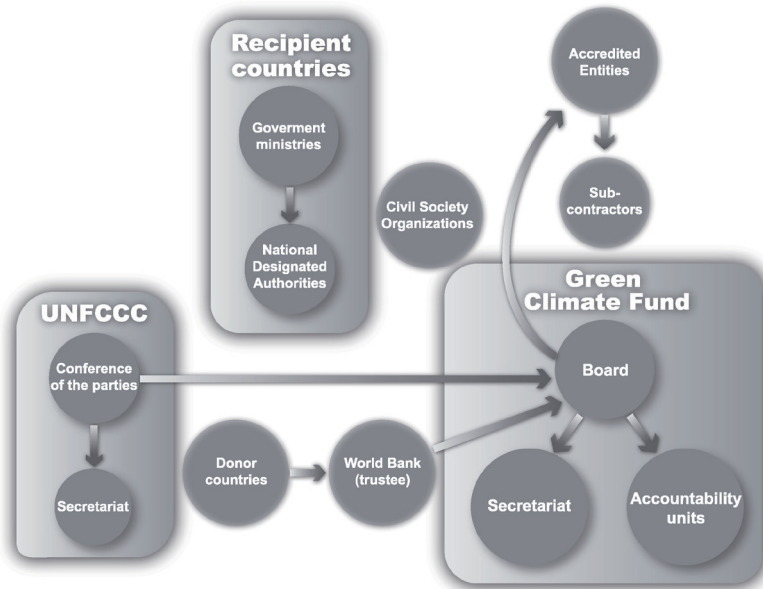


Figure 4.2: GCF accountability relationships. GCF accountability relationships, including the role of the UNFCCC, donor countries, recipient countries, and the Green Climate Fund.

knowledgeable respondents made it possible to obtain in-depth knowledge required for this within-case analysis (George and Bennett 2004; Paterson 2010). The documents and interview transcripts were then coded to identify and understand the various elements of the accountability regime. Coding and quantification of relevant descriptive text and statements related to accountability was undertaken using a directed approach (Hsieh and Shannon 2005), by using existing theory on accountability to identify key concepts as initial coding categories.

4.3.2 Documenting the attributes of information and processes in the GCF regime

Table 4.3 summarises the attributes of information and processes that are in place for the utilisation of performance information in the relationship between the GCF Board and its Accredited Entities, as per the findings of the document review and key informant interviews.

4.3.3 Strengths and weaknesses within the analysed GCF accountability regime

As Table 4.3 shows, the GCF has ex ante elements in place for the production of solid performance information across the four assessment criteria for the attributes of information. This includes: the rationale for input (re)allocation; the measurement of performance

Table 4.3: *Ex ante and ex post attributes of information and processes that are in place for the utilisation of performance information in a GCF vertical accountability relationship*

	Ex ante	Ex post
Attributes of information		
Comprehensiveness of rationale for input (re)allocation	<ul style="list-style-type: none"> • GCF monitoring and accountability framework and Accreditation Master Agreement mentions that disbursements may be suspended and AEs may be asked to return funds due to poor performance. • GCF Results Management Framework proposes that ex-post allocation decisions be informed by regular performance measurement exercises conducted by AEs; impact assessments at the end of a project; and evaluation results. However, there is no strong oversight within the GCF Secretariat to challenge or verify AEs' performance targets and claims. 	<ul style="list-style-type: none"> • Too early to determine if any reallocation will be required in the current portfolio of projects funded by the GCF.
Ability to measure performance against standards	<ul style="list-style-type: none"> • GCF monitoring and accountability framework includes targets and metrics. • The lack of monitoring and evaluation capacity within the GCF Secretariat has led to measuring process indicators, as opposed to more meaningful results. 	<ul style="list-style-type: none"> • Too early to determine if performance data that is planned to be collected will be available or suitable for measuring against targets set by AEs.
Alignment of indicators with program goals	<ul style="list-style-type: none"> • As per GCF project preparation guideline requirements, all AE project proposals need to include indicators that align with the GCF goals and demonstrate alignment with country priorities. • The lack of monitoring and evaluation capacity within the GCF Secretariat hinders its ability to quality-assure AEs' choice of indicators. 	<ul style="list-style-type: none"> • Too early to determine if performance data associated with current indicator selection will be available or suitable for measuring against targets set by AEs, which could lead to modification of indicators and misalignment.
Quality and credibility of evaluation data	<ul style="list-style-type: none"> • Establishment of independent evaluation unit increases credibility of evaluation data to be produced. However, the unit does not undertake project-level evaluations per se. • GCF draft Evaluation Policy establishes the principles, criteria, processes, types of evaluations, roles and responsibilities for stakeholders involved in its oversight and implementation. • No requirement for third-party verification of annual performance report and no substantive review by the GCF Secretariat. • Several of the early projects funded by the GCF did not collect baseline data, making evaluations challenging. 	<ul style="list-style-type: none"> • Too early to determine – no GCF project has been evaluated yet.

Attributes of performance information utilisation process

Comprehensiveness of performance measurement and management system	<ul style="list-style-type: none"> • GCF monitoring and accountability framework requires: Ongoing monitoring of performance; annual performance reporting; annual reviews; mid-term accreditation reviews; ad hoc checks or periodic reviews; and internal and external audits. • Project proposals need to include a logic model to ensure appropriate performance measurement. However, many of the earlier projects funded by the GCF had poor logic models that lacked meaningful performance measures. • Process to address poorly performing projects outlined in GCF monitoring and accountability framework and Accreditation Master Agreement • No clear indication that performance information will be integrated within project management decision-making based on formal requirements. • Some AEs have internal processes that foster integration of performance information into decision-making, but this is done independently of GCF requirements. 	<ul style="list-style-type: none"> • Too early to determine as projects are in early implementation.
Diligence of evaluation follow-up	<ul style="list-style-type: none"> • No explicit requirement or established process to address project evaluation recommendations. 	<ul style="list-style-type: none"> • Too early to determine – no GCF project has been evaluated yet.
Broadness of disclosure approach	<ul style="list-style-type: none"> • GCF disclosure policy limits information made publicly available, including deliberative information exchanged, prepared for or derived from the exchanges between the GCF and its AEs. This information is planned to be disclosed publicly in the near future. • “Operational documents” now on GCF website, broadening AE-related disclosure, as well as information on potential project impacts. However, many AEs were already disclosing such documents on their own website. 	<ul style="list-style-type: none"> • Too early to determine – no GCF project has been evaluated yet.
Level of engagement of civil society via performance reporting	<ul style="list-style-type: none"> • NA³⁶ 	<ul style="list-style-type: none"> • NA

36. This is not an applicable criterion as it applies to a different accountability relationship, namely that of civil society as account holder vis-à-vis AEs and/or the GCF.

against standards; the alignment of indicators with program goals; and the quality and credibility of evaluation data. However, the lack of strong oversight and limited monitoring and evaluation capacity within the GCF Secretariat risks the above being mostly a “box ticking exercise”. In addition, the quality and credibility of the annual performance reports might be in doubt, as they are not required to be third-party verified. In fact, several of the early projects funded by the GCF did not collect baseline data, making performance reporting and the conduct of evaluations challenging.

More gaps and weaknesses exist with respect to the processes that are in place for the utilisation of performance information, namely:

- There is no clear indication that performance information will be integrated within project management decision-making (e.g., via employee performance agreements).
- There are no explicit requirements or established process for AE management to address project evaluation recommendations.
- The GCF disclosure policy limits information made publicly available, including deliberative information exchanged, prepared for or derived from the exchanges between the GCF and its AEs.

However, the GCF has recently started to publish “operational documents” on its website, including Environmental and Social Safeguards Reports and Information disclosure decisions. This broadens AE disclosure as well by making more information regarding potential project impacts publicly available. A GCF key informant also mentioned that deliberative information is planned to be disclosed publicly in the near future. It must be noted that many AEs were already disclosing such documents on their own website.

It is too early to assess the ex post information and process attributes, as AEs are mostly in the planning or early implementation phase of the project lifecycle.

4.4 DISCUSSION

This section briefly describes the results of the application of the framework to the GCF, how the framework’s theoretical underpinnings could be improved and the framework’s practical applications.

4.4.1 Identification of accountability regime strengths and weaknesses with AIAF

AIAF was applied to a vertical accountability relationship within the GCF accountability web. Sufficient information was available to assess ex ante elements of this accountability relationship, as other authors have found that the account giving process for GCF Accred-

ited Entities is well formalised (Basak and Karlsson-Vinkhuyzen (2022)). However, it was too early to assess the ex post information and process attributes, as Accredited Entities are mostly in the planning or early implementation phase of the project lifecycle.

Applying the AIAF to the accountability regime that exists between the GCF and its Accredited Entities allowed the identification of the strengths and weaknesses in that regime. The application of the framework revealed a lack of third-party verified annual performance reports. This could be easily addressed by allocating GCF resources towards such verification. However, some of the gaps and weaknesses uncovered with respect to the processes that are in place for the utilisation of performance information are more challenging to address, as they would demand more fundamental changes at the GCF and also in individual organisations accredited by the GCF. For instance, the integration of performance information within project management decision-making and ensuring project evaluation recommendations are substantially addressed would require operational changes within all Accredited Entities, as well as stronger oversight within the GCF Secretariat. As for making deliberative exchanges between the GCF and its Accredited Entities public, this type of information is likely to be made available to the public in the near future, based on key informant input received.

The timing of the assessment via the AIAF limited its usefulness because it was too early to assess the GCF's ex post information and process attributes. However, the application of AIAF to the GCF shows that it may be beneficial for account givers to discuss expectations with their account holders ex ante to then put in place the appropriate mechanisms for information generation and use.

4.4.2 Strengthening the framework's theoretical underpinnings

The framework's theoretical underpinnings for vertical relationships are based on a rich body of literature. Vertical accountability relationships, as underlined in the literature, have well-established and formalised accountability processes (e.g., via legal contracts), which facilitate assessments using a tool such as AIAF. Similarly, the literature on diagonal relationships (e.g., role of auditors and external financial verification) is well established and the public administration literature clearly describes the many formal processes such as audits, evaluations and financial verifications that public sector and international organisations are subjected to (Bradlow 2005; Monfardini and von Maravic 2019), which in turn produces a large number of documents to draw from for an assessment using AIAF. In contrast, very little was found in the literature on the question of information needs for horizontal accountability relationships. In the absence of specific guidance from the literature on horizontal accountability relationships, the framework relies on some of the evaluative criteria stemming from the literature that focused on vertical and diagonal accountability relationships and applied them to horizontal relationships. Horizontal

relationships are relationships of two actors that are on an equal footing, yet one acts as an account holder (principal) and the other is required to give account (agent). This “relationship of equals” can be diplomatically charged in the case where account holder and the account giver are a donor country and a multilateral fund, for instance. The framework should therefore be revisited to ensure that it can build on any future insights from the literature on horizontal accountability relationships and their particular information needs. In terms of the information needs and expectations for social accountability, again, the literature tends to advocate broad transparency, with few insights about which information should be prioritised so that social actors can play a more effective role in mobilising other players involved in vertical, horizontal and diagonal relationships within accountability regimes. These are two areas that would benefit from further academic study in order to develop normative guidance, as well as gather empirical evidence of successful approaches, which could then be used to further strengthen AIAF.

4.4.3 Practical use and relevance of the framework

The AIAF was used to assess the attributes of information and those of the processes that are in place for the utilisation of performance information in the vertical accountability relationship between the GCF and one of its Accredited Entities. It was found that in order to properly assess all attributes contained in AIAF, there is a need to have access to a significant number of documents and key informants, which can be resource intensive and a significant constraint. Practitioners could apply AIAF more efficiently if they have direct access to performance measurement experts within the organisation they want to assess, as opposed to using a broader set of informant interviews. It may also be possible to use AIAF solely via a document review for expediency purposes, but this would reduce the richness of qualitative information that can be gathered through interviews (Brenner 2012). The AIAF could also be used for project teams to self-assess, which could be done in a more informal and expeditious fashion. A further improvement to the AIAF would be to develop a colour and scoring system (numerical or qualitative). A simple traffic light colour system could be developed, with weak areas coded red and strong areas in green, which would make the tool less resource intensive to use. This traffic light colour system would also offer practitioners a more communicative, albeit more explicitly judgemental tool (Gupta et al. 2010).

A key consideration in the establishment of account giving requirements is the implementation cost of monitoring and reporting systems. The design and selection of performance indicators, collection of data, editing and publication of performance reports, can add up to substantial sums in money and staff time (Basak and van der Werf 2019; Ebrahim 2003a; Woods 2001). These costs are indirectly borne by the ultimate beneficiaries of projects (Ebrahim 2005), which are developing country recipients that are facing climate impacts. Using AIAF could guide project design and implementation to help better align

the expectations of the various account holders and account givers across the accountability regimes within complex climate finance accountability webs, thus minimising monitoring and reporting cost.

Another key consideration is the receptivity of the principal in using performance information to hold their agent to account. Boyne et al. (2002) argue that in addition to increasing the quality and relevance of performance information in accountability regimes, account holders need to make use of the said information to fulfil their role by motivating agents (or account givers) to improve their performance. This aligns with Boyne et al. (2002), who argue that in addition to increasing the quality and relevance of performance information in accountability regimes, account holders need to make use of the said information to fulfil their role by motivating agents (or account givers) to improve their performance. This also requires a regime whereby account holders are empowered to play their role via effective means of motivating or incentivising agents (e.g., through penalties or rewards). Or as Ehresman & Stevis (2014) would call it, a system of capabilities or human rights justice, not merely distributive justice. According to the interviews conducted as part of this research, there are signs that certain account holders in the GCF accountability web are reluctant to forcefully play that role. Determining the level of receptivity of the principal would complement the assessment undertaken using the AIAF.

4.5 CONCLUSIONS

This study set out to develop a framework to assess the attributes of information and those of the processes that are in place for the utilisation of performance information for serving accountability. More precisely, the framework helped us answer the question: “What performance information is produced and how does its use strengthen or weaken the accountability regimes of international climate change financing institutions?” Undertaking such an assessment becomes increasingly important in the context of complex accountability webs that involve multiple principals and agents and a variety of types of accountability relationships, as is often the case in international climate change financing.

The assessment framework (AIAF) was developed based on reviewing relevant literature and expert consultation and identifies three key criteria for strengthening accountability regimes: measuring performance against standards; aligning indicators with program goals; and having high quality and credible of evaluation data. As for how this information is used, it needs to be integrated within a comprehensive performance measurement and management system; a diligent evaluation follow-up process needs to be in place, as well as a broad disclosure approach. In addition, a high level of engagement of civil society via performance reporting needs to take place for social accountability to function properly.

The application of AIAF to the accountability relationship that exists between the GCF and its Accredited Entities identified areas of strengths and weaknesses within the accountability regime. Strengths include: several ex ante elements in place for the production of solid performance information, including the rationale for input (re)allocation; the measurement of performance against standards; the alignment of indicators with program goals; and the quality and credibility of evaluation data. Weaknesses found include: the lack of strong oversight and limited monitoring and evaluation capacity within the GCF Secretariat risks the above being mostly a “box ticking exercise”. Also, the findings of this study suggest that there are weaknesses in the processes that are in place for the utilisation of performance information. These include: the lack of evidence that performance information will be integrated within project management decision-making; the absence of explicit requirements or established process to address project evaluation recommendations; and the limitations imposed by the GCF disclosure policy regarding the information on deliberations between the GCF and its AEs (although the GCF Secretariat is said to make some of this information public in the near future). It is too early to assess the ex post information and process attributes, as AEs are mostly in the planning or early implementation phase of the project lifecycle. Trade-offs between the production of accountability information and the resources available for delivering project outcomes were also discussed.

Further research might explore the use AIAF across an entire climate change financing accountability web. This would allow to systematically assess the information produced and used in diagonal, vertical, horizontal and social accountability regimes. In addition, empirical analysis should be undertaken to determine whether accountability webs that are assessed as robust across all AIAF criteria have indeed projects that tend to perform better than those in accountability webs that are weak across most assessment criteria. Such analysis would need to quantify the influence of performance measurement budgets and the receptivity of principals on project performance. Finally, the framework could be improved by building on any future insights from an as yet too limited literature on horizontal accountability relationships and their particular information needs.



Chapter 5

Performance Information in a Complex Climate Finance Accountability Web

This chapter is submitted to a journal as:

Basak, R., S.I. Karlsson-Vinkhuyzen and C.J.A.M. Termeer (sub). Performance Information in a Complex Climate Finance Accountability Web.

5.1 INTRODUCTION

Climate change will disproportionately impact developing countries – from increased health issues to population displacement and poverty exacerbation (IPCC 2001, 2014b). There is a significant need for climate change financing to help these countries adapt to climate change (Sovacool et al. 2017; Steckel et al. 2017) and there are many donor-funded climate change mitigation and adaptation projects in these countries. The climate finance flows to developing country Parties of the United Nations Framework Convention on Climate Change (UNFCCC) included in 2018 \$1.6 billion from UNFCCC funds, \$2.4 billion from multilateral climate funds, \$33.6 billion in bilateral donor country funding and \$19.7 billion in financing from multilateral development banks (UNFCCC Standing Committee on Finance 2018). Funded projects range from research into specific technologies to mitigate and adapt to climate change and pilot projects to further ground-proof technologies, to mass upscaling exercises.

In these internationally-funded projects, accountability for how money is spent and for the achievement of results is expected by UNFCCC parties, as well as donors (Abbott and Gartner 2011; Bird et al. 2011; van Kerkhoff et al. 2011). However, expectations of what accountability is and what it can bring about can vary considerably. Internationally-funded projects often involve a large set of actors, leading to long accountability chains and creating ‘complex accountability webs’ (Page 2006). Actors can include multilateral and bilateral donors, international not-for-profits, local partners and government institutions, to name a few. Each actor involved in these complex accountability webs has a different role to play as a principal (account holder) or agent (account giver), and often both.³⁷

The role of accountability in social accounting has been widely discussed (Gray et al. 1997). Although public sector reforms have been promoted with promises of increased accountability, accountability as a concept can be chameleon-like, with subjective understandings (Sinclair 1995). However, in this paper we take the basic understanding of accountability as pertaining to “relationships between groups, individuals, organisations and the rights to information that such relationships entail.” (Gray et al., 1997, p.5) and we focus on the role of performance information in accountability.

Performance information has been suggested to be central to improving accountability and the quality of performance information, as well as how this information is used, are important factors that enable account givers and account holders to play their respective roles effectively (Holzapfel 2016; McGillivray 2003). There is evidence that putting in place comprehensive Performance Measurement Systems (PMSs) can improve work

37. For a description of how accountability regimes can be construed as individual “principal–agent” relationships, please see Basak & van der Werf (2019) and Brett (1993).

performance (Hall 2008). This may in part be thanks to PMSs requiring organisations to clearly define and measure goals, which helps focus efforts and in turn drive performance (Verbeeten 2008). In addition to focusing attention, the use of performance measures helps communicate expectations, can facilitate strategic decision making and legitimise decisions (Henri 2006). Yet, relying too heavily on performance measures to incentivise actors in accountability regimes can produce perverse outcomes, including managing to a specific measure or even gaming the measures themselves (Verbeeten 2008).

Research into the utilisation of performance information has been a growing focus in the public administration literature (Ammons and Rivenbark 2008; Kroll 2015; Moynihan and Lavertu 2012; Moynihan and Pandey 2010), as well as in the accounting literature (Cavalluzzo and Ittner 2004; Connolly and Hyndman 2004; Speklé and Verbeeten 2014; Verbeeten 2008). Although complex accountability webs have long been the subject of much attention in the public administration literature (Koppell 2005; Page 2006; Romzek 2015a; Romzek and Dubnick 1987), much less has been written on the topic of performance information in such webs (Pellinen et al. 2018). Those few studies that have focused on complex accountability webs have centred around: understanding how auditors communicate with audit committees in the context of multiple accountability relationships (Compernelle 2018); disclosure approaches and accountability practices without attention to specific information requirements (Dhanani and Connolly 2012); and the organisational characteristics that affect multiple accountability relationships, without consideration for what can drive performance (Kurunmäki and Miller 2011). Hence, the role of performance information in general and how it may strengthen complex accountability webs has not been addressed in the literature and is thus poorly understood. This paper aims to fill this gap.

The objective of this paper is to determine how accountability can be strengthened in the complex accountability webs of internationally-financed climate change projects via performance information. To meet this objective, we set out to answer the following research questions:

- RQ1: Who are the actors (principals and agents) that make up the complex accountability web in the given internationally-financed climate change project?
- RQ2: Does the performance information produced by account givers in the project's complex accountability web strengthen accountability and how?
- RQ3: How do the performance information utilisation processes meet the accountability needs of the actors in the complex web and lead to strengthened accountability?

Similar questions were posed by Dobija et al. (2019), who sought to gain an understanding of performance measurement in the university administration context (also an ill-

researched area).³⁸ Our study, similar to the efforts of Dobija and colleagues, provides insights regarding how a multitude of actors use performance measurement within a complex accountability web, therefore contributing to the literature on the uses and users of performance measurement, in the context of international climate finance.

We seek to answer these questions and meet the objective of identifying how accountability can be strengthened by applying the Accountability Information Assessment Framework (AIAF) to a case study. The AIAF was developed for systematically assessing the performance information requirements and how such information is best used for account giving and account holding purposes in climate finance (Basak et al. 2022). In earlier work (Basak et al. 2022) we have shown that the AIAF is a useful tool for mapping and assessing performance information produced and used for an accountability relationship between a single donor and recipient. In this paper, we test whether AIAF can support the assessment of performance information requirements and how such information is best used for account giving and account holding purposes across a broad set of actors in the context of complex accountability webs for climate finance projects in developing countries.

Our case study is an internationally-financed climate-smart agriculture project in India funded through the CGIAR³⁹ and led by the International Maize and Wheat Improvement Center (CIMMYT), which has a longstanding history of managing smallholder agriculture projects in developing countries since the Green Revolution (Glaeser 2010; Rajaram 1994). This and other CGIAR funded projects qualify as complex accountability webs, as they comprise a considerable number of actors playing the roles of account holder and account giver.

The next section describes the conceptual framework, followed by a description of the methodological approach. The subsequent section presents the results including descriptions of the actors within the complex accountability web, as well as the assessment of how the performance information account givers produce and how the processes that use such information strengthen accountability. The ensuing discussion focuses on the value of performance information in strengthening accountability and of the usefulness of the AIAF as a mapping and heuristic tool in the context of complex accountability webs. Potential solutions for the strengthening of accountability within the web under study are also provided, followed by concluding remarks.

38. Dobija and her colleagues' specific research questions were: Who uses PM? What measures are used? How is PM used? (Dobija et al. 2019).

39. Formerly known as the Consultative Group for International Agricultural Research, and now simply known by its acronym.

5.2 CONCEPTUAL FRAMEWORK

In this section, we describe key concepts and provide a brief description of the analytical framework used to answer our research questions. For our analytical purpose we use Bovens' (2007, p.450) definition of accountability: "a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences." Such a relational form of accountability, and the accountability regimes that serve to enact it, help legitimise the organisations involved and can be an indication of the quality of their governance (Dubnick 1998; Kersbergen and Waarden 2004). Accountability regimes play a central role in this paper and refer to the actors involved (account holders and account givers) and the systems of management that are put in place to ensure accountability.

The conceptual framework for answering our research questions is the AIAF, developed by Basak et al. (2022). The AIAF was developed to analyse performance information produced and used in climate finance accountability regimes and enables to systematically map the accountability relationships between actors in the various regimes that form an accountability web. The AIAF helps assess the performance information produced and used by accountability web actors and identify any informational gaps that may exist within individual accountability regimes.

To facilitate the mapping, the first component of the AIAF is a categorisation of actors based on the nature of their accountability relationship – from vertical, horizontal, diagonal to social (Bovens 2007). Vertical accountability relationships are those where the account holder has formal, often hierarchical, authority over the account giver (Bovens 2007; O'Donnell 1998).⁴⁰ Horizontal accountability is when no such hierarchical relationship exists, for instance, when the account holder and account giver have a relationship of equals (O'Donnell 1998). Diagonal accountability relationships also exist in the absence of direct hierarchical authority, but, an indirect line of authority is present (e.g., ombudsperson, auditor, evaluator). Social accountability also involves a lack of hierarchical authority, but pressure from social actors can activate horizontal, vertical and/or diagonal accountability relationships (Pereira et al. 2017; Peruzzotti and Smulovitz 2006).

40. "Account giver" (or agent) refers to the actor who provides account for his/her performance to a given forum, whereas the "account holder" (or principal) holds the agent(s) to account.

The second component of the framework is a set of eight evaluative criteria to assess the attributes of performance information (a) production and (b) use linked to strengthening accountability⁴¹ Identified through a broad literature search, including empirical and conceptual studies across different disciplines, particularly in accounting and public administration.

a) Evaluative criteria to assess the attributes of information include:

1. Comprehensiveness of rationale for input (re)allocation: Information on the decision-making rationale for the allocation or reallocation of project resources (Ezzamel et al. 2007; Nelson 2001; Sohn et al. 2022).
2. Ability to measure performance against standards: Information pertaining to compliance with standards, commitments, rules and procedures (Flamholtz et al. 1985; Woods and Narlikar 2001).
3. Alignment of indicators with program goals: Information on how performance indicators align (or are mismatched) with program goals (Ebrahim 2002b; Ezzamel et al. 2007; Heckman and Smith 1995).
4. Quality and credibility of evaluation data: Information on the level of quality and credibility of project and program evaluations (Donaldson 2001; Moizer 1997; Woods 2001).

b) Evaluative criteria for the utilisation of information include:

5. Comprehensiveness of performance measurement and management system: A PMS that can track compliance with standards, commitments, rules and that enables the passing of judgement and the management of performance via penalties and rewards (Frink and Ferris 1998; M. Hall 2008; Starbird 2001; Wheeler et al. 1993; Woods and Narlikar 2001).
6. Diligence of evaluation follow-up: Process is in place to share and act upon evaluation findings (Grafton et al. 2010; Hoefer 2000; Woods and Narlikar 2001).
7. Broadness of disclosure approach: The nature of documents and extent of their disclosure (Ezzamel et al. 2004; Monfardini 2010; Roberts 2004).
8. Level of engagement of civil society via performance reporting: The nature of the performance information shared with and means of engagement of civil society (Bebbington et al. 2007; Cameron 2004; Cohen and Karatzimas 2015; Linders 2012; Martinez and Cooper 2019; Sharma 2011).

The third component of the framework is a segregation based on the timeline of accountability (Lindberg 2013), namely into ex ante versus ex post information requirements.⁴²

41. The criteria align with Gray's characteristics of "good social accounts," namely "Clarity of objectives, a systematic approach, quality evidence, completeness, integrity and independence" (Gray (2001, p.14).

42. This aligns with the ex ante and ex post components of organisational control (Flamholtz, E. G. et al. 1985).

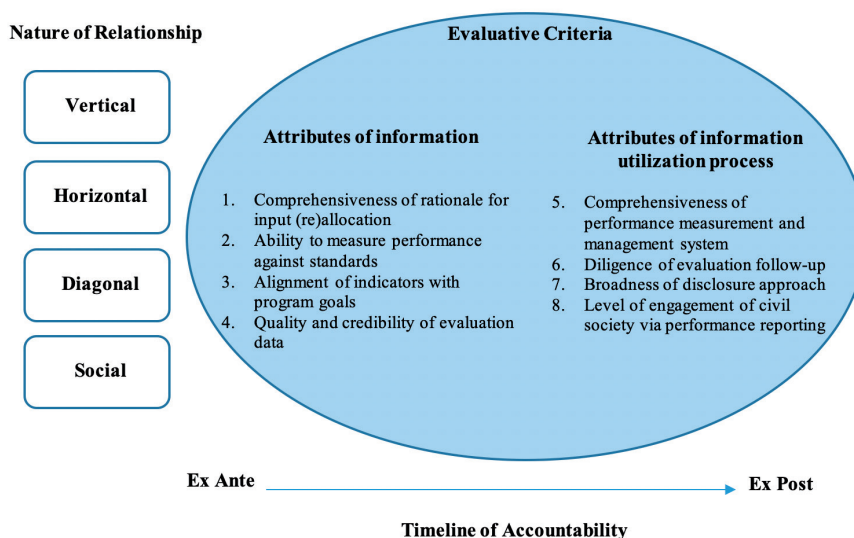


Figure 5.1: Graphical representation of the AIAF. The list of criteria is shown inside circle and the nature of accountability on the left-hand side and the timeline of accountability at the bottom of the figure.

The point in time in a project’s financing lifecycle dictates the type of performance information required by a given principal (e.g., at project proposal phase versus during implementation). Figure 5.1 is a graphical representation of AIAF.

5.3 MATERIALS AND METHODS

5.3.1 Case study selection

The case study chosen for this paper is a CGIAR funded project entitled: “*Developing, adapting and targeting portfolios of Climate-Smart Agriculture practices for sustainable intensification of smallholder and vulnerable farming systems in South Asia.*” The project’s size, scope, implementation status and complexity of accountability relationships across project actors make it a good candidate to study performance information needs in complex accountability webs. The project aims to diffuse a set of climate-smart agriculture practices mainly in the states of Bihar and Haryana in India.⁴³ The project generates and disseminates knowledge, builds capacity and uses a participatory approach to tailor farming practices that are profitable, improve food security, resilience, gender and social equity, as well as reduce greenhouse gas emissions. Using sophisticated analytics, including crop and soil modelling, as well as climate forecasts, gender-sensitive climate-smart agriculture practices are tailored to individual villages participating in the project. The

43. Climate-smart agriculture is defined as a set of agricultural practices that improve food security, while bringing about climate change benefits, such as the mitigation of greenhouse gases and/or the ability to better position farmers to adapt to climate change (FAO 2016).

project's capacity-building component focuses on 200 key decision-makers who then act as champions for further dissemination of evidence-based knowledge of the tailored climate-smart agriculture practices. The project aims to reach one million farmers across the two states in over 600 villages, enabling to raise farm-level productivity by 15 percent, reduce greenhouse gases by 10 percent and lower operating costs by 20 percent. The four-year project has an annual budget of over USD 2 million with funds coming from multiple funders and implementation undertaken across several partners (international and Indian). This project represents approximately four percent of the CGIAR allocation towards CCAFS (CGIAR Research Program on Climate Change, Agriculture and Food Security) and 1.5 percent of CIMMYT's annual budget (CCAFS 2017; CIMMYT 2017).⁴⁴

5.3.2 Data collection

The key concepts within the AIAF (e.g., nature of accountability relationships, evaluative criteria and timeline of accountability) offered a basis for the initial document coding, but we also allowed for inductively emerging themes. Similarly, key AIAF concepts formed the basis for the interview questionnaire, but we allowed for probing with follow-up questions to obtain additional details from respondents. Our approach is further detailed below.

Data collection was undertaken via document review and interviews. Project documents were reviewed to gather performance information on the actors within the web, the information being produced and the processes in place for information use by web actors (account givers and account holders). The two main document types reviewed were "project documents" and "policy documents". Project documents were limited to the final versions of documents submitted to funders for project approval, status updates and project performance reporting. Policy documents (e.g., CGIAR System Management Board Audit and Risk Committee Terms of Reference) were also limited to the final versions of documents approved by the relevant institution. Project and policy documents were selected for analysis in three steps. In the first step discussions were held with senior officials involved in the project who shared internal project documents (i.e., not available publicly). In the second step the CGIAR, CCAFS CGIAR Research Program (CRP) and CIMMYT websites were browsed to identify areas where publications were available. Finally, in the third step a series of restricted Google searches were made using terms found in the internal documents. A total of 22 documents were collected in this way during the period of December 2016 and August 2020.

Key informant interviews were conducted with the main actors in the project's accountability web. Selected respondents needed to have first-hand knowledge about the account-

44. The total budget of the CGIAR and all its member research centres stood at \$918 million in 2016 (CGIAR System Management Office 2021), whereas the CIMMYT budget was \$133 million (CIMMYT 2017) and that of CCAFS \$70.6 million (CCAFS 2017).

ability regimes in the given institution. In total, 25 informants were interviewed, including farmers, a village head, a cooperative leader, Indian government officials, scientists and project managers, an auditor, monitoring and evaluation specialists, a communications expert, a member of the System Management Board, as well as funders and members of the System Council.⁴⁵ The interviews conducted across different informant categories reached saturation (i.e., reached the point whereby little to no new information was obtained by informants).⁴⁶ The key informant interviews were semi-structured and mostly used “mini tour” questions, that is, questions that require respondents to provide details on particular or more specific issues or experiences (Spradley 1979). Closed questions were also used to probe and obtain additional details from respondents, as suggested by Holstein and Gubrium (1995). The interview questionnaire contained a comprehensive set of questions covering all key facets of performance information for accountability as outlined in the AIAF. Due to the seniority of many of the interviewees (i.e., many held positions of authority, with significant demands on their time), interviews were kept short (usually between 30 and 60 minutes) and prioritised questions that were most essential to the study. All interviews were recorded, with the consent of participants, to facilitate the transcription and coding process, which is described below. In order to ensure participation and candid responses, respondents were assured anonymity. To preserve anonymity, the quotes included in the results section refer to respondent categories, as opposed to specific individuals.

The documents collected and interview transcripts produced were uploaded into Atlas.ti, a software program for coding and interpreting textual, audio and visual data. Coding and quantification of relevant descriptive text and statements related to accountability was undertaken using a directed approach (Hsieh and Shannon 2005), with codes based on the elements of the AIAF. Additional codes were created as the first documents were being coded (i.e., inductively emerging themes). Some of these codes were to add specificity (i.e., narrowing down the concepts), while other codes were created with new findings (i.e., broadening the concepts). The AIAF structure was then used to organise results – from describing the complex web that was mapped out via the use of the framework, to clustering results based on performance information production and use *ex ante* versus *ex post*.

To ensure study rigor, efforts were made to have logical and construct validity, as well as generalisability and reliability (Cook and Campbell 1979; Yin 2003). The AIAF was built based on literature providing evidence supporting the causal relationship between var-

45. The interviews conducted with the farmers, village head and cooperative leader were in various climate-smart villages in Haryana, whereas scientists, government officials and project managers were interviewed in Delhi. The remainder of interviews were conducted at CIMMYT headquarters in Mexico, as well as via videoconferencing.

46. A sample size of 25 is in-line with similar studies (see for instance Pauw (2017)).

ables analysed and the results obtained, which helps build logical validity (Yin 2003). In addition, logical validity was improved by capturing all accountability elements in the regimes under study to form a comprehensive picture of the accountability web, as well as by seeking to obtain perspectives from informants across that web. Furthermore, having access to the internal workings of the organisations under study by being physically located at CIMMYT's headquarters during the full duration of the research helped build a deep understanding of the organisation and its stakeholders. The use of two data collection methods, that is, a document review combined with interviews of key accountability web actors helped bolster construct validity (Denzin and Lincoln 2005; Gibbert et al. 2008). The results are generalisable for other CGIAR-funded projects managed within complex accountability webs. Reliability was ensured through aiming for transparency and ease of replication (Gibbert et al. 2008). To that end, case study data are stored, according to the data management plan of Wageningen University's Public Administration and Policy Group, the coding for the content analysis was validated with CGIAR staff, and results validation discussions were undertaken with CGIAR staff. There was also a good level of response overlap between respondents in similar stakeholder categories.

5.4 RESULTS

Findings from the document review and key informant interviews are summarised below. Results are presented in three sub-sections, one for each of the paper's three research questions.

5.4.1 Actors in the complex accountability web

The actors that make up the complex accountability web are described in this section. Project funding under the CGIAR System is allocated under a process that includes many actors, with every project funded expected to gather performance data that can then be effectively used to meet reporting requirements at the program level. There is a board (i.e., CGIAR System Council comprising funders and developing country representatives), an executive team (i.e., CGIAR System Management Board comprising mostly of heads of individual CGIAR centres) and secretariat (i.e., the System Management Office) that provides support and coordination services for the day-to-day operations of the CGIAR. The secretariat is responsible for setting reporting standards and collecting performance information across CGIAR centres and providing a CGIAR-wide performance story.

Funding for this case study project is from the CCAFS CGIAR Research Program⁴⁷, with the main funders being the governments of Australia, Ireland, the Netherlands, New Zealand,

47. Individual CGIAR Research Programs are managed by at least one of the 15 CGIAR centers.

Switzerland, UK and US, as well as the European Commission and the International Fund for Agricultural Development. As such, the actors involved in the accountability web for this project include:

- Funders
- World Bank (trustee)
- CGIAR System Council (funder board)
- CGIAR System Management Board (executive team)
- System Management Office (secretariat)
- CCAFS, led by the International Centre for Tropical Agriculture
- CIMMYT (main project implementer)
- Sub-grantees and partner institutions (i.e., the International Crops Research Institute for the Semi-Arid Tropics, the International Livestock Research Institute, the International Rice Research Institute and the Indian Council of Agricultural Research)

In addition, there are other key actors in the accountability web, who play various roles to facilitate the account-giving and account-holding process. These include:

- The CGIAR's International Evaluation Arrangement, whose role is to evaluate projects and programs funded through the CGIAR system.
- The CGIAR Internal Audit Unit.
- Farmers, who are the intended beneficiaries of the project.

Within CIMMYT, there are two key units playing important account giving roles (not shown in figure 5.2): The Project Management Unit, who is responsible for liaising with funders, including sharing project status and performance reports and meeting contracting requirements, as well as playing an advisory role for project monitoring, evaluation and learning; and the Communications Unit, who is responsible for producing communication products, including annual reports and other narratives that showcase the institution's work. In Figure 5.2, we categorise the accountability web actors based on the nature of their relationship.

It can be seen in Figure 5.2 that several actors play the role of principal and agent, as well as some play the role of agent vis-à-vis more than one principal. These actors form a complex accountability web across different accountability natures.

5.4.2 Information produced in the accountability web

The performance information produced in the accountability web was assessed based on the AIAF criteria for the attributes of information (as outlined in Figure 5.1).

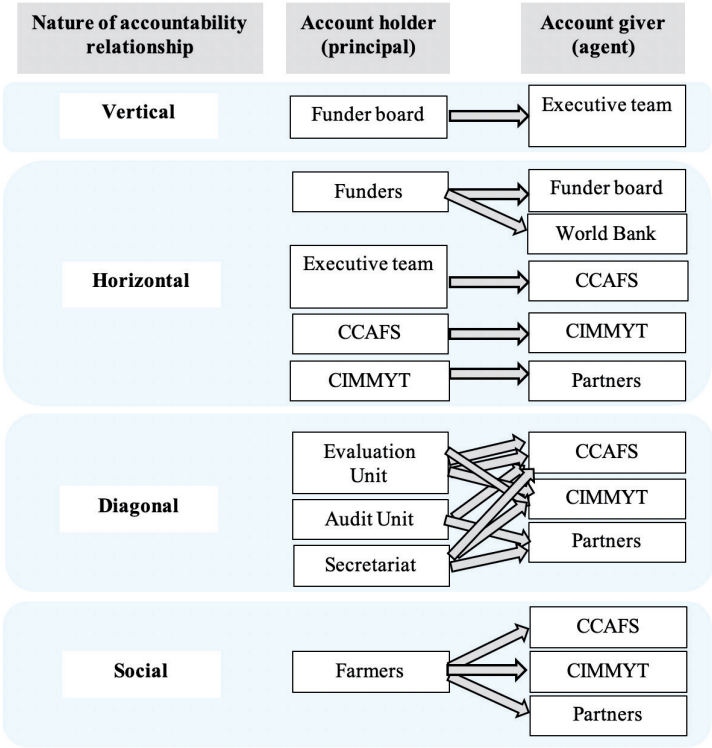


Figure 5.2: Nature of relationships between accountability web actors. The nature of the accountability relationship is shown on the left-hand side, with account holders (principals) in the centre and account givers (agents) on the right-hand side. The arrow points from account holder to account giver.

Comprehensiveness of rationale for input (re)allocation

The rationale for input allocation and changes to budgets is not always clearly spelled out. The process to allocate funding towards the CGIAR is carried out via three separate avenues: general support to the CGIAR; support to a specific CGIAR Research Program; or bilateral support to a specific CGIAR centre. General support to the CGIAR and support to specific CGIAR Research Programs entails trilateral contribution arrangements between individual donor countries, the CGIAR System Management Office and the World Bank as trustee. These set forth the administrative procedures for the transfer of funds, but do not include any details on performance expectations for projects or implementing agents per se. As for support to specific CGIAR centres, this is done via bilateral funding agreements, which spell out in more detail the activities, outputs and outcomes that the funder expects to see from their funding.

Certain processes and documents used for funding allocation purposes were criticised by account holders, including funders and members of the System Council. Issues span the

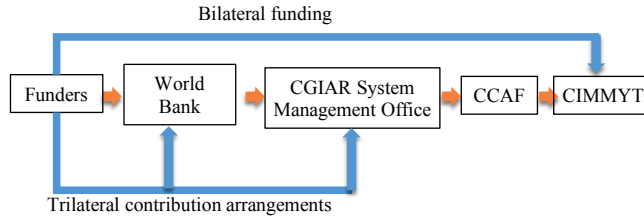


Figure 5.3: Contractual relationship and transfer of funds between actors in the web. The orange arrows between actors show where money is being transferred, whereas the blue arrows represent the contractual relationship between principal and agent.

planning and proposal phase (ex ante), through the ongoing monitoring and the annual reporting (ex post). This is also acknowledged by many informants that were tasked with producing CGIAR Research Program proposals based on instructions from the System Management Office. Each CRP team needed to produce detailed proposals spanning hundreds of pages that would then be used for budget allocation decisions by the members of the Council. The main concern was regarding how onerous the proposal development process was, with many information requirements that did not bring value-added in terms of planning, nor in helping with the allocation decision. The CRP proposal development process and the final proposals per se are especially disliked, as the following quotes show:

The CRPs are... pretty bloated...(the) undefined nature of the CRP proposals, which were just a disaster... Generally, people felt like they weren't defined research programs, but that they were attempts for the CG(IAR) to put everything they were doing in a certain area, under one heading. So those are really not serving any good purpose for us..." – Funder and System Council member

"Because the programs are so broadly defined...So, how meaningful do these programs become? Are the CRPs really the means of operation? Or, are they aggregation of bilateral projects with a little bit of a management entity stuck on top that's not actually calling the shots or moving the overall agenda?... I think one of the problems that we and other donors...is, what are we getting for our money? We don't know exactly what we're buying. I would like a fairly clear understanding of what we're buying. And right now, the way they write up the CRPs, they are really soup-to-nuts." – Funder and System Council member

The scepticism about the proposal development process is acknowledged by many informants that were tasked with producing CRP proposals based on instructions from the System Management Office:

"I would say that there is a lot of scepticism in the donor community that the CG(IAR) is business as usual." – CCAFS Manager

Several respondents complained about the length of the CRP proposals, which made it challenging to review in any substantive fashion. A System Management Board member mentioned that the proposal review was made easier by involving the ISPC, who coordinated a detailed expert review by more than fifty experts, providing funders a summary assessment. However, funders and System Council members mentioned that the ISPC review was not very useful to them, as it was too focused on the quality of the science, as opposed to broader management and ultimate impact of the proposed programs. As such, a group of funders undertook their own independent assessment of all CRP proposals. There was an acknowledgement on the part of one funder that a balance needed to be struck between flexibility and accountability for results:

I think we're still struggling...to get the right trade-off between preserving some degree of flexibility for the centres with a greater degree of visibility and accountability and understanding on the part of the funders.” – Funder and System Council member

However, once proposals are reviewed, System Council funding decisions are well documented. This includes details on how the performance of certain programs has informed the decision to maintain, reduce or increase funding (CGIAR System Management Office 2016).

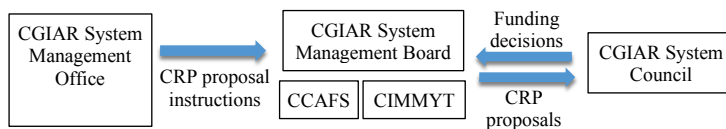


Figure 5.4: Flow of ex ante resource allocation information between actors in the web. The blue arrows represent the flow of information between principals and agents.

Annual reports are produced by the CRPs and individual CGIAR centres (so-called institutional annual reports). Funders, managers at CIMMYT and a member of the System Management Board all agreed that one key benefit of institutional annual reports is the audited financial statements contained therein.⁴⁸ These allow to assess the overall financial health of individual CGIAR centres, as well as the various sources of financing they attract. However, individual centres' annual reports do not provide sufficient project-level information to be able to clearly link System Management Board funding decisions to a given centre's financial position.

48. CRP annual reports do not contain audited financial statements, as CRPs are not legal entities per se.

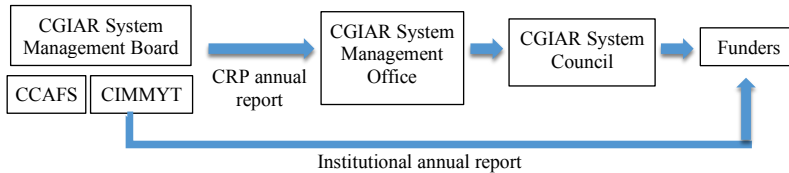


Figure 5.5: Flow of ex post resource allocation information between actors in the web. The blue arrows represent the flow of information between principals and agents.

Ability to measure performance against standards

The ability of agents to measure their performance against standards is weak across the accountability web. Respondents playing account holding roles mentioned that “success” is ill-defined in some cases, with funders and funder board members (vertical and horizontal relationship) and evaluators (diagonal relationship) interviewed suggesting that more specificity in terms of deliverables and reporting requirements should be included ex ante.

“And I think if everybody was agreeing ex ante about what is useful and important as information and was sharing information ex post, that would be more efficient and much better for the overall information of everybody.” – Auditor

“(I)t is only the last couple of years that we have tried to switch to a more results-oriented way of programming. And we are not yet there. So, I think that until now we just take what the CG(IAR) proposes and we do not really set a concrete target that we would then monitor and see whether the CG(IAR) is delivering what we planned in these targets... They are vague, very vague formulated targets but the project officer (within our aid agency) is not able to have a meaningful discussion with the implementing organisation about what more precisely the targets would be.” – Funder

Although there is a strong emphasis on delivering projects and programs through partnerships within the CGIAR system, there is little by way of information on standards set for what would constitute a successful partnership. For instance, there are no performance measures in place to assess the quality of individual partnerships and the process to assess such partnerships is ad hoc in nature, as the following quote indicates:

“We also talk about accountability to partners, but that’s in somewhat more symbolic manner because there is no direct account(-giving).” – Evaluator

The account giving on the partners’ side (horizontal relationship) was limited to project performance measures that do not relate to the quality or strength of the partnership per se. CIMMYT has recently instituted a formal annual assessment of the performance of its partners (i.e., sub-grantees), thus moving away from the ad hoc process.

As for ex post reporting on performance against standards, the main source for such information is the annual report. However, managers within CIMMYT mentioned the limitations of institutional annual reports in terms of measuring performance against standards and funders overwhelmingly saw institutional annual reports as biased and not an appropriate document for accountability purposes:

“(A)nnual reports evolved very drastically over the last twenty or thirty years... Scientists like to read them. But it was not targeted to the proper audience. And I think now annual reports are more communication instruments than really reporting instruments. There is a selection of the story which can be quite subjective.” – CIMMYT Manager

This was echoed by at least one funder:

“They’re usually just pretty much PR pieces so I don’t think anybody... I think people probably look at them but I don’t think they’re taken particularly seriously.” – Funder and System Council member

“To be honest, the majority of those are very much PR documents. So, I wouldn’t say we use them very significantly... in general, the annual reports of the centres are written at a level that is much too generic for any specific accountability.” – Funder

Alignment of indicators with program goals

The alignment of indicators with program goals is seen as important by web actors, but is elusive. Funders and funder board members (vertical and horizontal relationship) see value in the development of tools such as theories of change and program logic models, as these help align project activities with targeted longer-term impacts.

The following quote describes a funder’s view:

“What is important for us is what politicians want. And the issue of results and measuring results for accountability has become extremely important for the last couple of years and it’s very much emphasised by the... parliament. Therefore, nowadays we look a little bit differently at results and accountability. I mean, not only accountability in terms of, let’s say, from a perspective of control but much more also from the perspective of results theory. So, I think it’s very much on that we try to look at, well, what you could call value for money. And then go a little bit deeper into what actually the reach and the impact of intervention is and compare that to the cost.” – Funder

However, tools such as theories of change and program logic models are perceived as merely funder requirements by some of the other actors within the web. Funders and funder board members do not consider the current focus on performance monitoring and reporting on outputs and outcomes as being fully satisfactory. Some of the funders

interviewed would prefer seeing more performance information focused on project outcomes:

“I think in spite of all the money that’s gone into (technology development) and getting those to farmers, our ability to track how well that happens is really pretty poor.”

– Funder and System Council member

This was echoed by CCAFS and CIMMYT Managers (horizontal relationships), as they are aware that this is important to funders and funder board members:

“Because basically if you employ descent enough people you don’t have to worry about research quality and research outputs because that’s what scientists are innately able to produce. And what they are sure not able to produce is connection to society and making sure their research appears useful. So, we do look at the numbers of papers per centre and per budget and all those sorts of things, and make sure that we’re within averages in terms of production of science. But actually, what’s really much more difficult for scientists is producing these outcomes. So therefore, I put more of my own time into the outcome analysis.” – CCAFS Manager

On the other hand, those tasked with collecting and reporting the performance information within the accountability web find the resource requirements to do so excessive. As one senior auditor (diagonal relationship) mentioned, there was no solid benchmarking data to compare performance across CGIAR Research Programs. Similarly, an evaluator (diagonal relationship) pointed out that the number of academic publications produced is often used as a proxy for performance achievement, even though funders and funder board members have expressed that they do not see much value in reporting on such outputs, as they are far-removed from the outcomes to be achieved:

“(Y)ou want a high (scientific) quality of course but people’s ideas of quality vary. I mean, some people think it’s how many publications have been published. And frankly, we don’t care a lot about that; that’s not why we fund. The CGs do a lot of publications. We’re much more interested in new varieties that have better traits.” –

Funder and System Council member

Some informants, including one evaluator, indicated that the focus on academic publications may be due to organisational culture and personal preferences, as opposed to a desire for appropriate account giving:

“I think many people just dream of the old days where they could just do science and could do papers and those sorts of things.” – CCAFS Manager

As for information related to outcomes or impacts of projects, there is no systematic approach, strategy or work plan at the organisational or CGIAR Research Program level to undertake impact studies that could be comparable across projects. As part of the CCAFS

requirements for project funding, outcome case studies need to be undertaken and then fed into the centralised performance reporting portal, but there are no standards for the scope, depth or quality of such assessments. When one respondent was asked to explain how impact information was generated, the answer was the following:

“Well, it varies year to year and project to project. So most of the time it’s a narrative. But wherever we are able to achieve some degree of success, it also goes by some interviews like what you’re doing with the stakeholders or some written evidence of success and things like that.” – CCAFS Manager

“(T)hey can do it on anything in relation to the CCAFS portfolio. We don’t ask for a specific project. And the numbers of ex-post impact assessments in a six-year period are in relation to the budget size. Some centres are really small. And there are some (small) centres (from) which we don’t expect anything. And then on the other extreme, the big centres. I think that we expect three sub-studies in a six-year cycle.” – CCAFS Manager

Quality and credibility of evaluation data

It is too early to determine whether the quality and credibility of evaluation data will be appropriate, although there are early signs of weakness. The project under study is to be evaluated in 2021, and as such, no evaluation information was available at the time of writing. In terms of ongoing monitoring and performance data, some informants raised concerns about the usefulness of reported information. One evaluator (diagonal relationship) mentioned that there is a tendency to produce impact studies of poor quality in a reactive fashion, based on funder and funder board member (vertical and horizontal relationship) requests. This was confirmed by a CCAFS manager, who said that impact information that was produced by CGIAR centres was disappointing. Only narrative-based two-pagers on project impacts were produced, with no quantitative performance metrics, apart from basic statistics, such as the number of planned new climate-smart villages and total hectares of land that these villages occupy. Evaluators also stated that institutional annual reports were not very useful for formal accountability purposes, especially in the context of evaluations:

“Currently, the CRP annual reports have very long list of indicators which have not been found very meaningful for evaluation because they report sort of achievement of the targets. And we have no way of assessing where the targets are feasible, reasonable, strategically the right ones” – Evaluator

Overall assessment of the information produced in the accountability web

The information produced across the accountability web was assessed using the AIAF criteria. It was found that information relating to the rationale for input (re)allocation is somewhat lacking ex ante (e.g., no details on performance expectations in trilateral

Table 5.1: Summary assessment of ex ante and ex post information produced in the accountability web

Information produced in the accountability web		
	Ex ante	Ex post
Comprehensiveness of rationale for input (re) allocation	<ul style="list-style-type: none"> Information on input allocation is somewhat lacking ex ante (e.g., no details on performance expectations in trilateral contribution arrangements), yet it can be onerous to produce (i.e., in the case of the CRP proposals). Bilateral funding agreements spell out in more detail the activities, outputs and outcomes that the funder expects to see from their funding. 	<ul style="list-style-type: none"> System Council funding decisions are well documented. Annual reports are produced by the CRPs and institutional annual reports. Account holders appreciate the audited financial statements contained in institutional annual reports. However, these do not provide sufficient project-level information to be able to clearly link System Management Board funding decisions to a given centre's financial position.
Ability to measure performance against standards	<ul style="list-style-type: none"> Information produced for the measurement of performance against standards suffers from poor definition of what would constitute success ex ante. 	<ul style="list-style-type: none"> Ex post information contained in institutional annual reports is seen as biased for accountability purposes.
Alignment of indicators with program goals	<ul style="list-style-type: none"> Information on alignment of indicators with program goals is valued by funders and funder board members, but not so much by scientists tasked with project implementation. 	<ul style="list-style-type: none"> Scientists tasked with project implementation favour reporting on outputs, such as academic publications, although these are not well aligned with project intended outcomes.
Quality and credibility of evaluation data	<ul style="list-style-type: none"> The assessment of the quality and credibility of evaluation data was limited by the lack of evaluation having been conducted at the time of review. 	<ul style="list-style-type: none"> Performance information being produced might not meet the needs of evaluators due to low quality and incompleteness.

contribution arrangements), yet it can be onerous to produce (i.e., in the case of the CRP proposals). Ex post information for that criterion fares better (e.g., System Council funding decisions are well documented). The information produced for the measurement of performance against standards suffers from poor definition of what would constitute success ex ante and the ex post information contained in institutional annual reports is seen as biased for accountability purposes. As for the alignment of indicators with program goals, this is information that is valued by funders and funder board members, but not so much by scientists tasked with project implementation. These same scientists favour indicators related to outputs such as academic publications, although these are not well aligned with project intended outcomes. The assessment of the quality and credibility of evaluation data was limited by the lack of evaluation having been conducted at the time of review. There are indications that the performance information being produced might not meet the needs of evaluators due to low quality and incompleteness.

5.4.3 Information used to meet the needs of the actors in the web

The performance information used in the accountability web was assessed based on the AIAF criteria for the attributes of performance information utilisation process (as outlined in Figure 5.1).

Comprehensiveness of performance measurement and management system

The comprehensiveness of performance measurement and management systems that are in place across the web is uneven. There is a well-established process within the CCAFS CGIAR Research Program (horizontal relationship) for the annual performance reporting, including a centralised performance data reporting portal. There is also a series of ad hoc accountability information flows across the various regimes within the CGIAR system. For instance, the CIMMYT Communications Unit receives and requests performance information from multiple sources on an ad hoc basis in order to craft various communication products for the organisation and for the CGIAR Research Program. According to the respondent from the Communications Unit, a key driver in the information sharing is the keenness of individual scientists and managers in getting their project results publicised and highlighted. There is no centralised performance data portal at CIMMYT to be used by the Communications Unit, nor for employee performance evaluations.⁴⁹

The following quote illustrates the situation:

“(T)here’s no one way to get information about performance and implementation of projects. If you look at our (employee performance) evaluations in CIMMYT, at the program director level, (they) don’t evaluate people directly except the strategic leaders. And individual scientists are assessed by the project leaders under which they serve... Some people work in five different projects and the direct supervisor, which is usually the strategic leader.” – CIMMYT Manager

The need for such as centralised performance information management system was mentioned by funders and funder board members (vertical and horizontal relationship). Respondents responsible for project- and program-level account giving (horizontal relationships) voiced frustration regarding the different auditing, monitoring, evaluation and reporting processes depending on individual funders and account giving processes. The System Management Board member (horizontal relationship) mentioned that the System Management Board had recently put in place a “combined issuance” system to coordinate audits and evaluations across the CGIAR and ensure duplication is minimised. Some mentioned that reporting requirements are disproportionately high, as the funding levels are relatively low compared to other sources of funding. Respondents at the working and management levels within CIMMYT (horizontal relationship) mentioned that the report-

49. CIMMYT is the lead center for two of the largest CGIAR Research Programs, which did not have a centralized performance data reporting portal at the time the interviews took place. CIMMYT recently adopted the same portal as the CCAFS CGIAR Research Program and is at the early implementation stage.

ing burden (as per requirements set by the CGIAR System Management Office) often distracts and takes away resources that could otherwise be put towards project implementation. Many of these same respondents did not make use of the performance data for ongoing project management and learning. This is not surprising, as several respondents stated that they were implementing the PMS mostly to satisfy donors.

It was suggested that efficiency gains could be realised through the harmonisation of reporting requirements. Funders and funder board members, on the other hand, mentioned that they are striving to reduce the reporting burden while still meeting the expectations of their elected officials. One funder explained that the implementation of robust monitoring and evaluation frameworks and processes is taken as a proxy for good management, even though they don't necessarily have the time to critically review the performance information they receive from grantees.

Diligence of evaluation follow-up

The level of diligence for following up on evaluations is low. Formal evaluations are conducted within the CGIAR system and for specific CGIAR Research Programs. These are undertaken by an external party, namely the Independent Evaluation Arrangement (diagonal relationship) and the consultants that office engages to conduct evaluations on their behalf. These evaluations are provided to senior management in the targeted CGIAR centre and CGIAR Research Program leader, who then produce a formal management response to outline how they intend to address any issues uncovered by the evaluation. However, there is no follow-up process to determine whether commitments found in management responses have been met, nor is there a systematic process for this management response to then be scrutinised by funders:

“Donors were supposed to get the final report which has been already commented on and there’s a response from management of program, and then the consortium. This change was never completed. I can tell you that there was a big gap in accountability... Never formally have they discussed any of our evaluations or brought it to a closure.” – Evaluator

This gap in information utilisation was mentioned by funders and funder board members, as this quote illustrates:

“It’s funny, we have an evaluation system in place but it’s not clear at all that it’s really being used in ways that drive decision making. So that’s something that came up in the last meeting in the Netherlands that we spend a lot of money on evaluations. But, I wouldn’t say that it’s seen by donors as a main level of accountability.” – Funder and System Council member

Breadth of disclosure approach

The breadth of disclosure varies between account givers in the web. The main tool to disclose performance information to the general public is the institutional annual report. As mentioned above, funders and funder board members (vertical and horizontal relationship) overwhelmingly see institutional annual reports as biased and not an appropriate document for accountability purposes. Many project outputs, such as videos and academic publications are made available on the project's website, although these are not used by key account holders within the web. Conversely, project-level financials are not publicly available and neither is performance achieved against project targets. In fact, the initial project plan or proposal is not publicly available either.

The Charter of the CGIAR System Organisation is made public and states that the CGIAR General Assembly will make rules of procedure available publicly. The Charter also states that the outcomes of a closed session of the System Management Board will be made public in open plenary if a decision is taken that has a material impact on the CGIAR System. Similarly, the CGIAR System Framework states that the outcomes of a closed session of the System Council will be made public in open plenary if a decision is taken that has a material impact on the CGIAR System. However, one evaluator (diagonal relationship) mentioned that they have had some difficulties in getting the CGIAR Research Program board minutes for evaluation purposes, as they are not publicly available.

Two of the funders and funder board members (vertical and horizontal relationship) expressed their preference for a more transparent performance reporting system than what is currently available. One funder suggested that project-level financial and results data should be published in real time to allow to compare results across projects, aggregate across programs and get a sense of value for money:

“And what you would want to have is ...a system, which would also have the advantage of being completely public so everybody can have a look at it...(T)he data would continuously flow into a modality that we are now starting to build for results where they can be aggregated. Which would then at any point in time give you an indication of the results that are being realised with our funding.” – Funder

As for evaluations, these are made public, including the corresponding management responses. Similarly, audit reports are made public and so are the System Management Board Audit and Risk Committee meeting summaries.

Level of engagement of civil society via performance reporting

There is no direct engagement of civil society via performance reporting. There is little effort expended on engaging civil society directly when it comes to the dissemination

Table 5.2: Summary assessment of ex ante and ex post information used to meet the needs of the actors in the accountability web

Information used to meet the needs of the actors in the accountability web		
	Ex ante	Ex post
Comprehensiveness of performance measurement and management system	<ul style="list-style-type: none"> The performance measurement and management system is comprehensive, with some areas for improvement (e.g., creating a centralised repository for performance information). 	<ul style="list-style-type: none"> The comprehensiveness of the system is creating a monitoring and reporting burden on those tasked with project implementation, which might benefit from further streamlining.
Diligence of evaluation follow-up	<ul style="list-style-type: none"> There is a lack of diligence for evaluation follow-ups, with no formal process to ensure project improvements take place post-evaluation. 	<ul style="list-style-type: none"> Ex post evaluations are undertaken by the Independent Evaluation Arrangement and are provided to senior management in the targeted CGIAR centre and CGIAR Research Program leader, who then produce a formal management response to outline how they intend to address any issues uncovered by the evaluation.
Breadth of disclosure approach	<ul style="list-style-type: none"> Much variation exists in the breadth of disclosure policies across the web. 	<ul style="list-style-type: none"> Difficulties to obtain certain documents that are not made public makes it challenging for ex post evaluations. Funders and funder board members would prefer a more transparent performance reporting system. Evaluations and their corresponding management responses are made public and so are the System Management Board Audit and Risk Committee meeting summaries.
Level of engagement of civil society via performance reporting	<ul style="list-style-type: none"> Engagement of civil society via performance reporting is not being prioritised, as the focus has mostly been on satisfying donors' information requirements. 	<ul style="list-style-type: none"> Dissemination of best practices to farmer organisations aligns with the expectations and needs of the farmers and cooperative leaders to improve their farming practices.

of performance information, apart from the publication of annual reports, which are not tailored to the general public. According to different respondents, this is because the main objective of account giving efforts is to satisfy funders. The explicit efforts to cater messaging directly to a broader audience are focused on disseminating best practices to farmer organisations. This aligns with the expectations and needs of the farmers and cooperative leaders (social relationship) interviewed, who voiced their desire to receive information that can help them improve their farming practices.

There is no evidence of independent “social audits” of the CGIAR project being undertaken by international or Indian bodies.

Overall assessment of information used to meet the needs of the actors in the web

The performance measurement and management system is comprehensive, although some components could be improved (e.g., creating a centralised repository for performance information). The comprehensiveness of the system is creating a monitoring and reporting burden on those tasked with project implementation, which might benefit from further streamlining. Regarding the diligence of evaluation follow-ups, this is a clear area for improvement, as no formal process exists to ensure project improvements take place post-evaluation. As for how broad the disclosure approach is within the accountability web, there is much variation depending on the account giver and the type of document, with greater disclosure at the ex ante stage (e.g., Charter of the CGIAR System Organisation) than ex post (e.g., project-level financials and achievements). Regarding the level of engagement of civil society via performance reporting, this is not an area that is receiving much attention within the accountability web, as the focus has mostly been on satisfying donors' information requirements.

5.5 DISCUSSION

In this section, we briefly explain our findings and how these relate to the debate in the literature regarding performance information and its role in strengthening accountability. The usefulness of the assessment framework chosen for this study is also considered and potential solutions to strengthen accountability are discussed.

We identified close to a dozen actors that make up the complex accountability web in the case study project and found gaps in accountability information produced and used by these actors, which risks weakening accountability. As some authors have noted, performance measurement is so widespread in public sector organisations that it is taken as a given, or adopted by default (Johnsen 2005; Lapsley 2008). Yet, performance measurement and the performance information it produces has many critics and detractors who argue that it can cause harms ranging from misalignment with organisational goals to misleading or inaccurate pictures of organisational (or individual) performance and gaming (Chang 2015; Gibbons 1998; Lapsley 2008). As Siverbo, Cäker, & Åkesson (2019) theorise, most of the problems associated with performance measurement stem from design and use issues, as well as the make-up of the accountability measures that are in place (or "control practices") and contextual challenges. Indeed, the interviews conducted for this case study indicated that several performance measurement problems seem to be present within the CGIAR, and so are some of the underlying issues for such dysfunction (e.g., misaligned, irrelevant or underused indicators, lack of adequate accountability measures). Addressing such underlying issues and challenges might therefore be required, in addition to tackling performance measurement dysfunction.

Performance information can also lead to improvements in accountability when actors of different accountability “natures” are empowered to play their role in account holding within complex webs – either directly, or by enabling other account holders in the web to take action (Fox 2015; Laebens and Lührmann 2021). The finding that the diagonal accountability role of evaluators, who produce reports that do not have a properly functioning “forum”, is a case in point. The lack of formal and systematic process for funders to review program evaluation findings behoves the System Council to establish a formal evaluation committee in order to close this important accountability gap. This evaluation committee would hold individual CGIAR centres to account vis-à-vis the recommended actions in evaluation reports. This could also be an appropriate forum to evaluate the extent of performance measurement dysfunction that exists within the accountability web.

The use of AIAF allowed to systematically assess information across actors in this complex accountability web. Using the framework allowed to identify that some of the accountability information is shared in a relatively ad hoc fashion within this complex web of accountability. In addition, certain documents that are integral to the account holding and account giving process were seen as inadequate for such purposes. These include the CGIAR Research Program proposals, institutional annual reports and certain performance indicators that were in use at the time when interviews were conducted. The finding related to the limited usefulness of institutional annual reports aligns with the literature (Mayston, 1992; Priest, Ng, & Dolley, 1999; Steccolini, 2004). A significant reporting burden was mentioned by several respondents, taking resources away from project implementation. Similar examples abound in the literature (Bornstein 2006; Ebrahim 2005; Mancini et al. 2004; Romzek and Dubnick 1987). A lack of accountability information pertaining to the performance of partnerships was also found, although this gap is now being filled by CIMMYT via the institution of a formal annual assessment of partners’ performance.

The use of AIAF facilitated the mapping of the various actors playing different accountability roles, along with the accountability processes they participate in and the corresponding accountability information produced and used (ex ante and ex post). The mapping exposed a set of long accountability chains that are in place to ensure strong accountability via oversight and delegation in the CGIAR’s accountability web. However, this complex web puts the CGIAR system at risk of what others have referred to as ‘multiple accountability disorder’(Koppell 2005). The complexity of accountability webs can be associated with significant challenges (e.g., role confusion, ineffectiveness, system breakdowns) and negative consequences (Koppell 2005; Romzek and Dubnick 1987).

Respondents in this case study confirmed many of the typical challenges and negative consequences associated with complex accountability webs mentioned in the literature. Several respondents mentioned that the accountability regimes and overall governance within the CGIAR is complicated or even complex. This included a manager within the CCAFS program, a member of the System Management Board and a member of the System Council. This leads to correspondingly complicated accountability information flows. At least one respondent mentioned how this can in turn lead to management challenges, stating that the more complex the CRP is in terms of the numbers of centres involved, the less real management seems to be occurring. One respondent saw the accountability web as having implications in terms of driving up the cost of program delivery, asserting that they were using too many resources to navigate approval layers, leading to distraction for scientists that need to focus on work outputs. This aligns with other authors who have raised the issue of whether the benefits of a PMS outweigh the costs of running it (Neely et al. 2005; Vogel and Hattke 2018).

It is unclear whether the new governance structure of the “One CG” (i.e., a unified governance under a common board and Executive Management Team) that is currently under implementation will lead to shorter or longer accountability chains, simplify the accountability web, or increase its complexity. However, it is clear from the Terms of References of the Executive Management Team that the intent is for the accountability relationship between the new Executive Management Team and the heads of individual research centres that comprise the CGIAR to be one of a vertical nature (compared to the previous relationship that existed between centre heads and the System Management Office, which was of a horizontal nature).

Moving towards more systematic, streamlined, standardised and centralised performance information gathering could address several underlying issues for some of the PMS dysfunctions observed (i.e., misaligned, irrelevant or underused indicators, lack of adequate accountability measures). The concept of proportionality should be kept in mind for the CGIAR Research Program proposal development, as well as the corresponding annual performance reporting requirements, as the current processes are overly cumbersome relative to the funding made available. In other words, the benefits of the performance information production and use must outweigh the resource requirements for account giving (Vogel and Hattke 2018). In order to achieve this balance, it is important to reduce the reporting burden and increase the usefulness of the accountability information (e.g., by ensuring project performance data is also useful for ongoing management and learning), as opposed to putting in place an account giving process only to meet funder requirements (Ebrahim 2002b).

Ensuring that senior management commitment to the PMS and that authority is delegated to performance information users, as well as offering training in performance measurement, could lead to increases in appreciation and usage of the PMS (Cavalluzzo and Ittner 2004). Similarly, deeper involvement of CGIAR staff and managers in the development of the performance measures via an experienced- based process could improve the PMS (Wouters and Wilderom 2008). This would go a long way towards what has been called an “enabling PMS,” that is, a system that facilitates users’ work as opposed to being used (or perceived) as a control device (Wouters and Wilderom 2008). An enabling PMS could help meet the accountability needs of the actors in the complex web while leading to strengthened accountability, as the current system does not seem to be satisfactory for most account givers and account holders.

Although our study did not set out to analyse whether there were conflicting roles amongst the actors that make up the complex accountability web, the open-ended nature of our questions yielded respondent feedback that indicates that this might be the case. The finding that funders see value in tools such as theories of change, but that those are perceived as merely funder requirements by some of the other actors within the web indicates dissonance, if not a conflict in roles per se. The scientists’ focus on reporting the number of academic publications stemming from the project instead of quantifying project benefits also points to a potential conflict between what donors, cooperative leaders and farmers want, versus what scientists would like to report on.

The lack of meaningful civil society engagement in the development and use of the PMS is a common challenge (Gray 2001) that will not be fixed easily in the absence of incentives to go beyond satisfying donors’ information requirements. In many other climate finance accountability webs, such as that of projects financed by the Green Climate Fund, CSO engagement is a mandatory component of the project proposal development process (GCF 2020j). Without such formal requirements for CGIAR projects, the remaining option is for other actors within the web (e.g., donors playing a horizontal accountability role, evaluators playing a diagonal role) to put pressure on the CGIAR System Council, CGIAR System Management Board, or the System Management Office to push for substantive engagement.

Regarding the choice of case study to analyse complex accountability regimes, there is little doubt that analysing the CGIAR provided an inside glimpse into a complex accountability web through the lens of a single project. Although efforts were made to ensure validity and reliability, studying several CGIAR projects, perhaps across different countries, as well as undertaking follow-up interviews across all respondents, would increase the robustness of the findings.

5.6 CONCLUSIONS

Our study adds a theoretical contribution to the literature by offering an empirical validation of the AIAF and by filling a gap on the role of performance information production and use by various actors in complex accountability webs. This paper assesses how performance information is produced and used in a complex accountability web using a framework that enabled systematic mapping of the information production and use across the broad set of account givers and account holders. Such application of the framework as a heuristic tool allowed for the identification of gaps and opportunities for the strengthening of accountability. The document review and series of key informant interviews across a range of actors have enabled a better understanding of the overall set of regimes and actors within the project's accountability web (addressing RQ1), the type of information produced (RQ2) and used (RQ3) for accountability purposes by those actors, as well as the limitations and gaps this creates for enacting accountability within the web.

We identified close to a dozen actors that make up the complex accountability web in the case study project, playing different roles of a vertical, horizontal, diagonal and social nature (and often playing multiple roles, as Figure 5.2 illustrates). This finding aligns with what some have called the web of managerial accountability (Page 2006), the tangled web of accountability (Romzek 2015a) or multiple accountabilities disorder (Koppell 2005).

Regarding our research question on how the performance information produced by account givers in the project's complex accountability web affect accountability (RQ2), several key gaps and weaknesses have been found. This included information pertaining to the performance of partnerships, as well as inadequate performance indicators and targets. Furthermore, certain documents that are integral to the account holding and account giving process were seen as inadequate. These include the CGIAR Research Program proposals, institutional annual reports and certain performance indicators that were in use at the time when interviews were conducted. This finding echoes what many other authors have observed (Boyne et al. 2002; Han 2020; Hyndman and Anderson 2010; Kloot 2009).

Regarding RQ3, there are also many areas for improvement in the performance information utilisation processes to meet the accountability needs of the actors in the web and strengthen accountability. Firstly, there is a lack of a formal and systematic process for funders to review program evaluation findings. Although this is a significant gap in the performance information utilisation process, it is an unsurprising finding, as some have stated that *"(I)t is common for evaluation reports to be read by few; their results, therefore, are used by even fewer."* (Mancini et al. (2004) page 19). Secondly, although there are several formal and well-established processes for account giving within the project's com-

plex accountability web, the sharing of certain types of accountability information across actors is described by many as being performed in an ad hoc fashion. This lack of account giving formality, although not uncommon, can have negative consequences, as the provision of formal evidence of performance helps build trust with account holders (Han 2020).

This study outlines accountability challenges for public organisations and the non-profits they finance, which echo findings in the literature. These include: long accountability chains comprising oversight and reporting layers within the web (Brunner and Enting 2014; Nielson and Tierney 2003; Romzek, Leroux, et al. 2012); lack of systematic, streamlined, standardised and centralised performance information gathering to reduce the reporting burden and increase the usefulness of the accountability information shared across the accountability web (Franklin 2000; Kloot and Martin 2000; Moynihan 2005); and the absence of a formal evaluation committee to ensure there is a forum to hold implementing agents to account for addressing recommendations of evaluation reports and help reduce the performance measurement dysfunction that exists within the accountability web (Hudaya et al. 2015; Maggetti and Papadopoulos 2022).

Although the AIAF was developed to analyse performance information and accountability in the context of international climate finance, further research should be undertaken to determine the tool's broader applicability to international public sector management and complex accountability webs in aid projects, as well as its possible use as a dialogic engagement tool across web actors (Bebbington et al. 2007). Using the AIAF to more explicitly determine whether the actors that make up complex accountability webs play conflicting roles would be a relevant contribution to the performance measurement and accountability literature. Adapting the AIAF for a broader application stands to benefit practitioners and decision-makers concerned with strengthening accountability within the complex webs that exist in bilateral, multilateral and parastatal service provision.



Chapter 6

Synthesis, reflections and conclusions

Developing countries will face disproportionately more of the negative impacts of climate change (IPCC, 2014) and the corresponding financial requirements have been acknowledged (UNFCCC 2018a) and reaffirmed at the 27th Conference of the Parties of the United Nations Framework Convention on Climate Change in Sharm el-Sheikh in 2022 (UNFCCC 2022). The international community has set climate finance goals and expectations are high as to how these funds will be used (Khan et al. 2019). Although billions of dollars in climate finance are already being spent, with much more in the planning stages or being pledged (GCF 2020e; Roberts et al. 2021), little academic analysis has been undertaken on accountability for results of such funds. The aim of my research was to gain a better empirical and theoretical understanding of what factors lead to strengthened accountability in complex accountability webs in international climate change financing. The building of this understanding in turn provides insights for the design and improvement of accountability regimes.

This chapter synthesises my findings and includes reflections on theoretical and methodological issues related to my thesis. In section 6.1, I provide a brief description of my understanding of accountability, while section 6.2 answers the research questions posed to meet the aims of my research. In sections 6.3 and 6.4, I reflect on the theoretical and methodological approaches used to answer my research questions and how these choices have a bearing on the scope of application, validity and reliability of my results. Areas for further research are identified in section 6.5, whereas section 6.6 outlines policy recommendations stemming from my findings. Concluding comments are offered in section 6.7.

6.1 UNDERSTANDING OF ACCOUNTABILITY

In order to understand what factors lead to strengthened accountability in complex accountability webs in international climate change financing, I first had to take a step back and define key concepts, why they are important and how they interrelate.

Accountability, in its simplest definition, is a relationship between at least two individuals - one giving account to the other. Or as Romzek & Dubnick (1987) describe it: “*answerability for one’s actions or behaviour*” (p.228). As Mashaw (2006) argues, this begs the following questions: who is accountable? To whom? For what? What is the process whereby account can be given? Against what is the account to be judged? What are the impacts or penalties associated with poor performance?

As described in the introduction to this thesis, I used the following definition of accountability for my research: “[A] relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences” (Bovens 2007, p. 450). This definition

captures the concept of accountability being a relationship between two or more actors, that the relationship entails answerability and consequences for one's actions or behaviour. This definition, as Bovens puts it, "stay(s) close to its etymological and historical roots and define(s) accountability as a specific social relation" (Bovens 2007, p. 450).

The application of this definition in my research made me realise the importance of not only the formal aspects of accountability but also those of an informal nature. As Romzek & Dubnick (1987) mention, internal sources of control for accountability can include formal hierarchical structures, but also informal social norms within an organisation. Similarly, they argue that external responsibilities for accountability can also stem from formal sources (e.g., legislative or contractual), or informal ones (e.g., pressure from civil society organisations). Similarly, Bovens (2007) outlines formal and informal types of penalties: "fines, disciplinary measures, civil remedies or even penal sanctions, but they can also be based on unwritten rules, as in the case of the political accountability of a minister to parliament, where the consequence can comprise calling for the minister's resignation." (p.452).

The application of the above definition also made me come to see accountability not as an end in itself in organisational governance, but rather as means to an end. As I explain below, accountability plays a role in building input and output legitimacy of organisations.

Organizations involved in international climate change financing operate in complex accountability webs, as they entail a broad set of actors involved as account holders and account givers. As my research interest was to analyse international climate change financing, it was important to clearly define what these complex accountability webs comprised, that is, they were made up of several "accountability regimes." I used Wolfe's definition of accountability regimes: individual accountability regimes include the involved actors and their specific account giver and account holder relationships, as well as the elements (formal and informal) that are in place to ensure accountability (Wolfe 2015). Figure 6.1 illustrates how accountability webs contain multiple individual regimes.

The literature establishes an important role for accountability in terms of how it can bring about institutional and organisational legitimacy. As discussed in chapter 2, accountability can contribute to input (relating to the governance process) and output (relating to the performance of the organisation) legitimacy (Scharpf 1997). And legitimacy can play a key role for organisations when securing funding and support to fulfil their mandate (Sommerer and Agné 2018). In other words, organisations who are well-governed, that perform well and benefit their target population face less resistance by stakeholders to justify their authority, decisions and existence.

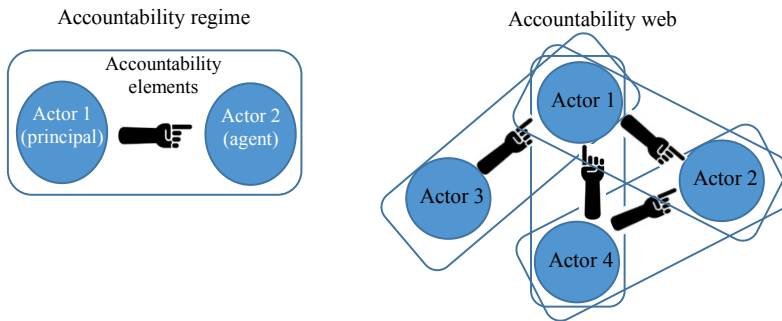


Figure 6.1: *Accountability regime versus accountability web. An accountability regime, comprising elements and two actors, versus an accountability web, comprising multiple regimes. Pointing hands represent the accountability requirements imposed by the principal upon the agent.*

6.2 ANSWERS TO RESEARCH QUESTIONS

This section unpacks the concepts related to accountability and applies these concepts by answering the four research questions I set out to tackle as part of this thesis.

6.2.1 What are the main elements of the many accountability regimes of the GCF and how can these elements impact the legitimacy of the Fund (RQ1)?

The first conclusion is that ex ante mechanisms were much more important than ex post mechanisms. Secondly, I found that there are two key actors: one main account holder (the GCF board) and one main account giver group (Accredited Entities).⁵⁰ Civil society organisations (CSOs) have no formal position either as account holder, nor account giver.

Ex ante accountability mechanisms (i.e., those put in place prior to any money being disbursed from principal to agent) were found to play a significant role in the accountability regimes, with the accreditation process of potential recipients being an important measure providing input legitimacy. This is congruent with findings from Dietrich (2011), who observed donors preferring to define ex ante the terms of aid contracts, especially in instances where recipient capacity is low and there is a risk of aid capture.⁵¹ Ex post mechanisms, such as penalties and rewards, did not play as significant a role in increasing legitimacy. How or whether the penalties are enforced, and whether they provide sufficient incentives for the various actors to perform as expected, will only be determined once projects are further into implementation. This finding aligns with other authors who

50. Accredited Entities can include international organisations (e.g., United Nations agencies, regional development banks), or developing country organisations (e.g., local non-governmental organisations, government ministries, national financial institutions).

51. Aid capture is when foreign aid gets diverted from projects and ends up in the pockets of recipient country politicians, bureaucrats or other elites (Andersen et al. 2020).

have looked at the use of penalties to incentivise performance in international aid. For instance, Oliveira Cruz and McPake (2010) found that donors fail to impose penalties on aid recipients for poor performance.

The main account holder in the GCF accountability web is the GCF board, whereas the main account givers are the Accredited Entities. The GCF board is responsible for the strategic direction and oversight of the GCF, whereas the Accredited Entities are the ones securing funding from the board to implement projects. Findings from Chapter 2 highlight that the GCF's accountability web is heavily focused on the control of Accredited Entities by various principals (i.e., GCF board, GCF Secretariat) and would benefit from formalising accountability measures pertaining to other agents within the web (i.e., this would serve to increase input legitimacy).

A key category of agents within the accountability web that lacks formal accountability measures is CSOs. I found that CSOs lack a formal role as account holder and as account giver, with no formal forum where CSOs could be held accountable and only informal and ad hoc means for them to give account. However, the informal pressure they put on other actors within the accountability web can be an effective means to drive performance, which would increase output legitimacy. There is also a lack of formal standard to assess the performance of civil society organisations, a lack of formal and transparent process for the monitoring and evaluation of their performance, nor is there a comprehensive penalty or 'remedy' scheme to incentivise CSOs to change their behaviour if they are seen as not performing adequately. The above CSO accountability weaknesses and gaps reduce input legitimacy. This finding is in keeping with other authors, who have found that some CSOs in global politics lack accountability standards, a clear constituency and even a formal mandate, as well as fail to publicly report on their activities, have poor financial monitoring and are not subject to any complaints or redress mechanism (Brandsen et al. 2017; Scholte 2004). This is in contrast, although it does not necessarily conflict with the findings from Dombrowski (2010), who determined that some of the non-governmental organisations involved global climate governance have indeed managed to make international organisations more accountable vis-à-vis the communities they can affect. On the other hand, I found that input legitimacy is increased thanks to the GCF's involvement of CSOs as observers at GCF Board meetings, as this augments openness and transparency. However, CSOs' lack of decision-making role reduces input legitimacy.

6.2.2 What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing (RQ2)?

The first conclusion is that formal accountability procedures such as ex ante accreditation and ex post penalties serve to align the incentives of the donor with those of the recipient in climate change financing. Secondly, pressure from CSOs can incentivise the efficiency and effectiveness of both the principal and agent.

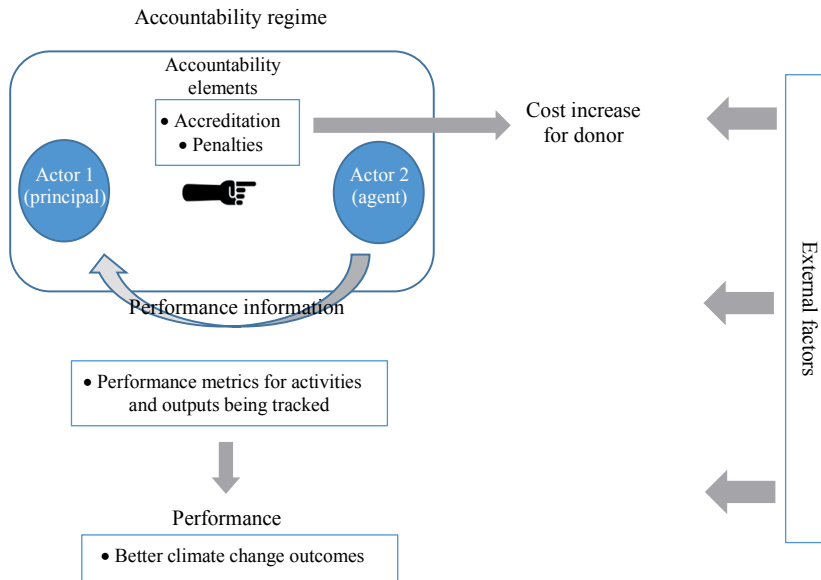


Figure 6.2: *The Accountability regime, comprising of elements (including accreditation and penalties) and actors, whereby the principal imposes accreditation and penalties upon the agent (as shown by pointing hand from principal to agent) and performance information flows from agent to principal (as shown by arrow). Performance and cost are influenced by accountability elements and external factors, with metrics used to track performance.*

In Chapter 3, a theoretical analysis was presented to better understand the specific accountability measures that can be put in place in international climate change financing. Chapter 3 discussed the importance of ensuring that the information used for accountability purposes (i.e., the performance metrics for activities and outputs being tracked) indeed leads to better climate change outcomes. I found that the accountability measures that serve to align the incentives of the donor with those of the recipient in climate change financing were the formal accountability procedures such as ex ante accreditation and ex post penalties. Although ex ante accreditation and ex post penalties (if the principal is willing to impose them) can influence recipient behaviour and have a positive impact on project outcomes, I found that they can also lead to an overall cost increase for the donor (see Figure 6.2).

This adds to findings from Cohen (1987), whose use of principal-agent analysis showed that penalties can lead to other unintended consequences on the principal and agent, such as excessive monitoring expenditures by the principal and over-spending to achieve results by the agent. Furthermore, I show that penalties help share the risk of poor project performance between the donor and the recipient, causing the recipient to have a personal stake in the achievement of climate change mitigation and adaptation results. My analysis shows that the imposition of formal accountability measures hinges upon the

risk profile of the project and the level of risk the grant recipient is willing to take on and tolerate. As such, I found that the donor needs to carefully consider the amount of risk she intends to impose upon her agent in the form of accountability requirements to ensure that there are indeed some entities willing to bid for the delivery of projects. This result aligns with the findings from other authors, who have determined that agents seek to decrease accountability-related risks (Markman and Tetlock 2000). However, my results contrast with the conclusions and recommendations of certain authors, who implicitly advocate for imposing further risk upon implementing agents via the increased number and sophistication of accountability measures (see Mees and Driessen (2019), for example).

The analysis also showed that pressure from civil society organisations can incentivise the efficiency and effectiveness of both the principal and agent. Other authors have found that civil society organisations contribute to accountability in global governance, climate governance and on-the-ground climate change action by shining a light on operations, by playing an oversight role, by insisting on redress for negative performance impacts, by pushing for formal accountability measures and by providing information to other account holders within the accountability web (Adger 2003; Bäckstrand et al. 2017; Laebens and Lührmann 2021; Scholte 2004; Themudo 2013). The analysis in Chapter 3 suggests that in addition to playing an important role in fostering accountability as other authors have argued, pressure from CSOs (informal account holding) could also lead to performance improvements via increased efficiency and effectiveness of donors and recipients.

6.2.3 What performance information should be produced and how should it be used to strengthen the accountability regimes of international climate change financing institutions (RQ3)?

Based on a literature review I found various insights that were integrated in an Accountability Information Assessment Framework. A test of this framework helped identify areas of strengths and weaknesses within a two-actor accountability regime.

Chapter 4 looked at the informational requirements in international climate change financing. In this fourth chapter, the literature across various disciplines was reviewed to identify key considerations for the production and use of information for accountability purposes. I found that informational needs vary at different points in times within the project cycle (i.e., according to the timeline of accountability) and based on the nature of the accountability relationship within a given regime. Normative criteria were also identified for the production and use of accountability information. I then used insights from the literature to develop the Accountability Information Assessment Framework (AIAF), which facilitates the assessment of the attributes of information and those of the processes that are in place for the utilisation of performance information (Figure 6.3).

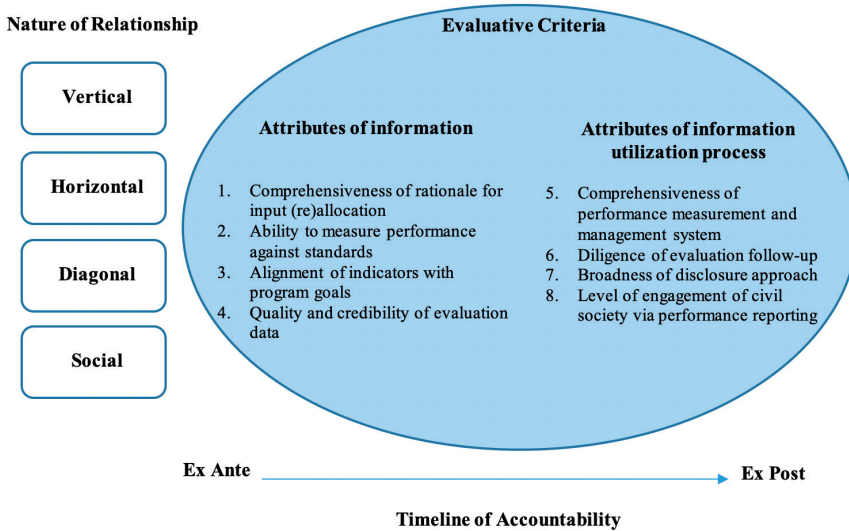


Figure 6.3: Graphical representation of the Accountability Information Assessment Framework. Evaluative criteria are shown inside circle and the different types of accountability "natures" are on the left-hand side. The timeline of accountability is shown at the bottom of the figure, from ex ante to ex post.

In order to test the framework’s usefulness, I applied it to the accountability relationship that exists between the GCF and its Accredited Entities. The application of the framework helped identify areas of strengths and weaknesses within this two-actor accountability regime. I found solid requirements for the production of performance information within the regime. These informational requirements focused on the rationale for input allocation, the measurement of performance against standards, the alignment of indicators with program goals, as well as the quality and credibility of evaluation data. I found several information-related weaknesses through the application of the framework. Most of the weaknesses uncovered pertained to the processes that were in place for the utilisation of performance information (i.e., lack of evidence that performance information will be integrated within project management decision-making, absence of explicit requirements or established process to address project evaluation recommendations and the limitations imposed by the GCF disclosure policy regarding the information on deliberations between the GCF and AEs).

The finding that there is a lack of integration of performance information within project management decision-making aligns with Kroll’s systematic literature review on the drivers of performance information use (Kroll 2015). Kroll finds that poor use of performance information tends to reflect: the immaturity of the performance measurement system; low capacity to support performance measurement implementation; minimal stakeholder involvement in the performance measurement process; a lack of support from the organ-

isation's leadership team; low goal clarity; and the absence of an innovative culture within the organisation. The interviews I conducted provided some anecdotal evidence that the poor use of performance information may be due to the same underlying reasons as Kroll suggests. I found that evaluation recommendations are not systematically addressed via a formal process, which is difficult to compare with the extant empirical literature. The gap in the literature with respect to the influence of evaluations on decision-making was identified in the 2000's (Christie 2007; Henry and Gordon 2004) and is still present today. The finding may be indicative of the GCF being a relatively young organisation, as some authors have found that younger organisations can lack the experience to make more strategic use of evaluations for organisational learning (Smillie and Hailey 2013). Through the document review and interviews, I found that information disclosure is somewhat limited at the GCF, which is a trend outlined by Nielson and colleagues, namely that emerging international organisations and new bilateral donors have more limited disclosure practices, compared to traditional donors (Nielson et al. 2017).

I found that the production of accountability information is often at odds with the resources available for delivering project outcomes. This finding contrasts with the few authors who have argued for the need to increase the number of performance metrics in the context of managing for sustainable development (Gulluscio et al. 2020; Pintea 2010) and the calls for further data collection by advocates of "evidence-based management" (Pfeffer and Sutton 2000; Stewart 2016). However, my findings echo the conclusions reached by other authors, who have found that the account giving process can be costly and can detract from other key tasks. For example, Ebrahim (2005) found this result in the context of accountability in the relationship between donors and non-profit organisations and Franco-Santos et al. (2012) in the private sector context.

Another finding is that there is a need for receptive principals for accountability regimes to properly function. This is not as dramatic as the findings from Hamman et al. (2010), who observed principals that pursued self-interested outcomes and used agents to achieve their aims. None of the key informants interviewed for the study described in Chapter 4 indicated that the GCF behaved in the self-interested fashion described in Hamman et al. (2010).

6.2.4 Does the performance information produced and used in local climate finance projects meet the needs of the actors in complex accountability webs (RQ4)?

The main conclusion is that informational needs vary across actors involved in complex accountability webs. Production and use of accountability information were also found to be lacking.

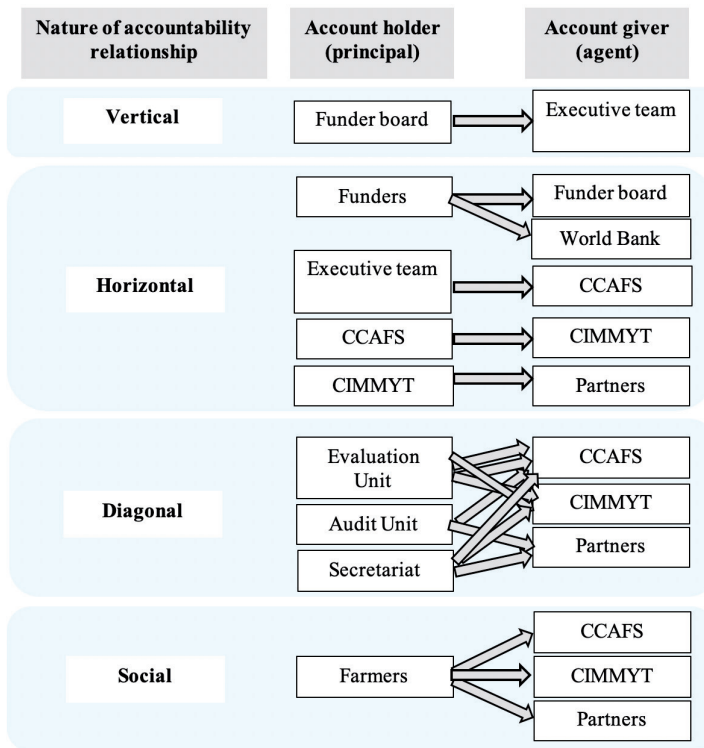


Figure 6.4: Nature of relationships between accountability web actors. The different types of accountability relationships are shown on the left-hand side, with account holders (principals) in the centre and account givers (agents) on the right-hand side. The arrow points from account holder to account giver.

To answer the research question, the fourth paper presented in Chapter 5 applied the framework developed in Chapter 4 to analyse the accountability information used in a complex accountability web: a CGIAR-funded climate-smart agriculture project in India (see Figure 6.4). Figure 6.4 illustrates that some of the actors play a role of principal vis-à-vis others, while also being agents themselves vis-à-vis others. For instance, the Funder Board is principal vis-à-vis the CGIAR Executive team, but is also agent vis-à-vis other funders. The CGIAR Executive team is also principal vis-à-vis the Climate Change and Food Security Program of the CGIAR (CCAFS). Other actors are principals to multiple different agents, such as the Evaluation Unit, Audit Unit and GCF Secretariat, who are principals for CCAFS, CIMMYT and project implementation partners.

Through a document review and a series of key informant interviews, I found that the accountability relationships between the various account holders and account givers required information that is broader than compliance with the terms of the contract or financing agreement. Through the interviews I conducted, I found that the actors involved

across regimes had different expectations in terms of the informational requirements and usage. Indeed, this validated the hypothesis that the nature of the accountability relationship, be it of a vertical, horizontal, diagonal or social nature, has a bearing on the information needs.

Gaps in the production of accountability information, as well as how it is used, were found in some of the regimes analysed (e.g., information on the performance of partnerships, lack of formal and systematic process for funders to review program evaluation findings and inadequate performance indicators and targets). I found that although there are several formal and well-established processes for account giving within the accountability regimes, the sharing of certain types of accountability information across actors is described by many as being performed in an ad hoc fashion. Similar findings were obtained by other authors. For instance, Collins-Williams and Wolfe (2010) found that transparency practices ranged from poor to stellar in the organisation they studied (i.e., the World Trade Organisation) and Carrasco and his colleagues found that information disclosure by regional development banks is deemed inadequate by civil society organisations (Carrasco et al. 2011).

Another finding was that certain documents that are integral to the account giving process within the accountability web were seen as inadequate for such purposes by key account holders, including donors. This finding contrasts with what Ebrahim has argued is a common “myopia” in accountability, namely, that many organisations who receive funding from donors tend to focus their reporting efforts on providing performance information relevant for accountability to their donors (Ebrahim 2007).

Lastly, a set of long accountability chains were found to be in place in the CGIAR project used as a case study. This finding echoes Page (2006), who observed that internationally-funded projects often involve a large set of actors, leading to long accountability chains and creating ‘complex accountability webs’ (Page 2006). Similarly, other authors have found complex and overlapping accountability chains in the context of international financial institutions (Woods 2001), global governance (Keohane 2008) and international climate change governance in particular (Keohane and Victor 2010; Widerberg and Pattberg 2017), in the non-governmental organisation context (Lewis 2007), as well as several other public sector management contexts (Krahmann 2016; Page 2006; Romzek 2015a; Romzek and Dubnick 1987; Romzek and Ingraham 2000).

The finding that the several long accountability chains, together forming an accountability web, indeed gave rise to many of the typical challenges and negative consequences mentioned in the literature (e.g., role confusion, ineffectiveness, system breakdowns) (Brunner and Enting 2014; Koppell 2005; Nielson and Tierney 2003; Romzek, LeRoux, et al. 2012; Romzek 2015a; Romzek and Dubnick 1987).

This case study validated the Accountability Information Assessment Framework (figure 6.3) as a valuable heuristic tool that can be further improved to facilitate the academic study of information needs in complex accountability webs beyond those of international climate finance. Adapting the AIAF for a broader application also stands to benefit practitioners and decision-makers concerned with strengthening accountability within the complex webs that exist in bilateral, multilateral and parastatal service provision. The AIAF could therefore support calls for focusing climate change performance measurement efforts on what matters as opposed to what can be easily measured (Gulluscio et al. 2020).

6.2.5 Answering the overarching research question: What factors lead to strengthened accountability in the complex accountability webs of international climate change financing?

Taken together, the four studies undertaken for this dissertation allow me to determine four interrelated factors that can lead to weaker or stronger accountability in these complex accountability webs of international climate change financing: effective accountability relationships; balanced accountability measures; the principal's willingness to apply accountability measures; and the agent's willingness to participate in the accountability regime (see figure 6.5). I elaborate on these factors below.

Effective accountability relationships

Effective relationships between the many actors within the accountability web is essential to strengthen accountability. This includes relationships between principal and agent across different "natures of accountability" – from vertical and horizontal, to diagonal and social. The myriad actors playing the role of principal, agent, and often both, pose a risk of creating gaps in accountability (Bovens et al. 2008). Detailed mapping in chapters 2 and 5 allowed to produce a fine-grained depiction of accountability relationships surrounding the GCF and the CGIAR. This exposed long accountability chains forming complex accountability webs, with evidence of gaps and other challenges associated with such webs (Koppell 2005; Romzek and Dubnick 1987).

Evidence of actors, namely civil society organisations (CSOs), playing the role of principal without being formally accountable to any other party themselves (i.e., absence of, or gap in accountability relationship) was found. The absence of accountability of a given actor means that this actor's performance will not be formally evaluated, which in turn can lead the actor to poorer decision making (Aleksavska et al. 2019; Tetlock 1985). As other authors have determined, informality in accountability regimes can lead to complicated relationships and more opaque expectations (Romzek et al. 2012). The informal accountability stemming from CSOs was found to have potentially positive as well as negative effects on climate change project outcomes. On the one hand, the pressure CSOs exert on donors and implementing agents can motivate project effectiveness improvements.

On the other hand, CSO pressure may also lead to motivate donors to focus their funding allocation towards less risky projects, which may not be the projects with the highest benefits in terms of greenhouse gas reductions or climate change adaptation.

Balanced accountability measures

Related to the effectiveness of accountability relationships are the measures principals can use to incentivise their agents to perform. In well-functioning accountability regimes, performance expectations (or standards) are established, along with the consequences for poor or stellar performance (Bovens 2007; Mashaw 2006). Similarly, I find that the choice of information to be collected on the agent's performance needs to be well thought through by the principal. My findings indicate that performance information is key to the relationship between the account holder and account giver, as it establishes the contract (ex ante) between principal and agent, and is crucial to the enactment of accountability (ex post). Performance information is what the principal uses to determine whether and to what extent her agent is meeting expectations. This information is then used by the principal to make the corresponding decisions to reward or penalise her agent. It is via this information that the agent justifies his role to his various principals. As such, the lack of performance information or poor information is found to lead to weakened accountability. However, findings from my research also show that burdensome reporting requirements, especially when the performance information collected is not useful for principals' decision-making, helps neither the principal, nor the agent, nor the ultimate beneficiaries of climate finance. I found evidence that performance information, including evaluation results, is being underused, representing a missed opportunity to integrate performance information within project management decision-making. There is also evidence of performance information not meeting the expectations of account holders. Yet, there was also evidence that the production and reporting of performance information is creating a significant reporting burden and causing distractions from project implementation, which is in-line with findings from other others (Bornstein 2006; Romzek and Dubnick 1987).

Principal's willingness to apply accountability measures

If principals within the accountability web are unwilling to impose accountability measures, this weakens accountability. There is indeed evidence of the lack of willingness of certain actors within the accountability web in international climate finance to use existing penalties for fear of broader consequences. For instance, the Conference of the Parties (COP) was reluctant to penalise the GCF Board for poor performance in the early days of the GCF's existence. This is consistent with findings from other authors who have analysed other public sector accountability regimes (Romzek and Johnston 2005; Sclar 2001). I also found evidence of actors being ill-equipped to play their role as principal, such as the GCF Secretariat having limited capacity to undertake monitoring and evaluation in its early

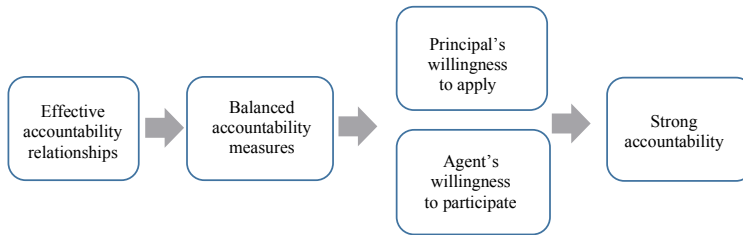


Figure 6.5: *Interrelated concepts for strong accountability. Effective accountability relationships and balanced accountability measures are required, with the principal and agent needing to be willing to play their respective roles.*

days of operation. According to anecdotal evidence, this has somewhat improved since I conducted the key informant interviews, thanks to new leadership at the GCF and a new focus on providing value-added services to GCF funding recipients.

Agents' willingness to participate in the accountability regime

Excessive risk cannot be imposed on the agent via heavy-handed accountability measures, as this can lead the agent to opt out of participating in the implementation of climate change projects. Similarly, overly burdensome monitoring and reporting requirements can impose a cost to the agent, dissuading him to participate in climate change projects (either by foregoing future payments for project implementation, or by not even submitting a proposal to be a project implementer from the outset).

Relationships, measures and willingness to act

The four factors described above are interrelated, as illustrated in Figure 6.5.

Strong accountability requires effective relationships amongst the multiple actors within accountability webs, along with a balanced set of accountability measures employed by the principals to motivate their agents. This behoves the principal to be willing to apply the accountability measures and requires the measures to be reasonable enough for the agent to be willing to participate.

6.3 THEORETICAL CONTRIBUTION

This section describes the theoretical contribution of my research, which include: the clarification of key concepts and how these relate; analysing the incentives faced by actors in an accountability regime; and relating information requirements to accountability relationships. In this section, I also describe the theoretical contribution of my research by comparing my research against other studies within the relevant literature and by outlining how this work adds to existing scientific debates.

6.3.1 Clarifying relationships between key accountability-related concepts

Calls for greater accountability in the public sphere, and to some extent, the treatment of accountability as a concept by some authors, can lead to the erroneous perception that improving accountability should be a goal in itself. For instance, most chapters in McNeil and Malena (2010), and indeed the book's foreword, fall victim to such a treatment of the concept. Others either imply that accountability is the targeted outcome or are simply silent about where accountability fits in the grander scheme (Baldoni et al. 2021; Broadbent et al. 1996; Gilbert et al. 2011; Overman et al. 2020). And, as pointed out by many authors, there is also a vast literature that mentions accountability without defining it, as well as vague and conflicting definitions for the concept (Bovens 2007; Brummel 2021; Koppell 2010a; Sinclair 1995).

The accountability and governance literature also has its share of confusing or overlapping constructs, which I had to parse through in order to establish the theoretical framework. For instance, some have treated legitimacy and effectiveness (i.e., effectiveness leads to performance) as two separate concepts (Karlsson-Vinkhuyzen and Vihma 2009), instead of seeing performance as helping to bolster legitimacy. Others only link accountability and legitimacy in the relationship between account giver and account holder, whereby the latter needs to have "legitimacy" to ask for an account from others (Baldoni et al. 2021; Overman et al. 2020).

Undertaking the research for my thesis led me to identify more clearly what is meant by the concept of accountability (as described earlier in this chapter), but also drove me to see accountability as a means to an end, not an end in itself. Accountability is an essential ingredient in good governance, enabling the rooting out of mismanagement (Said et al. 2015), but more importantly, it plays a key role in establishing the legitimacy of organisations (Keohane and Grant 2005; Koppell 2010a). Legitimacy, in turn, is important to justify the continued existence of an organisation and its ongoing financial support (Bäckstrand 2008b; Biermann and Gupta 2011; Fisher et al. 2017).

6.3.2 Analysing incentives faced by actors in an accountability regime

Another key part of my research was to frame accountability relationships using agency theory. Agency theory offers "*a flexible framework for modelling innumerable variations in institutional arrangements, and comparing their potential for inducing desirable behaviour by agents.*" (Gailmard, 2014, p. 2). This allowed me to analyse the incentives faced by actors in an accountability regime for the financing of international climate change projects, the impact of specific accountability measures and the role of information in the account holding process.

The use of agency theory to analyse the impact of performance measurement in the context of the delegation relationship between donor and recipient adds to the body of literature on factors that can limit the effectiveness of such measurement approaches in public sector organisations. By providing normative guidance on the production and use of performance information (e.g., type of information required and how to use it), as well as positive statements about performance measurement practices in complex accountability webs (e.g., existing best practices, common weaknesses), this also brings about insights into the effectiveness and limits of performance measurement. These complex interactions, as well as the incentives and risks they can generate, require scholars and practitioners focused on accountability to think through carefully the normative advice they provide regarding interventions within complex accountability webs.

6.3.3 Relating information requirements to the nature of accountability

The framework I developed in chapter 4 addresses the lack of guidance in the literature on accountability information requirements. The literature focused on accountability acknowledges the importance of information in accountability regimes. Information about the account giver's actions is required in order to hold actors to account (Bovens 2007; Ebrahim 2019). Performance information is seen as being an integral part of accountability regimes, as it allows account holders to determine whether these institutions are achieving their objectives (Ebrahim 2019; Mack and Ryan 2007; Romzek 2015b). Donors involved in development aid require specific types of information about the performance of the projects they fund, often specifying performance indicators to be used by their grant recipients (Adam and Gunning 2002; Morra-Imas and Rist 2009). It has also been established that the quality of the performance information, including performance indicators, impacts decisions made by the various actors involved (Brignall and Modell 2000; Adam and Gunning 2002; McGillivray 2003; Mosley, Hudson, and Verschoor 2004; Holzapfel 2016).

However, little guidance could be found in the literature in terms of what type of information should be produced, how such information should be used (Boyne et al. 2002; Connolly and Hyndman 2004). Furthermore, there is an acknowledgement that the nature of the relationship between account holder and account giver has a bearing on how accountability can be enacted (Kloot and Martin, 2001). Yet, the literature is uneven on how information requirements may vary based on the nature of accountability relationships, with certain types of relationships (i.e., vertical and diagonal) being tackled by several authors, while others (e.g., horizontal and social) being under-represented or offering little by way of normative guidance. No comprehensive source could be found in the literature for insights on informational needs on all natures of accountability.

This lack of guidance in the literature is the gap that chapter 4 attempts to fill by developing a theory-based framework to systematically determine the information requirements and how such information is best used for account giving and account holding purposes in international climate finance accountability regimes, across all natures of accountability. This is especially important in the case of complex accountability webs, which comprise many accountability regimes of different natures. In the development of the framework, I applied insights from the literature on information in vertical accountability relationships to horizontal and social relationships, which was a pragmatic solution, but could be proven to be inappropriate once further research is undertaken on the specific information needs for such relationships.

These findings contribute to the academic debate about the value of performance measurement. Many authors have outlined the potential risks of performance measurement, including how such a practice can lead to perverse outcomes, such as manipulating data to improve the appearance of performance, or even selecting performance measures that are easily attainable, without necessarily making the actual work practices better (Hood 2006; Keevers et al. 2012; Perrin 2015; Thiel and Leeuw 2002). As in the case of Moynihan (2008) and Speklé and Verbeeten (2014b), this thesis' contribution to the academic debate is to critically assess the value and limitations of performance measurement, with the understanding that it has already been embraced by, and has had a significant influence on, the public sector (Van Dooren et al. 2015), and I found that climate finance is no exception.

6.4 REFLECTIONS ON METHODOLOGICAL APPROACHES

This section describes my reflections on the methodological approaches used to answer my research questions. This includes a discussion on the case studies selected, their design and the generalisability of my findings. The validity and reliability of my results are also discussed.

6.4.1 Case study selection, design and generalisability of results

Three case studies were used as part of my thesis to gain further insights into accountability regimes – two were focused on the GCF, while the case study in chapter 5 was on a project funded through the CGIAR. I chose to undertake idiographic, theory-guided case studies (Levy 2008), as my aim was to describe and understand international climate finance accountability regimes based on well-established concepts in the literature. As such, using inductive case studies (also known as “atheoretical”, or “configurative-idiographic” (Eckstein 1975; Lijphart 1971; Verba 1967)), although highly descriptive, would not have had the theoretical framework to guide the analysis, including for the design of

key informant interview questionnaires and coding for the content analysis. I chose not to undertake process tracing or “causal-process observations” (Bennett and Checkel 2014; Brady 2010), as my aim was not to generate causal hypotheses per se. Similarly, the use of a hypothesis testing case study did not align with my intended aims.

As for the organisations selected for the case study, the rationale was as follows: the GCF was chosen for two of the three case studies because it is the flagship climate change financing organisation. It has received the most attention by the media, civil society and Parties of the United Nations Framework Convention on Climate Change (UNFCCC). It is also the newest and largest fund under the financial mechanism under Article 11 of the UNFCCC, with the international community looking towards the GCF for the mobilisation and disbursement of the lion’s share of international climate finance.

6

In chapter 5, I use a case study of a climate-smart agriculture project in India that is funded through the CGIAR and led by the International Maize and Wheat Improvement Center (CIMMYT). Both the CGIAR and CIMMYT have been in existence for decades, which ensured that accountability relationships and measures would be in a mature state. A project funded by the CGIAR was also chosen as it is situated within a complex accountability web due to the plethora of actors playing the roles of account holder and account giver (and often both) – from officials in donor agencies that sit on the oversight board, to the team of international and local government scientists who implement the project, as well as auditors and evaluators playing a diagonal accountability role.

These two case studies were also chosen for pragmatic reasons, namely that I knew that I would be able to have access to a broad range of key informants, including senior-level officials, thanks to my existing professional network (as a previous executive in the Canadian International Development Agency and an international consultant with clients and contacts in various international organisations).

My choice of case study approach and of the organisations to target allowed for rich and detailed information gathering. However, my findings are context-specific, as such case studies tend to be, which can limit generalisability (Flyvbjerg 2006; Goertz and Mahoney 2009; Steinberg 2013). In order to broaden the applicability of my findings, I chose two typical international organisations involved in climate change financing that are associated with complex accountability webs, at different maturity stages and with different set of actors (Seawright and Gerring 2008; Shakir 2002). As such, my findings are generalisable to complex accountability webs of international organisations involved in climate change financing in developing countries. Many of my findings are likely applicable more broadly to development aid, as there is significant overlap in the accountability measures used in the aid context with those used in international climate finance, as well as many of

the same actors (principals and agents). Additional case studies would need to be undertaken in order to validate the applicability of my results to this broader context.

6.4.2 Use of agency theory

Although using agency theory to analyse accountability relationships is common in public administration (see for instance Steinberg (2010), Kluvers & Tippett (2010) and Haque (2014)), it is not without its limits. Some have argued that the contracts designed as part of agency theory may be unrealistic and dehumanising, leading some agents to resist being held to such restrictive contractual terms (Gorz 1989). This argument has been challenged as an oversimplification of how principal-agent models can be used and ignores the benefits of using more objective compensation measures (Power 1992). More importantly, the incentives outlined in chapter 3 reflect how much of the climate financing contracts have been evolving in practice, with payments being made based on specific outcomes to be achieved.

Another criticism relates to how principal-agent models tend to focus on a snapshot in time and ignore dynamic interactions between principal and agent over time (Broadbent et al. 1996). The issue of dynamic interactions has been tackled in the principal-agent modelling literature by introducing multiple periods, as well as collaboration and building trust over time (Bjurstrøm 2020; Kreps et al. 1982). However, the simplified agency relationship I use in chapter 3 is justified, as it reflects the situation where an agent is hired to deliver a climate change project by a donor, which in reality may well be a one-off relationship if the agent performs poorly.

The simplification of the principal-agent relationship described in chapter 3 cannot be overstated. In reality, there is a “cascade” of accountability relationships in international climate change financing, with countries funding multilateral institutions, who in turn fund implementing partners, who then sub-contract all or parts of the implementation to local agents that have more “on-the-ground” experience. This undoubtedly has an impact on the ability of the various principals to ensure their agents perform as intended and the interaction between the many principals and agents likely also affects the ultimate outcome (i.e., how effectively climate change financing leads to better mitigation and adaptation). Indeed, this is the challenge of complex accountability webs (Page 2006; Upton 2000). This is a key limitation of using a simplified analytical approach, as some authors have observed (Delreux and Adriaensen 2017). Accordingly, there is an emerging literature focused on building evermore complex models with multiple principals and agents (see for instance DeMarzo and Kaniel (2021); Hu et al. (2019)).

Throughout the analysis undertaken in chapter 3, I take for granted that the principal indeed plays her role of account holder seriously and does not hesitate to impose penal-

ties for poor performance, for instance. This has been shown to often not be the case in practice and is one other criticism of using agency theory to analyse accountability issues (Schillemans and Busuioac 2015). The credibility and willingness of the principal to impose the accountability measures at her disposal are no doubt essential to the well-functioning of the accountability regime (Bovens and Wille 2020). Indeed, as discussed in chapter 2, there are significant political sensitivities involved in imposing heavy-handed accountability measures in the governance of the GCF, which will likely reduce the likelihood of such measures being used.

Notwithstanding the limitations noted above, the framing of the accountability relationships present in international climate change financing using agency theory, as undertaken for my research, was an appropriate and useful choice for its intended use. The focus on a simplified relationship serves to isolate the specific accountability measures that I set out to analyse in order to more easily assess their potential impact.

6.4.3 Validity and reliability of results

Validity and reliability are important to any analytical endeavour, with validity pertaining to the accuracy of results or measure at hand, whereas reliability being about the consistency of results of given a measure (Price et al. 2015). In order to assess the rigor of my case studies, I used the following criteria: internal validity (or logical validity), construct validity, external validity (or generalisability) and reliability (Cook and Campbell 1979; Yin 2003).

Internal or logical validity requires that a plausible causal relationship be established between the variables under study and the results obtained (Yin 2003). Internal or logical validity can be achieved by establishing a research framework based on the literature, by undertaking “pattern matching” (i.e., identifying patterns that match with those in the literature), and via triangulation (e.g., establishing a research framework based on different bodies of literature) (Eisenhardt 1989b). For my case studies, there are four elements that contribute to internal or logical validity: I established a theory-based research framework; I captured all accountability elements in the organisations under study in order to have a comprehensive view of their accountability regimes; I obtained perspectives from multiple informants across accountability regimes; and I built an in-depth understanding of the organisations under study via my professional work experience, which gave me access to the inner workings of these organisations.

Construct validity pertains to the extent to which the concepts under study are indeed reflected in the case study observations (Denzin and Lincoln 2005; Gibbert et al. 2008). This can be achieved by drawing a clear line between a study’s research questions and conclusions, or by triangulating via different data sources (Yin 2003). For my case stud-

ies, I established a logical chain between my research questions and my conclusions, in addition to using a document review and key informant interviews to ensure I had two different data collection strategies and different data sources.

External validity or generalisability refers to the applicability of a given case study to other settings or within a case and the ability to generalise empirical observations to theory (Azham and Yusof 2011). This is different from statistical generalisation, which allows to infer conclusions about populations (Yin 2003). In order to improve external validity or generalisability, the choice of case study must be accompanied with a strong rationale, with corresponding contextual information about the case study (Cook and Campbell 1979). For my case studies, I indeed provided a clear rationale for the case selection, as well as details on case study context.

As for reliability, it pertains to transparency and replication (Gibbert et al. 2008). Reliable case studies are those that include documented procedures that allow others to follow the same steps and achieve similar results (Denzin and Lincoln 2005; Yin 2003). For my case studies, five elements helped improve their reliability: A case study protocol was developed; the case study data was uploaded to the secure Wageningen server in accordance with the data management plan; the coding for the content analysis was validated with CGIAR staff and I undertook results validation discussions with staff from the CGIAR and GCF; I undertook additional interviews a few years after initial interviews to uncover any changes over time; and I found internal consistency via overlap between respondents in same stakeholder category (i.e., respondents in the same stakeholder category provided similar responses).

Table 6.1 summarises the approaches used to improve the methodological rigor in my case studies, as per guidance provided by Gibbert et al. (2008).

Although I made efforts to ensure that the case studies had a high level of validity and reliability, this could have been strengthened both by:

- Conducting additional case studies to compare the GCF to other climate change financing institutions (e.g., the Climate Investment Funds, Adaptation Fund).
- Increasing the number of CGIAR projects to study, perhaps across different countries.

Of course, this would have required significantly more time and resources. Also, at least in the case of other climate change financing institutions, this would have presented a logistical challenge in terms of gaining access to these organisations, which could have negatively impacted validity and reliability.

Table 6.1: Approaches to improve methodological rigor of my case studies

Internal / logical validity	Construct validity	External validity / generalisability	Reliability
Theory-based research framework established.	Logical chain established between research questions to conclusions	Clear rationale for case study selection and details on case study context provided to justify choice.	Case study protocol developed.
Captured all accountability elements for comprehensive view of accountability regimes.	Used document review and key informant interviews (two different data collection strategies and different data sources).		Case study data uploaded to the secure Wageningen server (audio files, transcripts) for any future replication.
Perspectives from multiple informants across accountability regimes.			Validated coding with CGIAR staff and undertook validation discussions.
Built an in-depth understanding of the organisations under study via professional work experience that gave access to inner workings of the organisations.			Undertook interviews a few years after initial interviews to uncover any changes over time.
			Found internal consistency via overlap between respondents in same stakeholder category.

6.5 AREAS FOR FURTHER RESEARCH

In this section, I describe three main areas of further research, namely: the analysis of principal-agent relationships inherent in accountability regimes; the improvement of understanding on information for accountability; and the further study of the specific organisations I used as case studies for my research.

6.5.1 On accountability and principal-agent relationships

As mentioned in section 6.2.1, the use of agency theory to analyse the relationship between a donor and recipient in climate change financing was a useful and appropriate analytical framework, but also has many limitations. To address the criticism about principal-agent models failing to capture dynamic interactions between principal and agent over time, a multi-period modelling approach could be adopted, incorporating the role of trust as an element that has an influence on the principal and agent over the longer term. This would allow to see how agents can behave to increase their chances of receiving future funding, which is likely a strong incentive for agents to perform. To capture the “cascade” of accountability relationships in international climate change financing a mul-

ti-principal, multi- agent model could be developed for climate change financing, similar to those developed by Attat et al. (2010), DeMarzo and Kaniel (2021) and Hu et al. (2019).

Gaining a deeper understanding of how donors could further incentivise their grant recipients for the achievement of individual outcomes (e.g., carbon sequestration, climate resilience) would also be essential. This could be achieved by using an approach similar to Thiele (2010), who developed a multi-task principal-agent model to analyse how the varying abilities of an agent to deliver on certain tasks require different incentive contracts. This would shed light on the value of the various outcomes to be achieved and whether certain expectations distract from achieving key outcomes, as has been argued by certain respondents interviewed for the case study in chapter 5 and identified as needing addressing by authors such as Ebrahim (2003a, 2005) and Woods (2001).

6.5.2 On information for accountability

The framework developed in chapter 4 has theoretical underpinnings that are based on a body of literature that is uneven. Vertical accountability relationships have been tackled in depth by authors across several disciplines. Similarly, the literature on diagonal relationships (e.g., role of auditors and external financial verification) is well established and the public administration literature clearly describes the many formal processes such as audits, evaluations and financial verifications that public sector and international organisations are subjected to (Bradlow 2005; Monfardini and von Maravic 2019). On the other hand, very little was found in the literature on the question of information needs for horizontal accountability relationships. In the absence of specific guidance from the literature on horizontal accountability relationships, the framework relies on some of the evaluative criteria stemming from the literature that focused on vertical and diagonal accountability relationships and applied them to horizontal relationships. Horizontal relationships are relationships of two actors that are on an equal footing, yet one acts as an account holder (principal) and the other is required to give account (agent). This “relationship of equals” can be diplomatically charged in the case where account holder and the account giver are a donor country and a multilateral fund, for instance.

In terms of the information needs and expectations for social accountability relationships, again, the literature is somewhat lacking in normative guidance. The social accountability literature tends to advocate broad transparency, with few insights about which information should be prioritised so that social actors can play a more effective role in mobilising other players involved in vertical, horizontal and diagonal relationships within accountability regimes. Therefore, the framework developed in chapter 4 should be revisited to integrate any future insights from the normative and empirical literature on horizontal and social accountability relationships and their particular information needs.

Perhaps more importantly, another area for future research pertains to the receptivity of the principal in using performance information to hold their agent to account. Boyne et al. (2002) argue that in addition to increasing the quality and relevance of performance information in accountability regimes, account holders need to make use of the said information to fulfil their role by motivating agents (or account givers) to improve their performance. Determining the level of receptivity of the principal would complement the assessment undertaken using the framework developed in Chapter 4. This would apply to the many different principals that make up accountability webs (e.g., board of an organisation, auditors, managers). A survey of key principals in climate finance accountability webs would shed light on their willingness to use performance information to reward or penalise their agents.

6.5.3 On specific organisations

Finally, further research should be undertaken on the two organisations targeted in the case studies used in this thesis (i.e., GCF and CGIAR). In the case of the GCF, the timing of the case studies did not allow to analyse certain aspects, as the organisation is in its early stages of development. This includes the use of ex post accountability measures (e.g., penalties for poor performance). Similarly, it would be valuable to undertake an empirical study to assess whether the GCF has an implicit site selection bias (i.e., projects in lower risk countries are more likely to receive funding) and whether the onerous ex ante accountability measures, such as accreditation, are indeed creating barriers to entry. Site selection and barriers to entry stand to have a significant impact on fairness and therefore output legitimacy.

Unlike the GCF, the CGIAR is a well-established organisation that was setup many decades ago. However, the recently announced merger of all of the CGIAR centres into a “One CGIAR” will have significant impacts on governance and accountability, which will render many of the observations and findings in this thesis antiquated within the next few years, or possibly months. A follow-up study to compare the findings about accountability practices, as well as accountability information production and use, would allow to uncover changes over time.

6.6 POLICY RECOMMENDATIONS

This section outlines policy recommendations aimed mostly at donors and international climate finance organizations, based on the insights from my research. The policy recommendations I propose are clustered into two categories: the need to increase transparency and formalisation in accountability webs; and the importance of reducing accountability requirements and web complexity, while increasing effectiveness.

6.6.1 Increasing transparency and formalisation

There are calls from various stakeholders to increase accountability of climate finance, but these calls are not always anchored with a specific definition of what is meant by accountability, let alone what is to be achieved via this increased accountability. Establishing a definition for accountability, clarifying roles and responsibilities for account holders and account givers within accountability regimes, as well as how actors interact and use accountability information (e.g., how will donors use evaluation reports?) would increase the formalisation of accountability elements.

Formalising the accountability roles and measures of regime actors (and publicising them) would allow to make complementary use of the strength of social, diagonal and horizontal accountability relationships. For instance, if performance standards for CSOs were made public, evaluators (diagonal relationship) and donor countries (horizontal relationship) could pressure the CSOs directly, or influence other climate finance organisations to exert pressure onto CSOs for them to improve their performance. Similarly, if NDAs' performance were made public, developing countries could compare performance across NDAs in different countries to get a better sense of how well they are being served.

Establishing objective and transparent criteria for site selection would allow to make more informed and equitable funding decisions regarding projects in countries that face more challenging implementation circumstances (e.g., fragile states). Similarly, establishing objective and transparent criteria for the use of penalties (and rewards) and acknowledging the need to avoid real or perceived conflicts of interest in the application of such penalties (and rewards) would make for more effective account holding.

Efforts towards increased transparency and formalization would need to be led by donors and international climate finance organizations, in cooperation with other actors in climate finance accountability regimes (e.g., CSOs and NDAs).

6.6.2 Reduce accountability requirements and web complexity, while increasing effectiveness

The long delegation chains present in international climate change financing, as well as the large number of actors playing vertical, horizontal, diagonal and social accountability roles, make for complex management challenges. Shortening delegation chains by reducing the number of actors could simplify relationships and reduce the risk of “accountability disorders” (Koppell 2005). The reduction in the number of actors would need to be balanced with the calls for further participation by external actors. One possible remedy would be to formalise the coordination function of CSOs, increasing their participation, while making them accountable for their performance, including how well they represent their constituency. The formalisation of CSO roles and responsibilities would also address

the lack of standards to monitor, evaluate and incentivise CSO performance. This would also strengthen the legitimacy of CSOs, thus facilitating their role as account holders, going beyond their exertion of informal pressure on other accountability web actors.

Another delegation chain streamlining opportunity is for international climate finance to interact more directly with developing country AEs, instead of international organisations. This would reduce at least one player in the accountability chain. Developing country AEs may also have greater on-the-ground expertise, therefore being able to implement the project themselves, instead of having to hire a local implementing agent, thus reducing yet another actor in the accountability chain.

6

Relatedly, a key accountability requirement in some international climate finance organisations is the accreditation process. Accreditation is an onerous process and is seen as a barrier to entry for organisations that could play an important role in reducing greenhouse gases and helping with adaptation to climate change. There is a clear need for the GCF and donor countries more broadly to continue their support in building capacity and so-called “readiness” in developing countries, including to facilitate accreditation. Doing so would stand to create a greater set of local actors (e.g., AEs, implementing agents, evaluators) to play strong roles as principals and agents. This would in turn build country ownership (a key GCF priority), as well as help reduce the length of accountability chains and the complexity of the GCF’s overall accountability web (as described above for AEs).

There is dissonance between how donors and those tasked with project implementation perceive the value of performance information and other accountability requirements. Effort needs to be expended towards consolidating performance information requirements and ensuring that this information is useful for project management purposes (as opposed to only meeting the needs of donors, as is the current perception of some respondents). These consolidation efforts need to be done by engaging actors across the accountability web to optimise data generation, collection and reporting, balancing the needs of account holders and the resources allocated for account giving. The consolidated data and information could then be better used to drive performance through incentives (i.e., penalties and rewards) and learning. Of course, this type of donor coordination may become increasingly challenging with the proliferation of new donor countries (Gulrajani and Swiss 2019).

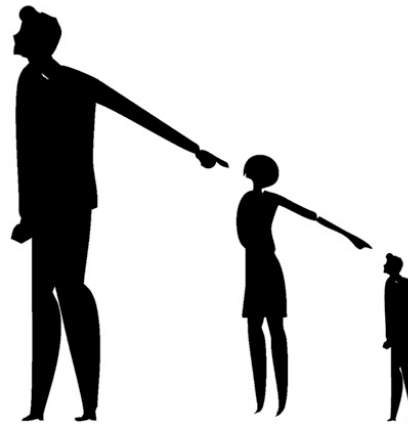
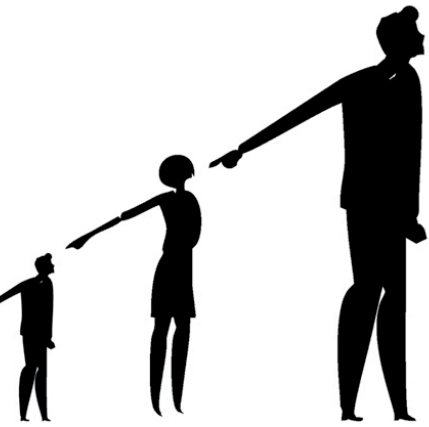
Balance between accountability requirements and effectiveness is especially important in the context of UNFCCC negotiations. Developing country COP members and CSOs have been pressing for more decision-making power, as well as on-the-ground results (Ballesteros et al. 2010; Abbott and Gartner 2011; Schalatek 2012). CSOs have also voiced their frustration with the complexity in accessing climate funds (Halle et al. 2012; Möhner and

Klein 2007). If the risk imposed onto agents in developing countries (i.e., risk of penalty or of not reaping a reward) and the complexity of the web (and multiplicity of account holders) is too great, this could drive agents away, leading to fewer developing country actors engaged and less climate action in these countries. In order to meet their commitment to make “predictable financial resources” (UNFCCC 2015, p.8) available to developing countries, donor countries and international climate finance organisations need to continue their efforts to make access to funds for mitigation and adaptation less challenging. Donor countries and international climate finance organisations may be able to meet this commitment if they are willing to take on additional risk on their end by reducing layers of oversight, some of the accountability measures and reporting requirements.

6.7 CONCLUSIONS

This research sought to gain a better empirical and theoretical understanding of the accountability regimes of key global climate change financing institutions. The research in this thesis addresses the argument that there is a need to go beyond mere descriptions of such regimes in order to advance our understanding of the accountability webs that they form (Abouassi and Trent 2016; Taşan-Kok et al. 2021). In addition to describing in rich detail the complex accountability webs via case studies, the research conducted for this thesis includes an assessment of the accountability measures and informational issues in the enacting of accountability, and how these have an impact on the legitimacy of organizations involved in international climate finance. In such complex accountability webs, a right balance needs to be struck in terms of the multiplicity of actors and their oversight roles, and the measures put in place to incentivise agents, as these affect project outcomes and even funding allocation decisions.

The nature of accountability relationships, regardless of the international organisation in question, affects the formal accountability measures that can be put in place and the informal ways in which account holding can take place. International climate change financing involves many new institutions who are still learning and in the process of setting up their accountability regimes. These accountability regimes, and the information that will feed them, can influence the performance of climate change projects funded by international donors and the legitimacy of the organisations involved. The broad set of actors in international climate change projects makes the corresponding accountability regimes web-like, requiring a complex mix of well-managed interactions and accountability measures that bring about results and build the legitimacy of the organisations financing such projects. These accountability webs also require balanced measures that reduce the risk of creating insurmountable barriers to entry for smaller, local players, and information about project management and results that suits the needs of the various actors, while not over-burdening the ones tasked with implementing projects and building capacity in developing countries.



References

- Abbott, K. W., & Gartner, D. (2011). *The Green Climate Fund and the Future of Environmental Governance* (No. 16). *EARTH System Governance Working Paper*. Lund and Amsterdam: Earth System Governance.
- Abouassi, K., & Trent, D. L. (2016). NGO Accountability from an NGO Perspective: Perceptions, Strategies, and Practices. *Public Administration and Development*, 296, 283–296. <https://doi.org/10.1002/pad>
- Adam, C. S., & Gunning, J. W. (2002). Redesigning the Aid Contract: Donors' use of Performance Indicators in Uganda. *World Development*, 30(12), 2045–2056. [https://doi.org/10.1016/S0305-750X\(02\)00123-7](https://doi.org/10.1016/S0305-750X(02)00123-7)
- Adaptation Fund. (2018). *Legal Agreement between the Adaptation Fund Board and Implementing Entity*. Washington, DC: Adaptation Fund.
- Adaptation Fund. (2019). Adaptation Fund - Governance. <https://www.adaptation-fund.org/about/governance/>. Accessed 9 February 2021
- Adaptation Fund. (2021a). 10 Years of the Adaptation Fund.
- Adaptation Fund. (2021b). Adaptation Fund Timeline. <https://www.adaptation-fund.org/about/adaptation-fund-timeline/page/2/>. Accessed 26 July 2021
- ADB. (2021). FP156: ASEAN Catalytic Green Finance Facility (ACGF): Green Recovery Program. Songdo International Business District, South Korea: Green Climate Fund.
- Adger, W. N. (2003). Social capital, collective action, and adaptation to climate change. *Economic Geography*, 79(4), 387–404. <https://doi.org/10.1111/j.1944-8287.2003.tb00220.x>
- Adger, W. N., Arnell, N. W., & Tompkins, E. L. (2005). Successful Adaptation to Climate Change Across Scales. *Global Environmental Change*, 15(2), 77–86. <https://doi.org/10.1016/j.gloenvcha.2004.12.005>
- Akerlof, G. A. (1970). The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Aleksovskva, M., Schillemans, T., & Grimmelikhuisen, S. (2019). Lessons from five decades of experimental and behavioral research on accountability: A systematic literature review. *Journal of Behavioral Public Administration*, 2(2), 1–18. <https://doi.org/10.30636/jbpa.22.66>
- Ammons, D. N., & Rivenbark, W. C. (2008). Factors influencing the use of performance data to improve municipal services: Evidence from the North Carolina benchmarking project. *Public Administration Review*, 68(2), 304–318. <https://doi.org/10.1111/j.1540-6210.2007.00864.x>
- Anandajayasekeram, P., Van Rooyen, C. J., & Liebenberg, F. (2004). *Agricultural Project Planning and Analysis: A Sourcebook*. (P. Anandajayasekeram, C. J. Van Rooyen, & F. Liebenberg, Eds.) (Second Ed.). University of Pretoria. <https://doi.org/10.13140/2.1.4499.7121>
- Andersen, J. J., Johannesen, N., & Rijkers, B. (2020). Elite capture of foreign aid: Evidence from Offshore Bank Accounts. *Policy Research Working Paper Series*. Washington, DC: World Bank Group.
- Anderson, J. R., & Feder, G. (2004). Agricultural extension: Good intentions and hard realities. *World Bank Research Observer*, 19(1), 41–60. <https://doi.org/10.1093/wbro/lkh013>
- Antimiani, A., Costantini, V., Markandya, A., Paglialunga, E., & Sforza, G. (2017). The Green Climate Fund as an effective compensatory mechanism in global climate negotiations. *Environmental Science and Policy*, 77(August), 49–68. <https://doi.org/10.1016/j.envsci.2017.07.015>
- Arnesen, S. (2017). Legitimacy from Decision-Making Influence and Outcome Favourability: Results from General Population Survey Experiments. *Political Studies*, 65, 146–161. <https://doi.org/https://doi.org/10.1177/0032321716667956>
- Arneson, R. J. (2003). Defending the Purely Instrumental Account of Democratic Legitimacy. *Political Philosophy*, 11(1), 122–132. <https://doi.org/https://doi.org/10.1111/1467-9760.00170> |
- Asenova, D., & Beck, M. (2010). Crucial silences: When accountability met PFI and finance capital. *Critical Perspectives on Accounting*, 21(1), 1–13. <https://doi.org/10.1016/j.cpa.2008.09.009>
- Attar, A., Campioni, E., Piaser, G., & Rajan, U. (2010). On multiple-principal multiple-agent models of moral hazard. *Games and Economic Behavior*, 68(1), 376–380. <https://doi.org/10.1016/j.geb.2009.07.010>
- Audia, P. G., & Greve, H. R. (2006). Less Likely to Fail: Low Performance, Firm Size, and Factory Expansion in the Shipbuilding Industry. *Management Science*, 52(1), 83–94. <https://doi.org/10.1287/mnsc.1050.0446>
- Auel, K. (2007). Democratic Accountability and National Parliaments: Redefining the Impact of Parliamentary Scrutiny in EU Affairs. *European Law Journal*, 13(4), 487–504. <https://doi.org/10.1111/j.1468-0386.2007.00380.x>
- Azham, M. A., & Yusof, H. (2011). Quality in qualitative studies: The case of validity, reliability and generalizability. *Issues in Social and Environmental Accounting*, 5(1/2), 26.

- Bache, I., Bartle, I., Flinders, M., & Marsden, G. (2015). Blame Games and Climate Change: Accountability, Multi-Level Governance and Carbon Management. *British Journal of Politics and International Relations*, 17(1), 64–88. <https://doi.org/10.1111/1467-856X.12040>
- Bäckstrand, K. (2008a). Accountability of public-private multilateralism: Multi-sectoral networks in climate change. *Global Environmental Politics*, 8(3), 74–102.
- Bäckstrand, K. (2008b). Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships. *Global Environmental Politics*, 8(3), 74–102. <https://doi.org/10.1162/glep.2008.8.3.74>
- Bäckstrand, K., Khan, J., Kronsell, A., & Lövbrand, E. (2010). The promise of new modes of environmental governance. *Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance*, (October 2017), 3–27. <https://doi.org/10.4337/9781849806411.00009>
- Bäckstrand, K., Kuyper, J. W., Linnér, B. O., & Lövbrand, E. (2017). Non-state actors in global climate governance: from Copenhagen to Paris and beyond. *Environmental Politics*, 26(4), 561–579. <https://doi.org/10.1080/09644016.2017.1327485>
- Baldoni, M., Baroglio, C., Micalizio, R., Tedeschi, S., Torino, U., & Informatica, D. (2021). Robustness based on Accountability in Multiagent Organizations. In U. Endriss, A. Nowé, F. Dignum, & A. Lomuscio (Eds.), *Proceedings of the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021)* (pp. 142–150). Online: International Foundation for Autonomous Agents and Multiagent Systems.
- Ballesteros, A., Nakhoda, S., Werksman, J., & Hurlburt, K. (2010). Power, responsibility, and accountability: Rethinking the legitimacy of institutions for climate finance. *Climate Law*, 1(2), 261–312. <https://doi.org/10.3233/CL-2010-013>
- Basak, R., & Karlsson-Vinkhuyzen, S. I. (2018). *Accountability Regimes and International Climate Change Financing: The Green Climate Fund*. Mimeo. Wageningen, The Netherlands.
- Basak, R., Karlsson-Vinkhuyzen, S. I., & Termeer, C. J. A. M. (2022). Information for climate finance accountability regimes: Proposed framework and case study of the Green Climate Fund. *Public Administration and Development*, 42, 261–280. <https://doi.org/10.1002/pad.2000>
- Basak, R., & van der Werf, E. (2018). Moral Hazard in International Climate Change Financing. Wageningen, The Netherlands.
- Basak, R., & van der Werf, E. (2019). Accountability mechanisms in international climate change financing. *International Environmental Agreements: Politics, Law and Economics*, April(0123456789). <https://doi.org/10.1007/s10784-019-09437-8>
- Bebbington, J., Brown, J., Frame, B., & Thomson, I. (2007). Theorizing engagement: The potential of a critical dialogic approach. *Accounting, Auditing and Accountability Journal*, 20(3), 356–381. <https://doi.org/10.1108/09513570710748544>
- Bemelmans-Videc, M., Lonsdale, J., & Perrin, B. (2007). *Making Accountability Work: Dilemmas for evaluation and for audit*. (M.-L. Bemelmans-Videc, J. Lonsdale, & B. Perrin, Eds.). New Brunswick and London: Transaction Publishers.
- Benner, T., Reinicke, W. H., & Witte, J. M. (2004). Multisectoral Networks in Global Governance: Towards a Pluralistic System of Accountability. *Government and Opposition*, 39(2), 191–210. <https://doi.org/10.1111/j.1477-7053.2004.00120.x>
- Bennett, A., & Checkel, J. T. (2014). Process tracing: from philosophical roots to best practices. In C. Elman, J. Gerring, & J. Mahoney (Eds.), *Process tracing: From Metaphor to Analytic Tool* (pp. 3–38). Cambridge University Press. <https://doi.org/10.5553/kwalon/138515352014019003004>
- Bernstein, S. (2011). Legitimacy in intergovernmental and non-state global governance. *Review of International Political Economy*, 18(1), 17–51. <https://doi.org/10.1080/09692290903173087>
- Bertilsson, J., & Thörn, H. (2021). Discourses on transformational change and paradigm shift in the Green Climate Fund: the divide over financialization and country ownership. *Environmental Politics*, 30(3), 423–441. <https://doi.org/10.1080/09644016.2020.1775446>
- Best, J. (2012). Ambiguity and Uncertainty in International Organizations: A History of Debating IMF Conditionality. *International Studies Quarterly*, 56(4), 674–688. <https://doi.org/10.1111/j.1468-2478.2012.00744.x>
- Bhandary, R. R., Gallagher, K. S., & Zhang, F. (2021). Climate finance policy in practice: a review of the evidence. *Climate Policy*, 21(4), 529–545. <https://doi.org/10.1080/14693062.2020.1871313>

- Biermann, F., & Gupta, A. (2011). Accountability and Legitimacy in Earth System Governance: A Research Framework. *Ecological Economics*, 70(11), 1856–1864. <https://doi.org/10.1016/j.ecolecon.2011.04.008>
- Binnendijk, A. (2000). *Results Based Management in the Development Co-operation Agencies: A Review of Experience*. Paris: OECD.
- Bird, N., Brown, J., & Schalatek, L. (2011). Design Challenges for the Green Climate Fund. London, UK: Heinrich Boll Stiftung North America, Overseas Development Institute.
- Birdsall, N., & de Nevers, M. (2012). *Adaptation Finance: How to Get Out from between a Rock and a Hard Place* (No. 001). *CGD Policy Papers*. Washington, DC.
- Bishop, W. (1990). A Theory of Administrative Law. *Journal of Legal Studies*, 19(2), 489–530.
- Bjurström, K. H. (2020). Principal–Agent or Principal–Steward: How Ministry–Agency Relations Condition the Impact of Performance Management in the Steering of Government Agencies. *Public Performance and Management Review*, 43(5), 1053–1077. <https://doi.org/10.1080/15309576.2020.1739087>
- Blagescu, M., de Las Casas, L., & Lloyd, R. (2005). Pathways to Accountability: the GAP framework. London, UK: One World Trust.
- Bodansky, D. (1999). The Legitimacy of International Governance: A Coming Challenge for International Environmental Law? *The American Journal of International Law*, 93(3), 596–624.
- Bornstein, L. (2006). Systems of Accountability, Webs of Deceit? Monitoring and Evaluation in South African NGOs. *Development*, 49(2), 52–61. <https://doi.org/10.1057/palgrave.development.1100261>
- Bourguignon, F., & Sundberg, M. (2007). Aid Effectiveness—Opening the Black Box. *American Economic Review*, 97(2), 316–321.
- Bourne, M., Mills, J., Wilcox, M., Neely, A., & Platt, K. (2000). Designing, implementing and updating performance measurement systems. *International Journal of Operations & Production Management*, 20(7), 754–771. <https://doi.org/10.1108/01443570010330739>
- Bovens, Mark. (2007). Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal*, 13(4), 447–468.
- Bovens, Mark, Schillemans, T., & Hart, P. T. (2008). Does public accountability work? An assessment tool. *Public Administration*, 86(1), 225–242. <https://doi.org/10.1111/j.1467-9299.2008.00716.x>
- Bovens, Mark, & Wille, A. (2020). Indexing watchdog accountability powers a framework for assessing the accountability capacity of independent oversight institutions. *Regulation & Governance*, (April). <https://doi.org/10.1111/rego.12316>
- Box, R. C. (1998). *Citizen Governance: Leading American Communities into the 21st Century*. Thousand Oaks, California: SAGE Publications.
- Boyne, G., Gould-Williams, J., Law, J., & Walker, R. (2002). Plans, Performance Information and Accountability: the Case of Best Value. *Public Administration*, 80(4), 691–710. <https://doi.org/10.1111/1467-9299.00324>
- Bracking, S. (2015). The anti-politics of climate finance: The creation and performativity of the green climate fund. *Antipode*, 47(2), 281–302. <https://doi.org/10.1111/anti.12123>
- Bradlow, D. D. (2005). Private Complainants and International Organizations: A Comparative Study of the Independent Inspection Mechanisms in International Financial Institutions. *Georgetown Journal of International Law*, 36(2), 403–494.
- Brady, H. E. (2010). Data-Set Observations versus Causal-Process Observations: The 2000 U.S. Presidential Election. *Rethinking social inquiry: Diverse tools, shared ...*, 267–271.
- Branca, G., Tennigkeit, T., Mann, W., & Lipper, L. (2012). *Identifying opportunities for climate-smart agriculture investments in Africa*. Food and Agriculture Organization of the United Nations. Rome, Italy: FAO.
- Brandsen, T., Trommel, W., & Verschuere, B. (2017). The state and the reconstruction of civil society. *International Review of Administrative Sciences*, 83(4), 676–693. <https://doi.org/10.1177/0020852315592467>
- Brenner, M. E. (2012). Interviewing in Educational Research. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 357–370). Routledge.
- Brett, E. A. (1993). Voluntary Agencies as Development Organizations: Theorizing the Problem of Efficiency and Accountability. *Development and Change*, 24(1993), 269–303. <https://doi.org/10.1111/j.1467-7660.1993.tb00486.x>
- Briggs, R. C. (2017). Does Foreign Aid Target the Poorest? *International Organization*, 71(1), 187–206. <https://doi.org/10.1017/S0020818316000345>

- Brignall, S., & Modell, S. (2000). An Institutional Perspective on Performance Measurement and Management in the 'New Public Sector'. *Management Accounting Research*, 11(June 1999), 281–306. <https://doi.org/10.1006/mare.2000.0136>
- Broadbent, J., Dietrich, M., & Laughlin, R. (1996). The Development of Principal-Agent, Contracting and Accountability Relationships in the Public Sector: Conceptual and Cultural Problems. *Critical Perspectives on Accounting*, 7, 259–284.
- Brummel, L. (2021). Social Accountability Between Consensus and Confrontation: Developing a Theoretical Framework for Societal Accountability Relationships of Public Sector Organizations. *Administration & Society*, 3997. <https://doi.org/https://doi.org/10.1177/0095399720988529>
- Brunner, S., & Enting, K. (2014). Climate finance: A transaction cost perspective on the structure of state-to-state transfers. *Global Environmental Change*, 27, 138–143. <https://doi.org/10.1016/j.gloenvcha.2014.05.005>
- Buchanan, A., & Keohane, R. O. (2006). The Legitimacy of Global Governance Institutions. *Ethics & international affairs*, 20(4), 405–437.
- Buchanan, Allen. (2002). Political Legitimacy and Democracy. *Ethics*, 112(4), 689–719. <https://doi.org/10.1086/340313>
- Bühlmann, M., & Kriesi, H. (2013). Models for Democracy. In H. Kriesi, D. Bochsler, J. Matthes, Lavenex S., M. Bühlmann, & F. Esser (Eds.), *Democracy in the Age of Globalization and Mediatization* (p. 250). Palgrave Macmillan. <https://doi.org/10.1057/9781137299871>
- Bunea, A. (2018). Legitimacy through targeted transparency? Regulatory effectiveness and sustainability of lobbying regulation in the European Union. *European Journal of Political Research*, 57(2), 378–403. <https://doi.org/10.1111/1475-6765.12231>
- Buntaine, M. T. (2015). Accountability in Global Governance: Civil Society Claims for Environmental Performance at the World Bank. *International Studies Quarterly*, 59(1), 99–111. <https://doi.org/10.1111/isqu.12145>
- Burton, I., Malone, E. L., & Huq, S. (2004). *Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures*. (B. Lim & E. Spanger-Siegfried, Eds.). New York: Cambridge University Press. [https://doi.org/ISBN 0 521 61760 X](https://doi.org/ISBN%20521%2061760%20X)
- Cameron, W. (2004). Public accountability: Effectiveness, equity, ethics. *Symposium*, 63(December), 59–67.
- Carment, D., & Samy, Y. (2016). Canada's Fragile States Policy: What Have We Accomplished and Where Do We Go from Here? In S. Brown, M. den Heyer, & D. R. Black (Eds.), *Rethinking Canadian Aid* (Second edi., pp. 1–339). University of Ottawa Press. https://doi.org/10.26530/oopen_612090
- Carrasco, E. R., Carrington, W., & Lee, H. J. (2011). Governance and accountability: The regional development banks. In E. Kwakwa (Ed.), *Globalization and International Organizations* (First Edit., p. 60). Routledge. <https://doi.org/https://doi.org/10.4324/9781315254098>
- Castro, P., Michaelowa, K., & Namhata, C. (2020). Donor accountability reconsidered: Aid allocation in the age of global public goods. In *Proceedings of the Presentation at Political Economy of International Organizations, 20–22 February 2020* (p. 37).
- Cavalluzzo, K. S., & Ittner, C. D. (2004). Implementing performance measurement innovations: Evidence from government. *Accounting, Organizations and Society*, 29(3–4), 243–267. [https://doi.org/10.1016/S0361-3682\(03\)00013-8](https://doi.org/10.1016/S0361-3682(03)00013-8)
- CCAFS. (2017). Power of Partnerships: CCAFS 2016 Annual Report. Wageningen, The Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- CGIAR System Management Office. (2016). Meeting Summary - 2nd System Council meeting. Mexico City.
- CGIAR System Management Office. (2021). CGIAR Financial Report Dashboards. <https://www.cgiar.org/food-security-impact/finance-reports/dashboard/overview/>. Accessed 8 March 2021
- Chang, L. cheng. (2015). Accountability, Rhetoric, and Political Interests: Twists and Turns of NHS Performance Measurements. *Financial Accountability and Management*, 31(1), 41–68. <https://doi.org/10.1111/faam.12045>
- Chen, H. (2015). *Practical program evaluation: Theory-driven Evaluation and the Integrated Evaluation Perspective* (Second edi.). SAGE Publications.
- Cheryl Simrell, K., Kathryn M, F., & Bridget, On. (1998). The Question of Participation: Toward Authentic Public Participation in Public Administration. *Public Administration Review*, 58(4), 317–326.

- Chouinard, J. a. (2013). The Case for Participatory Evaluation in an Era of Accountability. *American Journal of Evaluation*, 34(2), 237–253. <https://doi.org/10.1177/1098214013478142>
- Christensen, T., & Læg Reid, P. (2007). The whole-of-government approach to public sector reform. *Public Administration Review*, 67(6), 1059–1066. <https://doi.org/10.1111/j.1540-6210.2007.00797.x>
- Christie, C. C. (2007). Reported influence of evaluation data on decision makers' actions: An empirical examination. *American Journal of Evaluation*, 28(1), 8–25. <https://doi.org/10.1177/1098214006298065>
- CIF. (2021). History of the CIF.
- CIMMYT. (2017). Annual Report: Maize and Wheat for Future Climates. Texcoco, Mexico: The International Maize and Wheat Improvement Center (CIMMYT). <https://doi.org/10.1680/imotp.1837.24724>
- Ciplet, D., Roberts, J. T., & Khan, M. (2013). The Politics of International Climate Adaptation Funding : Justice and Division in the Greenhouse. *Global Environmental Politics*, 13(1), 49–68.
- Ciplet, D., Roberts, J. T., & Khan, M. R. (2015). *Power in a warming world: The new global politics of climate change and the remaking of environmental inequality*. Cambridge, MA and London, England: MIT Press.
- Climate Policy Initiative. (2019). *Global Landscape of Climate Finance 2019. Climate Policy Initiative Report*. London, UK.
- Cohen, M. A. (1987). Optimal Enforcement Strategy to Prevent Oil Spills: An Application of a Principal-Agent Model with Moral Hazard. *Journal of Law and Economics*, 30(1), 23–51.
- Cohen, S., & Karatzimas, S. (2015). Tracing the future of reporting in the public sector: introducing integrated popular reporting. *International Journal of Public Sector Management*, 28(6), 449–460. <https://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077>
- Colenbrander, S., Dodman, D., & Mitlin, D. (2018). Climate finance to advance climate justice: the politics and practice of channelling resources to the local level. *Climate Policy*, 18(7), 902–915. <https://doi.org/10.1080/14693062.2017.1388212>
- Collier, P., Guillaumont, P., Guillaumont, S., & Gunning, J. W. (1997). Redesigning Conditionality. *World Development*, 25(9), 1399–1407.
- Collins-Williams, T., & Wolfe, R. (2010). Transparency as a trade policy tool: The WTO's cloudy windows. *World Trade Review*, 9(4), 551–581. <https://doi.org/10.1017/S1474745610000303>
- Compernelle, T. (2018). Communication of the external auditor with the audit committee: Managing impressions to deal with multiple accountability relationships. *Accounting, Auditing and Accountability Journal*, 31(3), 900–924. <https://doi.org/10.1108/AAAJ-05-2013-1356>
- Conference of Parties. (1998). Decision 3/CP.4 Review of the financial mechanism. United Nations Framework Convention on Climate Change.
- Conference of Parties. (2001). Decision 7/CP.7: Funding under the Convention. UNFCCC.
- Connolly, C., & Hyndman, N. (2004). Performance reporting: A comparative study of British and Irish charities. *British Accounting Review*, 36(2), 127–154. <https://doi.org/10.1016/j.bar.2003.10.004>
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-Experimentation: Design and Analysis Issues for Field Settings*. Boston: Houghton Mifflin Company. https://doi.org/10.1207/s15327752jpa4601_16
- Crainich, D., & Eeckhoudt, L. (2008). On the intensity of downside risk aversion. *Journal of Risk and Uncertainty*, 36(3), 267–276. <https://doi.org/10.1007/s11166-008-9037-x>
- Crawford, P., & Bryce, P. (2003). Project Monitoring and Evaluation: A Method for Enhancing the Efficiency and Effectiveness of Aid Project Implementation. *International Journal of Project Management*, 21(5), 363–373. [https://doi.org/10.1016/S0263-7863\(02\)00060-1](https://doi.org/10.1016/S0263-7863(02)00060-1)
- Cui, L., & Huang, Y. (2018). Exploring the Schemes for Green Climate Fund Financing: International Lessons. *World Development*, 101, 173–187.
- Cui, L., Sun, Y., Song, M., & Zhu, L. (2020). Co-financing in the green climate fund: lessons from the global environment facility. *Climate Policy*, 20(1), 95–108. <https://doi.org/10.1080/14693062.2019.1690968>
- Curtin, D., & Meijer, A. J. (2006). Does transparency strengthen legitimacy? A critical analysis of European Union policy documents. *Information Polity*, 11, 109–122. <https://doi.org/10.2139/ssrn.1434862>
- Delreux, T., & Adriaensens, J. (2017). Use and Limitations of the Principal-Agent Model in Studying the European Union. In T. Delreux & J. Adriaensens (Eds.), *The Principal Agent Model and the European Union* (pp. 1–34). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-55137-1_1
- DeMarzo, P. M., & Kaniel, R. (2021). *Contracting in Peer Networks. NBER Working Paper Series*. Cambridge, MA. <https://doi.org/10.2139/ssrn.3767603>

- Denzin, N. K., & Lincoln, Y. S. (2005). *Handbook of Qualitative Research*. (N. Denzin & Y. S. Lincoln, Eds.). Thousand Oaks, California: SAGE Publications.
- Devas, N., & Grant, U. (2003). Local Government Decision-making? Citizen Participation and Local Accountability: Some Evidence from Kenya and Uganda. *Public Administration and Development*, 23(4), 307–316. <https://doi.org/10.1002/pad.281>
- Dhanani, A., & Connolly, C. (2012). Discharging not-for-profit accountability: UK charities and public discourse. *Accounting, Auditing and Accountability Journal*, 25(7), 1140–1169. <https://doi.org/10.1108/09513571211263220>
- Dietrich, S. (2011). *Foreign aid delivery, donor selectivity, and poverty: A political economy of aid effectiveness*. Pennsylvania State University.
- Dixit, A. K. (2002). Incentives and Organizations in the Public Sector: An Interpretative Review. *Journal of Human Resources*, 37(4), 696–727. <https://doi.org/10.2307/3069614>
- Dobija, D., Górska, A. M., Grossi, G., & Strzelczyk, W. (2019). Rational and symbolic uses of performance measurement: Experiences from Polish universities. *Accounting, Auditing and Accountability Journal*, 32(3), 750–781. <https://doi.org/10.1108/AAAJ-08-2017-3106>
- Dobrev, S. D. (2001). Revisiting Organizational Legitimation: Cognitive Diffusion and Sociopolitical Factors in the Evolution of Bulgarian Newspaper Enterprises, 1846-1992. *Organization studies*, 22(3), 419–444. *Organization studies*, 22(3), 419–444. <https://doi.org/10.1177/07399863870092005>
- Dombrowski, K. (2010). Filling the gap? An analysis of non-governmental organizations responses to participation and representation deficits in global climate governance. *International Environmental Agreements: Politics, Law and Economics*, 10(4), 397–416. <https://doi.org/10.1007/s10784-010-9140-8>
- Donaldson, S. I. (2001). Overcoming our negative reputation: Evaluation becomes known as a helping profession. *American Journal of Evaluation*, 22(3), 355–361. [https://doi.org/10.1016/S1098-2140\(01\)00148-5](https://doi.org/10.1016/S1098-2140(01)00148-5)
- Dore, R. P. (2000). *Stock market capitalism: Welfare capitalism: Japan and Germany versus the Anglo-Saxons*. Oxford, UK: Oxford University Press.
- Dubnick, M. J. (1998). Clarifying Accountability: An Ethical Theory Framework. In N. Preston & C. Sampford (Eds.), *Public sector ethics: Finding and Implementing Values* (pp. 68–81). London, UK: Routledge. <https://doi.org/10.4324/9780203063941>
- Dubnick, M. J. (2005). Accountability and the Promise of Performance: In Search of the Mechanisms. *Public Performance & Management Review*, 28(3), 376–417. <https://doi.org/10.2307/3381159>
- Dubnick, M. J., & Frederickson, H. G. (2010). Accountable agents: Federal performance measurement and third-party government. *Journal of Public Administration Research and Theory*, 20(SUPPL. 1), 143–159. <https://doi.org/10.1093/jopart/mup039>
- Duus-Otterström, G. (2016). Allocating climate adaptation finance: examining three ethical arguments for recipient control. *International Environmental Agreements: Politics, Law and Economics*, 16(5), 655–670. <https://doi.org/10.1007/s10784-015-9288-3>
- Ebrahim, A. (2002a). Information Struggles: The Role of Information in the Reproduction of NGO-Funder Relationships. *Nonprofit and Voluntary Sector Quarterly*, 31(1), 84–114. <https://doi.org/10.1177/0899764002311004>
- Ebrahim, A. (2002b). Information Struggles: The Role of Information in the Reproduction of NGO-Funder Relationships. *Nonprofit and Voluntary Sector Quarterly*, 31(1), 85–113.
- Ebrahim, A. (2003a). Making Sense of Accountability: Conceptual Perspectives for Northern and Southern Nonprofits. *Nonprofit Management and Leadership*, 14(2), 191–212. <https://doi.org/10.1002/nml.29>
- Ebrahim, A. (2003b). Accountability in practice: Mechanisms for NGOs. *World Development*, 31(5), 813–829. [https://doi.org/10.1016/S0305-750X\(03\)00014-7](https://doi.org/10.1016/S0305-750X(03)00014-7)
- Ebrahim, A. (2005). Accountability Myopia: Losing Sight of Organizational Learning. *Nonprofit and Voluntary Sector Quarterly*, 34(1), 56–87. <https://doi.org/10.1177/0899764004269430>
- Ebrahim, A. (2007). Towards a reflective accountability in NGOs. In A. Ebrahim & E. Weisband (Eds.), *Global accountabilities: Participation, Pluralism, and Public Ethics* (pp. 193–224). New York: Cambridge University Press.
- Ebrahim, A. (2019). *Measuring Social Change Performance and Accountability in a Complex World*. Stanford, California: Stanford University Press.

- Eckstein, D., Künzel, V., & Schäfer, L. (2018). *Global Climate Risk Index 2018*. Germanwatch.
- Eckstein, H. (1975). Case Studies and Theory in Political Science. In F. Greenstein & N. Polsby (Eds.), *Handbook of political science* (pp. 79–138). Reading, MA: Addison-Wesley.
- Ehresman, T., & Stevis, D. (2014). Transparency and Environmental Equity: The International Finance Corporation's Disclosure Practices. In A. Gupta & M. Mason (Eds.), *Transparency in Global Environmental Governance: Critical Perspectives*. Cambridge, MA: MIT Press.
- Eisenhardt, K. M. (1989a). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57–74. <https://doi.org/10.2307/258191>
- Eisenhardt, K. M. (1989b). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- El Ghoul, S., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies* (Vol. 48). <https://doi.org/10.1057/jibs.2016.4>
- El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. (2011). Does corporate social responsibility affect cost of capital? *Journal of banking & finance*, 35(9), 2388–2406. <https://doi.org/10.1016/j.apmr.2019.04.001>
- Engle, N. L. (2011). Adaptive capacity and its assessment. *Global Environmental Change*, 21(2), 647–656. <https://doi.org/10.1016/j.gloenvcha.2011.01.019>
- Ezzamel, M., Hyndman, N., Johnsen, Å., Lapsley, I., & Pallot, J. (2007). Experiencing institutionalization: The development of new budgets in the UK devolved bodies. *Accounting, Auditing & Accountability Journal*, 20(1), 11–40. <https://doi.org/10.1108/09513570710731191>
- Ezzamel, M., Hyndman, N. S., Johnsen, Å., Lapsley, I., & Pallot, J. (2004). Has devolution increased democratic accountability? *Public Money and Management*, 24(3), 145–152. <https://doi.org/10.1111/j.1467-9302.2004.00411.x>
- Fankhauser, S., & McDermott, T. K. J. (2014). Understanding the adaptation deficit: Why are poor countries more vulnerable to climate events than rich countries? *Global Environmental Change*, 27(1), 9–18. <https://doi.org/10.1016/j.gloenvcha.2014.04.014>
- FAO. (2016). *Planning, implementing and evaluating Climate-Smart Agriculture in Smallholder Farming Systems The experience of the MiCCA pilot projects in Kenya* (No. 11). Rome.
- Farand, C. (2019). Green Climate Fund replenishment fails to fill hole left by Trump's US. *Climate Change News*. <https://www.climatechangenews.com/2019/10/25/green-climate-fund-replenishment-fails-fill-hole-left-trumps-us/>
- Feltham, G. a, & Xie, J. (1994). Performance Measurement Congruity and Diversity in Congruity Principal/Agent Relations. *The Accounting Review*, 69(3), 429–453.
- Fenton, A., Wright, H., Afionis, S., Paavola, J., & Huq, S. (2014). Debt relief and financing climate change action. *Nature Climate Change*, 4, 650–653.
- Fisher, G., Kuratko, D. F., Bloodgood, J. M., & Hornsby, J. S. (2017). Legitimate to whom? The challenge of audience diversity and new venture legitimacy. *Journal of Business Venturing*, 32(1), 52–71. <https://doi.org/10.1016/j.jbusvent.2016.10.005>
- Flamholtz, E. G., Das, T. K., & Tsui, A. S. (1985). Toward an integrative framework of organizational control. *Accounting, organizations and society*, 10(1), 35–50. <https://doi.org/10.1002/hed.20053>
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245. <https://doi.org/10.1177/1077800405284363>
- Fox, J. A. (2015). Social Accountability : What Does the Evidence Really Say ? *World Development*, 72, 346–361. <https://doi.org/10.1016/j.worlddev.2015.03.011>
- Franco-Santos, M., Lucianetti, L., & Bourne, M. (2012). Contemporary performance measurement systems: A review of their consequences and a framework for research. *Management Accounting Research*, 23(2), 79–119. <https://doi.org/10.1016/j.mar.2012.04.001>
- Franklin, A. L. (2000). An Examination of Bureaucratic Reactions to Institutional Controls. *Public Performance & Management Review*, 24(1), 8. <https://doi.org/10.2307/3381073>
- Freeman, S., & Schuller, M. (2020). Aid projects: The effects of commodification and exchange. *World Development*, 126. <https://doi.org/10.1016/j.worlddev.2019.104731>
- Frink, D. D., & Ferris, G. R. (1998). Accountability, Impression Management, and Goal Setting in the Performance Evaluation Process. *Human Relations*, 51(10).

- Gailmard, S. (2014). Accountability and Principal–Agent Theory. In M. Bovens, R. E. Goodin, & T. Schillemans (Eds.), *Oxford Handbook of Accountability* (pp. 90–105). Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199641253.013.0016>
- GCF. (2011). Governing Instrument. Durban, South Africa.
- GCF. (2013a). Guidelines relating to the observer participation, accreditation of observer organizations and participation of active observers, 13–15.
- GCF. (2013b). *Guidelines relating to the observer participation, accreditation of observer organizations and participation of active observers*.
- GCF. (2014a). Revised Programme of Work on Readiness and Preparatory Support. Bridgetown, Barbados: Green Climate Fund.
- GCF. (2014b). *Annex XIII : Initial best-practice guidelines for the selection and establishment of national designated authorities and focal points*. Songdo International Business District, South Korea.
- GCF. (2014c). *Annex II: Initial fiduciary principles and standards of the Fund*.
- GCF. (2014d). GCF/B.07/11: Annex III : Interim environmental and social safeguards of the Fund. Songdo International Business District, South Korea: GCF.
- GCF. (2015a). Green Climate Fund approves first 8 investments. <https://www.greenclimate.fund/news/green-climate-fund-approves-first-8-investmen-1>. Accessed 23 November 2020
- GCF. (2015b). *DECISION B.11/10 - Agenda item 15: Initial monitoring and accountability framework for accredited entities*. Songdo International Business District, South Korea.
- GCF. (2015c). Terms of Reference of the Technical Advisory Panel.
- GCF. (2015d). Green Climate Fund Accreditation Application Form. Songdo International Business District, South Korea: GCF.
- GCF. (2015e). Form 01 - Concept Note. Green Climate Fund.
- GCF. (2015f). Form 02 - Funding Proposal. Green Climate Fund.
- GCF. (2016a). *Accreditation Master Agreement between the Environmental Investment Fund and the Green Climate Fund*.
- GCF. (2016b). *Comprehensive Information Disclosure Policy of the Fund*. Songdo International Business District, South Korea.
- GCF. (2017a). Accreditation to the Green Climate Fund. Songdo International Business District, South Korea: GCF.
- GCF. (2017b). Decision of the Board on updated Terms of Reference of the Independent Redress Mechanism (Revised). Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF. (2017c). Get accredited - Green Climate Fund. <http://www.greenclimate.fund/partners/accredited-entities/get-accredited>. Accessed 10 March 2017
- GCF. (2018). Annual Portfolio Performance Report (2017). Songdo, Incheon, Republic of Korea.
- GCF. (2019a). Annual Portfolio Performance Report (2018). Songdo, Incheon, Republic of Korea.
- GCF. (2019b). Concept Note User's Guide. Green Climate Fund. <https://doi.org/10.1017/CBO9781107415324.004>
- GCF. (2020a). Initial Resource Mobilization. <https://www.greenclimate.fund/about/resource-mobilisation/irm#overview>. Accessed 7 January 2021
- GCF. (2020b). Status of Pledges and Contributions. Songdo, Incheon, Republic of Korea.
- GCF. (2020c). Status of Pledges and Contributions (Initial Resource Mobilization). Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF. (2020d). About us: Partners. <https://www.greenclimate.fund/about/partners/ae>. Accessed 7 January 2021
- GCF. (2020e). Annual Portfolio Performance Report (2019). Songdo, Incheon, Republic of Korea.
- GCF. (2020f). GCF at a Glance: Project Portfolio. Songdo, Incheon, Republic of Korea.
- GCF. (2020g). Readiness and Preparatory Support Programme: Work Programme and Budget 2020-2021. Songdo, Incheon, Republic of Korea.
- GCF. (2020h). Updated Strategic Plan for the Green Climate Fund: 2020-2023. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF. (2020i). GCF: About us, Accountability. *Springer Series in Reliability Engineering*. https://doi.org/10.1007/978-1-84882-641-0_12
- GCF. (2020j). Project Preparation Facility Guidelines: A detailed guide on how to prepare Project Preparation Facility applications for the Green Climate Fund. Songdo, Incheon, Republic of Korea.

- GCF. (2020k). What we do - Portfolio Dashboard. <https://www.greenclimate.fund/what-we-do/portfolio-dashboard>. Accessed 7 January 2020
- GCF. (2021a). GCF At a Glance: Projet Portfolio.
- GCF. (2021b). Report on the activities of the Secretariat. Songdo, Incheon, Republic of Korea.
- GCF. (2021c). Review of Secretariat capabilities to deliver the updated Strategic Plan for 2020-2023. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF. (2021d). Integrated Results Management Framework. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF Independent Evaluation Unit. (2018a). GCF Evaluation Policy. Songdo, Incheon, Republic of Korea: Independent Evaluation Unit of the Green Climate Fund.
- GCF Independent Evaluation Unit. (2018b). *Results management framework : Independent Evaluation Unit recommendations to improve the Results Management Framework* (Vol. 29).
- GCF Independent Evaluation Unit. (2020a). Independent evaluation of the relevance and effectiveness of the green climate fund's investments in small island developing states. Songdo, Incheon, Republic of Korea.
- GCF Independent Evaluation Unit. (2020b). Addressing gaps in the current portfolio for measurement. Geneva, Switzerland.
- GCF Independent Evaluation Unit. (2021). Independent Evaluation Unit 2021 Work Plan and Budget and Update of its Three- year Objectives and Work Plan. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF Independent Integrity Unit. (2020a). Workplan and budget of the Independent Integrity Unit for 2020. Green Climate Fund.
- GCF Independent Integrity Unit. (2020b). Annual Implementation Report on the Policy on Prohibited Practices. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF Independent Integrity Unit. (2020c). Annual Implementation Report on the Policy on the Protection of Whistleblowers and Witnesses. Songdo, Incheon, Republic of Korea: Green Climate Fund.
- GCF Independent Redress Mechanism. (2021). Case register. <https://irm.greenclimate.fund/case-register>. Accessed 11 May 2021
- GCF, & World Bank. (2013). Agreement on the Terms and Conditions for the Administration of the Green Climate Fund Trust Fund. Bonn and Washington. <https://doi.org/10.1515/9783866539686.335>
- GEF-CSO Network. (2018). History of the GEF-CSO Network. <http://www.gefngo.org/history-of-the-gef-cso-network/>. Accessed 19 March 2020
- GEF. (1996). GEF Focal Points. Global Environment Facility.
- GEF. (2012). *Procedure: Accreditation of GEF Project Agencies*. Washington, DC: Global Environment Facility.
- GEF. (2014). Guidance From the Conference of the Parties and Responses by the Global Environment Facility. Global Environment Facility.
- GEF. (2017). *Policy on Monitoring Agency Compliance with GEF Policies*. Washington, DC: Global Environment Facility.
- GEF. (2020a). About Us. <https://www.thegef.org/about-us>. Accessed 4 January 2021
- GEF. (2020b). Funding. <https://www.thegef.org/about/funding>. Accessed 4 January 2021
- George, A. L., & Bennett, A. (2004). *Case studies and theory development in the social sciences*. London, UK: MIT Press.
- Germanwatch. (2019). CIVIL SOCIETY ENGAGEMENT WITH THE GREEN CLIMATE FUND. Germanwatch.
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What Passes as a Rigorous Case Study? *Strategic Management Journal*, 29(13), 1465–1474.
- Gibbons, R. (1998). Incentives in Organizations. *Journal of Economic Perspectives*, 12(4), 115–132. <https://doi.org/10.1257/jep.12.4.115>
- Gilbert, D. U., Rasche, A., & Waddock, S. (2011). Accountability In A Global Economy: The Emergence of International Accountability Standards. *Business Ethics Quarterly*, 21(1), 23–44. <https://doi.org/10.1017/s1052150x00013038>
- Glaeser, B. (2010). *The Green Revolution revisited: critique and alternatives*. (B. Glaeser, Ed.). London and New York: Routledge.
- Goertz, G., & Mahoney, J. (2009). Scope in Case-Study Research. In D. Byrne & C. C. Ragin (Eds.), *The Sage Handbook of Case-Based Methods* (pp. 307–317). Thousand Oaks, California: SAGE Publications.

- Goldsmith, P. D., & Basak, R. (2001). Incentive Contracts and Environmental Performance Indicators. *Environmental and Resource Economics*, 20(4), 259–279. <https://doi.org/10.1023/A:1013065801547>
- Gomes, P. S. (2017). Performance Evaluation and Reporting. *Global Encyclopedia of Public Administration, Public Policy, and Governance*, 1–13. https://doi.org/10.1007/978-3-319-31816-5_2316-1
- Gomez-echeverri, L. (2022). National climate funds. In A. Michaelowa & A.-K. Sacherer (Eds.), *Handbook of International Climate Finance* (pp. 167–186). Cheltenham: Edward Elgar. <https://doi.org/https://doi.org/10.4337/9781784715656.00014>
- Goodhart, M. (2011). Democratic Accountability in Global Politics: Norms, not Agents. *The Journal of Politics*, 73(1), 45–60. <https://doi.org/10.1017/S002238161000085X>
- Gorz, A. (1989). *Critique of the Economic Reason*. London, New York: Verso.
- Grafton, J., Lillis, A. M., & Widener, S. K. (2010). The role of performance measurement and evaluation in building organizational capabilities and performance. *Accounting, Organizations and Society*, 35(7), 689–706. <https://doi.org/10.1016/j.aos.2010.07.004>
- Grasso, M. (2010). An ethical approach to climate adaptation finance. *Global Environmental Change*, 20, 74–81. <https://doi.org/10.1016/j.gloenvcha.2009.10.006>
- Gray, R. (2001). Thirty years of social accounting, reporting and auditing : what (if anything) have we learnt? *Business Ethics: A European Review*, 10(1), 9–15.
- Gray, R., Dey, C., Owen, D., Evans, R., & Zadek, S. (1997). Struggling with the praxis of social accounting: Stakeholders, accountability, audits and procedures. *Accounting, Auditing & Accountability Journal*, 10(3), 325–364. <https://doi.org/10.1108/09513579710178106>
- Gray, R., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing & Accountability Journal*, 8, 78–101. <https://doi.org/10.1108/09513579510086812>
- Green Climate Fund. (2016). USD 200 million pilot of additional modalities to enhance direct access under GCF. <http://www.greenclimate.fund/-/usd-200-million-pilot-of-additional-modalities-to-enhance-direct-access-under-gcf>. Accessed 7 March 2017
- Grimes, M. (2013). The Contingencies of Societal Accountability: Examining the Link Between Civil Society and Good Government. *Studies in Comparative International Development*, 48(4), 380–402. <https://doi.org/10.1007/s12116-012-9126-3>
- Groff, M., & Karlsson-Vinkhuyzen, S. I. (2018). The Rule of Law as a Global Public Good—Exploring Trajectories for Democratizing Global Governance Through Increased Accountability. In S. Cogolati & J. Wouters (Eds.), *Global Public Goods, Global Commons and Democracy. New paradigms for a democratic global governance?* (pp. 130–159). Cheltenham: Edward Elgar.
- Grossman, S. J., & Hart, O. D. (1983). An Analysis of the Principal-Agent Problem. *Econometrica*, 51(1), 7–45.
- Gulluscio, C., Puntillo, P., Luciani, V., & Huisingh, D. (2020). Climate change accounting and reporting: A systematic literature review. *Sustainability*, 12(13), 1–31. <https://doi.org/10.3390/su12135455>
- Gulrajani, N., & Swiss, L. (2019). Donor proliferation to what ends? New donor countries and the search for legitimacy. *Canadian Journal of Development Studies*, 40(3), 348–368. <https://doi.org/10.1080/02255189.2019.1543652>
- Gundimeda, H., & Guo, Y. (2003). Undertaking Emission Reduction Projects: Prototype Carbon Fund and Clean Development Mechanism. *Economic and Political Weekly*, 38(41), 4331–4337. <https://doi.org/10.2307/4414134>
- Gupta, J., Termeer, C. J. A. M., Klostermann, J., Meijerink, S., Brink, M. Van Den, Jong, P., et al. (2010). The Adaptive Capacity Wheel: a method to assess the inherent characteristics of institutions to enable the adaptive capacity of society. *Environmental Science and Policy*, 13(6), 459–471. <https://doi.org/10.1016/j.envsci.2010.05.006>
- Hall, M. (2008). The effect of comprehensive performance measurement systems on role clarity, psychological empowerment and managerial performance. *Accounting, Organizations and Society*, 33(2–3), 141–163.
- Hall, N. (2017). What is adaptation to climate change? Epistemic ambiguity in the climate finance system. *International Environmental Agreements: Politics, Law and Economics*, 17(1), 37–53. <https://doi.org/10.1007/s10784-016-9345-6>
- Halle, M., Wolfe, R., & Drake, A. (2012). *Locating Accountability: Conceptual and Categorical Challenges in the Literature*. Winnipeg: ENTWINED and International Institute for Sustainable Development.

- Hamman, J. R., Loewenstein, G., & Weber, R. A. (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review*, 100(4), 1826–1846. <https://doi.org/10.1257/aer.100.4.1826>
- Han, Y. (2020). The impact of accountability deficit on agency performance: performance-accountability regime. *Public Management Review*, 22(6), 927–948. <https://doi.org/10.1080/14719037.2019.1679237>
- Han, Y., & Hong, S. (2019). The Impact of Accountability on Organizational Performance in the U.S. Federal Government: The Moderating Role of Autonomy. *Review of Public Personnel Administration*, 39(1), 3–23. <https://doi.org/10.1177/0734371X16682816>
- Haque, M. A. (2014). Accountability for Public Expenditure in Bangladesh: the Principal-agent Problem and Role of the Office of the Comptroller and Auditor General. *Asia Pacific Journal of Public Administration*, 36(4), 249–260. <https://doi.org/10.1080/23276665.2014.979018>
- Hatry, H. P. (2013). Sorting the Relationships Among Performance Measurement, Program Evaluation, and Performance Management. In S. B. Nielsen & D. E. K. Hunter (Eds.), *Performance management and evaluation: New Directions for Evaluation* (pp. 19–32). Wiley Periodicals, Inc., and the American Evaluation Association. <https://doi.org/10.1002/ev.20043>
- Hawkins, D. G., Lake, D. A., Nielson, D. L., Tierney, M. J., & Eds. (2006). *Delegation and Agency in International Organizations*. (D. G. Hawkins, D. A. Lake, D. L. Nielson, & M. J. Tierney, Eds.). Cambridge University Press.
- Heal, G. (2000). *Environmental Markets: Equity and Efficiency*. (G. Chichilnisky & G. Heal, Eds.). New York: Columbia University Press.
- Heckman, J. J., & Smith, J. (1995). *The performance of performance standards: The effects of JTPA performance standards of efficiency, equity and participant outcomes* (No. 73). University of Western Ontario.
- Heikkilä, T., & Isett, K. R. (2007). Citizen involvement and performance management in special-purpose governments. *Public Administration Review*, 67(2), 238–248. <https://doi.org/10.1111/j.1540-6210.2007.00710.x>
- Henri, J. F. (2006). Organizational culture and performance measurement systems. *Accounting, Organizations and Society*. <https://doi.org/10.1016/j.aos.2004.10.003>
- Henry, G. T., & Gordon, C. S. (2004). Coming full circle: Assessing evaluation's influence on program performance. In *American Evaluation Association annual conference*. Atlanta, Georgia.
- Hoefer, R. (2000). Accountability in Action? Program Evaluation in Nonprofit Human Service Agencies. *Nonprofit Management and Leadership*, 11(2), 167–178.
- Holstein, J. A., & Gubrium, J. F. (1995). *The Active Interview*. SAGE Publications.
- Holzappel, S. (2016). Boosting or Hindering Aid Effectiveness? An Assessment of Systems for Measuring Donor Agency Results. *Public Administration and Development*, 36(February), 3–19. <https://doi.org/10.1002/pad.1749>
- Hood, C. (2006). Gaming in targetworld: The targets approach to managing british public services. *Public Administration Review*, 66(4), 515–521. <https://doi.org/10.1111/j.1540-6210.2006.00612.x>
- Hsieh, H. F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Hu, Y., Li, X., Chen, Y., & Zeng, B. (2019). Multi-Principal Multi-Agent Contract Design: Theory and Application to Device-to-Device Communications. *IEEE Transactions on Vehicular Technology*, 68(3), 2535–2544. <https://doi.org/10.1109/TVT.2019.2893931>
- Hudaya, M., Smark, C., Watts, T., & Silaen, P. (2015). The use of accountability reports and the accountability forum: Evidence from an Indonesian local government. *Australasian Accounting, Business and Finance Journal*, 9(4), 57–70. <https://doi.org/10.14453/aabf.v9i4.5>
- Hwang, K., & Han, Y. (2020). Exploring the Sources of Cognitive Gap Between Accountability and Performance. *Public Personnel Management*, 49(3), 393–420. <https://doi.org/10.1177/0091026019873031>
- Hyndman, N. S., & Anderson, R. (2010). Performance information, accountability and executive agencies. *Public Money and Management*, 18(3), 23–30. <https://doi.org/10.1111/1467-9302.00123>
- IPCC. (2001). *Climate Change 2001 : Impacts, Adaptation, and Vulnerability*. (J. J. McCarthy, O. F. Canziani, N. A. Leary, D. J. Dokken, & K. S. White, Eds.). Cambridge, UK: Cambridge University Press.
- IPCC. (2014a). Summary for Policymakers. In *Climate Change 2014: Impacts, Adaptation and Vulnerability - Contributions of the Working Group II to the Fifth Assessment Report* (pp. 1–32). <https://doi.org/10.1016/j.renene.2009.11.012>

- IPCC. (2014b). *Climate change 2014, impact challenges and adaptation*. Cambridge University Press. <https://doi.org/10.1017/CBO9781107415324.004>
- Jensen, C., & Meckling, H. (1976). Theory of the Firm : Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(December 2000), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Johnsen, Å. (2005). What does 25 years of experience tell us about the state of performance measurement in public policy and management? *Public Money and Management*, 25(1), 9–17. <https://doi.org/10.1111/j.1467-9302.2005.00445.x>
- Karlsson-Vinkhuyzen, S. I., & Vihma, A. (2009). Comparing the legitimacy and effectiveness of global hard and soft law: An analytical framework. *Regulation and Governance*, 3(4), 400–420. <https://doi.org/10.1111/j.1748-5991.2009.01062.x>
- Kawabata, T. (2019). What are the determinants for financial institutions to mobilise climate finance? *Journal of Sustainable Finance and Investment*, 9(4), 263–281. <https://doi.org/10.1080/20430795.2019.1611148>
- Keevers, L., Treleaven, L., Sykes, C., & Darcy, M. (2012). Made to Measure: Taming Practices with Results-based Accountability. *Organization Studies*, 33(1), 97–120. <https://doi.org/10.1177/0170840611430597>
- Keohane, R. (2008). Complex accountability and power in global governance: Issues for global business. *Corporate Governance*, 8(4), 361–367. <https://doi.org/10.1108/14720700810899103>
- Keohane, R., & Grant, R. W. (2005). Accountability and Abuses of Power in World Politics. *American Political Science Review*, 99(01), 29–43. <https://doi.org/10.1017/S0003055405051476>
- Keohane, R., & Victor, D. G. (2010). *The Regime Complex for Climate Change*. Cambridge, MA: The Harvard Project on International Climate Agreements.
- Kersbergen, K. Van, & Waarden, F. Van. (2004). ‘Governance’ as a Bridge Between Disciplines: Cross-disciplinary Inspiration Regarding Shifts in Governance and Problems of Governability, Accountability and Legitimacy. *European Journal of Political Research*, 43(2), 143–171. <https://doi.org/10.1111/j.1475-6765.2004.00149.x>
- Khan, M., Robinson, S., & Weikmans, R. (2019). Twenty-five years of adaptation finance through a climate justice lens. *Climatic Change*.
- Khang, D. B., & Moe, T. L. (2008). Success Criteria and Factors for International Development Projects: A Life-Cycle-Based Framework. *Project Management Journal*, 39(1), 72–84. <https://doi.org/10.1002/pmj>
- Kimball, M. S. (1990). Precautionary Saving in the Small and in the Large. *Econometrica*, 58(1), 53–73.
- Klabbers, J. (2013). Law, ethics and global governance: Accountability in perspective. *New Zealand Journal of Public and International Law*, 11(2), 309.
- Kloot, L. (2009). Performance measurement and accountability in an Australian fire service. *International Journal of Public Sector Management*, 22(2), 128–145. <https://doi.org/10.1108/09513550910934538>
- Kloot, L., & Martin, J. (2000). Strategic performance management: A balanced approach to performance management issues in local government. *Management Accounting Research*, 11(2), 231–251. <https://doi.org/10.1006/mare.2000.0130>
- Kloot, L., & Martin, J. (2001). Local government accountability: explaining differences. *Accounting, Accountability and Performance*, 7(1), 51.
- Kluvers, R., & Tippett, J. (2010). Mechanisms of accountability in local government: An exploratory study. *International Journal of Business and Management*, 5(7), 46–53.
- Kneale, D., Thomas, J., & Harris, K. (2015). Developing and Optimising the Use of Logic Models in Systematic Reviews : Exploring Practice and Good Practice in the Use of Programme Theory in Reviews. *PLOS One*, 10(11), 1–27. <https://doi.org/10.1371/journal.pone.0142187>
- Koenig-Archibugi, M. (2011). Is global democracy possible? *European Journal of International Relations*, 17(3), 519–542. <https://doi.org/10.1177/1354066110366056>
- Koliba, C. J., Mills, R. M., & Zia, A. (2011). Accountability in Governance Networks: An Assessment of Public, Private, and Nonprofit Emergency Management Practices Following Hurricane Katrina. *Public Administration Review*, 71(2), 210–220. <https://doi.org/10.1111/j.1540-6210.2011.02332.x>
- Koppell, J. G. S. (2005). Pathologies of accountability: ICANN and the challenge of “Multiple Accountabilities Disorder”. *Public Administration Review*, 65(1), 94–108. <https://doi.org/10.1111/j.1540-6210.2005.00434.x>

- Koppell, J. G. S. (2010a). Accountability and Legitimacy- Authority Tension in Global Governance. In *World Rule : Accountability, Legitimacy, and the Design of Global Governance* (pp. 31–71). University of Chicago Press.
- Koppell, J. G. S. (2010b). *World Rule: Accountability, Legitimacy, and the Design of Global Governance*. Chicago: University of Chicago Press. <https://doi.org/https://doi.org/10.7208/9780226450964>
- Krahmann, E. (2016). NATO contracting in Afghanistan: The problem of principal-agent networks. *International Affairs*, 92(6), 1401–1426. <https://doi.org/10.1111/1468-2346.12753>
- Kramarz, T., & Park, S. (2016). Accountability in Global Environmental Governance: A Meaningful Tool for Action? *Global Environmental Politics*, 16(2), 1–21. <https://doi.org/10.1162/GLEP>
- Kreps, D. M. (1997). Intrinsic Motivation and Extrinsic Incentives. *The American Economic Review*, 87(2).
- Kreps, D. M., Milgrom, P., Roberts, J., & Wilson, R. (1982). Rational cooperation in the finitely repeated prisoners' dilemma. *Journal of Economic Theory*, 27(2), 245–252. [https://doi.org/10.1016/0022-0531\(82\)90029-1](https://doi.org/10.1016/0022-0531(82)90029-1)
- Krippendorff, K. (2012). *Content Analysis: An Introduction to Its Methodology* (Third Edit.). London: Sage.
- Kroll, A. (2015). Drivers of performance information use: Systematic literature review and directions for future research. *Public Performance and Management Review*, 38(3), 459–486. <https://doi.org/10.1080/15309576.2015.1006469>
- Kurunmäki, L., & Miller, P. (2011). Regulatory hybrids: Partnerships, budgeting and modernising government. *Management Accounting Research*, 22(4), 220–241. <https://doi.org/10.1016/j.mar.2010.08.004>
- Laebens, M. G., & Lührmann, A. (2021). What halts democratic erosion? The changing role of accountability. *Democratization*, (April). <https://doi.org/10.1080/13510347.2021.1897109>
- Laffont, J.-J., & Martimort, D. (2009). *The Theory of Incentives: the Principal-Agent Model*. Princeton and Oxford: Princeton University Press.
- Lange, A., Vogt, C., & Ziegler, A. (2007). On the importance of equity in international climate policy: An empirical analysis. *Energy Economics*, 29(3), 545–562. <https://doi.org/10.1016/j.eneco.2006.09.002>
- Lapsley, I. (2008). The NPM Agenda: Back to the Future. *Financial Accountability & Management*, 24(1), 77–96. <https://doi.org/10.1111/j.1468-0408.2008.00444.x>
- Laufer, W. S. (2003). *Social accountability and corporate greenwashing*. *Journal of Business Ethics* (Vol. 43).
- Lebel, L., Salamanca, A., & Kallayanamitra, C. (2017). The governance of adaptation financing: Pursuing legitimacy at multiple levels. *International Journal of Global Warming*, 11(2), 226–245. <https://doi.org/10.1504/IJGW.2017.082181>
- Lederman, D., Loayza, N. V., & Soares, R. R. (2005). Accountability and corruption: Political institutions matter. *Economics and Politics*, 17(1), 1–35. <https://doi.org/10.1111/j.1468-0343.2005.00145.x>
- Leite, J. R. F. (2021). *Barriers and Enablers for the Coordination of Climate Change-related Official Development Assistance in Mozambique: expressed perceptions of involved stakeholders*. Lunds University.
- Leung, P., Cooper, B. J., Perera, L., & Leung, P. (2011). Accountability structures and management relationships of internal audit An Australian: study. *Managerial Auditing Journal*, 26(9), 794–816. <https://doi.org/10.1108/02686901111171457>
- Levy, J. S. (2008). Case studies: Types, designs, and logics of inference. *Conflict Management and Peace Science*, 25(1), 1–18. <https://doi.org/10.1080/07388940701860318>
- Lewis, D. (2007). Bringing in society, culture, and politics: Values and accountability in a Bangladeshi NGO. In A. Ebrahim & E. Weisband (Eds.), *Global accountabilities: Participation, Pluralism, and Public Ethics* (pp. 131–148). Cambridge University Press. <https://doi.org/10.1017/CBO9780511490903.009>
- Ligon, J. A., & Thistle, P. D. (2013). Background Risk in the Principal-Agent Model. *The Geneva Risk and Insurance Review*, 38(2), 115.
- Lijphart, A. (1971). Comparative Politics and the Comparative Method. *American Political Science Review*, 65(3), 2021. <https://doi.org/https://doi.org/10.2307/1955513>
- Lindberg, S. I. (2013). Mapping accountability: core concept and subtypes. *International Review of Administrative Sciences*, 79(2), 202–226. <https://doi.org/10.1177/0020852313477761>
- Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly*, 29(4), 446–454. <https://doi.org/10.1016/j.giq.2012.06.003>
- Lonsdale, J. (2007). Walking a Tightrope? The Changing Role of State Audit in Accountability Regimes in Europe. In B. Perrin, J. Lonsdale, & M.-L. Bemelmans-Vidéc (Eds.), *Making Accountability Work: Dilem-*

- mas for Evaluation and for Audit* (pp. 85–104). New Brunswick (USA) and London (UK): Transaction Publishers.
- Mack, J., & Ryan, C. (2007). Is there an audience for public sector annual reports: Australian evidence? *International Journal of Public Sector Management*, 20(2), 134–146. <https://doi.org/10.1108/09513550710731490>
- Madison, A. (2007). Monitoring, Reporting, and Evidence-Based Learning in the Climate Investment Funds' Pilot Program for Climate Resilience. *New Directions for Evaluation*, (114), 107–114. <https://doi.org/10.1002/ev>
- Maggetti, M., & Papadopoulos, Y. (2022). Happily unaccountable? Perceptions of accountability by public managers. *Public Policy and Administration*, 0(0), 095207672210744. <https://doi.org/10.1177/0952076722107447>
- Mancini, J. A., Marek, L. I., Byrne, R. A. W., & Huebner, A. J. (2004). Community-based program research: Context, program readiness, and evaluation usefulness. *Journal of Community Practice*, 12(1–2), 7–21. https://doi.org/10.1300/J125v12n01_02
- Markman, K. D., & Tetlock, P. E. (2000). 'I couldn't have known': Accountability, foreseeability and counterfactual denials of responsibility. *British Journal of Social Psychology*, 39(3), 313–325. <https://doi.org/10.1348/014466600164499>
- Martinez, D. E., & Cooper, D. J. (2019). Assembling performance measurement through engagement. *Accounting, Organizations and Society*, 78(xxxx). <https://doi.org/10.1016/j.aos.2019.04.002>
- Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic Theory* (First.). Oxford, UK: Oxford University Press.
- Mascarenhas, M., & Scarce, R. (2004). "The intention was good": Legitimacy, consensus-based decision making, and the case of forest planning in british columbia, Canada. *Society and Natural Resources*, 17, 17–38. <https://doi.org/10.1080/08941920490247227>
- Mashaw, J. L. (2006). Accountability and Institutional Design: Some Thoughts on the Grammar of Governance. In M. Dowdle (Ed.), *Public Accountability: Designs, Dilemmas and Experiences* (pp. 115–156). Cambridge University Press.
- Mayne, J. (2015). Useful Theory of Change Models. *Canadian Journal of Program Evaluation*, 30(2), 119–142. <https://doi.org/10.3138/cjpe.230>
- Mayston, D. (1992). Financial Reporting in the Public Sector and the Demand for Information. *Financial Accountability and Management*, 8(4), 317–324. <https://doi.org/10.1111/j.1468-0408.1992.tb00446.x>
- McAfee, P., & McMillan, J. (1986). Bidding for Contracts: A Principal-Agent Analysis. *The RAND Journal of Economics*, 17(3), 326–338.
- Mcafee, P. R., Mialon, Hugo, M., & Williams, Michael, A. (2004). What is a Barrier to Entry? *The American Economic Review*, 94(2), 461–465. <https://doi.org/10.1257/0002828041302235>
- McGillivray, M. (2003). *Aid Effectiveness and Selectivity: Integrating Multiple Objectives into Aid Allocations* (No. 2003/71). WIDER Discussion Papers // World Institute for Development Economics (UNU-WIDER).
- McNeil, M., & Malena, C. (2010). *Demanding Good Governance*. (M. Mcneil & C. Malena, Eds.) *Demanding Good Governance*. Washington, DC: The World Bank. <https://doi.org/10.1596/978-0-8213-8380-3>
- Mees, H., & Driessen, P. (2019). A framework for assessing the accountability of local governance arrangements for adaptation to climate change. *Journal of Environmental Planning and Management*, 1–21. <https://doi.org/10.1080/09640568.2018.1428184>
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, Resources, and Entry Strategies in Emerging Economies. *Strategic Management Journal*, 30(1), 61–80. <https://doi.org/10.4337/9781788978927.00015>
- Michaelowa, A., & Michaelowa, K. (2011). Coding Error or Statistical Embellishment? The Political Economy of Reporting Climate Aid. *World Development*, 39(11), 2010–2020.
- Michaelowa, K., Michaelowa, A., Reinsberg, B., & Shishlov, I. (2020). Do multilateral development bank trust funds allocate climate finance efficiently? *Sustainability (Switzerland)*, 12(14). <https://doi.org/10.3390/su12145529>
- Milgrom, P. (1981). An Axiomatic Characterization of Common Knowledge.
- Milne, M.J., & Patten, D. . (2002). Securing organizational legitimacy: An experimental decision case examining the impact of environmental disclosures. *Accounting, Auditing & Accountability Journal*, 15(3), 372–405. <https://doi.org/https://doi.org/10.1108/09513570210435889>

- Milne, Markus J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237–256. <https://doi.org/10.1108/09513579910270138>
- Milner, H. V. (2006). Why Multilateralism? Foreign Aid and Domestic Principal-Agent Problems. In D. G. Hawkins, D. A. Lake, D. L. Nielson, & M. J. Tierney (Eds.), *Delegation and Agency in International Organizations* (pp. 107–139). <https://doi.org/10.1017/CBO9780511491368.005>
- Mitchell, R. B., & Parson, E. a. (2001). Implementing the Climate Change Regime's Clean Development Mechanism. *Journal of Environment and Development*, 10(2), 125–146.
- Modica, S., & Scarsini, M. (2005). A Note on Comparative Downside Risk Aversion. *Journal of Economic Theory*, 122(2), 267–271. <https://doi.org/10.1016/j.jet.2004.06.008>
- Möhner, A., & Klein, R. J. T. (2007). *The Global Environment Facility: Funding for Adaptation or Adapting to Funds? Climate and Energy Programme*. Stockholm: Stockholm Environment Institute.
- Moizer, P. (1997). Auditor Reputation: The International Empirical Evidence. *International Journal of Auditing*, 1(1), 61. <https://doi.org/10.1111/1099-1123.00013>
- Monfardini, P. (2010). Accountability in the new public sector: a comparative case study. *International Journal of Public Sector Management*, 23(7), 632–646. <https://doi.org/10.1108/09513551011078897>
- Monfardini, P., & von Maravic, P. (2019). Too big to be audited? The new world of auditing in international organizations. *Financial Accountability and Management*, 35(2), 143–157. <https://doi.org/https://doi.org/10.1111/faam.12186>
- Morra-Imas, L. G., & Rist, R. C. (2009). *The Road to Results: Designing and Conducting Effective Development Evaluations*. Washington, DC: The International Bank for Reconstruction and Development / The World Bank. <https://doi.org/10.1596/978-0-8213-7891-5>
- Mosley, P., Hudson, J., & Verschoor, A. (2004). Aid, Poverty Reduction and the 'New Conditionality'. *The Economic Journal*, 114(June), 217–244.
- Moynihan, D. P. (2005). Goal-based learning and the future of performance management. *Public Administration Review*, 65(2), 203–216. <https://doi.org/10.1111/j.1540-6210.2005.00445.x>
- Moynihan, D. P. (2008). *The Dynamics of Performance Management Constructing Information and Reform*.
- Moynihan, D. P., & Lavertu, S. (2012). Does Involvement in Performance Management Routines Encourage Performance Information Use? Evaluating GPRA and PART. *Public Administration Review*, 72(4), 592–602. <https://doi.org/10.1111/j.1540-6210.2011.02539.x>
- Moynihan, D. P., & Pandey, S. K. (2010). The Big Question for Performance Management: Why Do Managers Use Performance Information? *Journal of Public Administration Research and Theory*, 20(4), 849–866. <https://doi.org/10.1093/jopart/muq004>
- Müller, B., & Bhandary, R. R. (2022). Enhanced Direct Access: the first decade. In A. Michaelowa & A.-K. Sacherer (Eds.), *Handbook of International Climate Finance* (pp. 333–351). Cheltenham: Edward Elgar.
- Müller, Benito. (2011). Time to Roll Up the Sleeves – Even Higher! Longer-term climate finance after Cancun. *Environmental Liability: Law, Policy, and Practice*, 19(1), 3–7.
- Munyazikwiye, F., & Michaelowa, A. (2022). The Rwandan approach to maximising benefits from international climate finance. In A. Michaelowa & A.-K. Sacherer (Eds.), *Handbook of International Climate Finance* (pp. 242–254). Cheltenham: Edward Elgar. <https://doi.org/https://doi.org/10.4337/9781784715656.00017>
- Neely, A., Gregory, M., & Platts, K. (2005). Performance measurement system design: A literature review and research agenda. *International Journal of Operations and Production Management*, 25(12), 1228–1263. <https://doi.org/10.1108/01443570510633639>
- Nelson, P. J. (2001). Transparency Mechanisms at the Multilateral Development Banks. *World Development*, 29(11), 1835–1847.
- Newell, P. (2008). Civil Society, Corporate Accountability and the Politics of Climate Change. *Global Environmental Politics*, 8(3), 122–153. <https://doi.org/10.1162/glep.2008.8.3.122>
- Ng, A. W. (2018). From sustainability accounting to a green financing system: Institutional legitimacy and market heterogeneity in a global financial centre. *Journal of Cleaner Production*, 195(September 2018), 585–592. <https://doi.org/10.1016/j.jclepro.2018.05.250>
- Nielson, D. L., Parks, B., & Tierney, M. J. (2017). International organizations and development finance: Introduction to the special issue. *Review of International Organizations*, 12(2), 157–169. <https://doi.org/10.1007/s11558-017-9270-7>

- Nielson, D. L., & Tierney, M. J. (2003). Delegation to International Organizations: Agency Theory and World Bank Environmental Reform. *International Organization*, 57(02), 241–276. <https://doi.org/10.1017/S0020818303572010>
- O'Donnell, G. A. (1998). Horizontal accountability in new democracies. *Journal of democracy*, 9(3), 112–126.
- OECD. (2008). An implementation guide to ensure accountability and transparency in state ownership. Paris: OECD.
- OECD. (2021a). Climate Finance Provided and Mobilised by Developed Countries Aggregate trends updated with 2019 data. *Climate Finance and the USD 100 Billion Goal*. Paris: OECD Publishing. <https://doi.org/https://doi.org/10.1787/03590fb7-en>
- OECD. (2021b). OECD data - Net ODA. <https://data.oecd.org/oda/net-oda.htm#indicator-chart>. Accessed 29 March 2022
- OECD Development Assistance Committee. (2014). *Development Assistance and Approaches to Risk in Fragile and Conflict Affected States*. Paris, France: OECD Publishing.
- Oliveira Cruz, V., & McPake, B. (2010). The 'aid contract' and its compensation scheme: A case study of the performance of the Ugandan health sector. *Social Science and Medicine*, 71(7), 1357–1365. <https://doi.org/10.1016/j.socscimed.2010.06.036>
- Omukuti, J., Marchant, R., & White, P. C. L. (2021). COP26 as an opportunity to further democratise the Green Climate Fund. *The Lancet Planetary Health*, 5(8), e497–e498. [https://doi.org/10.1016/S2542-5196\(21\)00175-3](https://doi.org/10.1016/S2542-5196(21)00175-3)
- Osborne, D., & Plastrik, P. (2000). *The Reinventor's Fieldbook: Tools for Transforming Your Government*. San Francisco: Jossey-Bass.
- Ostrom, V. (1997). *The Meaning of Democracy and the Vulnerability of Democracies: A Response to Tocqueville's Challenge*. (U. of M. Press, Ed.). Ann Arbor: University of Michigan Press.
- Overman, S., Schillemans, T., & Grimmelikhuijsen, S. (2020). A validated measurement for felt relational accountability in the public sector: gauging the account holder's legitimacy and expertise. *Public Management Review*, 00(00), 1–20. <https://doi.org/10.1080/14719037.2020.1751254>
- Page, S. (2006). *The Web of Managerial Accountability: The Impact of Reinventing Government*. *Administration & Society* (Vol. 38). <https://doi.org/10.1177/0095399705285990>
- Palmer, A. J. (1993). Performance measurement in local government. *Public Money & Management*, 13(4), 31–36. <https://doi.org/10.1080/09540969309387786>
- Panel on Public Participation in Environmental Assessment and Decision Making. (2008). *Public Participation in Environmental Assessment and Decision Making*. (T. Dietz & P. C. Stern, Eds.). Washington, DC: The National Academies Press. <https://doi.org/10.17226/12434>
- Paterson, B. L. (2010). Within-Case Analysis. In Albert J. Mills, Gabrielle Durepos, & Elden Wiebe (Eds.), *Encyclopedia of Case Study Research*. Thousand Oaks, California: SAGE Publications, Inc. <https://doi.org/10.4135/9781412957397.n357>
- Pauw, W. Pieter. (2017). Mobilising private adaptation finance: developed country perspectives. *International Environmental Agreements: Politics, Law and Economics*. <https://doi.org/10.1007/s10784-016-9342-9>
- Pauw, W P, Castro, P., Pickering, J., & Bhasin, S. (2020). Conditional nationally determined contributions in the Paris Agreement: foothold for equity or Achilles heel? *Climate Policy*, 20(4), 468–484. <https://doi.org/10.1080/14693062.2019.1635874>
- Pellinen, J., Mättö, T., Sippola, K., & Rautiainen, A. (2018). Blame game or dialogue? Financial, professional and democratic accountabilities in a complex health care setting. *Accounting, Auditing and Accountability Journal*, 31(2), 626–650. <https://doi.org/10.1108/AAAJ-03-2016-2449>
- Pereira, A. E., Horochovski, R. R., Cruz, M. M. de A., & Rodrigues, N. (2017). Accountability in International Organizations: the case of World Bank Inspection Panel (1993-2015). *Brazilian Political Science Review*, 11, 1–28.
- Perrin, B. (2015). Bringing accountability up to date with the realities of public sector management in the 21st century. *Canadian Public Administration*, 58(1), 183–203. <https://doi.org/10.1111/capa.12107>
- Peruzzotti, E., & Smulovitz, C. (2006). Social Accountability. In E. Peruzzotti & C. Smulovitz (Eds.), *Enforcing the rule of law: Social accountability in the new Latin American democracies* (pp. 3–33). Pittsburgh, PA: University of Pittsburgh Press.
- Pfeffer, J., & Sutton, R. I. (2000). Evidence-Based Management. *Harvard Business Review*, 16(4), 3–24. <https://doi.org/10.1097/01974520-200004000-00002>

- Pickering, J., Betzold, C., & Skovgaard, J. (2017). Special issue: managing fragmentation and complexity in the emerging system of international climate finance. *International Environmental Agreements: Politics, Law and Economics*, 17(1), 1–16. <https://doi.org/10.1007/s10784-016-9349-2>
- Pintea, M. (2010). The Need of Extra-Financial Measures of Performance in the Context of Sustainable. *Economic Magazine B*, 6(53), 197–204.
- Pittel, K., & Rübbelke, D. (2013). International Climate Finance and Its Influence on Fairness and Policy. *World Economy*, 36(4), 419–436. <https://doi.org/10.1111/twec.12029>
- Pollitt, C., & Bouckaert, G. (2011). *Public Management Reform: A Comparative Analysis*. Oxford, UK: Oxford University Press.
- Power, M. (1992). After calculation? Reflection on critique of economic reason by André Gorz. *Accounting, Organizations and Society*, 17(5), 477–499. [https://doi.org/10.1016/0361-3682\(92\)90043-R](https://doi.org/10.1016/0361-3682(92)90043-R)
- Price, P., Jhangiani, R., & Chiang, I. (2015). *Research Methods in Psychology* (2nd Canadi.).
- Priest, A., Ng, J., & Dolley, C. (1999). Users of local government annual reports: information preferences. *Accounting, Accountability & Performance*.
- Przeworski, A., Stokes, S. C., & Manin, B. (1999). *Democracy, accountability, and representation*. (A. Przeworski, S. C. Stokes, & B. Manin, Eds.). New York: Cambridge University Press.
- Quayle, B., Sciulli, N., & Wilson-Evered, E. (2020). Accountable to who, to whom, for what and how? Unpacking accountability in local government response to climate change. *Australasian Accounting, Business and Finance Journal*, 14(3), 56–74. <https://doi.org/10.14453/aabfj.v14i3.5>
- Rajaram, S. (1994). Wheat germplasm improvement: historical perspectives, philosophy, objectives, and missions. In S. Rajaram & G. P. Hettel (Eds.), *Wheat breeding at CIMMYT: commemorating 50 years of research in Mexico for global wheat improvement* (pp. 1–10). Ciudad Obregón, Mexico: CIMMYT.
- Ratajczak-juszk, I., & Nyka, M. (2022). Financial aspects of international legal regulations of climate change - between two concepts: the common concern of humankind and the common but differentiated responsibilities. In A. Michaelowa & A.-K. Sacherer (Eds.), *Handbook of International Climate Finance* (pp. 84–103). Cheltenham: Edward Elgar. <https://doi.org/https://doi.org/10.4337/9781784715656.00011>
- Remling, E., & Persson, Å. (2015). Who is adaptation for? Vulnerability and adaptation benefits in proposals approved by the UNFCCC Adaptation Fund. *Climate and Development*, 5529(March), 37–41. <https://doi.org/10.1080/17565529.2014.886992>
- Roberts, A. (2004). A Partial Revolution: The Diplomatic Ethos and Transparency in Intergovernmental Organizations. *Public Administration Review*, 64(4), 410–424.
- Roberts, J. T. (2009). The international dimension of climate justice and the need for international adaptation funding. *Environmental Justice*, 2(4), 185–190. <https://doi.org/10.1089/env.2009.0029>
- Roberts, J. T., Weikmans, R., Robinson, S. ann, Ciple, D., Khan, M., & Falzon, D. (2021). Rebooting a failed promise of climate finance. *Nature Climate Change*, 11(3), 180–182. <https://doi.org/10.1038/s41558-021-00990-2>
- Romzek, B. S. (2015a). The Tangled Web of Accountability in Contracting Networks. In M. J. Dubnick & H. G. Frederickson (Eds.), *Accountable governance: Problems and promises* (pp. 22–39). London and New York: Routledge.
- Romzek, B. S. (2015b). Living accountability: Hot rhetoric, cool theory, and uneven practice. *PS - Political Science and Politics*, 48(1), 27–34. <https://doi.org/10.1017/S1049096514001553>
- Romzek, B. S. , LeRoux, K., & Blackmar, J. M. . (2012). A Preliminary Theory of Informal Accountability among Network Organizational Actors. *Public Administration Review*, 72(3 (May/June)), 442–453. <https://doi.org/10.2307/41506786>
- Romzek, B. S., & Dubnick, M. J. (1987). Accountability in the Public Sector: Lessons from the Challenger Tragedy. *Public Administration Review*, 47(3), 227–238. <https://doi.org/10.2307/975901>
- Romzek, B. S., & Ingraham, P. W. (2000). Cross pressures of accountability: Initiative, command, and failure in the Ron Brown plane crash. *Public Administration Review*, 60(3), 240–253. <https://doi.org/10.1111/0033-3352.00084>
- Romzek, B. S., & Johnston, J. M. (2005). State social services contracting: Exploring the determinants of effective contract accountability. *Public Administration Review*, 65(4), 436–449. <https://doi.org/10.1111/j.1540-6210.2005.00470.x>

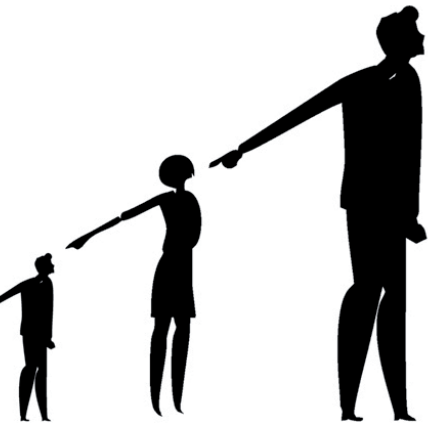
- Romzek, B. S., Leroux, K., & Blackmar, J. M. (2012). A Preliminary Theory of Informal Accountability Among Network Organizational Actors. *Public Administration Review*, 72(3), 442–453. <https://doi.org/10.1111/j.1540-6210.2011.02547.x>
- Said, J., Alam, M. M., & Bin Abd Aziz, M. A. (2015). Public accountability system: Empirical assessment of public sector of Malaysia. *Asian Journal of Scientific Research*, 8(2), 225–236. <https://doi.org/10.3923/ajsr.2015.225.236>
- Samkin, G., & Schneider, A. (2010). Accountability, narrative reporting and legitimation: The case of a New Zealand public benefit entity. *Accounting, Auditing and Accountability Journal*, 23(2), 256–289. <https://doi.org/10.1108/09513571011023219>
- Sappington, D. E. M. (1991). Incentives in Principal-Agent Relationships. *The Journal of Economic Perspectives*, 5(2), 45–66. <https://doi.org/10.1017/CBO9781107415324.004>
- Schade, J., & Obergassel, W. (2014). Human rights and the Clean Development Mechanism. *Cambridge Review of International Affairs*, 27(4), 717–735. <https://doi.org/10.1080/09557571.2014.961407>
- Schalatek, L. (2012). Democratizing climate finance governance and the public funding of climate action. *Democratization*, 19(5), 951–973. <https://doi.org/10.1080/13510347.2012.709690>
- Scharpf, F. W. (1997). Economic integration, democracy and the welfare state. *Journal of European Public Policy*, 4(1), 18–36. <https://doi.org/10.1080/135017697344217>
- Scharpf, F. W. (1998). *Interdependence and Democratic Legitimation* (No. 98/2). Max-Planck-Institut für Gesellschaftsforschung. Cologne.
- Schiavo-Campo, S. (1999). “Performance” in the Public Sector. *Asian Journal of Political Science*, 7(2), 75–87. <https://doi.org/10.1080/02185379908434148>
- Schillemans, T. (2015). Calibrating Public Sector Accountability: Translating experimental findings to public sector accountability. *Public Management Review*, 18(9), 1400–1420. <https://doi.org/10.1080/14719037.2015.1112423>
- Schillemans, T., & Busuioac, M. (2015). Predicting public sector accountability: From agency drift to forum drift. *Journal of Public Administration Research and Theory*, 25(1), 191–215. <https://doi.org/10.1093/jopart/muu024>
- Scholte, J. A. (2004). Civil Society and Democratically Accountable Global Governance. *Government and Opposition*, 39(2). <https://doi.org/10.1111/j.1477-7053.2004.00121.x>
- Scholte, J. A. (2011). Towards greater legitimacy in global governance. *Review of International Political Economy*, 18(1), 110–120. <https://doi.org/10.1080/09692290.2011.545215>
- Scar, E. D. (2001). *You don't always get what you pay for: The economics of privatization*. Cornell University Press. <https://doi.org/10.1002/pam.1056>
- Scott, D. (2021). Biden Doubles Down on Green Climate Fund for Developing Nations. *Bloomberg Law*. <https://bnanews.bna.com/environment-and-energy/biden-doubles-down-on-green-climate-fund-for-developing-nations>. Accessed 26 July 2021
- Seawright, J., & Gerring, J. (2008). Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options. *Political Research Quarterly*, 41(11), 1492–1514. <https://doi.org/https://doi.org/10.1177/1065912907313077>
- Shakir, M. (2002). The selection of case studies: Strategies and their applications to IS implementation cases studies. Maha Shakir. *Research Letters in the Information and Mathematical Sciences*, (3), 191–198.
- Sharma, R. (2011). *Use of Social Accountability Tools and Information Technologies in Monitoring and Evaluation* (No. 7).
- Shavell, S. (1979). Risk Sharing and Incentives in the Principal and Agent Relationship. *The Bell Journal of Economics*, 10(1), 55–73. <https://doi.org/10.2307/3003319>
- Shaw, K. L. (1996). An Empirical Analysis of Risk Aversion and Income Growth. *Journal of Labor Economics*, 14(4), 626–653.
- Siedenburg, J., Brown, S., & Hoch, S. (2015). Voices from the field – carbon markets and rural poverty as seen from Madagascar and Mali. *Climate and Development*, 5529(July 2015), 1–16. <https://doi.org/10.1080/17565529.2014.998602>
- Sinclair-Desgagné, B., & Spaeter, S. (2017). *Incentive Contracts and Downside Risk Sharing*. CIRANO, CNRS.

- Sinclair, A. (1995). The Chameleon of Accountability : Forms and Discourses. *Accounting, Organizations and Society*, 20(2), 219–237.
- Siverbo, S., Cäker, M., & Åkesson, J. (2019). Conceptualizing dysfunctional consequences of performance measurement in the public sector. *Public Management Review*, 21(12), 1801–1823. <https://doi.org/10.1080/14719037.2019.1577906>
- Smillie, I., & Hailey, J. (2013). *Managing for Change Leadership, Strategy and Management in Asian NGOs*. (I. Smillie & J. Hailey, Eds.). London, UK: Routledge.
- Smith, J. B., Dickinson, T., Donahue, J. D. B., Burton, I., Haites, E., Klein, R. J. T., & Patwardhan, A. (2011). Development and climate change adaptation funding: coordination and integration. *Climate Policy*, 11(3), 987–1000. <https://doi.org/10.1080/14693062.2011.582385>
- Sohn, H., Han, D., & Bae, K. Bin. (2022). The Effect of Performance Information on Actual Budgeting Allocation: The Role of Policy Type. *Public Performance and Management Review*, 5. <https://doi.org/10.1080/15309576.2022.2062014>
- Sommerer, T., & Agné, H. (2018). Consequences of legitimacy in global governance. In *Legitimacy in Global Governance: Sources, Processes, and Consequences* (pp. 153–168). <https://doi.org/10.1093/oso/9780198826873.003.0009>
- Soudry, O. (2008). A Principal-Agent Analysis of Accountability in Public Procurement. In G. Piga & K. V. Thai (Eds.), *Advancing Public Procurement: Practices, Innovation and Knowledge Sharing* (pp. 432–451). Boca Raton, Florida: PrAcademics Press.
- Sovacool, B. K., Linnér, B. O., & Klein, R. J. T. (2017). Climate change adaptation and the Least Developed Countries Fund (LDCF): Qualitative insights from policy implementation in the Asia-Pacific. *Climatic Change*, 140(2), 209–226. <https://doi.org/10.1007/s10584-016-1839-2>
- Spagnuolo, F. (2011). Diversity and pluralism in earth system governance: Contemplating the role for global administrative law. *Ecological Economics*, 70(11), 1875–1881. <https://doi.org/10.1016/j.ecolecon.2011.01.024>
- Speklé, R. F., & Verbeeten, F. H. M. (2014). The use of performance measurement systems in the public sector: Effects on performance. *Management Accounting Research*, 25(2), 131–146. <https://doi.org/10.1016/j.mar.2013.07.004>
- Spence, M., & Zeckhauser, R. (1971). Insurance, Information, and Individual Action. *The American Economic Review*, 61(2), 380–387. <https://doi.org/10.1016/b978-0-12-214850-7.50027-9>
- Spradley, J. P. (2016). *The Ethnographic Interview*. (R. and W. Holt, Ed.). Long Grove, Illinois: Waveland Press.
- Stadelmann, M., Michaelowa, A., & Roberts, J. T. (2013). Difficulties in accounting for private finance in international climate policy. *Climate Policy*, 13(6), 718–737. <https://doi.org/10.1080/14693062.2013.791146>
- Starbird, S. (2001). Penalties, Rewards, and Inspection: Provisions for Quality in Supply Chain Contracts. *The Journal of the Operational Research Society*, 52(1), 109–115.
- Steccolini, I. (2004). Is the Annual Report an Accountability Medium? An Empirical Investigation Into Italian Local Governments. *Financial Accountability & Management*, 20(August), 327–350. <https://doi.org/10.1111/j.0267-4424.2004.00389.x>
- Steckel, J. C., Jakob, M., Flachsland, C., Kornek, U., Lessmann, K., & Edenhofer, O. (2017). From climate finance toward sustainable development finance. *Wiley Interdisciplinary Reviews: Climate Change*, 8(1), 1–8. <https://doi.org/10.1002/wcc.437>
- Steffek, J. (2010). Public Accountability and the Public Sphere of International Governance. *Ethics & international affairs*, 1(1), 45–68.
- Steinberg, P. F. (2013). Can we generalize from case studies? *Global Environmental Politics*, 15(3), 152–175. <https://doi.org/10.1162/GLEP>
- Steinberg, R. S. (2010). Principal-Agent Theory and Nonprofit Accountability. In T. Hopt, K.J. and Von Hippelpp (Ed.), *Comparative Corporate Governance of Non-Profit Organizations* (pp. 73–125). Cambridge University Press. <https://doi.org/10.1017/CBO9780511712128.006>
- Stern, N. (2014). *ETHICS, EQUITY and the ECONOMICS of CLIMATE CHANGE PAPER 2: ECONOMICS and POLITICS*. *Economics and Philosophy* (Vol. 30). Cambridge University Press. <https://doi.org/10.1017/S0266267114000303>
- Stewart, R. (2016). *Evidence-Based Management: A Practical Guide for Health Professionals*. London, UK: CRC Press.

- Strebel, M. A., Kübler, D., & Marcinkowski, F. (2019). The importance of input and output legitimacy in democratic governance: Evidence from a population-based survey experiment in four West European countries. *European Journal of Political Research*, 58(2), 488–513. <https://doi.org/10.1111/1475-6765.12293>
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.5465/AMR.1995.9508080331>
- Taşan-Kok, T., Atkinson, R., & Martins, M. L. R. (2021). Hybrid contractual landscapes of governance: Generation of fragmented regimes of public accountability through urban regeneration. *Environment and Planning C: Politics and Space*, 39(2), 371–392. <https://doi.org/10.1177/2399654420932577>
- Templier, M., & Paré, G. (2015). A Framework for Guiding and Evaluating Literature Reviews. *Communications of the Association for Information Systems*, 37(August), 112–137. <https://doi.org/10.17705/1CAIS.03706>
- Tetlock, P. E. (1985). Accountability: The Neglected Social Context of Judgment And Choice. *Research In Organizational Behavior*, 7, 297–332.
- Themudo, N. S. (2013). Reassessing the Impact of Civil Society: Nonprofit Sector, Press Freedom, and Corruption. *Governance*, 26(1), 63–89. <https://doi.org/10.1111/j.1468-0491.2012.01602.x>
- Thiel, S. Van, & Leeuw, F. L. (2002). The Performance Paradox in the Public Sector. *Public Performance & Management Review*, 25(3), 267–281. <https://doi.org/10.2307/3381236>
- Thiele, V. (2010). Task-specific abilities in multi-task principal-agent relationships. *Labour Economics*, 17(4), 690–698. <https://doi.org/10.1016/j.labeco.2009.12.003>
- Tolliver, C., Keeley, A. R., & Managi, S. (2020). Drivers of green bond market growth: The importance of Nationally Determined Contributions to the Paris Agreement and implications for sustainability. *Journal of Cleaner Production*, 244(January 2020), 118643. <https://doi.org/10.1016/j.jclepro.2019.118643>
- UK Government. (2021). Taskforce on Access to Climate Finance - Revised concept note.
- UNFCCC. (1996). *Report of the Conference of the Parties on its second session, held at Geneva from 8 to 19 July 1996. Addendum-Part two: action taken by the Conference of the Parties.*
- UNFCCC. (2009). COP15: Copenhagen Accord - Draft Decision. *Fccc/Cp/2009/L.7*.
- UNFCCC. (2011a). Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. *Decision 1/CP.16*.
- UNFCCC. (2011b). Report of the Transitional Committee for the design of the Green Climate Fund. Durban, South Africa.
- UNFCCC. (2012). Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. Copenhagen, Denmark. <https://doi.org/FCCC/CP/2011/9/Add.1>
- UNFCCC. (2013). Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012.
- UNFCCC. (2014a). FOCUS: Climate Finance. Bonn, Germany: United Nations Framework Convention on Climate Change.
- UNFCCC. (2014b). Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013 Addendum Part two: Action taken by the Conference of the Parties at its nineteenth session.
- UNFCCC. (2015a). Adoption of the Paris Agreement. Paris: United Nations Framework Convention on Climate Change. <https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>
- UNFCCC. (2015b). *Paris Agreement*. <https://doi.org/FCCC/CP/2015/L.9>
- UNFCCC. (2015c). *Report of the Green Climate Fund to the Conference of the Parties.*
- UNFCCC. (2016). Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015. Paris: United Nations Framework Convention on Climate Change.
- UNFCCC. (2018a). Solidarity and Just Transition Silesia Declaration. Katowice: UNFCCC.
- UNFCCC. (2018b). Report of the Green Climate Fund to the Conference of the Parties and guidance to the Green Climate Fund. Katowice, Poland: United Nations Framework Convention on Climate Change.
- UNFCCC. (2019a). Introduction to climate finance. <https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance>. Accessed 4 January 2021
- UNFCCC. (2019b). Draft decision -/CP.25 Report of the Green Climate Fund to the Conference of the Parties and guidance to the Green Climate Fund. Madrid: UNFCCC.

- UNFCCC. (2021a). Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-serving-as-the-meeting-of-the-parties-to-the-paris-agreement-cma>. Accessed 11 May 2021
- UNFCCC. (2021b). Climate Finance Delivery Plan: Meeting the US \$ 100 Billion Goal.
- UNFCCC. (2022). Sharm el-Sheikh Implementation Plan. Sharm el-Sheikh, Egypt: UNFCCC.
- UNFCCC Standing Committee on Finance. (2014). Fifth review of the Financial Mechanism.
- UNFCCC Standing Committee on Finance. (2018). *2018 Biennial Assessment and Overview of Climate Finance Flows*. Bonn, Germany: United Nations Climate Change Secretariat.
- United Nations. (1992). United Nations Framework Convention on Climate Change. Rio, Brazil: United Nations.
- United Nations Climate Change Secretariat. (2022). Message from the Co-Chairs of the Ad Hoc Work Programme on the New Collective Goal on Climate Finance to Parties. Bonn, Germany.
- Upton, B. (2000). *The Multilateral Development Banks: Improving U.S. Leadership*. (Praeger, Ed.). Westport, Connecticut.
- Van Dooren, W., Bouckaert, G., & Halligan, J. (2015). *Performance Management in the Public Sector. Performance Management in the Public Sector* (Second edi.). Routledge. <https://doi.org/10.4324/9781315817590>
- van Kerkhoff, L., Ahmad, I. H., Pittock, J., Steffen, W., Ahmad, I. H., Pittock, J., & Steffen, W. (2011). Designing the Green Climate Fund: How to Spend \$100 Billion Sensibly. *Environment Magazine*, 53(3), 18–31.
- Vanhommerig, I., & Karré, P. M. (2014). Public accountability in the internet age: Changing roles for governments and citizens. *International Review of Public Administration*, 19(2), 206–217. <https://doi.org/10.1080/12294659.2014.928477>
- Vanhoucke, M. (2011). On the dynamic use of project performance and schedule risk information during project tracking. *Omega*, 39(4), 416–426. <https://doi.org/10.1016/j.omega.2010.09.006>
- Varian, H. R. (1992). *Microeconomic Analysis* (Third edit.). New York: W.W. Norton & Company.
- Verba, S. (1967). Some dilemmas in comparative research. *World Politics*, 20, 111.
- Verbeeten, F. H. M. (2008). Performance management practices in public sector organizations: Impact on performance. *Accounting, Auditing and Accountability Journal*, 21(3), 427–454. <https://doi.org/10.1108/09513570810863996>
- Vogel, R., & Hattke, F. (2018). How is the Use of Performance Information Related to Performance of Public Sector Professionals? Evidence from the Field of Academic Research. *Public Performance and Management Review*, 41(2), 390–414. <https://doi.org/10.1080/15309576.2017.1400986>
- Ward, A., Dargusch, P., Grussu, G., & Romeo, R. (2015). Using carbon finance to support climate policy objectives in high mountain ecosystems. *Climate Policy*, 3062(February), 1–20. <https://doi.org/10.1080/14693062.2015.1046413>
- Ward, S. C., & Chapman, C. B. (1995). Risk-management Perspective on the Project Lifecycle. *International Journal of Project Management*, 13(3), 145–149.
- Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly*, 26(2), xiii–xxiii. <https://doi.org/10.1.1.104.6570>
- Wheeler, P., Haertel, G. D., & Scriven, M. (1993). *Teacher Evaluation Glossary*. Kalamazoo, Michigan, United States: Wester Michigan University.
- Widerberg, O., & Pattberg, P. (2017). Accountability Challenges in the Transnational Regime Complex for Climate Change. *Review of Policy Research*, 34(1), 68–87. <https://doi.org/10.1111/ropr.12217>
- Wilmshurst, T. D., & Frost, G. R. (2000). Corporate environmental reporting: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 13(1), 10–26. <https://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077>
- Winters, M. S. (2010). Accountability, Participation and Foreign Aid Effectiveness. *International Studies Review*, 12, 218–243.
- Wolfe, R. (2015). An anatomy of accountability at the WTO. *Global Policy*, 6(1), 13–23. <https://doi.org/10.1111/1758-5899.12160>
- Woods, N. (2001). Making the IMF and the World Bank More Accountable. *International Affairs*, 77(1), 83–100. <https://doi.org/10.1111/1468-2346.00179>

- Woods, N., & Narlikar, A. (2001). Governance and the Limits of Accountability: The WTO, the IMF, and the World Bank. *International Social Science Journal*, 53(170), 569–583. <https://doi.org/10.1111/1468-2451.00345>
- World Bank. (2004). *World Development Report 2004: Making Services Work for Poor People*. Washington, DC: World Bank. <https://doi.org/10.1093/jae/ejh019>
- Wouters, M., & Wilderom, C. (2008). Developing performance-measurement systems as enabling formalization: A longitudinal field study of a logistics department. *Accounting, Organizations and Society*, 33(4–5), 488–516. <https://doi.org/10.1016/j.aos.2007.05.002>
- WRI. (2019). How Much Should Countries Contribute to the Green Climate Fund's Replenishment? <https://www.wri.org/blog/2019/04/how-much-should-countries-contribute-green-climate-funds-replenishment>
- Yasmin, S., & Ghafran, C. (2021). Accountability and legitimacy of non-profit organisations: challenging the current status quo and identifying avenues for future research. *Financial Accountability & Management*.
- Yin, R. K. (2003). *Case Study Research: Design and Methods* (Third Edit., Vol. Applied So). Thousand Oaks, California: SAGE Publications. https://doi.org/10.1300/J145v03n03_07
- Zadek, S. (2011). Beyond climate finance: from accountability to productivity in addressing the climate challenge. *Climate Policy*, 11(3), 1058–1068. <https://doi.org/10.1080/14693062.2011.582288>
- Zamarioli, L. H., Pauw, P., & Grüning, C. (2020). Country Ownership as the Means for Paradigm Shift: The Case of the Green Climate Fund. *Sustainability*, (c), 1–18.
- Zürn, M. (2004). Global Governance and Legitimacy Problems. *Government and Opposition*, 39(2), 260–287.



Supplementary materials

ANNEX 1 (PART OF CHAPTER 2)

Sub-components of legitimacy and their link to accountability

Openness and transparency practices can enable stakeholders to monitor and scrutinise organisations and can reflect an organisation's willingness to be subjected to such scrutiny, thus enhancing the potential for accountability and thereby legitimacy (Bunea 2018; Karlsson-Vinkhuyzen and Vihma 2009). Encouraging participation and more inclusive decision-making also contributes to increased accountability and legitimacy (Cheryl Simrell et al. 1998; Mascarenhas and Scarce 2004; Panel on Public Participation in Environmental Assessment and Decision Making 2008). Combined with increased openness and transparency, participation offers the possibility to hold decision-makers to account for the content of policies for those who may have rightful expectations (Groff and Karlsson-Vinkhuyzen 2018). Robust management processes and practices are a key ingredient to building the legitimacy of an organisation and are integral to the functioning of accountability regimes, including putting in place strong oversight roles, establishing monitoring and evaluation functions and exercising due diligence (M. Bemelmans-Videc et al. 2007; Wilmshurst and Frost 2000). Problem solving effectiveness improves legitimacy, as it provides substantive positive impact by contributing to addressing specific challenges and achieving concrete results (Karlsson-Vinkhuyzen and Vihma 2009; Scharpf 1998). Accountability measures that are linked to effectiveness and the achievement of results can therefore increase legitimacy, but can still be perceived as illegitimate and unfair if these maintain or reinforce inequity (Karlsson-Vinkhuyzen and Vihma 2009). Therefore, accountability measures that may disadvantage some or that are not applied equitably could reduce output legitimacy.

List of documents reviewed and subjected to content analysis

1. Agreement on the Terms and Conditions for the Administration of the Green Climate Fund Trust Fund
2. Governing Instrument for the Green Climate Fund
3. Consideration of Funding Proposal – Funding Proposal Package FP001
4. Consideration of Funding Proposal – Funding Proposal Package FP002
5. Consideration of Funding Proposal – Funding Proposal Package FP003
6. Consideration of Funding Proposal – Funding Proposal Package FP004
7. Consideration of Funding Proposal – Funding Proposal Package FP005
8. Consideration of Funding Proposal – Funding Proposal Package FP006
9. Consideration of Funding Proposal – Funding Proposal Package FP007
10. Consideration of Funding Proposal – Funding Proposal Package FP008
11. Consideration of Funding Proposal – Funding Proposal Package FP125
12. Consideration of Funding Proposal – Funding Proposal Package FP126
13. Consideration of Funding Proposal – Funding Proposal Package FP127
14. Consideration of Funding Proposal – Funding Proposal Package FP128
15. Selection Process and Terms of Reference of the Heads of the Accountability Units: Recommendations of the Appointment Committee
16. GCF Accredited Master Agreement between the Environment Investment Fund and the Green Climate Fund
17. Annex II: Initial Fiduciary Principles and Standards of the Fund
18. Guidelines Relating to the Observer Participation, Accreditation of Observer Organisations and Participation of Active Observers
19. Comprehensive Information Disclosure Policy of the Fund
20. Rules of Procedure of the Board
21. Initial Monitoring and Accountability Framework for Accredited Entities
22. Decision of the Board on the Administrative Guidelines on the Internal Control Framework and Internal Audit Standards
23. Initial Proposal Approval Process, Including the Criteria for Programme and Project Funding (Progress Report)
24. Annex XIII: Initial Best-Practice Guidelines for the Selection and Establishment of National Designated Authorities and Focal Points
25. Trust Fund Contribution Arrangement (Canada)
26. Trust Fund Contribution Arrangement (Japan)
27. Trust Fund Contribution Arrangement (United Kingdom)
28. Trust Fund Contribution Arrangement (United Kingdom)
29. Report of the Green Climate Fund to the Conference of the Parties” (2015)
30. Arrangements between the Conference of the Parties and the Green Climate Fund
31. Decision-making in the absence of consensus: Co-Chairs’ proposal

32. Review of the financial mechanism
33. Decision of the Board on updated Terms of Reference of the Independent Redress Mechanism (Revised)
34. Independent Redress Mechanism Case register
35. Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA)
36. Draft decision -/CP.25 Report of the Green Climate Fund to the Conference of the Parties and guidance to the Green Climate Fund
37. Workplan and budget of the Independent Integrity Unit for 2020
38. Annual Implementation Report on the Policy on Prohibited Practices
39. Annual Implementation Report on the Policy on the Protection of Whistleblowers and Witnesses
40. Independent Evaluation Unit 2021 Work Plan and Budget and Update of its Three-year Objectives and Work Plan
41. Fifth Review of the Financial Mechanism

Case Study Protocol

Information Sources for Document Review

Below is a table that outlines the information sources that will be used for each accountability element, using Mashaw (2006) as the overarching framework for categorisation:

Accountability Element	Information Source
Accountable to whom?	
Internal - formal	Governing instrument for the Green Climate Fund Selection Process and Terms of Reference of the Heads of the Accountability Units Rules of Procedure of the Board
Internal - informal	Interview of GCF officials
External - formal	Governing instrument for the Green Climate Fund Funding proposal packages for FP001-8
External - informal	Interview of donors and NGOs
Accountable about what?	Institutions' terms of reference/charter and other documents; GCF National Designated Authority/Focal point GCF Guidelines relating to the observer participation, accreditation of observer organisations and participation of active observers Initial monitoring and accountability framework for accredited entities Comprehensive Information Disclosure Policy of the Fund Funding proposal packages for FP001-8 Selection Process and Terms of Reference of the Heads of the Accountability Units Interview of GCF officials, donors and NGOs
Accountability process	Governing instrument for the Green Climate Fund Funding proposal packages for FP001-8 Selection Process and Terms of Reference of the Heads of the Accountability Units Comprehensive Information Disclosure Policy of the Fund Interview of GCF officials, donors and NGOs
Accountability criteria/ standards	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs; GCF Administrative Guidelines on the Internal Control Framework and Internal Audit Standards GCF Decision of the Board on the Administrative Guidelines on the Internal Control Framework and Internal Audit Standards Initial Proposal Approval Process, Including the Criteria for Programme and Project Funding (Progress Report) Funding proposal packages for FP001-8 Selection Process and Terms of Reference of the Heads of the Accountability Units Initial fiduciary principles and standards of the Fund
Penalties and rewards	Governing instrument for the Green Climate Fund GCF Accreditation Master Agreement (for accredited entities) Interview of GCF officials, donors and NGOs

The maximum number of informants interviewed will be dictated by the attainment of saturation (i.e., whence a point is reached whereby little to no new information is obtained by informants)⁵².

1. Choose type of interview - telephone, Skype or face-to-face⁵³. The technique will largely depend on the key informants' availability and preferred choice, as well as my available time, resources and overall logistical feasibility.
2. Develop an interview tool. Questions will be developed to obtain detailed qualitative information. The main components of the interview tool will include:
 - Introduction: Before beginning the interview, I will introduce myself and the project. I will describe the purpose for the interview, explain who is involved in the process and why their cooperation is important. A brief description of how the information will be used will also be provided.
 - Tombstone questions: Gather/confirm basic information about the respondent – name, position, organisation.
 - Key questions: Five to ten questions will be developed to elicit feedback on information related mostly to informal accountability elements (i.e., those for which little information could be found in the institutional documents) and to see how formal accountability relationships are enacted.
 - Probing questions: Probing questions will be developed to encourage participants to reflect more deeply on the meaning of their comments, as well as help clarify any input received in the key questions.
 - Closing question: This will provide an opportunity for the key informant to give any additional information or comments.
 - Summary: If time permits, the major comments heard throughout the interview will be verbally recapped and informants will be asked if I have missed anything.
 - Final thanks. I will thank the informants for their time and their valuable input.
3. Determine documentation method. A combination of notetaking and recording will be used, unless some respondents are not comfortable with recording the conversation. This will allow me to take brief notes during the interview, write down and organise my notes at the end of each interview and then use the tape recording to fill in information gaps or details.
4. Select designated interviewer(s). I will be the primary interviewer, but may require extra help to speed up the process. I have identified a person that I have worked with in the past and that is familiar with the GCF.

52. There is significant debate and little guidance available on the issue of saturation and sample size. Mason (2010), analysed 560 PhD studies that used qualitative interviews and found a mean sample size of 31, which may be indicative of requirements for saturation.

53. It must be noted that the offices of the Green Climate Fund are in Incheon, South Korea, making face-to-face interviews time consuming and expensive.

5. Conduct key informant interviews using the interview tool.
6. Compile and organise key informant interview data.
 - Descriptive codes will be used on the left-hand margins of the handwritten interview notes to help organise responses - these codes will cover key themes, concepts, questions, or ideas, and will be noted.
 - Handwritten interview notes will be typed up as Interview Summary Sheets in a word processing software by clear categories (e.g., by individual question and theme) and then organised in an Excel spreadsheet or database.
 - Each Interview Summary Sheet will provide information about the key informant's position, reason for inclusion in the list of informants, main points made, implications of these observations, and any accountability-related insights or ideas.
 - Interview Summary Sheets will then be imported into a qualitative data analysis tool, such as Atlas.ti and coded appropriately for analytical purposes.
 - A copy of the interview notes as well as the organised/coded responses will be sent to WUR Public Administration and Policy Group as per the group's data management policy.

Codebook for Document Review and Interviews

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
Accountable to whom?						
Internal - formal	Institutions' terms of reference/charter and other documents	AIF (accountability element, internal, formal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board)	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	To code as internal, the person/entity giving account and the forum (i.e., the person to whom account is given) must be within the GCF. The Board is considered internal for the purposes of this study. To code as formal, there needs to be evidence that documentation or process exists. Even if there is evidence of ad hoc use/adoption, the element can still be considered formal. The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., Administrative Accountability: Auditors, Inspectors and Controllers). Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort). Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).

54. "Nature of obligation" is the terminology used by Bovens (2007) and will be useful for the categorisation of the accountability findings (for the document review and the informant interviews).

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
Internal - informal	Interview of GCF officials, donors and NGOs	Aii (accountability element, internal, informal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board)	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	<p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing). Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p> <p>To code as internal, the person/entity giving account and the forum (i.e., the person to whom account is given) must be within the GCF. The Board is considered internal for the purposes of this study.</p> <p>To code as informal, there needs to be evidence that there is no documentation (e.g., policy, directive) or formal process that exists.</p> <p>Evidence of ad hoc use/adoption is not a sufficient condition to be considered informal.</p> <p>Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient.</p> <p>Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).</p> <p>Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).</p> <p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing).</p>

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
External - formal	Institutions' terms of reference/charter and other documents	AEF (accountability element, external, formal)	DD (donor, direct) DI (donor, indirect, e.g., parliament) UN (UNFCCC) R (recipient country)	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dla (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	<p>Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p> <p>To code as external, the person/entity giving account and the forum (i.e., the person to whom account is given) must not be within the GCF. The Board is considered internal for the purposes of this study.</p> <p>To code as formal, there needs to be evidence that documentation or process exists.</p> <p>The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., elected representative, political parties, voters, media).</p> <p>Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient.</p> <p>Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).</p> <p>Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).</p> <p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing).</p> <p>Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p>

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
External - informal	Interview of GCF officials, donors and NGOs Web commentary COP21 Tweets	AEI (accountability element, external, informal)	DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	To code as external, the person/entity giving account and the forum (i.e., the person to whom account is given) must not be within the GCF. The Board is considered internal for the purposes of this study. To code as informal, there needs to be evidence that there is no documentation (e.g., policy, directive) or formal process that exists. Evidence of ad hoc use/adoption is not a sufficient condition to be considered informal. The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., elected representative, political parties, voters, media). Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort). Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management). Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing). Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
Accountable about what?	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	AWhatFin (accountable about what - finance) AWhatRep (accountable about what - reporting) AWhatPerf (accountable about what - performance) AWhatProc (accountable about what - process) AWhatO (accountable about what - other) AWhatMgt (accountable about management)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post)	Finance includes official financial statements for a given project of organisation, but also any financial information (e.g., expenditures, travel claims). Reporting includes official reports (e.g., financial statements, annual reports, technical reports), as well as any ad hoc reporting requested by interested parties. Performance includes any benchmarking information, outputs, outcomes/results/impact data/information. Process includes any procedure, rules or regulations that ought to be followed. "Other" should be used when there is indication of accountability about a specific issue that is not clearly financial or performance-related. In this case, the coder should put in (i.e., in vivo) an additional code that further describes "accountability about what".

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁴	Coding Instructions
Accountability process	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	APF (accountability process, formal) APF (accountability process, informal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	To be construed as a process, one or more steps that ought to be followed must be identified. Processes can be formal or informal and even ad hoc if ad hoc, the coder should make note of it by adding "ah" as a code. As many of the parties involved in the process should be identified and this should be coded in vivo. Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).
Accountability criteria/standards	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	ACI (accountability criterion/criteria, informal) ACF (accountability criterion/formal) ASI (accountability standard(s), informal) ASF (accountability standard(s), formal)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) DIa (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	Criteria can be documented or informal, as well as applied on an ad hoc basis. If ad hoc, the coder should make note of it by adding "ah" as a code.

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation⁵⁴	Coding Instructions
Penalties and rewards	Institutions' terms of reference/charter and other documents; Interview of GCF officials, donors and NGOs	API (accountability penalty, informal) APF (accountability penalty, formal) ARI (accountability reward, informal) ARF (accountability reward, formal)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	Penalties and rewards for bad or good performance can include fines, disciplinary measures, civil remedies or even penal sanctions, but they can also be based on unwritten rules, as in the case of the political accountability of a minister to parliament, where the consequence can comprise calling for the minister's resignation. Penalties and rewards can be documented or informal, as well as applied on an ad hoc basis. If ad hoc, the coder should make note of it by adding "ah" as a code. Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).

Gray, Kouhy, and Lavers (1995) suggest that the preferred unit of analysis in document content analysis is sentences, as they are best suited to infer meaning. As such, coding will be applied to individual sentences in the institutional documents to be reviewed. In order to increase the reliability of the content analysis, following Milne and Adler (1999), I may make use of multiple coders and/or ensure I have well-specified decision categories and decision rules. To measure reliability, I may try to determine stability (i.e., ability to code the data the same way over time), reproducibility (i.e., getting the same results from different coders), and accuracy (i.e., assess the coding quality against a set of standards), as described by Krippendorff (2012).

A coding hierarchy will be developed using transitive relations (Krippendorff 2012). More details on analysis and results presentation are included in a section further below.

Interview Questions, by Target Population

The key informant interviews will be semi-structured and will mostly use “mini tour” questions, that is, questions that require respondents to details on particular or more specific issues or experiences (Spradley 1979). Closed questions may also be used to probe and obtain additional details from respondents, as suggested by Holstein and Gubrium (1995).

Opening comment: Thank you for agreeing to participate in this study led by Wageningen University. This study aims to improve our understanding of the accountability regime of the Green Climate Fund. We are interested in various facets and elements of accountability, including internal and external stakeholders, formal and informal accountability drivers, the specific processes by which accountability is managed, the criteria and/or standards against which recipients are judged and the penalties and rewards for bad or good performance.

Accountability Element	Questions for GCF staff and management	Questions for GCF Board members	Questions for NGOs	Questions for blended donors	Questions for recipients
Accountable to whom? Internal - formal	<p>1. a) Within the GCF, what are the formal internal sources of control for accountability to ensure that projects that get funded perform well?</p> <p>1. b) How could this be improved?</p> <p>2. a) How does the hierarchical structure within the GCF foster accountability for the performance of projects that get funded?</p> <p>2. b) How could this be improved?</p> <p>3. a) In terms of your professional accountability, what schemes or processes are in place to hold people to account regarding how well GCF-funded projects perform?</p> <p>3. b) How could this be improved?</p>	<p>1. a) Within the responsibilities of the Board, what are the formal internal sources of control for accountability to ensure that projects that get funded perform well?</p> <p>1. b) How could this be improved?</p> <p>2. a) As an individual Board member, in terms of your personal accountability, what schemes or processes are in place to hold you or other Board members to account regarding how well GCF-funded projects perform?</p> <p>2. b) How could this be improved?</p>	<p>1. a) Within your organisation, what are the formal internal sources of control for accountability that you can think of to ensure that projects funded by the GCF perform well?</p> <p>1. b) How could this be improved?</p> <p>2. a) How does the hierarchical structure within your organisation foster accountability regarding how well GCF-funded projects perform?</p> <p>2. b) How could this be improved?</p> <p>3. In terms of your professional accountability, what schemes or processes are in place to hold people to account regarding how well GCF-funded projects perform?</p> <p>3. b) How could this be improved?</p>	<p>1. a) Within your organisation, what are the formal internal sources of control for accountability that you can think of to ensure that projects funded by the GCF perform well?</p> <p>1. b) How could this be improved?</p> <p>2. a) How does the hierarchical structure within your organisation foster accountability regarding how well GCF-funded projects perform?</p> <p>2. b) How could this be improved?</p> <p>3. In terms of your professional accountability, what schemes or processes are in place to hold people to account regarding how well GCF-funded projects perform?</p> <p>3. b) How could this be improved?</p>	<p>1. a) Within your organisation, what are the formal internal sources of control for accountability that you can think of to ensure that projects funded by the GCF perform well?</p> <p>1. b) How could this be improved?</p> <p>2. a) How does the hierarchical structure within your organisation foster accountability regarding how well GCF-funded projects perform?</p> <p>2. b) How could this be improved?</p> <p>3. In terms of your professional accountability, what schemes or processes are in place to hold people to account regarding how well GCF-funded projects perform?</p> <p>3. b) How could this be improved?</p>

Accountability Element	Questions for GCF staff and management	Questions for GCF Board members	Questions for NGOs	Questions for blended donors	Questions for recipients
Internal - informal	4. a) Are there any informal sources of control for accountability within the GCF that affect how GCF-funded projects perform (e.g., peer pressure, competitive work environment, collaborative culture)? 4. b) How could this be improved?	3. a) Are there any informal sources of control for accountability within the Board that affect how GCF-funded projects perform (e.g., peer pressure, competitive work environment, collaborative culture)? 3. b) How could this be improved?	4. a) Are there any informal sources of control for accountability within your organisation that affect how GCF-funded projects perform (e.g., peer pressure, competitive work environment, collaborative culture)? 4. b) How could this be improved?	4. Are there any informal sources of control for accountability within your organisation that affect how GCF-funded projects perform (e.g., peer pressure, competitive work environment, collaborative culture)? 4. b) How could this be improved?	4. a) Are there any informal sources of control for accountability within your organisation that affect how GCF-funded projects perform (e.g., peer pressure, competitive work environment, collaborative culture)? 4. b) How could this be improved?
External - formal	5. a) What are the formal sources of control for accountability within the GCF that affect how GCF-funded projects perform (e.g., legislative or contractual) 5. b) How could this be improved?	4. a) What are the formal sources of control for accountability within the Board that affect how GCF-funded projects perform (e.g., legislative or contractual) 4. b) How could this be improved?	5. a) What is the formal role that you or your organisation plays in terms of holding the GCF Board to account? 5. b) How could this be improved? 6. a) What is the formal role that you or your organisation plays in terms of holding the recipients of GCF funding to account? 6. b) How could this be improved?	5. a) What is the formal role that you or your organisation plays in terms of holding the GCF Board to account? 5. b) How could this be improved? 6. a) What is the formal role that you or your organisation plays in terms of holding the recipients of GCF funding to account? 6. b) How could this be improved?	5. a) What are the formal sources of control for accountability within your organisation that affect how GCF-funded projects perform (e.g., legislative or contractual) 5. b) How could this be improved?

Accountability Element	Questions for GCF staff and management	Board members	Questions for NGOs	Donors	Questions for recipients
External - informal	<p>6. a) What informal tools or approaches can the GCF Secretariat use to hold grant recipients to account?</p> <p>6. b) How could this be improved?</p> <p>7. How does pressure from civil society organisations and other informal accountability pressures influence the work of the GCF Secretariat?</p>	<p>5. a) What informal tools or approaches the Board can use to hold GCF Secretariat to account?</p> <p>5. b) How could this be improved?</p> <p>6. a) What informal tools or approaches the Board can use to hold GCF recipients to account?</p> <p>6. b) How could this be improved?</p> <p>7. How does pressure from civil society organisations and other informal accountability pressures influence the work of the GCF Board?</p>	<p>7. a) What informal tools or approaches can you or your organisation use to hold the GCF to account?</p> <p>7. b) How could this be improved?</p> <p>8. a) What informal tools or approaches can you or your organisation use to hold GCF recipients to account?</p> <p>8. b) How could this be improved?</p>	<p>7. a) What informal tools or approaches can you or your organisation use to hold the GCF Secretariat to account?</p> <p>7. b) How could this be improved?</p> <p>7. a) What informal tools or approaches can you or your organisation use to hold the GCF Board to account?</p> <p>7. b) How could this be improved?</p> <p>8. a) What informal tools or approaches can you or your organisation use to hold GCF recipients to account?</p> <p>8. b) How could this be improved?</p> <p>9. How does pressure from civil society organisations and other informal accountability pressures influence your relationship with the GCF Board and Secretariat?</p>	<p>6. How does pressure from civil society organisations and other informal accountability pressures influence your relationship with the GCF Board and Secretariat?</p>

Accountability Element	Questions for GCF staff and management	Questions for GCF Board members	Questions for NGOs	Questions for blended donors	Questions for recipients
Accountable about what?	<p>8. a) What is the GCF Secretariat accountable for?</p> <p>8. b) How is this established (e.g., via formal documentation, informal pressure)</p>	<p>8. a) What is the GCF Board accountable for?</p> <p>8. b) How is this established (e.g., via formal documentation, informal pressure)</p>	<p>9. a) What are NGOs involved in the GCF (e.g., participating in Board meetings) accountable for?</p> <p>9. b) How is this established (e.g., via formal documentation, informal pressure)</p>	<p>10. a) What is your organisation accountable for with respect to the GCF? How is this established (e.g., via formal documentation, informal pressure)</p>	<p>7. a) What is your organisation accountable for with respect to the GCF?</p> <p>7. b) How is this established (e.g., via formal documentation, informal pressure)</p>
Accountability process	<p>9. a) What is the process whereby account can be given about the performance of GCF-funded projects?</p> <p>9. b) How could this be improved?</p> <p>10. a) How is this done by staff and managers within the GCF Secretariat?</p> <p>10. b) How is this done by the GCF Board?</p> <p>10. c) How is this done with respect to the UNFCCC COP?</p> <p>10. d) How is this done with respect to GCF donors?</p>	<p>9. a) What is the process whereby account can be given about the performance of GCF-funded projects?</p> <p>9. b) How could this be improved?</p> <p>10. a) How is this done by staff and managers within the GCF Secretariat?</p> <p>10. b) How is this done by the GCF Board?</p> <p>10. c) How is this done with respect to the UNFCCC COP?</p> <p>10. d) How is this done with respect to GCF donors?</p>	<p>10. a) What is the process by which NGOs and CSOs can hold the GCF to account?</p> <p>10. b) Is this process sufficient?</p> <p>10. c) How could this process be improved?</p>	<p>10. a) What is the process whereby account can be given about the performance of GCF-funded projects?</p> <p>10. b) How is this done by staff and managers within your organisation?</p> <p>10. c) How is this done with respect to elected officials (e.g., Secretary/Minister, parliament/legislature)?</p>	<p>8. a) What is the process whereby account can be given about the performance of GCF-funded projects?</p> <p>8. b) How is this done by staff and managers within your organisation?</p> <p>8. c) How is this done with respect to elected officials (e.g., Secretary/Minister, parliament/legislature)?</p>
Accountability criteria/standards	<p>11. a) When GCF grant recipients give (or will give) account on their performance, against what will they be judged?</p> <p>11. b) Are there clear criteria or standards?</p>	<p>11. a) When GCF grant recipients give (or will give) account on their performance, against what will they be judged?</p> <p>11. b) Are there clear criteria or standards?</p>	<p>11. a) When GCF grant recipients give (or will give) account on their performance, against what will they be judged?</p> <p>11. b) Are there clear criteria or standards?</p>	<p>11. a) When GCF grant recipients give (or will give) account on their performance, against what will they be judged?</p> <p>11. b) Are there clear criteria or standards?</p>	<p>9. a) When GCF grant recipients give (or will give) account on their performance, against what will they be judged?</p> <p>9. b) Are there clear criteria or standards?</p>

Accountability Element	Questions for GCF staff and management	Board members	Questions for NGOs	Questions for blended donors	Questions for recipients
Penalties and rewards	<p>12. a) What are the impacts or penalties associated with poor performance of projects funded by the GCF?</p> <p>12. b) Do you believe the impact or penalty, as well as the likelihood of facing the consequences, are a sufficient incentive to perform well as a recipient?</p> <p>12. c) What would help increase the incentive to perform better?</p>	<p>12. a) What are the impacts or penalties associated with poor performance of projects funded by the GCF?</p> <p>12. b) Do you believe the impact or penalty, as well as the likelihood of facing the consequences, are a sufficient incentive to perform well as a recipient?</p> <p>12. c) What would help increase the incentive to perform better?</p>	<p>12. a) What are the impacts or penalties associated with poor performance of projects funded by the GCF?</p> <p>12. b) Do you believe the impact or penalty, as well as the likelihood of facing the consequences, are a sufficient incentive to perform well as a recipient?</p> <p>13. c) What would help increase the incentive to perform better?</p>	<p>12. a) What are the impacts or penalties associated with poor performance of projects funded by the GCF?</p> <p>12. b) Do you believe the impact or penalty, as well as the likelihood of facing the consequences, are a sufficient incentive to perform well as a recipient?</p> <p>12. c) What would help increase the incentive to perform better?</p>	<p>10. a) What are the impacts or penalties associated with poor performance of projects funded by the GCF?</p> <p>10. b) Do you believe the impact or penalty, as well as the likelihood of facing the consequences, are a sufficient incentive to perform well as a recipient?</p> <p>10. c) What would help increase the incentive to perform better?</p>

ANNEX 2 (PART OF CHAPTER 4)

Methodological note

The documents reviewed were limited to the latest versions of documents approved by the GCF Board and available online. All documents were collected during the period of March 2016 and December 2019. A total of 33 documents were included in the review.

The key informant interviews were semi-structured and mostly used ‘mini tour’ questions, that is, questions requiring respondents to provide details on particular or more specific issues or experiences (Spradley 1979). Closed questions were also used to probe and obtain additional details from respondents, as suggested by Holstein and Gubrium (1995). The detailed key informant interviews included five GCF Board members, five representatives from Accredited Entities, three officials from Civil Society Organisations and two National Designated Authorities.⁵⁵ The key informants interviewed are representative of the target population, as they all play, or have played, important roles in the GCF accountability regimes as account holders or account givers. The semi-structured interviews with very knowledgeable respondents made it possible to obtain in-depth knowledge required for this within-case analysis (George and Bennett 2004; Paterson 2010). The interviews were conducted between June and December 2016. All interviews were recorded with the concurrence of participants to facilitate the transcription and coding process, and respondents were assured of the anonymity of their responses.⁵⁶ To preserve anonymity, the quotes in the text below refer to respondent groups, as opposed to specific institutions or individuals.

The documents and interview transcripts were then coded to identify and understand the various elements of the GCF’s accountability regimes. To do so, all documents and interview transcripts were uploaded into Atlas.ti, a software program for coding and interpreting textual, audio and visual data. Coding and quantification of relevant descriptive text and statements related to accountability was undertaken using a directed approach (Hsieh and Shannon 2005), by using existing theory on accountability to identify key concepts as initial coding categories. Definitions for each code were then determined based on this theoretic foundation and coding instructions were written to ensure consistency in the use of the codes. The codebook developed included code definitions, as well as criteria for inclusion and exclusion. Additional codes were created as the first documents were being coded (i.e., inductively emerging themes). Some of these codes were to add specificity (i.e., narrowing down the concepts), while other codes were created with new findings.

55. National Designated Authorities (or focal points) are responsible for the coordination of individual developing countries’ access to GCF financing.

56. Respondents were assured that the feedback they provided would be kept confidential; that is, no specific responses would be attributed to them directly and results would be clustered by respondent category (e.g., responses from AEs, GCF Board members).

Coding of documents and transcripts

The documents and interview transcripts were then coded to identify and understand the various elements of the GCF's accountability regimes. To do so, all documents and interview transcripts were uploaded into Atlas.ti, a software program for coding and interpreting textual, audio and visual data. Coding and quantification of relevant descriptive text and statements related to accountability was undertaken using a directed approach (Hsieh and Shannon 2005), by using existing theory on accountability to identify key concepts as initial coding categories. Definitions for each code were then determined based on this theoretic foundation and coding instructions were written to ensure consistency in the use of the codes. The codebook developed included code definitions, as well as criteria for inclusion and exclusion. Additional codes were created as the first documents were being coded (i.e., inductively emerging themes). Some of these codes were to add specificity (i.e., narrowing down the concepts), while other codes were created with new findings. Gray, Kouhy, and Lavers (1995) suggest that the preferred unit of analysis in document content analysis is sentences, as they are best suited to infer meaning. As such, coding was applied to individual sentences.

Codebook for Document Review and Interviews

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
Accountable to whom?						
Internal - formal	Institutions' terms of reference/charter and other documents	AIF (accountability element, internal, formal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board)	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	<p>To code as internal, the person/entity giving account and the forum (i.e., the person to whom account is given) must be within the GCF. The Board is considered internal for the purposes of this study.</p> <p>To code as formal, there needs to be evidence that documentation or process exists.</p> <p>Even if there is evidence of ad hoc use/adoption, the element can still be considered formal.</p> <p>The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., Administrative Accountability: Auditors, Inspectors and Controllers).</p> <p>Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient.</p> <p>Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).</p> <p>Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).</p> <p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing).</p>

57. "Nature of obligation" is the terminology used by Bovens (2007) and was used for the categorisation of the accountability findings (for the document review and the informant interviews).

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
Internal - informal	Interview of GCF officials, donors and NGOs	Aii (accountability element, internal, informal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board)	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	<p>Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p> <p>To code as internal, the person/entity giving account and the forum (i.e., the person to whom account is given) must be within the GCF. The Board is considered internal for the purposes of this study.</p> <p>To code as informal, there needs to be evidence that there is no documentation (e.g., policy, directive) or formal process that exists.</p> <p>Evidence of ad hoc use/adoption is not a sufficient condition to be considered informal.</p> <p>Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient.</p> <p>Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).</p> <p>Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).</p> <p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing).</p> <p>Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p>

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
External - formal	Institutions' terms of reference/charter and other documents	AEF (accountability element, external, formal)	DD (donor, direct) DI (donor, indirect, e.g., parliament) UN (UNFCCC) R (recipient country)	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	<p>To code as external, the person/entity giving account and the forum (i.e., the person to whom account is given) must not be within the GCF. The Board is considered internal for the purposes of this study.</p> <p>To code as formal, there needs to be evidence that documentation or process exists.</p> <p>The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., elected representative, political parties, voters, media).</p> <p>Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient.</p> <p>Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).</p> <p>Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management).</p> <p>Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing).</p> <p>Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.</p>

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
External - informal	Interview of GCF officials, donors and NGOs Web commentary COP21 Tweets	AEI (accountability element, external, informal)	DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	To code as external, the person/entity giving account and the forum (i.e., the person to whom account is given) must not be within the GCF. The Board is considered internal for the purposes of this study. To code as informal, there needs to be evidence that there is no documentation (e.g., policy, directive) or formal process that exists. Evidence of ad hoc use/adoption is not a sufficient condition to be considered informal. The coder should put in (in vivo) an additional code to describe the actor(s) involved in the accountability relationship (e.g., elected representative, political parties, voters, media). Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort). Vertical accountability refers to the situation where the forum formally wields power over the actor, perhaps due to the hierarchical relationship between actor and forum (e.g., employee to management). Horizontal accountability is when a hierarchical relationship is lacking between actor and forum (e.g., giving account to various stakeholders in society on a voluntary basis, mutual accountability between bodies standing on equal footing). Diagonal accountability are mostly administrative in nature (e.g., ombudsman, audit offices, inspectorates, supervisory authorities and accountants stand) with no direct hierarchical relationship, but a reporting function to the minister or to parliament and thus derive the requisite informal power from this. This is an indirect, two-step relation with a forum.

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
Accountable about what?	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	AWhatFin (accountable about what - finance) AWhatRep (accountable about what - reporting) AWhatPerf (accountable about what - performance) AWhatProc (accountable about what - process) AWhatO (accountable about what - other) AWhatMgt (accountable about management)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post)	Finance includes official financial statements for a given project of organisation, but also any financial information (e.g., expenditures, travel claims). Reporting includes official reports (e.g., financial statements, annual reports, technical reports), as well as any ad hoc reporting requested by interested parties. Performance includes any benchmarking information, outputs, outcomes/results/impact data/information. Process includes any procedure, rules or regulations that ought to be followed. "Other" should be used when there is indication of accountability about a specific issue that is not clearly financial or performance-related. In this case, the coder should put in (i.e., in vivo) an additional code that further describes "accountability about what".

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
Accountability process	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	APF (accountability process, formal) APF (accountability process, informal)	GM (GCF Secretariat management) GB (GCF Board) Peer	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	To be construed as a process, one or more steps that ought to be followed must be identified. Processes can be formal or informal and even ad hoc if ad hoc, the coder should make note of it by adding "ah" as a code. As many of the parties involved in the process should be identified and this should be coded in vivo. Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).
Accountability criteria/standards	Institutions' terms of reference/charter and other documents; Interview of donors and NGOs	ACI (accountability criterion/criteria, informal) ACF (accountability criterion/formal) ASI (accountability standard(s), informal) ASF (accountability standard(s), formal)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF Secretariat employee) GMA (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) DIa (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	Criteria can be documented or informal, as well as applied on an ad hoc basis. If ad hoc, the coder should make note of it by adding "ah" as a code.

Accountability Element	Information Source	Code Accountability Element	Code Accountable to Whom	Code Who is "Accountee"	Code for Ex Ante/Ex Post and Nature of Obligation ⁵⁷	Coding Instructions
Penalties and rewards	Institutions' terms of reference/charter and other documents; Interview of GCF officials, donors and NGOs	API (accountability penalty, informal) APF (accountability penalty, formal) ARI (accountability reward, informal) ARF (accountability reward, formal)	GM (GCF Secretariat management) GB (GCF Board) Peer DD (donor, direct) DI (donor, indirect, e.g., parliament) UNFCCC Cit (citizens) NGO	GEa (GCF employee) GMa (GCF Secretariat management) GBa (GCF Board) DDa (donor, direct) Dia (donor, indirect, e.g., parliament) UNa (UNFCCC) Ra (grant recipient) NGOa	XA (ex ante) XP (ex post) Vertical Horizontal Diagonal	Penalties and rewards for bad or good performance can include fines, disciplinary measures, civil remedies or even penal sanctions, but they can also be based on unwritten rules, as in the case of the political accountability of a minister to parliament, where the consequence can comprise calling for the minister's resignation. Penalties and rewards can be documented or informal, as well as applied on an ad hoc basis. If ad hoc, the coder should make note of it by adding "ah" as a code. Ex ante accountability elements are put in place prior to any work being undertaken or even before any money has been transferred between donor and recipient. Ex post accountability elements would be outputs and results achieved (after the transfer of money and the expending of effort).

Detailed findings from the application of AIAF to the GCF

Vertical Relationship between Accredited Entity and GCF Board

Attributes of ex ante and ex post information

Comprehensiveness of rationale for input (re)allocation

GCF requires that Concept Notes and proposals developed by AEs include information on how the project budget will be allocated (i.e., disaggregated by project component, output and activity), as well as the rationale for this proposed allocation (GCF 2015e, 2015f, 2019b). The GCF monitoring and accountability framework and Accreditation Master Agreement mentions that disbursements may be suspended and AEs may be asked to return funds due to poor performance (GCF 2015b, 2016a). Various documents imply that the information sources for making the reallocation decisions include data from ongoing performance monitoring, annual performance reporting, annual reviews, mid-term accreditation reviews and ad hoc checks or periodic reviews. It is unclear from the documents reviewed and interviews conducted what specific performance thresholds would trigger a budget reallocation by the AE or by the GCF. Also, it is unclear what information the GCF board would provide a low-performing AE to explain its decision to reallocate financing. This was also underscored by one of the AE respondents:

“The GCF has a performance monitoring and accountability framework which details what they call remedial and the risk measures. So, depending on the situation, whether there’s poor performance in a particular case, they will be taking different measures which could go up to, let’s say, interrupting the project, and possibly even requesting money back in extreme cases.”

However, two GCF Secretariat staff mentioned that there is no strong oversight within the GCF Secretariat to challenge or verify AEs’ performance targets and claims. It is too early to determine if any reallocation will be required in the current portfolio of projects funded by the GCF. As of January 10, 2020, only 16% of the total GCF project funding approved by the board had been disbursed (GCF 2020k).

Ability to measure performance against standards

The GCF put in place an accreditation scheme that requires potential project proponents to meet a set of policies and standards, which are spelled out in an Accreditation Master Agreement (GCF 2017c). The performance indicators included in the GCF monitoring and accountability framework offer a mix of short term and longer-term results, with an acknowledgement of the challenges involved in measurement (GCF 2015b). The GCF requires that AEs include specific targets as part of the Concept Notes and proposals they develop (GCF 2015e, 2015f, 2019b). The targets need to have corresponding indicators against which they are to be measured. In addition, as mentioned in the monitoring

and accountability framework for accredited entities, at the midpoint of the accreditation period, a mid-term review will be conducted to determine the AE's compliance against the accreditation standards (GCF 2015b).

As one of the AE respondents stated:

"We're also accountable to the GCF through an Accreditation Master Agreement. So, this ensures that, based on our accreditation standards, and the track of our fiduciary environmental and social safeguards...that we will uphold these standards carrying out all project activities using GCF funds."

However, according to one of the GCF Secretariat staff, the lack of monitoring and evaluation capacity within the GCF Secretariat has led to measuring process indicators, as opposed to more meaningful results. The key informant mentioned that this was akin to a "box ticking exercise".

It is too early to determine if performance data that is planned to be collected will be available or suitable for measuring against targets set by AEs.

Alignment of indicators with program goals

All AE Concept Notes and project proposals need to include indicators that align with the GCF goals and demonstrate alignment with country priorities (GCF 2015e, 2015f, 2019b). The GCF also recently put in place a set of standardized indicators to be used by AEs in the development of Concept Notes and proposals (i.e., planning phase), which would then be used for ongoing monitoring of performance during the project implementation phase (GCF 2015e, 2015f, 2019b).

As one AE respondent answered when asked if employee's performance will be measured against the same indicators as those selected for GCF-funded projects:

"Every team has an annual work plan. From the work plan every person identifies what the specific deliverables that he or she is going to contribute. So, it is reflected. If GCF project deliverables are one of or a couple of indicators for the performance of a staff member, yes there will be an alignment."

However, as one of the GCF Secretariat key informant stated, the lack of monitoring and evaluation capacity within the GCF Secretariat hinders its ability to quality-assure AEs' choice of indicators. It is too early to determine if performance data that is planned to be collected will be available or suitable for measuring against targets set by AEs, which could lead to modification of indicators and misalignment.

Quality and credibility of evaluation data

The establishment of independent evaluation unit increases credibility of evaluation data to be produced. It must be noted that the of independent evaluation unit does not undertake project-level evaluations per se – it undertakes thematic evaluations at a portfolio-wide level. Similarly, the GCF draft Evaluation Policy establishes the principles, criteria, processes, types of evaluations, roles and responsibilities for stakeholders involved in its oversight and implementation (GCF Independent Evaluation Unit 2018a). This in turn increases the likelihood of generating high-quality and credible evaluation data. It is too early to determine whether this will indeed be the case, as no GCF project has been evaluated at the time of writing.

Regarding the quality and credibility of the annual performance reports, there is no requirement for third-party verification, as one of the CSO respondents noted:

"...(W)e were hoping that the board was going to ensure that whenever an accredited entity makes an annual report, there should be a third-party verification on that specific information provider. Because one of the issues is how do you make sure that the right impact was achieved, if only the entity itself is the one describing these impacts and those results. Unfortunately, we didn't get that level of detail. So, there is still self-assessment at the end."

In addition, as two of the GCF Secretariat key informants mentioned, there is no substantive review by the GCF Secretariat, with little capacity to verify the credibility of targets, nor the veracity of results. As was noted by one of the GCF Secretariat respondents, several of the early projects funded by the GCF did not collect baseline data, making future evaluations challenging.

Attributes of the processes that are in place for the utilization of performance information ex ante and ex post

Comprehensiveness of performance measurement and management system

A monitoring and accountability framework has been developed for the proponents that obtain GCF accreditation (GCF 2015b). The document describes how Accredited Entities are to monitor their compliance with the GCF accreditation standards, as well as how they are to go about monitoring and evaluating individual projects funded by the GCF. A results management framework was also put in place, with corresponding logic models and performance indicators (GCF Independent Evaluation Unit 2018b).

However, many of the earlier projects funded by the GCF had poor logic models that lacked meaningful performance measures.

In addition, the GCF requires Accredited Entities to agree to ongoing monitoring of performance, annual reporting performance reporting, annual reviews, mid-term accreditation reviews and ad hoc checks or periodic reviews – all as part of the Accreditation Master Agreement they sign with the GCF (GCF 2016a). The results management framework lays out roles and responsibilities for reporting and describes how performance reporting can be used to guide the GCF's financial allocation (GCF Independent Evaluation Unit 2018b).

There is no clear indication in the GCF documents reviewed that performance information will be integrated within project management decision-making (e.g., via employee performance agreements) based on formal GCF requirements. However, some AEs have internal processes that foster integration of performance information into decision-making, but this is done independently of GCF requirements.

As one AE respondent mentioned:

“Through the (internal) project implementation policies – the operational policies I just mentioned – both in terms of procurement, financial transfers, reporting and monitoring, auditing, any budget rules, all of these are governed by these policies.”

Another respondent noted:

“You have your various projects for which you might be responsible and you have your various indicators of performance. So, in actuality being measured against those consistently...to determine whether or not you're getting value for money.”

It is still too early to determine how comprehensive the performance measurement and management systems that are being put in place by AEs who have received GCF funding, as projects are in early implementation.

Diligence of evaluation follow-up

None of the documents reviewed outline explicit requirements or an established process to address project evaluation recommendations. None of the respondents interviewed had any insights regarding such follow-ups. It is too early to determine whether and how follow-ups to project evaluations will be conducted, as no GCF project has been evaluated yet.

Breadth of disclosure approach

The GCF disclosure policy limits information made publicly available, including deliberative information exchanged, prepared for or derived from the exchanges between the GCF and its AEs (GCF 2016b). This information is planned to be disclosed publicly in the near future, according to one of the GCF Secretariat respondents.

Some AEs already have their own disclosure policies that will ensure that GCF project performance information will be made public, as one AE respondent noted:

"Maybe one thing I'd like to add is in terms of the information. The disclosure of information and transparency. All these things; we have a web-based user interface. The things that are on annual budgets, annual expenditures, total projects are always there with a snapshot and a summary on our project portals. You can filter by budget, region, and all that. There are reports that can be downloaded in Excel. All the project implementation reports and evaluation reports are public. So, I guess I just wanted to mention that around transparency and information flow, and public disclosure of information, which I think is a critical part for accountability for people to be able to look into and see how things are going."

It is too early to determine the breadth and depth of information that AEs will choose to disclose publicly. It must be noted that no project performance data currently made available on the GCF website, as only project planning documents are currently available. As one AE respondent mentions, there is an expectation of transparency:

"I don't think we have reached a stage yet of reporting on all the tasks performed. But I would assume that it would go through the normal process like most of the projects where you will have, for example, a final project evaluation. Then those reports are likely going to be shared online. In fact, most if not all GCF reports are online so that you'll be able to see what the evaluators are saying. And those will be carried out by independent evaluators."

Level of engagement of civil society via performance reporting

This is not an applicable criterion as it applies to a different accountability relationship, namely that of civil society as account holder vis-à-vis AEs and/or the GCF.

ANNEX 3 (PART OF CHAPTER 5)

Interview Questions, by Target Population

The key informant interviews were semi-structured and mostly used ‘mini tour’ questions, that is, questions requiring respondents to provide details on particular or more specific issues or experiences (Spradley 1979). Closed questions were also used to probe and obtain additional details from respondents, as suggested by Holstein and Gubrium (1995). The detailed key informant interviews included five GCF Board members, five representatives from Accredited Entities, three officials from Civil Society Organisations, two National Designated Authorities and two GCF Secretariat officials. The key informants interviewed are representative of the target population, as they all play, or have played, important roles in the GCF accountability regimes as account holders or account givers. The semi-structured interviews with very knowledgeable respondents made it possible to obtain in-depth knowledge required for this within-case analysis (George and Bennett 2004; Paterson 2010). The interviews were conducted between June 2016 and April 2020. All interviews were recorded with the concurrence of participants to facilitate the transcription and coding process, and respondents were assured of the anonymity of their responses.⁵⁸ To preserve anonymity, the quotes used in the paper refer to respondent groups, as opposed to specific institutions or individuals.

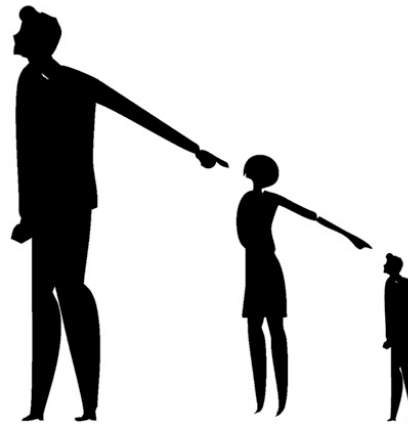
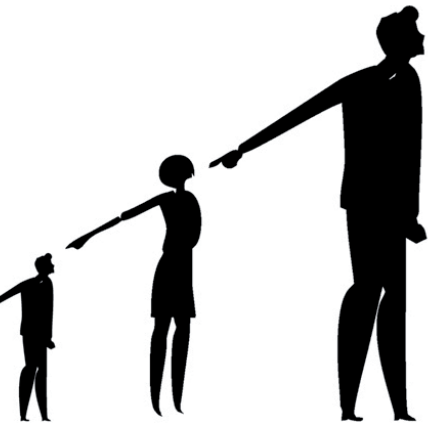
Opening comment: Thank you for agreeing to participate in this study led by Wageningen University. This study aims to improve our understanding of the accountability regime of the Green Climate Fund. We are interested in various facets and elements of accountability, including internal and external stakeholders, formal and informal accountability drivers, the specific processes by which accountability is managed, the criteria or standards against which recipients are judged and the penalties and rewards for bad or good performance.

58. Respondents were assured that the feedback they provided would be kept confidential; that is, no specific responses would be attributed to them directly and results would be clustered by respondent category (e.g., responses from AEs, GCF Board members).

Questions for blended donors	Questions for CIMMYT, CCAFS, partners	Questions for CGIAR Consortium, IEA, Audit
<ul style="list-style-type: none"> • What information is most important for you to have with respect to ensuring accountability in CGIAR projects or programmes? • Does that change, depending on whether it is funding under windows 1, 2 or 3? 	<ul style="list-style-type: none"> • What information is most important for you to have with respect to this project to effectively play your role and to meet your accountability commitments? • Does that change, depending on whether it is funding under windows 1, 2 or 3? • Is this the same information that you provide to the donor? What about information you provide to beneficiaries? 	<ul style="list-style-type: none"> • What information is most important for you to have with respect to this project to effectively play your role and to meet your accountability commitments? • [Ask who towards whom? Does/do the information/expectations change depending on the account holder?] • Does that change, depending on whether it is funding under windows 1, 2 or 3?
<ul style="list-style-type: none"> • Do you ever look at project-level information reported by CGIAR centres? • What information have you obtained on the status of specific projects or programmes? • How was this information conveyed to you? (report, newsletter, tweet, web content) • Was this information satisfactory to fulfil your accountability commitments? Does it satisfy what you see as responsibilities for accountability of the project? • How could it be improved? 	<ul style="list-style-type: none"> • What information have you reported/provided to the donor related to the status of the project? • To whom did you report this information? • How did you convey this information? • Was this information satisfactory to fulfil your accountability commitments? • How could it be improved? 	<ul style="list-style-type: none"> • What information have you obtained on the status of the project? • From whom did this information come from? • How was this information conveyed to you? • Was this information satisfactory to fulfil your accountability commitments? • How could it be improved?
<ul style="list-style-type: none"> • How do you make use of the following documents to fulfil your duties: • Project-specific proposals, including Monitoring/Evaluation/Learning (MEL)-related annexes • Project-specific annual reports or progress reports • Formative evaluations • Summative evaluations • Audits • Post-implementation monitoring reports • Institution annual reports • CGIAR Research Programs (CRP)-wide annual reports • How could these documents be improved to be more useful for accountability purposes? 	<ul style="list-style-type: none"> • How do you make use of the following documents to fulfil your duties: • Project-specific proposals, including Monitoring/Evaluation/Learning (MEL)-related annexes • Project-specific annual reports or progress reports • Formative evaluations • Summative evaluations • Audits • Post-implementation monitoring reports • Institution annual reports • CGIAR Research Programs (CRP)-wide annual reports • How could these documents be improved to be more useful for accountability purposes? 	<ul style="list-style-type: none"> • How do you make use of the following documents to fulfil your duties: • Project-specific proposals, including Monitoring/Evaluation/Learning (MEL)-related annexes • Project-specific annual reports or progress reports • Formative evaluations • Summative evaluations • Audits • Post-implementation monitoring reports • Institution annual reports • CRP-wide annual reports • How could these documents be improved to be more useful for accountability purposes?

Questions for blended donors	Questions for CIMMYT, CCAFS, partners	Questions for CGIAR Consortium, IEA, Audit
<ul style="list-style-type: none"> • During the four key project phases (namely: planning, implementation, closing and post-implementation), what information are you given by grant recipients for accountability purposes? • Is this sufficient (or too much), or could this be improved? • How is the CGIAR funding process different than other funding processes (e.g., bilateral funding) 	<ul style="list-style-type: none"> • During the four key project phases (namely: planning, implementation, closing and post-implementation), what information do you provide (or are you given) for accountability purposes? • Is this sufficient (or too much), or could this be improved? 	<ul style="list-style-type: none"> • During the four key project phases (namely: planning, implementation, closing and post-implementation), what information are you given by the grant recipient for accountability purposes? • Is this sufficient (or too much), or could this be improved?
<ul style="list-style-type: none"> • In a more general sense, that is, for the various project or programme funding how important is it for accountability purposes to obtain information related to: <ul style="list-style-type: none"> • Activities • Outputs • Outcomes • [define activities, outputs and outcomes] • In the case of CGIAR projects, how satisfied are you with the information you receive at the activity, output and outcome level (i.e., in the various CGIAR documents you receive or have access to)? 	<ul style="list-style-type: none"> • For accountability purposes, how important is information related to: <ul style="list-style-type: none"> • Activities • Outputs • Outcomes • [define activities, outputs and outcomes] • How satisfied are you with the information you receive (or you provide) at the activity, output and outcome level? • How does this information improve how the project is managed and achieves results? 	<ul style="list-style-type: none"> • For accountability purposes, how important is information related to: <ul style="list-style-type: none"> • Activities • Outputs • Outcomes • [define activities, outputs and outcomes] • How satisfied are you with the information you receive (or you provide) at the activity, output and outcome level? • How does this information improve how the project is managed and achieves results?
<ul style="list-style-type: none"> • Are there performance criteria and/or standards for projects that you fund more generally and how does the information provided by funding recipients enable you to determine if they are met? • How does this apply in the context of your funding of the CGIAR? 	<ul style="list-style-type: none"> • Are there performance criteria and/or standards for the project and how does the information provided by funding recipients (or that you provide) enable to determine if they are met? 	<ul style="list-style-type: none"> • Are there performance criteria and/or standards for the project and how does the information provided by funding recipients enable to determine if they are met?

Questions for blended donors	Questions for CIMMYT, CCAFS, partners	Questions for CGIAR Consortium, IEA, Audit
<ul style="list-style-type: none"> • If project performance information (or institution or CRP-level information) provided indicates poor performance, are there penalties that come into play? (follow-up with other terms) • Conversely, if performance information surpasses planned achievements, are there rewards involved? 	<ul style="list-style-type: none"> • If project performance information indicates poor performance, are there penalties that come into play? (follow-up with other terms) • Conversely, if performance information shows that the project surpassed planned achievements, are there rewards involved? 	<ul style="list-style-type: none"> • If project performance information indicates poor performance, are there penalties that come into play for the grant recipient? (follow-up with other terms) • Conversely, if performance information shows that the project surpassed planned achievements, are there rewards involved? • How does this apply to the donors who fund the CGIAR? Do they impose penalties or provide rewards?
<ul style="list-style-type: none"> • Once a project has closed, do you request or receive post-implementation information? • If so, how do you, or would you make use of such information for accountability purposes? 	<ul style="list-style-type: none"> • Once a project has closed, do you request (or are you requested) or receive post-implementation information? • If so, how do you, or would you make use of such information for accountability purposes? (or how does the donor make use of such information) 	<ul style="list-style-type: none"> • Once a project has closed, do you request or receive post-implementation information? • If so, how do you, or would you make use of such information for accountability purposes? (or how does the donor make use of such information)
<ul style="list-style-type: none"> • If you had a suggestion to make on how to improve the quality, quantity, type, timeliness or format of the information currently being shared for accountability purposes (or how it is being used by various parties), what would that be? • What would be required to make this happen? • How is this different than for other funding mechanisms (e.g., bilateral)? 	<ul style="list-style-type: none"> • If you had a suggestion to make on how to improve the quality, quantity, type, timeliness or format of the information currently being shared for accountability purposes (or how it is being used by various parties), what would that be? • What would be required to make this happen? • How is this different than for other funding mechanisms (e.g., bilateral)? 	<ul style="list-style-type: none"> • If you had a suggestion to make on how to improve the quality, quantity, type, timeliness or format of the information currently being shared for accountability purposes (or how it is being used by various parties), what would that be? • What would be required to make this happen? • How is this different than for other funding mechanisms (e.g., bilateral)?



Summary

Climate change will disproportionately impact developing countries and there is a significant need for climate change financing to help these countries mitigate and adapt to climate change. Many donor-funded climate change projects are being implemented in developing countries with more money being committed. Accountability for how money is spent and the results achieved is of key import. Although billions of dollars are being spent by donors on climate change financing via new climate change financing organisations there is still much to learn about the accountability regimes within these new organisations. This research aims to gain a better understanding of such accountability regimes. The overarching research question for this research is: *What factors lead to strengthened accountability in the complex accountability webs of international climate change financing?*

Chapter 2 of this thesis focuses on the accountability regimes of the Green Climate Fund (GCF). The GCF was established in 2010 to play a key role in mobilizing \$100 billion annually in climate finance by 2020. The size of anticipated financing and the impact it could have on developing countries leads to expectations from key stakeholders about the Fund's accountability and legitimacy. This chapter aims to fill a gap in scholarly knowledge, as accountability issues related to the GCF have only received limited academic attention. The paper answers the following questions: 1) What are the main elements of the many accountability regimes of the GCF? and 2) How can these elements impact the legitimacy of the Fund? My methodology includes content analysis of institutional documents and a series of key informant interviews (i.e., from GCF board members to recipient entities and civil society organisations (CSOs)). I also use theory-derived evaluative criteria to determine impacts of the Fund's accountability elements on its legitimacy. Key results: formal accountability measures and processes are mostly centred around the GCF board and its Accredited Entities; strong transparency practices have been put in place by the Board; no formal decision-making role exists for CSOs; there is a lack of consistent application of performance criteria and standards, as well as penalties, across all recipient entities; and there is a need for a formal process for the performance assessment, monitoring and evaluation of certain regime actors currently not facing comprehensive oversight.

Chapter 3 uses a theoretical approach, namely agency theory, to gain insights into the incentives at play and the role of information in the accountability relationship between the donor and recipient in climate change financing. This third chapter addresses the following question: What accountability measures serve to align the incentives of the donor with those of the recipient in climate change financing? I focus on the relationship between the Green Climate Fund as a donor and one of its Accredited Entities as a recipient. I examine the consequences of misaligned incentives and asymmetric information, looking at a specific set of accountability measures, including performance indicators, penalties for poor performance, as well as the role of pressure exerted by civil society organisations.

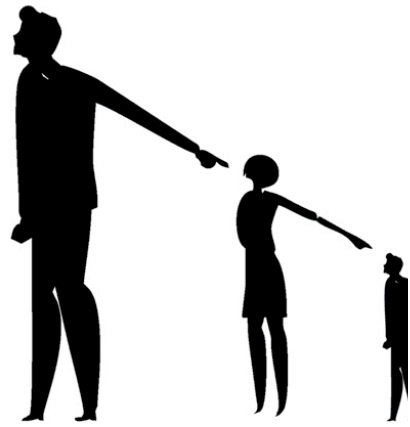
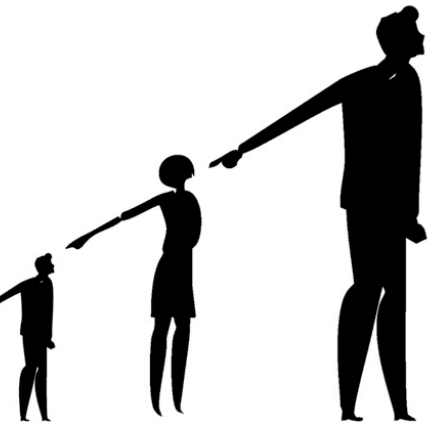
Chapter 4 addresses the question of what role performance information plays in the accountability regimes of international climate change financing institutions, and how this can be improved. It has been argued that the quality of the performance information of projects financed by public and private sources, as well as how that information is used, influences decisions made by the various actors in the accountability regimes, including the ability to hold actors to account. In this chapter, I develop a theory-based framework to analyse information needs to strengthen climate change financing accountability regimes. The proposed framework identifies information needs based on the nature of the accountability relationship and temporal considerations and sets evaluative criteria for the attributes and use of performance information. I test the framework by applying it to the GCF.

Chapter 5, also a case study, focuses on accountability information at the local level: a climate-smart agriculture project in India will be analysed via a document review and key informant interviews. The climate-smart agriculture project, funded by an international research partnership, was analysed to determine the effectiveness of the account giving processes across the project's various accountability regimes, as well as the adequacy of the performance information used for account giving purposes. The content analysis of project documents and the interviews conducted allow me to provide a description of performance information generation and dissemination, as well as account giving expectations across a broad set of actors in the project's complex accountability web (from funders to project officers and officials from partner institutions). Although there are several formal and well-established processes for account giving within this complex web, the sharing of certain types of accountability information can sometimes be ad hoc, with some information sources not meeting the expectations of certain account holders. Preferences and perceptions regarding accountability information varies across regime actors and gaps in accountability were found (e.g., absence of account giving between certain actors, lack of performance measures to assess some implementation aspects). A number of recommendations are made to address the limitations and gaps uncovered.

Through this research I found that the broad set of actors involved in international climate change projects makes the corresponding accountability regimes web-like. Such web characteristics require a complex mix of well-managed interactions and accountability measures that bring about results, as well as the building of the legitimacy of the institutions financing such projects. This accountability web also requires balanced measures that reduce the risk of creating insurmountable barriers to entry for smaller, local players. Further, information about project management and results that suits the needs of the various actors becomes important for accountability purposes in such webs, yet such information needs to be produced without over-burdening the ones tasked with implementing climate change projects and building capacity in developing countries.

The analysis suggests that asymmetric information between the climate change financing donor (principal) and the recipient (agent) about the agent's effort can increase the risk of low project performance. Paying the agent based on performance indicators related to the agent's activities and outputs, in addition to the climate change outcomes he achieves, is shown to drive the principal to expect higher performance from her agent. The analysis also shows that formal accountability procedures can influence the agent's behaviour and have a positive impact on project outcomes. Pressure from external actors (i.e., civil society organisations) was found to motivate donors and climate financing recipients to become more efficient and effective in their delivery of climate change projects. Moreover, the risk profile of a given climate change project and the level of risk the climate financing recipient is willing to tolerate is shown to have a bearing on the accountability measures the principal can impose.

This thesis provides theoretical and empirical grounding to build a deeper understanding of the accountability regimes involved in international climate change financing, what factors lead to strengthened accountability in the complex accountability webs they form and how these webs impact the legitimacy of these organisations. With its conceptual and empirical novelty, this thesis contributes to the literature on climate finance and accountability more broadly.



About the author

Rishi Basak is an economist with over 20 years' experience in both the private and public sectors. He has experience providing advice to officials at the most senior levels (e.g., CEO, Mayor, Deputy Minister, Minister and Prime Minister), having held advisory and management positions of increasing responsibility, including policy advisor for two Prime Ministers of Canada between 2004 and 2005 and Interim Director General of Canada's Office of Greening Government between 2011 and 2014.

Mr. Basak has led the mobilization of financing, development, implementation and evaluation of successful projects and policy initiatives in developed and developing countries. He has contributed to projects in the Americas, Africa and Asia, in his capacity as an executive in a donor agency (Canadian International Development Agency) and as a consultant focused on climate change mitigation and adaptation (e.g., for the CGIAR, the World Bank, FAO, the Global Green Growth Institute and UNDP). His academic interests and writings focus on performance management and accountability, mostly in the context of international climate change finance.

PUBLICATIONS

Basak, R., & Karlsson-Vinkhuyzen, S. (2022). The Green Climate Fund: history, status and legitimacy. In *Handbook of International Climate Finance* (pp. 135-166). Edward Elgar Publishing. DOI: 10.4337/9781784715656.00013.

Basak, R., & van der Werf, E. (2019). Accountability mechanisms in international climate change financing. *International Environmental Agreements: Politics, Law and Economics*, 19(3), 297–313. DOI: 10.1007/s10784-019-09437-8.

Basak, R. (2017). Accountability Regimes and International Climate Change Financing: The Green Climate Fund. In *5th International Conference on Current Research in Applied Business and Social Sciences*. New Delhi, India. DOI: 10.13140/RG.2.2.20170.47041.

Basak, R. (2017). *Financing Smallholder Climate-Smart Agriculture Adoption*, World Bank Agrifin Technical Summaries. Washington, DC.

Basak, R. (2017). *Credit Scoring and Climate-Smart Agriculture*, World Bank Agrifin Technical Summaries. Washington, DC.

Basak, R. (2017). *Irrigation Financing and Climate-Smart Agriculture*, World Bank Agrifin Technical Summaries. Washington, DC.

Basak, R. (2017). *Payment for Ecosystems Services – Focus on Landscapes and Forests*, World Bank Agrifin Technical Summaries. Washington, DC.

Basak, R., Guertin, M. and Gérard, B. (2017). *Theories of Change as a Tool for Strategy Development and Performance Improvement in Research for Development Organisations*. Texcoco, Mexico. DOI: 10.13140/RG.2.1.1042.5843.

Basak, R. (2016). *Benefits and Costs of Nitrogen Fertilizer Management for Climate Change Mitigation: Focus on India and Mexico* (No. 161). Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Basak, R. (2016). *Benefits and Costs of Climate Change Mitigation Technologies in Paddy Rice: Focus on Bangladesh and Vietnam* (No. 160). Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Basak, R. (2016). *Monitoring, reporting, and verification requirements and implementation costs for climate change mitigation activities: Focus on Bangladesh, India, Mexico, and Vietnam* (No. 162). Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Oliver, G., & Basak, R. (2002). *Competitiveness and Environmental Protection: A Dirty Dilemma*. *International Journal of Environment and Sustainable Development*, 1(3), 265–282.

Goldsmith, P. D., & Basak, R. (2001). *Incentive contracts and environmental performance indicators*. *Environmental and Resource Economics*, 20(4), 259–279.

The research described in this thesis this research received no external funding.
Financial support from Wageningen University for printing this thesis is gratefully acknowledged.

