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Our Forests, Our Cocoa, Our Future

The Promise and Performance of Collaborative REDD+ Governance Arrangements in Ghana

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Dedication

This thesis is dedicated to my parents, whose unwavering faith and encouragement have been my foundation; to my wife and children, whose love, patience, and companionship sustained me through every step of this journey; and to all the respondents, whose generosity in sharing their experiences and insights made this research possible.

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LIST OF APPENDED ARTICLES

This thesis is based on four empirical studies, with the corresponding findings reported in the appended papers:

Article I: Osei, M. K., Zachrisson, A., & Andoh, J. "Reviewing Key Challenges to Effective Collaborative Governance Dynamics in Subnational REDD+ Implementation across the Global South through the Integrative Framework for Collaborative Governance". Unpublished Manuscript.

Article II: Osei, M. K. (2025). Exploring System Context Contributing to Emerging REDD+ Collaborative Governance Regime in Ghana: Stakeholders' Perceptions at the National Level. *Environmental Management*, *75*(3), 505–523. https://doi.org/10.1007/s00267-024-02085-y

Article III: Osei, M. K. "Evaluating Perceived Process Performance and Outputs in the Formation of a Collaborative REDD+ Governance Program in Ghana." Under review, *Society & Natural Resources*.

Article IV: Osei, M. K. "Institutional Design and Perceived Local Legitimacy in Ghana's Multi-level Collaborative REDD+ Governance." Submitted Manuscript.

LIST OF ABBREVIATIONS

CEG – Collaborative Environmental Governance

CGR – Collaborative Governance Regime

CJA - Capacity for Joint Action

COCOBOD – Ghana Cocoa Board

CSOs – Civil Society Organizations

CREMA - Community Resources Management Area

CRMC - Community Resources Management Committee

ENGOs – Environmental Non-governmental Organizations

FAO – Food and Agriculture Organization of the United Nations

FC – Ghana Forestry Commission

FCPF - Forest Carbon Partnership Facility

GCFRP – Ghana Cocoa Forest REDD+ Program

GHG – Greenhouse Gas Emissions

HFZ – High Forest Zone

HIA - Kakum Hotspot Intervention Area

HMB - Hot Spot Intervention Area Management Board

IFCG - Integrative Framework for Collaborative Governance

IPCC - Intergovernmental Panel on Climate Change

KCALP- Kakum Cocoa Agroforestry Landscape Project

MRVs - Measurement, Reporting, and Verification Systems

PES - Payment for Environmental Services

SDGs - Sustainable Development Goals

UNFCCC - United Nations Framework Convention on Climate Change

UN-REDD - United Nations Initiative on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

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Misharch Kwadwo Osei
Umeå University, 2025

ABSTRACT

Tropical forests are facing mounting pressures from deforestation, climate change, and biodiversity loss, resulting in increasingly complex conservation challenges worldwide. In response, “Reducing Emissions from Deforestation and Forest Degradation” (REDD+) emerged in 2007 under the United Nations Framework Convention on Climate Change as a pivotal climate mitigation strategy. Since its inception, REDD+ has evolved from small-scale pilot projects to broader jurisdictional and landscape-level approaches that emphasize collaboration among multiple stakeholders to align shared objectives, coordinate collective action, and balance competing land-use demands across social, environmental, and economic spheres, with the overarching goal of cutting greenhouse gas emissions while advancing sustainable development. However, implementing such collaborative programs in politically contested tropical forest landscapes, characterized by diverse stakeholders, competing claims, and entrenched power dynamics, presents significant governance challenges. Despite growing recognition of collaborative governance as essential to the success of such REDD+ programs, theoretical frameworks to guide their design and implementation in Global South contexts remain underexplored, leaving a critical knowledge gap in this rapidly evolving field.

This thesis addresses that gap by examining how collaborative governance arrangements are designed and function within cocoa forest landscapes in Ghana. Using qualitative research methods, this thesis integrates the Integrative Framework for Collaborative Governance (IFCG) with decentralization theory, creating a novel analytical lens that reveals the enabling conditions and constraints for cross-sector and multi-level coordination in contexts characterized by limited resources, tenure insecurity, competing land-use pressures, and corruption. The study focuses on the Ghana Cocoa Forest REDD+ Programme (GCFRP) as a critical case of collaborative environmental governance, comprising four interrelated papers. These papers investigate: (1) unravelling collaborative governance dynamics in subnational REDD+ implementation; (2) the impact of system context on the drivers for the emergence of REDD+ collaborative governance regimes; (3) evaluating the perceived process performance and policy outputs in collaborative REDD+ program design; and (4) interrogating the effects of institutional design on perceived local legitimacy in multi-level REDD+ governance settings.

The findings from these studies demonstrate that the system context of tropical deforestation acts as a strong catalyst for collaboration, as weak governance and capacity constraints intersect with urgent social and environmental crises to drive collective action. Second, institutional design is crucial for collaborative outcomes: inappropriate local institutional structures weaken perceived legitimacy, thereby affecting stakeholder acceptance and program support. Incorporating decentralization theory reveals critical gaps in the IFCG, which, developed mainly from cases in the Global North, emphasizes broad participation and voluntary cooperation. Meanwhile, this research shows that in Global South contexts, the representativeness of participating actors, their decision-making power, and accountability are key factors for successful collaboration. Overall, this thesis advances collaborative governance theory by highlighting the political dimensions and power dynamics involved in combating deforestation and by demonstrating that strategic engagement with capable actors and external climate finance can energize collective efforts and foster a shared vision for sustainable land use in contested tropical landscapes.

Keywords

Collaborative governance, Multi-level governance, Decentralization, Collaborative performance, Institutional design, Perceived legitimacy, REDD+ policy, Tropical deforestation, Global South, Qualitative methods, Ghana Cocoa Forest REDD+ Programme

1. INTRODUCTION

Contemporary global environmental governance faces a core challenge in balancing food security for an estimated 10 billion people by 2050 with the protection of forests and climate systems, which are essential for planetary health. The nexus between agricultural production, forest management, and climate change highlights one of the key paradoxes of the Anthropocene (Golcher et al., 2018). Agriculture sustains billions of people, especially in the Global South (FAO, 2022). However, its expansion, driven by global demand for commodities such as cocoa, coffee, soy, palm oil, and beef, remains the primary cause of tropical deforestation (Pendrill et al., 2022). Land-use change, particularly deforestation, accounts for approximately 20–25% of global human-induced carbon emissions, with over 90% of this attributed to agricultural expansion (IPCC, 2022). Despite numerous international efforts to conserve, developing integrated and equitable solutions that balance immediate livelihood needs with forest preservation and climate goals remains a significant governance challenge (van Noordwijk et al., 2025). To address this, the international community established "Reducing Emissions from Deforestation and Forest Degradation (REDD+)" under the United Nations Framework Convention on Climate Change (UNFCCC), a market-based approach where developed countries compensate forest-rich countries in the Global South for reducing emissions from forests and land use (UNFCCC, 2015, Art. 5). Since 2007, REDD+ has been promoted by the global community through UNFCCC negotiations, international conservation organizations, and development actors as a "win–win" solution to potentially offer climate mitigation, biodiversity protection, and socio-economic benefits that has fundamentally reshaped tropical forest governance by integrating conservation into global climate politics (McDermott et al., 2022).

Despite the initial wave of enthusiasm and widespread praise for REDD+ as a transformative governance innovation that promises to be a win-win solution, many observers, stakeholders, and scholars have highlighted a more sobering reality. Early REDD+ efforts, primarily through pilot projects, have revealed significant limitations and troubling failures that challenge the optimistic narrative (Arts et al., 2019). Social and human rights issues have emerged, including the displacement of local communities, unfair benefit sharing, and disputed land rights (Lofts et al., 2021; Dawson et al., 2018). Technical and methodological problems have eroded credibility, including unreliable baseline measurements and complex measurement, reporting, and verification systems (MRVs) (Köhl et al., 2020). Weak governance, persistent power imbalances, and the marginalization of local communities in decision-making and implementation have allowed elites to capture benefits and foster corruption (Gizachew et al., 2017; Pham et al., 2021), while inadequate and unstable funding has limited long-term impacts (Morita & Matsumoto, 2023). Most troubling of all, deforestation has continued at an unrelenting pace (Duchelle et al., 2018). This chain of failures risks fueling broader conflicts across already contested tropical forest regions (Leach & Scoones, 2015; Schmid & Castro Osorio, 2025).

In response to the limitations and mixed results of early project-based interventions, REDD+ has quickly evolved toward jurisdictional and landscape-scale approaches, marking a significant shift in tropical forest land-use governance (Turnhout et al., 2017; Wunder et al., 2020). Supported by key international initiatives like the UN-REDD Programme and the World Bank's Forest Carbon Partnership Facility (FCPF), these strategies adopt holistic, integrated, and inclusive approaches with scalable solutions that transcend individual companies, sectors, and jurisdictions to balance competing land uses within political and administrative boundaries through cross-sector land use planning, economic incentives, and multi-stakeholder participation (Boyd et al., 2018; Wurtzebach et al., 2019). However, adopting a jurisdictional and landscape approach to REDD+ brings governance challenges (Ros-Tonen et al., 2018) comparable to those observed in transnational environmental conservation initiatives, development schemes, and other market-based environmental projects, such as Payments for Ecosystem Services (PES) and sustainability certification schemes broadly, where the involvement of multiple actors operating across different governance levels and accountability systems often generates coordination difficulties, uneven power relations, and tensions between global standards and local practices (Aryal et al., 2021; Chamanara et al., 2023; Schoon, 2013). These programs operate within contested tropical forest regions where multiple, often conflicting institutions intersect, as the involvement of a diverse array of stakeholders and authorities creates overlapping statutory, customary, and private authority structures that complicate decision-making, accountability, and perceptions of legitimacy (Ros-Tonen et al., 2018; Wallbott et al., 2019).

As a result, jurisdictional and landscape REDD+ programs can be seen as a form of collaborative governance that frames forest and land-use issues within the context of climate change, establishing new institutional arrangements that align some stakeholder interests and perspectives while marginalizing others (Reed et al., 2019; Weatherley-Singh & Gupta, 2017). Successfully implementing such complex, multifaceted, and politically sensitive programs requires aligning diverse stakeholders with often conflicting goals across sectors and coordinating policies across various government levels to address the drivers of deforestation (Bastos Lima et al., 2017). To manage this, public-private stakeholder partnerships, multi-stakeholder platforms, and cross-sectoral and multilevel collaboration approaches that facilitate collective action among various governmental and non-governmental stakeholders in designing, implementing, and managing REDD+ initiatives have increasingly been adopted in many REDD+ countries in recent years (e.g., Angelsen et al., 2018; Furumo & Lambin, 2020; Shin et al., 2022; van Der Haar et al., 2023). These arrangements may constitute collaborative governance—joint efforts by both state and non-state actors to address complex policy issues, aiming to deliver effective, efficient, and equitable outcomes implementation. However, designing and implementing such governance systems in the politically volatile and institutionally weak contexts typical of many tropical forest regions in the Global South presents significant challenges (Korhonen-Kurki et al., 2016; Sanders et al., 2017). Despite growing enthusiasm in academic and policy circles, empirical research applying collaborative governance frameworks to explore how such governance arrangements can be designed and implemented to provide context-specific insights into the conditions for achieving high performance in REDD+ contexts remains limited (Osei, 2025; Sarmiento Barletti et al., 2020). This important knowledge gap presents both a theoretical challenge for understanding collaborative environmental governance and a practical need to enhance the effectiveness of REDD+ in combating climate change.

Collaborative environmental governance (CEG), which involves diverse state and non-state actors across sectors in participatory processes, has gained recognition as a promising innovative approach for tackling complex and transboundary environmental issues such as climate change, biodiversity loss, and pollution (Jordan et al., 2018; Lemos & Agrawal, 2006; Nagendra & Ostrom, 2012; Ostrom, 1990). Emerging as a response to the limitations of top-down, hierarchical, centralized, and sectorally fragmented strategies, CEG emphasizes multi-actor coordination, shared decision-making, and adaptive institutional mechanisms that encourage learning, stakeholder participation, and inter-organizational collaboration (Eckerberg & Bjärstig, 2022; Margerum & Robinson, 2016). By fostering horizontal cooperation and deliberative engagement, CEG is theorized to boost social capital, innovation, and the adaptive capacity of socio-ecological systems, thereby increasing their resilience to environmental change (Bodin, 2017; Folke et al., 2005; Wondolleck & Yaffee, 2000). As a result, the growing scholarly and policy interest in CEG reflects a broader shift toward more inclusive, legitimate, and context-sensitive governance structures capable of managing the complexities of sustainability transitions (Partelow et al., 2020; Baird et al., 2019).

However, despite its theoretical appeal and growing popularity among scholars, policymakers, and practitioners, CEG implementation has produced mixed, often disappointing results (Lindgren et al., 2021; Newig et al., 2023). Empirical research increasingly demonstrates that CEG processes operating within complex, multi-layered policy environments remain vulnerable to persistent power asymmetries, weak accountability mechanisms, and coordination failures (Bjärstig et al., 2024; Whitley & Svensson, 2025). While normatively attractive, CEG processes demand substantial ongoing investments in time, capacity, and trust-building to sustain meaningful deliberation and collective decision-making (Ansell & Gash, 2008; Emerson & Nabatchi, 2015a). A critical concern centers on co-optation, whereby dominant actors—often government bodies or corporate sponsors—engage marginalized groups primarily to legitimize predetermined decisions rather than as genuine partners with substantive influence (Berthod et al., 2023; Dobbin et al., 2023). This challenge becomes particularly pronounced in CEG processes and governance across other fields such as development projects in the Global South, where governments frequently assert dominance in collaborative initiatives (Afandi et al., 2023; Aryal et al., 2021; Bruun & Rubin, 2023). Within power-laden REDD+ contexts specifically, deep-rooted power imbalances among stakeholders at multiple decision-making levels enable international donors, government agencies, well-funded environmental non-governmental organizations (ENGOs), civil society organizations (CSOs), and private sector actors to dominate collaborative efforts, thereby reinforcing rather than challenging existing power relations (Mukono, 2022). Consequently, marginalized communities often participate in collaborative forums that serve as arenas for compliance with top-down agendas rather than platforms for genuine engagement (Chorito & Assefa, 2024). Given these challenges, assessing CEG performance across diverse contexts remains a critical yet unresolved research priority (Jager et al., 2020; Koontz et al., 2020). This gap is particularly acute in the Global South, where empirical evidence on CEG performance and the conditions enabling high performance remains limited despite growing policy momentum for CEG arrangements (Ulibarri et al., 2023). Consequently, a deeper understanding is needed regarding why particular CEG arrangements—such as collaborative REDD+ governance arrangements—emerge, how they function, for whom, and under what conditions they achieve high performance.

Despite growing interest, empirical research on CEG performance remains limited by conceptual and methodological challenges stemming from its multifaceted nature, which encompasses both process performance (evaluating the quality and functioning of collaborative dynamics) and productivity dimensions (assessing outputs and diverse social and environmental outcomes) (Emerson & Nabatchi, 2015b). Furthermore, existing research provides limited insight into the causal mechanisms through which collaborative processes generate improved outputs and outcomes in complex environmental programs (Bjärstig et al., 2024; Koontz et al., 2020; Newig et al., 2018). While numerous theoretical frameworks have been developed to address this challenge (e.g., Ansell & Gash, 2008; Bryson et al., 2006, 2015; Newig et al., 2018; Ostrom, 1990, 2005; Plummer, 2009), they typically examine isolated dimensions of collaborative governance performance rather than its integrative systemic complexity. The Integrative Framework for Collaborative Governance (IFCG) (Emerson et al., 2012; Emerson & Nabatchi, 2015a, 2015b) represents one of the most comprehensive efforts to overcome this limitation. It systematically combines previous theoretical and empirical research to explain complex causal pathways linking contextual factors, collaboration drivers, and collaborative dynamics to both process quality, outputs, and substantive outcomes (Biddle, 2017; Douglas et al., 2020). The IFCG is one of the most widely cited frameworks for analyzing collaborative governance across various policy areas, yet its analytical strengths and practical utility have been mainly demonstrated in Global North settings (Ulibarri et al., 2023). Crucially, with only a few exceptions (e.g., Lawasi et al., 2024), its applicability for analyzing REDD+ governance in Global South contexts remains underexplored, raising important questions about the framework's generalizability across different political, socioeconomic, and environmental contexts. This research engages with these debates by critically examining collaborative REDD+ arrangements through the lens of the IFCG to extend the framework's applicability beyond its Global North origins and to advance collaborative governance theory.

Empirically, Ghana's Cocoa Forest REDD+ Program (GCFRP), launched in 2017 as one of the first commodity-based emissions reduction initiatives and an exemplar of landscape REDD+ programming (FCPF, 2022), provides a critical case for examining CEG in the Global South. The program explicitly embraces collaborative governance principles, emphasizing joint policy-making and collaborative implementation, and employing instruments such as partnerships, multistakeholder consultative groups, and deliberative forums throughout the full cycle of program design, implementation, and monitoring (Government of Ghana, 2017; van Der Haar et al., 2023), making it an interesting empirical case to challenge existing Western-developed collaborative governance theories such as the IFCG framework. The GCFRP operates within contested tropical forest landscapes in Ghana's High Forest Zone (HFZ) (Akamani et al., 2015), a context that epitomizes the theoretical challenges of CEG in the Global South. This contested landscape is characterized by entrenched power asymmetries between state and traditional authorities, overlapping and contested customary and statutory land tenure systems, pervasive corruption in forest resource management, and the systematic marginalization of local communities from environmental decision-making processes (Asiyanbi et al., 2017; Nukpezah & Alemagi, 2020). These contextual conditions render the program's capacity to achieve its intended results uncertain, providing a critical empirical case (cf. Flyvbjerg, 2006) for applying and extending the IFCG framework. By doing so, the study can explore how broader system context factors and collaborative dynamics interact to influence governance performance, revealing both the limitations and potential adaptations of the IFCG in complex, multi-faceted environmental policy settings such as REDD+ in the Global South.

1.1 Aim and Research Questions

The overarching aim of this thesis is to analyze how collaborative REDD+ governance arrangements are designed and function within cocoa-forest landscapes in Ghana, using the IFCG framework to critically evaluate its applicability and limitations in this context. By applying the IFCG to the GCFRP as a critical case of CEG, this thesis contributes to the sustainable implementation of REDD+ by empirically exploring the conditions that enable or constrain effective cross-sectoral and multi-level coordination in a context characterized by limited resources, competing land-use claims, tenure insecurity, and corruption. In doing so, this thesis seeks to understand not only why collaborative governance emerges in REDD+ initiatives but also how it operates, for whom, and under what conditions, to provide evidence-based recommendations for enhancing REDD+ collaboration to tackle commodity-driven deforestation and promote sustainable development in Ghana and other tropical forest regions in the

Global South with similar weak governance contexts. To achieve these aims, the thesis is structured around three research questions.

1) How applicable is the IFCG framework for understanding and explaining the conditions that enable or constrain the design and implementation of collaborative REDD+ governance arrangements in the Global South, and what limitations or contextual gaps emerge from its application?

2) To what extent do system context, drivers, and collaborative dynamics influence the effective functioning of collaborative governance arrangements and the delivery of high-quality policy outputs in the GCFRP, and how do these relationships differ from those observed in Global North contexts?

3) How do institutional design and implementation practices within the GCFRP influence local perceptions of legitimacy in a multi-level governance context?

By addressing these research questions, this thesis makes a main contribution by advancing collaborative governance theory through a critical engagement with the IFCG. This framework was developed and mainly empirically applied in Western, advanced democratic contexts. The study assesses its applicability and relevance in the complex, multi-faceted settings of REDD+ initiatives in the Global South. While the IFCG offers a comprehensive lens for understanding the emergence, design, and performance of collaborative governance arrangements, its usefulness in less-studied REDD+ contexts in the Global South, where unique contextual preconditions pose particular challenges to collaborative governance, remains uncertain (see Article I). By critically applying the IFCG to the critical case of the GCFRP (Articles II, III, and IV) presented in this thesis, this thesis sets an agenda to increase understanding and identify critical context-specific factors and procedural requirements that influence the drivers, collaborative dynamics, and collaboration outputs. In doing so, it operationalizes, strengthens, and advances the IFCG toward analysis of less-explored REDD+ contexts in the Global South, which differ considerably from the assumptions underlying the framework in the Global North. Ultimately, this research seeks not only to apply and expand one of the central frameworks in collaborative governance theory but also to bridge the empirical gap between Global North and Global South scholarship, providing practical insights for designing contextually appropriate and high-performing collaborative governance arrangements in complex environmental governance settings.

1.2 Outline of the Thesis

This compilation thesis comprises four interrelated articles that collectively examine the dynamics of collaborative governance in the context of REDD+. Article I presents a literature review that situates the empirical findings within the broader scholarly literature on collaborative governance in the context of REDD+ implementation. Articles II, III, and IV draw on data from semi-structured interviews with national- and local-level actors. Following the introductory chapter, Chapter 2 critically engages with relevant literature, including the growing scholarship on collaborative governance, CEG, and the evolution of REDD+ governance frameworks. Chapter 3 presents the analytical framework that underpins and integrates the four articles. Chapter 4 outlines the research design, encompassing the empirical context, case selection, data collection strategies, and ethical considerations. Chapter 5 provides concise summaries of the four articles, emphasizing their key findings and individual contributions. Finally, Chapter 6 synthesizes the main insights from the thesis, reflects on broader policy implications, and outlines avenues for future research.

2 SITUATING THE THESIS

As indicated earlier, this chapter critically engages with existing scholarship on the conceptual foundations of collaborative governance, explores the emergence and promises of CEG in contemporary natural resource and environmental policy, and traces the development and evolution of REDD+ governance within the context of the Global South.

2.1 Defining Collaborative Governance

The concept of 'governance' has become a buzzword in public administration and various other disciplines, reflecting its central role in shaping policy outcomes across diverse sectors (Milward & Provan, 2003; Rhodes, 1997). It can be broadly understood as "the set of structures, processes, mechanisms, and institutions through which social and political actors influence decision-making, actions, and outcomes" (Lemos & Agrawal, 2006, p. 298). Governance encompasses the systems, processes, and mechanisms that guide decision-making and the subsequent implementation of (or failure to implement) those decisions, which can be applied across various contexts, such as corporate, international, national, and local governance (Peters & Pierre, 2015). Fundamentally, governance concerns the exercise of power, the distribution of responsibilities, and the processes through which decisions are made, and actors are held accountable, emphasizing who holds influence, how decisions are taken, and the extent to which stakeholders are able to participate and shape outcomes (Evans & Thomas, 2023; Lemos & Agrawal, 2006).

Collaborative governance represents a distinct mode of public decision-making and problem-solving, characterized by the formal and sustained engagement of both state and non-state actors in collective processes that span institutional, sectoral, and jurisdictional boundaries (Ansell & Gash, 2008; Emerson & Nabatchi, 2015a). It involves structured, deliberative interactions, often institutionalized through partnerships, platforms, or forums, designed to facilitate joint problem definition, shared learning, and consensus-oriented decision-making (Emerson et al., 2012). Although collaborative governance shares normative underpinnings with related approaches, such as co-management, typically linked to joint stewardship arrangements between governments and local communities, and participatory governance, which emphasizes citizen involvement in policymaking, it is conceptually broader and institutionally grounded

(Bryson et al., 2020). Collaborative governance emphasizes the structured sharing of power among a diverse range of state and non-state actors, operating through institutionalized arrangements that facilitate sustained, cross-sectoral, and multi-level engagement in collective decision-making processes (Hofstad et al., 2022). The expanding body of theoretical and empirical scholarship on collaborative governance has evolved at the intersection of multiple disciplines, integrating foundational insights from collective action theory (Ostrom, 1990), participatory democratic theory (Fung, 2006), and public management (O'Toole, 1997). Collaborative governance is increasingly recognized as a response to governance challenges that conventional hierarchical and market-based mechanisms often fail to address, particularly those that require sustained coordination, legitimacy, and adaptive problem-solving capacity (Ansell et al., 2017; Huxham et al., 2000). While the concept was initially developed and widely applied in advanced democracies, its relevance has expanded since the 1990s to governance settings in the Global South, where it is increasingly employed to address complex, cross-jurisdictional, and multi-actor policy challenges (Batory & Svensson, 2019; Voets et al., 2021).

Collaborative governance today serves as a broad umbrella concept encompassing diverse institutional arrangements and governance styles, including policy networks, cross-sectoral coalitions, and public-private partnerships. Other forms of collaborative arrangements are becoming increasingly embedded within contemporary public management practices, especially as governments and stakeholders seek more integrated and collective approaches to implementing complex global agendas, such as the Sustainable Development Goals (SDGs) (Lima, 2021). Scholars commonly attribute the rise of collaborative governance to two interrelated developments. First, the shift from hierarchical, government-organized political institutions toward more diversified, fragmented, and multilevel governance systems has created a need for decision-making approaches that involve both state and non-state actors operating through negotiation, deliberation, and soft policy instruments (Sørensen & Torfing, 2022). Second, public authorities have recognized the strategic value of collaboration: by engaging non-state actors, they often achieve outcomes that would be difficult or impossible through unilateral action, particularly in addressing complex, dynamic, and boundary-spanning policy issues where traditional governance mechanisms have struggled to reconcile competing interests and perspectives (Ansell et al., 2022; Bianchi et al., 2021).

The increasing prominence of collaborative governance has generated a rich and diverse body of scholarship, leading to a proliferation of definitions, conceptual frameworks, and analytical approaches (Emerson et al., 2012). Scholars have drawn on multiple theoretical traditions to examine how collaborative arrangements function in practice. One influential line of inquiry, grounded in institutional theory, highlights the structural and contextual conditions that enable or constrain effective collaboration. Foundational work by Ostrom (1990) and Margerum (2011) highlights the significance of rules, norms, and institutional arrangements in facilitating collective action. Ostrom's Institutional Analysis and Development framework, in particular, has become a widely used approach for examining the contextual and structural conditions that support high-performing collaborative governance (Ostrom, 2011). Another key perspective, drawn from public management, frames collaborative governance as a strategic instrument that public managers use to tackle complex, interdependent policy challenges, particularly when collective decision-making facilitates consensus and joint problem-solving rather than unilateral action (Scott & Thomas, 2017; Prentice et al., 2019). Ongoing scholarly debates underscore a central tension in the study of collaborative governance: the tension between structure and process. While some scholars emphasize structural arrangements (Ansell & Gash, 2008), others highlight the critical role of dynamic, iterative processes in shaping collaborative outcomes (Emerson et al., 2012; Emerson & Nabatchi, 2015a). Still, scholars such as Bryson et al. (2015) argue for an integrated perspective that acknowledges the mutual influence of both structure and process. This divergence reflects the broader conceptual fluidity of collaborative governance itself, a term that encompasses a wide array of practices and institutional arrangements, including networks, coalitions, partnerships, participatory governance, or cross-sector collaborations (Bianchi et al., 2021; Emerson et al., 2012). In this thesis, collaborative governance is conceptualized as: "*the processes and structures of public policy decision-making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private, and civic spheres to carry out a public purpose that could not otherwise be accomplished*" (Emerson et al., 2012, p. 2).

This broader definition of collaborative governance, which emphasizes both processes and structures, is especially suitable for analyzing REDD+ governance. REDD+ governance is not merely about identifying who participates (the structural dimension), but equally about how they participate (the procedural dimension). Effective implementation of collaborative governance in the context of REDD+ hinges on formal institutional arrangements that provide the necessary organizational backbone for collaboration (Emerson & Nabatchi, 2015a). At the same time, it relies heavily on the quality of interactions among diverse actors, including dialogue, trust-building, and joint decision-making processes. Emerson et al.'s (2012) definition captures this dual importance, making it critical for comprehensively understanding the complexities of REDD+ governance and for informing efforts to improve its effectiveness and legitimacy. Emerson et al. (2012) emphasize that the formalization of collaborative governance processes occurs through the establishment of a Collaborative Governance Regime (CGR), a more structured and institutionalized arrangement specifically designed to facilitate collective decision-making. Within such regimes, cross-boundary collaboration is not merely incidental; it constitutes the prevailing behavioral pattern, fostering sustained interaction among autonomous organizations that represent diverse interests across various decision-making levels. CGRs are distinguished by their procedural norms, established rules, and iterative engagement among participants, ensuring that collaborative efforts evolve and adapt over time (Emerson & Nabatchi, 2015a). Thus, the GCFRP examined in this thesis exemplifies a CGR not only through its formal institutional architecture but also through the behavioral norms and relational dynamics that facilitate collaboration among interconnected institutions across overlapping policy domains within a complex governance context (Emerson et al., 2012).

2.2 Collaborative Environmental Governance (CEG)

In recent decades, CEG regimes have gained significant momentum in response to the growing complexity, scale, and transboundary nature of environmental challenges (Berkes, 2010; Bodin, 2017; Emerson & Nabatchi, 2015a; Ostrom, 1990). What was once the exclusive domain of state authorities and technical experts has evolved into a more inclusive and participatory space, where cross-sectoral and multi-level collaboration is now regarded as essential (Ansell & Gash, 2008; Koontz & Thomas, 2006; Wondolleck & Yaffee, 2000). Contemporary environmental challenges such as climate change, biodiversity loss, and land degradation are inherently complex, transcending jurisdictional boundaries, involving diverse stakeholder groups, and unfolding under conditions of deep uncertainty that demand governance approaches that prioritize coordination, foster mutual learning, and are grounded in shared knowledge, sustained dialogue, and collective action (Ostrom, 2009; Baird et al., 2019; Kalesnikaite, 2019). The global shift toward CEG has been catalyzed by influential international frameworks and agreements, including the UNFCCC Paris Agreement, the UN-REDD

Programme, the Convention on Biological Diversity, and the SDGs, along with key multi-stakeholder platforms such as the Nationally Determined Contributions Partnership and the Governors' Climate and Forests Task Force, collectively, these initiatives champion principles of participation, inclusivity, and broad-based actor engagement (Lima, 2021). They place increasing demands on national governments to adopt collaborative approaches in both policy design and implementation, ensuring alignment of goals and actions across global, national, regional, and local governance levels (Eckerberg & Bjärstig, 2022).

CEG arrangements are widely recognized for offering a range of potential benefits over traditional top-down or centralized approaches (Bodin, 2017; Newig et al., 2023). These benefits include not only greater efficiency and effectiveness in addressing complex environmental challenges but also enhanced legitimacy, trust, and local ownership of decision-making processes (Newig & Fritsch, 2009). Several scholars emphasize that collaborative governance can foster more effective coordination among diverse actors and enable pooling of financial, technical, and human resources (Emerson et al., 2012; Koontz & Thomas, 2006). It also strengthens social capital and facilitates shared understanding, which are crucial for navigating competing interests and building support for contextually appropriate solutions (Bodin, 2017; Wondolleck & Yaffee, 2000). Additionally, collaboration supports robust knowledge exchange and social learning, which enhance collective capacity to manage uncertainty and adapt to changing socio-ecological conditions (Newig & Fritsch, 2009). Moreover, when collaborative arrangements are designed to be context-sensitive and adaptive, they can enhance conflict resolution capacities, foster greater openness to experimentation, and promote stronger compliance with collectively developed rules (Dressel et al., 2021; Ostrom, 1990).

As a result, government agencies, local communities, the private sector, ENGOs, donors, CSOs, and other stakeholders have increasingly turned to collaborative approaches as a strategy for managing conflict, reducing uncertainty, addressing complex social-ecological challenges that exceed the capacity of any single actor, and promoting more sustainable resource governance (Ulibarri, 2019). This growing reliance on collaboration reflects the recognition that inclusive, multi-actor engagement can yield more adaptive and contextually responsive governance outcomes (Folke et al., 2005). Within this evolving field, Emerson et al. (2012) identify three distinct pathways through which CEG regimes may emerge: self-initiated, independently convened, or externally directed. Self-initiated arrangements are typically formed when local actors voluntarily organize to address shared concerns or manage common resources in the absence of external mandates. Independently convened regimes are facilitated by third-party institutions, such as universities, civil society organizations, or philanthropic entities, which function as neutral brokers to bring diverse stakeholders to the table. Externally directed CEGs, by contrast, arise through top-down directives, often in response to national policy frameworks, international agreements, or donor-driven initiatives (Emerson et al., 2012). Despite these general insights, while CEG arrangements are widely recognized to face implementation challenges (Ansell & Gash, 2008; Bodin, 2017; Huxham et al., 2000), there is growing acknowledgment that the nature and severity of such challenges are influenced by the type of governance regime, whether self-initiated, independently convened, or externally directed (Emerson & Nabatchi, 2015a; Nabatchi & Emerson, 2021). Although this typological distinction holds significant conceptual value, empirical inquiry remains limited regarding how these different regime types affect the quality and dynamics of the collaborative governance process and the perceived legitimacy of resulting policy outputs (Emerson & Nabatchi, 2015a), particularly in the underexplored governance contexts of the Global South (Ulibarri et al., 2023).

However, it is increasingly evident that CEG processes are deeply embedded in and often shaped by underlying power relations (Brisbois & de Loë, 2016). Contrary to the normative ideal of equal stakeholder participation, power asymmetries, manifested through differential access to authority, resources, and discursive influence, profoundly condition who participates, whose knowledge counts, and whose interests ultimately prevail in decision-making arenas (Cleaver & Whaley, 2018; Molinengo, 2023; Pollard et al., 2021). As Purdy (2012) argues, collaboration does not occur in a vacuum but within a web of uneven relationships that shape both the process and outcomes of collaborative governance. This presents a fundamental tension within CEG arrangements, which often rest on deliberative democratic ideals that presume fair, inclusive, and consensus-oriented dialogue among diverse stakeholders (Dryzek, 2002; Reed, 2008). Such assumptions risk obscuring the structural and institutional inequalities that can constrain meaningful participation, reconfiguring collaboration into a process that reproduces, rather than transforms, existing hierarchies of power (Dobbin et al., 2023). Power asymmetries fundamentally shape the practice of collaborative governance by influencing actors' commitment, their capacity to mobilize resources, and their ability to establish joint institutional arrangements, often enabling dominant stakeholders to steer collective action toward their strategic interests rather than genuinely shared goals (Emerson & Nabatchi, 2015a). As a result, the CEG process can lead to tokenistic participation, where some actors are excluded or marginalized from decision-making, resulting in policy outputs that lack broad legitimacy, hinder effective implementation on the ground, and ultimately fail to meet sustainability goals (Emerson & Nabatchi, 2015a; Koontz & Thomas, 2006). Hence, scholars such as Scott & Carter (2019) and Berthod et al. (2023) argue that a CEG process cannot be seen as a simple consensus-driven or power-neutral process but must be critically understood as a complex network of actors embedded in political dynamics and asymmetrical power relations, where control over technical knowledge and essential resources systematically marginalizes weaker participants, shaping whose voices influence decision-making, whose interests dominate policy outputs, and ultimately, what forms of governance arrangements are possible.

These issues of power imbalance and marginalization are especially pronounced in REDD+ and other environmental projects and conservation initiatives in the Global South, where the stakes of inclusive governance are particularly high (Aryal et al., 2021; Chorito & Assefa, 2024; Lund & Saito-Jensen, 2013). For example, across many parts of sub-Saharan Africa, including Ghana, CEG has produced inconsistent and often disappointing results, particularly in the context of forest resources and community-based conservation initiatives (Akamani et al., 2015; Larson & Ribot, 2007; Larson & Soto, 2008). Although local communities, traditional authorities, and smallholder farmers are effectively the de facto owners, primary users, and stewards of forest resources, they are often marginalized and undervalued within these collaborative arrangements, their voices overshadowed by more powerful actors and external stakeholders (Barrow et al., 2016; Musavengane & Simatele, 2017). This persistent sidelining raises critical concerns about whose interests and knowledge shape governance processes and outcomes on the ground (Johnson, 2021). Power relations are intrinsic to the multi-layered governance processes of REDD+, fundamentally shaping how collaborative efforts unfold, from actor convening and problem definition to decision-making authority and benefit-sharing negotiations (Boer, 2020). These relations decisively influence stakeholders' engagement, shaping not only their motivations but also the trust and commitment necessary for joint action (Boer, 2019). Despite its recognized importance, there remains a critical gap in our understanding of how power dynamics shape collaborative processes, relationships, and decision-making in CEG, all of which are central to the perceived legitimacy of governance arrangements (McIlwain et al., 2024; Morrison et al., 2023; Orth & Cheng, 2018). This gap is particularly salient in the context of REDD+ governance in the Global South, where diverse stakeholders, often with competing interests, unequal resources, and varying degrees of authority, engage in both formal and informal decision-making processes (Brockhaus et al., 2014). While collaboration is widely promoted as a pathway to inclusive and effective governance, we still know little about how power asymmetries influence the dynamics of collaboration and the quality of relationships among actors within such complex policy settings (Chorito & Assefa, 2024).

Even though power dynamics, organizational structures, stakeholder roles, procedural complexity, and participation present enduring challenges in CEG, previous studies consistently emphasize that there is no one-size-fits-all solution or universal blueprint for designing and implementing successful, high-performing collaborations (Ansell & Gash, 2008; Eckerberg et al., 2015; Ostrom, 2009). Instead, CEG arrangements must be carefully designed and tailored to the specific political, socioeconomic, and environmental contexts in which they are embedded in order to achieve their intended outcomes (Bodin, 2017; Clement et al., 2020; Cockburn et al., 2020). Consequently, the genesis, dynamics, and performance of CEG arrangements can only be fully understood when situated within their contextual milieu (Emerson & Nabatchi, 2015a). Despite the growing prominence of the IFCG in analyzing CEG, its empirical application remains largely concentrated on advanced democracies of the Global North, with a focus on a few established sectors such as forestry, wildlife management, water governance, and urban policy (for a review, see Douglas et al., 2020). This geographic and sectoral concentration highlights a critical gap in the literature: a limited understanding of the IFCG's generalizability and applicability to multifaceted environmental programs, such as REDD+ initiatives in the Global South (Ulibarri et al., 2023). The complexities inherent in these contexts, including fragmented institutions, power asymmetries, limited resources and capacity, pose unique challenges that may not be fully accounted for by frameworks primarily developed in Western, stable governance settings. Exploring the extent to which the IFCG can effectively capture and explain collaborative governance dynamics in such a dynamic context is therefore essential for both theoretical refinement and practical application.

2.3 Evolution of REDD+ Governance

Anthropogenic carbon emissions from land use, especially tropical deforestation and land degradation, are a major driver of climate change, accounting for a significant share of global emissions (IPCC, 2022). In response, forest-based emissions-reduction strategies in the Global South gained considerable prominence in the 2015 Paris Agreement, particularly under the REDD+ framework, alongside conservation, sustainable forest management, and the enhancement of forest carbon stocks (UNFCCC, 2015). REDD+ functions as a PES market-based governance instrument that offers results-based incentives designed to make forest conservation financially competitive with deforestation (Corbera et al., 2010). By compensating land users for maintaining forest cover incentivizes emission reductions and fosters sustainable forest management (Angelsen et al., 2017). These initiatives conceptualize forest carbon as a global public good, secured through local stewardship and rewarded via results-based payments (Wunder et al., 2020). This performance-based results financing approach to forest conservation in the Global South represents a significant departure from traditional conservation paradigms, as it links funding directly to verified emission reductions, thereby securing broad support from international donors and development partners (Theresia et al., 2025). Since its formal adoption in 2007, REDD+ implementation has progressed through distinct stages, beginning with localized pilot projects and gradually evolving toward broader jurisdictional and landscape-scale approaches, each characterized by unique features and challenges.

2.3.1 Early Local-Level Pilot Projects

The early phase of REDD+ implementation was characterized by localized pilot projects, typically led by ENGOs, CSOs, community-based groups, and, in some cases, private-sector partners (Larson et al., 2013). These initiatives aimed to demonstrate the feasibility of REDD+ approaches at the local level by focusing on activities such as forest monitoring, carbon measurement, and community engagement in sustainable forest management (Angelsen et al., 2018). While local communities and traditional authorities were key stakeholders, the overall project design and management often rested with external actors who facilitated implementation and provided technical support (Corbera et al., 2010). Despite their significant role in pioneering REDD+ implementation on the ground, these early initiatives soon revealed significant challenges and attracted considerable criticism. The market-based nature of REDD+, coupled with its broad scope, has been criticized for prioritizing carbon-focused goals at the expense of local needs and rights, leading to ambiguous conservation priorities and limited meaningful community participation (McAfee, 2016; Kemerink-Seyoum et al., 2018). Crucially, REDD+ has increasingly been condemned as a mechanism of “carbon colonialism,” in which forest resources in the Global South, rich in ecological and cultural value, are appropriated to serve the climate-mitigation ambitions of high-emitting countries in the Global North (Asiyanbi & Massarella, 2020; Leach & Scoones, 2015). This dynamic entrenches and reproduces deep-seated structural inequalities in global environmental governance, enabling Western, industrialized, wealthier countries to outsource their mitigation responsibilities while simultaneously extracting financial and natural capital from countries in the Global South (Lord & Sareen, 2025; Suiseeya, 2017). The commodification of forest carbon as a tradable asset reinforces neo-colonial power relations, with the sovereignty and rights of local communities subordinated to market logics and international donor agendas (Schmid & Castro Osorio, 2025).

Additionally, the early pilot REDD+ projects predominantly operated under a technocratic, top-down model that prioritized the agendas of international donors, ENGOs, CSOs, and external experts, often at the expense of forest-dependent communities and local institutions (Poudyal et al., 2020; Lofts et al., 2021). These initial projects aimed to demonstrate technical feasibility through localized interventions focused on carbon accounting and forest monitoring, yet they frequently marginalized the knowledge, rights, and active participation of those most intimately connected to the forest (Asiyanbi et al., 2017; Duchelle et al., 2019). This top-down approach reinforced centralized governance structures and diminished the potential for genuine community co-design and empowerment (Maraseni et al., 2020; Wong et al., 2019). Despite their pioneering status, these pilot initiatives exposed significant governance challenges, including limited transparency, elite capture, and skewed power relations that perpetuated inequalities rather than addressing them (Cadman et al., 2019; Morita & Matsumoto, 2023). Consequently, these early projects underscored the tensions inherent in REDD+ as a market-driven mechanism that commodifies forest carbon and disproportionately privileges global climate objectives over local livelihoods and autonomy (Poudyal et al., 2020).

Furthermore, both stakeholders and scholars widely recognize that these early pilot local REDD+ projects have failed to fulfil their promises for the climate, forests, and forest-dependent communities (Duchelle et al., 2018). This growing dissatisfaction, driven by unmet project objectives and perceptions of unfair benefit distribution, has frequently undermined trust and intensified tensions (Carbon Market Watch, 2023). In many cases, these dynamics have escalated into conflicts over land tenure and access to forest resources, further jeopardizing local livelihoods and social cohesion (Alusiola et al., 2021; Soliev et al., 2021). Despite being heralded as fundamental to REDD+ legitimacy, transparency and accountability have been poorly implemented in practice, resulting in an opaque decision-making process, limited stakeholder involvement, and widespread mistrust among local communities (Awung & Marchant, 2020; Saeed et al., 2018). Stakeholders involved in REDD+ implementation have consistently identified insecure land tenure, inequality in benefit-sharing, and the unpredictability of funding as significant impediments to the effective use of conditional incentives (Wong et al., 2019). Consequently, the original vision of a PES instrument underpinning REDD+ has encountered substantial challenges, collectively accounting for the persistent gap between theory and the practical realization of REDD+ goals on the ground (Wunder et al., 2020).

2.3.2 The Emergence of Jurisdictional and Landscape REDD+ Programs

In response to the limitations and critiques associated with early, localized REDD+ pilot projects, governance and implementation efforts have progressively shifted towards broader jurisdictional and landscape-scale approaches. These emerging frameworks aim to address key challenges that hinder project-level initiatives, including fragmented governance structures, unclear land tenure arrangements, and inadequate alignment with national policies. Jurisdictional and landscape REDD+ programs operate across expansive administrative or ecological units, ranging from provinces and states to entire forest landscapes, thereby facilitating more integrated land-use planning, multi-stakeholder coordination, and coherence with national climate objectives (Seymour & Harris, 2019). This evolution reflects REDD+'s deepening integration within global environmental governance architectures, particularly its formal inclusion in the Paris Agreement (2015, Article 5) and its alignment with the United Nations SDGs (2015–2030) (Seymour et al., 2020; UNFCCC, 2015). The institutional framework underpinning REDD+ was further consolidated through the Cancun Safeguards (2010) and the Warsaw Framework for REDD+ (2013), which introduced enhanced standardization concerning transparency, social and environmental safeguards, and results-based financing mechanisms (Rey Christen et al., 2020). These developments marked a decisive departure from the fragmented and project-centric implementation model characteristic of REDD+'s early phase, laying the groundwork for the formulation of comprehensive national strategies grounded in jurisdictional and landscape approaches (Wunder et al., 2020). Such approaches have been pivotal in enabling countries to operationalize their nationally determined contributions, under the Paris Agreement, while simultaneously advancing broader SDGs, encompassing forest conservation, climate mitigation, and inclusive environmental governance (Bishai et al., 2021; Turnhout et al., 2017). By expanding the scale of intervention, jurisdictional and landscape REDD+ programs offer the potential to overcome the structural and institutional constraints that limited the effectiveness and equity of earlier REDD+ efforts (Ros-Tonen et al., 2018).

Jurisdictional REDD+ programs have emerged as a key framework for structuring results-based finance agreements, both between national governments and with multilateral initiatives such as the World Bank's Forest Carbon Partnership Facility (FCPF), including its Carbon and Readiness Funds, the BioCarbon Fund, the Forest Investment Program the Climate Investment Funds, the UN-REDD Programme, and the EU REDD Facility, among others (Boyd et al., 2018). Unlike earlier project-based approaches, jurisdictional approaches require considering all forests within a defined political or administrative boundary, whether national, regional, or subnational, when establishing baselines and monitoring deforestation trends (Wunder et al., 2020). These approaches are anchored in formal governance jurisdictions, such as provinces or districts, where subnational or national governmental authorities (Seymour et al., 2020) typically lead REDD+ implementation. Critically, jurisdictional approaches aim to strengthen legal mandates, enhance cross-sector policy coherence, and align forest-based climate mitigation strategies with broader national development and climate goals (Angelsen et al., 2018). They are seen as a potential mechanism to scale REDD+ interventions beyond isolated pilot projects and integrate them more systematically into the governance architecture of participating countries.

In contrast to jurisdictional programmes aligned with political-administrative boundaries to coordinate forest governance, carbon accounting, and policy interventions at state or subnational scales, landscape REDD+ programmes adopt an ecological systems perspective that emphasizes the integrated management of heterogeneous land-use mosaics encompassing forests, agricultural lands, and human settlements within multifunctional landscapes (Bastos Lima et al., 2017). Rooted in principles analogous to the ecosystem approach, the landscape approach to REDD+ rejects sectoral interventions, acknowledging that sustainable outcomes require reconciling multiple, often competing land uses, including conservation, development, and agricultural production—within a defined landscape (Weatherley-Singh & Gupta, 2017). Central to this framework is the concept of multifunctional landscapes, which

Nilsson (2019) conceptualizes as mechanisms for harmonizing ecological functions with socioeconomic imperatives across broader territorial units through deliberate negotiation of trade-offs among competing land-use claims—principles that contemporary REDD+ initiatives increasingly adopt to integrate forest conservation with agricultural and other productive activities (Bishai et al., 2021; Wallbott et al., 2019).

Despite its conceptual appeal for simultaneously advancing climate mitigation and sustainable development, the practical implementation of the landscape approach to REDD+ encounters substantial challenges (Hermawan et al., 2023; McDermott et al., 2023). The literature highlights several challenges, including insufficient stakeholder alignment, difficulties in balancing conflicting land-use objectives, the dynamic nature of landscape processes, inadequate engagement, weak multilevel and cross-sectoral policy integration, contested land tenure and carbon rights, and inequitable benefit-sharing mechanisms (e.g., Ravikumar et al., 2015). Additional constraints stem from accountability deficits, limited resources and grassroots capacity, and entrenched power imbalances among stakeholders (Boer, 2020; Chorito & Assefa, 2024). To address these challenges, collaborative governance arrangements that enable cross-sector and multi-level coordination, broad stakeholder participation, decentralized decision-making, and adaptive learning have been increasingly adopted in many REDD+ countries as an innovative approach for overcoming governance challenges and scaling landscape REDD+ programs (e.g., Angelsen et al., 2018; Rodriguez-Ward et al., 2018; Ros-Tonen et al., 2018). Nonetheless, designing and implementing such collaborative REDD+ governance arrangements in Global South contexts remains profoundly challenging, with limited empirical understanding of the conditions that enable or constrain high performance—a gap that continues to animate scholarly debate (e.g., Sarmiento Barletti et al., 2020; Turnhout et al., 2017; Wurtzebach et al., 2019).

The GCFRP, which serves as the empirical focus of this thesis, exemplifies a landscape approach aimed at mitigating deforestation and forest degradation within Ghana's HFZ. The program is strategically designed to reconcile competing land uses across the cocoa-forest landscapes by emphasizing integrated land-use planning and fostering multi-level coordination across sectors and governance scales (FCPF, 2022; van der Haar et al., 2023). By embedding REDD+ implementation within Ghana's nationally determined contributions, the GCFRP reflects a deliberate effort to move beyond fragmented, project-based interventions toward a more coherent integration of forest conservation within broader national development and climate policy frameworks (Government of Ghana, 2017). Central to the program's design is its multi-level design, operationalized through the Hotspot Intervention Area (HIA) governance framework (Government of Ghana, 2016; NCRC, 2020). The HIA governance framework is intended to facilitate localized, place-based collaboration by bringing together a diverse range of actors, including local communities, state institutions, traditional authorities, and private sector stakeholders, to collectively address interrelated challenges such as land-use conflicts, unsustainable agricultural practices, and competing economic interests (Government of Ghana, 2017; NCRC, 2021).

However, the implementation of the GCFRP unfolds within a dynamic and deeply complex institutional and governance context, marked by entrenched power asymmetries and overlapping claims of authority between state and customary actors, ambiguities in decision-making responsibilities, the persistent marginalization of local actors in key governance processes, and contested land tenure arrangements, all of which raise critical concerns about the program's capacity to achieve its intended objectives (Akamani et al., 2015; Nukpezah & Alemagi, 2020). Thus, collaboration among diverse stakeholders, including international donors, government agencies, ENGOs, CSOs, private companies, traditional authorities, local communities, and smallholder farmers, unfolds within a context marked by entrenched power dynamics (Johnson, 2021). The deeply rooted political dynamics and entrenched power imbalances, which constitute significant issues underemphasized in the current formulation of the IFCG framework (Bruun & Rubin, 2023; Pells, 2015), present critical challenges to the effective implementation of collaborative governance in REDD+ initiatives. This renders the GCFRP a critical case for testing and advancing the assumptions of the IFCG in the context of REDD+ programs in Ghana's developing context.

Against this backdrop, the following chapter introduces the analytical frameworks through which I critically examine and interrogate these identified knowledge gaps. By applying these frameworks, I aim to uncover the enabling factors and challenges that shape the phenomena under study, providing a more nuanced and comprehensive understanding of their dynamics and implications.

3. ANALYTICAL FRAMEWORKS

In this chapter, I present the analytical frameworks used to examine the collaborative conditions shaping the perceived process performance and policy outputs of the collaborative REDD+ governance arrangement in Ghana. Two complementary frameworks guide this analysis: the IFCG framework (Emerson et al., 2012) and the decentralization framework of Agrawal & Ribot (1999).

3.1 The Integrative Framework for Collaborative Governance (IFCG)

As outlined in the introduction, the overall analytical framework of this research is based on the IFCG framework, which has become one of the most influential frameworks for analyzing collaborative governance across different disciplines and policy areas, including global health, integrated youth services, renewable energy, e-government, forestry, wildlife management, urban policy, water governance, and economic development partnerships (e.g., Emerson & Ahn, 2021; Douglas et al., 2020; Dressel et al., 2020; Hayter & Nisar, 2018; Thellbro et al., 2018). The IFCG is shaped by key theoretical contributions on collaborative governance (e.g., Ansell & Gash, 2008; Bryson et al., 2006; Ostrom, 1990) and incorporates a range of empirical works to offer a comprehensive, systemically integrative framework that goes beyond earlier frameworks that focused on individual aspects (Emerson et al., 2012; Emerson & Nabatchi, 2015a). The IFCG features a nested structure (see Figure 1), with the outermost level representing the broader system context in which the collaborative governance regime is embedded. From this system context, drivers of collaboration emerge that trigger the start of collaboration processes. Within the CGR, dynamics generate outputs and actions that lead to short- and long-term outcomes and may prompt possible adaptations in the system context (Emerson et al., 2012; Emerson & Nabatchi, 2015a). This systematic, integrative approach positions the IFCG as a comprehensive framework that maps causal pathways of collaborative conditions within governance and enables a detailed evaluation of its performance across multiple analytical levels (Emerson & Nabatchi, 2015b).

However, despite being one of the most widely cited frameworks for empirically analyzing collaborative governance, the IFCG's development and validation have mainly been shaped by Global North contexts (Ulibarri et al., 2023, for an overview). These contexts are characterized by relatively stable institutional environments, an established rule of law, and strong multi-stakeholder governance traditions. As mentioned in the introduction, with few exceptions (e.g., Lawasi et al., 2024), its application to complex PES programs such as REDD+ in the Global South remains critically underexplored. In these regions, weak institutional capacity, pronounced power asymmetries between state and non-state actors, limited financial resources, and historical governance legacies fundamentally shape the possibilities and constraints for CEG (Akamani et al., 2015; Musavengane et al., 2019). This geographical and theoretical gap is especially problematic because most REDD+ initiatives operate in these very contexts. This raises important questions about the framework's transferability, explanatory power, and universal applicability across very different governance settings. In this light, the GCFRP serves as a key case for evaluating the framework's relevance and usefulness in a context that differs significantly from those in which it was initially developed and used. By applying the IFCG to this setting, the study not only allows an empirical test of its core theoretical propositions within a governance environment that remains, mainly, understudied but also provides an opportunity to critically assess, refine, and possibly extend the framework. This could lead to a better understanding of the unique dynamics of CEG in the weak governance context of the Global South. In this thesis, I use the nested structure of the IFCG framework as the primary analytical tool, with the next section detailing the specific components and their operationalization for the empirical analysis.

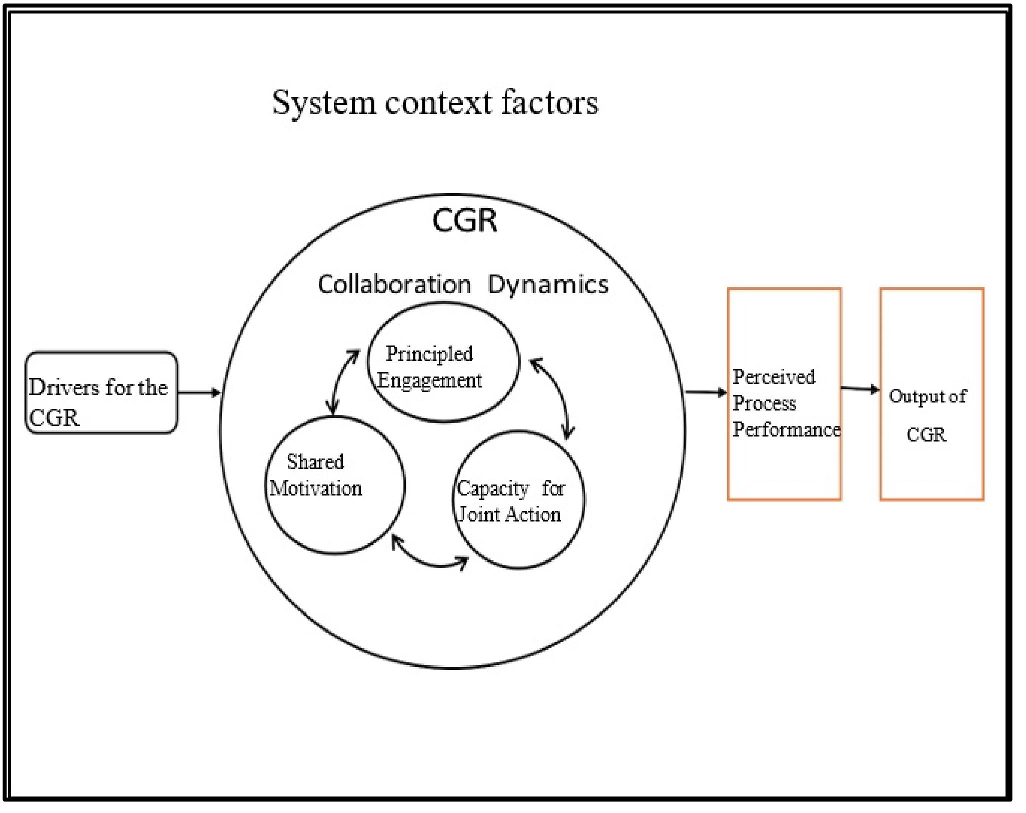

Figure 1: Analytical framework for evaluating perceived process and productivity performance of a multi-level REDD+ CGR. (Source: Adapted from Emerson et al., 2012; Emerson & Nabatchi, 2015a, 2015b).

3.2 Key Conditions Influencing Collaborative Performance

3.2.1 System Context and Drivers of Collaboration

The IFCG framework identifies six system context elements that characterize the broader environment within which CGRs are embedded, elements that simultaneously generate opportunities for and impose constraints upon the drivers that initiate and sustain CGRs (Emerson & Nabatchi, 2015a). These six elements encompass "*public resource and service conditions, policy and legal frameworks, socioeconomic and cultural characteristics, political dynamics and power relations, network characteristics, and conflict history*" (Emerson & Nabatchi, 2015a, p. 27). Public resources and service elements are linked to environmental challenges, including the degradation or depletion of natural resources and ecosystem services, which necessitate collective action. Policy and legal frameworks comprise the legislative, administrative, regulatory, and judicial architectures that both enable and constrain the formation of CGRs, establishing the formal rules of engagement for collaborative actors. Political dynamics and power relations encompass the distribution of authority within and across public sector organizations, as well as the capacity of political actors to shape collaborative processes through formal and informal influence. Network characteristics refer to the structural features of interorganizational relationships, including the density, strength, and configuration of ties among potential collaborative partners. Socioeconomic and cultural characteristics capture demographic, economic, and cultural factors that may affect the development of collaborative governance. Finally, the history of conflict considers how prior experiences of collaboration or contestation create path dependencies that either facilitate or impede the emergence of new collaborative arrangements (Emerson & Nabatchi, 2015a, pp. 40–43).

Within the system context, the IFCG framework identifies four key drivers that catalyze the initiation of a CGR: *uncertainty, interdependence, consequential incentives,* and *initiating leadership* (Emerson & Nabatchi, 2015a, p. 45). The CGR serves as the operational unit where collaborative governance is carried out, defined as “the particular mode of, or system for, public decision making in which cross-boundary collaboration represents the prevailing pattern of behavior and activity” (Emerson & Nabatchi, 2015a, p. 18). First, uncertainty arises from the complexity and ambiguity of tackling ‘wicked’ social problems. When such uncertainty cannot be resolved through unilateral action, it encourages actors to collaborate to collectively reduce, share, or diffuse risk. This directly connects to the second driver, interdependence, which arises when stakeholders recognize their mutual reliance and realize that independent action alone cannot achieve their goals, requiring collaboration to align strategies, share resources, and coordinate responses to common challenges. Third, consequential incentives include the tangible and intangible inducements and pressures that motivate actors to participate in collaborative efforts, such as access to funding, regulatory demands, and the desire to avoid sanctions, thereby increasing stakeholders' willingness to engage in the CGR. Lastly, initiating leadership refers to the catalytic role of individuals or organizations that actively bring stakeholders together, define a shared vision, broker relationships, and mobilize the resources needed to start a collaborative governance process. Effective initiating leadership is often crucial for overcoming organizational inertia, building trust, and turning system conditions into practical governance structures (Emerson et al., 2012, pp. 9–10).

While the IFCG framework conceptualizes system context primarily as shaping the drivers that initiate CGRs, examining the impact of system contextual elements in REDD+ implementation is theoretically and empirically crucial because these contextual elements not only facilitate or constrain the four essential drivers for the emergence of REDD+ CGR (Emerson et al., 2012) but can also, particularly in Global South REDD+ contexts, directly influence the quality and functioning of collaborative dynamics once governance arrangements are established—an influence that extends beyond the IFCG's original postulation of system context primarily as an antecedent condition (see Article 1). This dual-influence mechanism is particularly salient in Ghana's HFZ, a challenging system context in which the GCFRP is implemented. The HFZ faces ongoing deforestation pressures, rural poverty, and high reliance on forest resources for livelihoods (Akamani et al., 2015), worsened by weak governance conditions such as fragmented authority structures, corruption, poor regulatory enforcement, overlapping stakeholder mandates, and deep-seated power imbalances, along with historical conflicts among land-use actors (Nukpezah & Alemagi, 2020; Soliev et al., 2021). These challenging system contextual elements can create opportunities or barriers to the GCFRP's initiation and can also affect its processes and its ability to produce high-quality policy outputs (Osei, 2025).

3.2.2 Collaborative Dynamics

According to the IFCG framework, collaborative dynamics represent a virtuous cycle comprising three interdependent and mutually reinforcing components: *principled engagement, shared motivation,* and *capacity for joint action (CJA)* that enable stakeholders to work collectively toward a common purpose (Emerson & Nabatchi, 2015a, p. 59) (see Articles I and III; Figure 1 for illustration). These dynamics are inherently cyclical rather than linear, as the interactions among these components generate actions and outputs that, in turn, influence and reshape subsequent collaborative processes and outcomes (Emerson & Nabatchi, 2015a). Emerson et al. (2012) contend that the effective development of each component contributes meaningfully to the quality of collaborative processes that generate the desired high-quality policy outputs.

Principled engagement, the first component according to Emerson & Nabatchi (2015a, p. 59), describes the behavioral interactions through which stakeholders discover, define, deliberate, and determine a common understanding and plan of action. Through these principled engagement processes, stakeholders cultivate a shared understanding by articulating their collective values and interests, defining common purposes and objectives, and negotiating mutually agreed-upon agreements and strategies to pursue their joint goals (Emerson & Nabatchi, 2015a, p. 59). This component lays the conceptual and relational foundation for meaningful collaboration by fostering openness, constructive dialogue, and the co-definition of collective goals (Emerson et al., 2012). Empirical studies, predominantly conducted in Global North contexts, demonstrate that the success and performance of CGRs are frequently predicated on effective principled engagement (e.g., Avoyan et al., 2024; Douglas et al., 2020; Jager et al., 2020; Newig et al., 2023). However, the elements conducive to principled engagement in these relatively stable governance environments may not translate straightforwardly to Global South contexts characterized by pronounced power asymmetries, contested legitimacy, and entrenched authority structures. This study, therefore, examines the extent to which principled engagement emerges and evolves in settings where underlying inequalities and institutional constraints may fundamentally inhibit inclusive and deliberative collaboration, offering a critical counterpoint to findings derived predominantly from more institutionalized democratic governance contexts.

The second component of collaborative dynamics, shared motivation, functions as a critical reinforcing mechanism that can either consolidate or erode principled engagement processes. Emerson et al. (2012) conceptualize shared motivation as substantially overlapping with social capital, comprising four interrelated elements (i) mutual trust, which establishes confidence in collaborative partners and reduces perceived risks in future interactions; (ii) mutual understanding, reflecting stakeholders' recognition and appreciation of divergent perspectives and interests; (iii) internal legitimacy, derived from procedural fairness, meaningful participation, and the perception that collaborative relationships are justified and authoritative among participants; and (iv) shared commitment, which sustains stakeholders' willingness to invest resources and persevere through challenges over time (Emerson & Nabatchi, 2015a, p. 59). Emerson et al. (2012) contend that effective communication and sustained interactions play a vital supporting role in cultivating and maintaining shared motivation. Studies conducted in predominantly Global North settings have indicated that the success and high process performance of CGRs are significantly influenced by shared motivation (e.g., Avoyan et al., 2024; Dressel et al., 2020; Jager et al., 2020). However, in countries in the Global South, such as Ghana, fostering shared motivation presents a far more complex challenge. This complexity arises from limited transparency, weak accountability structures, and frustration with inequitable benefit-sharing and unmet expectations within REDD+ initiatives (Soliev et al., 2021). These factors suggest that the condition of shared motivation in REDD+ collaborations may be significantly undermined, given the eroding trust levels and diminishing legitimacy and commitment of stakeholders, particularly local actors.

The third component, CJA, refers to the structural and resource-based conditions that enable high-performing collaborations. This includes four elements consisting of (i) institutional and procedural arrangements, (ii) various forms of leadership that support initiation, coordination and facilitation, (iii) access to and mobilization of relevant knowledge to foster learning and adaptation, and (iv) the availability of resources, such as financial, technical, and organizational capacities (Emerson & Nabatchi, 2015a, p. 59). Recent empirical studies, again primarily from the Global North, have highlighted the importance of key elements of CJA in enhancing CGRs' perceived process performance (e.g., Avoyan et al., 2024; Dressel et al., 2020; Hossu et al., 2018; Thellbro et al., 2018). However, the development of CJA in REDD+ countries could potentially face significant constraints, including fragmented institutional landscapes, ambiguous land and resource tenure systems, limited access to financial and technical resources, and heavy reliance on external support, factors that collectively hinder the effectiveness and sustainability of collaborative governance in the context of REDD+ (Korhonen-Kurki et al., 2019).

3.2.3 Adding the Decentralization Framework

As established in the introduction, the IFCG framework (Emerson et al., 2012; Emerson & Nabatchi, 2015a, 2015b) provides a valuable analytical lens for examining how collaborative governance arrangements emerge, operate, and achieve high performance, its analytical utility becomes constrained when applied beyond its original Global North democratic context (e.g., Ulibarri et al., 2023). Furst, developed within stable, advanced democratic settings characterized by dispersed authority structures, elevated interpersonal trust, robust civil society networks, substantial stakeholder autonomy, and adequate resource endowments, the IFCG framework inherently assumes collaboration emerges and functions effectively within contexts of political openness and decentralized authority where multiple stakeholders voluntarily identify shared interests, negotiate roles, and pursue consensus-oriented solutions (e.g., Lee & Liu, 2024). However, these foundational conditions seldom hold true in weak-governance contexts characteristic of many Global South settings (e.g., Afandi et al., 2023). Within such contexts, CEG initiatives typically emerge through hierarchical, top-down, externally driven, donor-mandated processes characterized by predetermined targets, upward accountability mechanisms, mandatory obligations, and formal economic incentives necessary to initiate and sustain CEG arrangements (e.g., Lawasi et al., 2024). Consequently, international donors and national government agencies exert considerable influence over CEG processes, frequently resulting in tokenistic participation and superficial collaboration that prioritizes donor interests and central government objectives over genuine collective problem-solving (e.g., Bruun & Rubin, 2023). This dynamic proves particularly salient in REDD+ contexts, where implementation depends on results-based international carbon finance and involves diverse stakeholders with competing interests, asymmetrical power relations, contested leadership roles, and divergent priorities that fundamentally undermine collaborative efforts (e.g., Angelsen et al., 2018). Consequently, the IFCG framework's analytical utility becomes inadequate for examining complex, power-laden collaborative implementation practices within GCFRP under Ghana's weak-governance conditions (e.g., Johnson, 2021).

Second, procedural and institutional arrangements are a key part of the CJA component within collaborative dynamics in the IFCG framework (Emerson & Nabatchi, 2015a). They involve creating formal and informal mechanisms, rules, decision-making procedures, and coordination structures that facilitate collaboration, influence stakeholder interactions, and ensure accountability (Emerson et al., 2012). This concept closely aligns with the notion of institutional design found in governance or policy design research (e.g., Howlett et al., 2014; Ostrom, 1990), which is defined as "*the devising and realization of rules, procedures, and organizational structures that will enable and constrain behavior and action to accord with held values, achieve desired objectives, or execute given tasks*" (Alexander, 2005, p. 213). Empirical evidence indicates that institutional design significantly impacts the performance of CEG arrangements (e.g., Bell & Scott, 2020; Musavengane et al., 2019; Newig et al., 2018). However, despite its criticality in shaping CEG performance, the IFCG framework provides limited guidance on the diverse ways in which CEG regimes are designed or structured, particularly on who participates, under what mandate, and for what purpose collaborative forums are convened (e.g., Afandi et al., 2023). Moreover, the framework provides minimal insight into the design mechanisms that ensure inclusive representation and meaningful participation of cross-sector stakeholders who may represent different organizations, localities, demographic groups, and interests and ameliorate power dynamics through formalized protocols, rules, policies, and procedures (e.g., Pells, 2015). Recognizing these limitations, this study integrates Agrawal and Ribot's (1999) decentralization framework to complement the IFCG, thereby addressing critical analytical gaps concerning how institutional design and implementation practices within the GCFRP, as a prime example of multi-level REDD+ CGRs, influence local perceptions of legitimacy (see Article IV). This theoretical integration is crucial in Ghana's weak governance context, where historical legacies of local actor exclusion present fundamental challenges to CEG arrangements (Akamani et al., 2015).

The decentralization framework developed by Agrawal and Ribot (1999) has become one of the most influential frameworks in the study of decentralized environmental conservation and natural resource management in the Global South (e.g., Larson & Soto, 2008; Ribot, 2004). While the concept of decentralization remains a conceptually contested notion, in this thesis, it is understood as "*any act in which a central government formally cedes powers to actors and institutions at lower levels within a political-administrative and territorial hierarchy*" (Agrawal & Ribot, 1999, p. 475). Agrawal and Ribot's (1999) framework explicitly examines three dimensions central to understanding institutional design mechanisms: actors, powers, and accountability. The first dimension places representativeness of participating actors at the core, emphasizing that legitimacy depends on who participates and the criteria guiding their selection (Agrawal & Ribot, 1999). Ribot (2002) argues that decentralization is most legitimate when decision-making authority is transferred to elected local institutions accountable to the communities they serve. This focus on representative, inclusive participation closely aligns with the IFCG's notion of principled engagement, which identifies inclusive participation as a key condition for high-performing collaborative governance (Emerson et al., 2012).

The second dimension concerns the scope and nature of powers (Agrawal & Ribot, 1999). Scope addresses which powers should be devolved—ranging from rule-making and resource allocation to implementation, enforcement, and dispute resolution—to ensure effective and legitimate governance (Agrawal & Ribot, 1999, p. 476). Nature emphasizes that decentralized power must be discretionary to grant local actors sufficient autonomy to make decisions, facilitate implementation, and enhance legitimacy (Agrawal & Ribot, 1999; Ribot et al., 2006). This dimension aligns with the IFCG's system context condition of political dynamics and power relations, which acknowledges how power imbalances among stakeholders at various decision-making levels influence governance outcomes (Emerson & Nabatchi, 2015a).

The third dimension, accountability relations, concerns how decision-makers can be held accountable and to whom (Agrawal & Ribot, 1999). Ribot (2002) argues that downward accountability—in which decision-makers are responsible to local constituencies—is essential for legitimate decentralized governance. Key mechanisms include periodic elections, independent monitoring, participatory reviews, judicial oversight, term limits, recall procedures, legal recourse, third-party auditing, and political pressure by CSOs (Agrawal & Ribot, 1999; Ribot, 2004). This dimension on accountability relations relates to the collaborative dynamics conditions of principled engagement and shared motivation emphasized under the IFCG, which underscores that participants' interaction is the main element for achieving high-performing CGR (Emerson & Nabatchi, 2015a).

3.3 Performance of CGRs: Process and Productivity Dimensions

As noted, scholarly consensus on appropriate methods for assessing collaborative governance performance remains limited (e.g., Bjärstig et al., 2024; Douglas et al., 2020). Evaluating CGR performance is inherently multifaceted, making its assessment conceptually and methodologically challenging due to the multidimensional nature of collaboration itself (Emerson & Nabatchi, 2015b). The IFCG framework addresses this complexity by distinguishing between two complementary performance dimensions: process performance and productivity performance (Emerson & Nabatchi, 2015a, 2015b). In this study, I have integrated both dimensions into the analytical framework (Figure 1) to provide a structured and comprehensive approach to evaluating a multi-level REDD+ CGR performance.

Both process and productivity performance are often connected to the highly contested and multifaceted concept of legitimacy, understood differently across disciplinary traditions and analytical perspectives. From a normative standpoint, legitimacy is often associated with legality in legal scholarship or with the moral justification of authority in political philosophy (Beetham, 2013). In these traditions, the central concern lies in whether governing systems conform to formal rules or align with universal normative ideals. By contrast, in the social sciences, legitimacy is generally viewed as socially constructed and context-dependent, embedded in the perceptions and relationships among actors within specific governance settings (Bäckstrand et al., 2021; Bernstein, 2012). Following this reasoning, this thesis adopts Suchman's (1995) relational and empirical definition of legitimacy as "*a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions*" (p. 574). Building on Zachrisson (2004), legitimacy in this thesis is conceptualized as comprising two principal components that directly connect to the two performance dimensions. Procedural legitimacy refers to stakeholders' perceptions of fairness, inclusiveness, and transparency in decision-making processes – that is, to the process performance. In contrast, instrumental legitimacy concerns the perception that a governance process, institution, or collaborative arrangement is legitimate because it produces effective and desirable policy outputs (Zachrisson, 2004, p. 22), which corresponds to productivity performance.

Evaluating Process Performance of CGR

According to Emerson and Nabatchi (2015a, p. 185), process performance concerns the extent to which collaborative dynamics function effectively and the quality of these interactions. Collaborative dynamics comprise a virtuous cycle of the three interrelated elements outlined above in 3.2.2, which together sustain collaborative processes and outcomes (Emerson et al., 2012; Emerson & Nabatchi, 2015a) (see also Articles I & III for detailed illustration). In top-down, externally initiated performance-based initiatives such as the GCFRP, the effective functioning of collaborative dynamics requires that diverse stakeholders, including government agencies, private actors, and local communities, work together within a clearly defined institutional context (van Der Haar et al., 2023). The broader system context elements significantly influence the goals pursued, the issues prioritized, and who participates in collaborative processes (see Article III). Given the diversity of interests involved and the central role of national governments in providing legal and institutional frameworks, securing finance, and aligning interventions with international commitments such as the Paris Agreement, communication and coordination become critical (Cadman et al., 2019). This includes both internal communication among partners and external communication with broader stakeholder communities (Ravikumar et al., 2015; Rodriguez-Ward et al., 2018). In the collaborative governance literature, high process performance is assumed to be dependent on effective leadership—particularly from government actors that help manage competing interests, establish procedural clarity, allocate resources, and guide cross-sectoral collaboration to balance environmental and economic objectives (Bjärstig et al., 2024; Emerson & Nabatchi, 2015a; Zachrisson et al., 2018). Moreover, achieving inclusive, representative, and accountable processes depends on mitigating power asymmetries among actors (Bruun & Rubin, 2023; Cristofoli et al., 2022; Purdy, 2012). Inclusive decision-making, characterized by broad participation, transparency, and shared responsibility, is widely recognized as essential to addressing complex environmental challenges and ensuring the credibility of collaborative efforts (Jagger et al., 2020; Newig et al., 2023; Reed, 2008). Access to adequate resources, as well as appropriate procedural and structural arrangements, further enhances the capacity for joint action and overall process performance (Bjärstig & Sandström, 2017; Newig et al., 2023; Söderberg et al., 2021).

A key emergent property of collaborative dynamics processes is internal legitimacy—the participants' assessments of their collaborative endeavor's legitimacy —which is crucial to sustaining collaboration over time by fostering trust and commitment among participants (Emerson & Nabatchi, 2015a). It must exist across all CGR system levels to justify continued stakeholder engagement (Emerson et al., 2012; Emerson & Nabatchi, 2015a). For collaboration to endure, stakeholders must perceive mutual engagement as beneficial and believe that achieving shared goals is both realistic and collectively advantageous (Emerson & Nabatchi, 2015a).

In operational terms, I examined how the institutional design and implementation practices of the GCFRP influence its perceived local legitimacy—specifically through stakeholders' perceptions of approval of policy decisions, which are key indicators of internal procedural legitimacy (see Article IV).

Evaluating Productivity Performance of CGR

Productivity performance, according to the IFCG framework, relates to the outputs, outcomes, and adaptations arising from the collaboration dynamics (Emerson & Nabatchi, 2015a; 2015b). By definition, *outputs* refer to the immediate, tangible, and concrete actions, such as management and implementation plans, jointly defined goals and strategies, or formal agreements and institutional arrangements that emerge from collaborative dynamics (Koontz & Thomas, 2012).

Outcomes, on the other hand, represent observable transformations in environmental and natural resource conditions, or in social dimensions, attributable to CGR interventions (Emerson & Nabatchi, 2015a). *Adaptation* refers to the collaborative system's capacity for learning and transformation — that is, its ability to respond to changing circumstances, integrate new knowledge, and modify its structures, strategies, or actions over time, accordingly the collaborative regime demonstrates adaptive capacity (Emerson & Nabatchi, 2015a).

These three interrelated levels of performance: outputs, outcomes, and adaptation make up the IFCG's performance matrix, that also includes three units of analysis: the participating organizations, the CGR itself, and the target goals (Emerson & Nabatchi, 2015b). The performance matrix advances the evaluation of productivity performance by separating and more clearly specifying the performance levels and units, according to Emerson and Nabatchi (2015a, 2015b). It establishes a logic-model structure for evaluating collaborative governance performance, and has emerged as one of the most widely used models for assessing CEG performance (e.g., Avoyan et al., 2024; Koontz et al., 2020; Newig et al., 2018).

This thesis only investigates the first level, the actions or outputs, of the productivity performance matrix to examine output within a multi-level REDD+ CGR. The assessment is conducted across the three units of analysis: participating organizations, the CGR itself, and the targeted goals (see Table 1). Consequently, this study does not evaluate outcomes, such as perceived or actual environmental and social changes resulting from collaboration (Emerson & Nabatchi, 2015b). By assessing both perceived process performance and actual outputs, the thesis seeks to identify causal mechanisms and elucidate relationships among components of the IFCG framework, to inform causal analysis in the REDD+ context.

Table 1: Perceived Productivity Performance Matrix of Multilevel REDD+ CGR (Source: Adapted from Emerson & Nabatchi, 2015b)

Unit of Analysis	**Action/Outputs**	**Indicators**
Participating organization	For participating organizations, the efficiency of collaborative outputs, measured in terms of benefits gained or costs reduced through participation in the CGR, is a crucial consideration.	This is assessed based on all stakeholders' perceptions of the organizational benefits, value, and reduced costs connected to participation in the REDD+ CGR.
CGR	At the CGR level, collaborative output efficacy is essential, specifically, the extent to which generated outputs align with the purpose and collectively agreed expectations of the REDD+ CGR.	This is assessed based on all stakeholders perceptions of the extent to which policy outputs sufficiently integrate the different sectoral goals of participants and are consistent with the jointly agreed goals of the REDD+ CGR.
Target Goals	At the target goal level, equity concerns include whether the outputs of the collaboration proportionately distribute benefits relative to costs and risks, and whether these outputs equitably address the multiple interests and needs of beneficiaries.	This is assessed based on all stakeholders' perceptions of whether the measures, benefits, and costs associated with the CGR have been distributed equitably among all participants.

Having established this analytical framework, the next chapter outlines the research methodology. It explains my ontological and epistemological positions, describes the case study context and research design, and details the methods for data collection and analysis, along with key ethical considerations.

4. METHODOLOGY

This chapter outlines the methodological framework adopted for the thesis. It begins by examining the ontological and epistemological foundations that inform and guide the research approach. The subsequent section elaborates on the empirical context and selected research methods, detailing the strategies employed for data collection and analysis. The chapter then reflects on the researcher's positionality, followed by a discussion of the ethical considerations and the thesis's limitations.

4.1. Ontological and Epistemological Perspectives: Critical Realist Methodology

This thesis is philosophically grounded in critical realism, a paradigm that offers a robust lens for examining the complex and layered nature of social reality. Originating with Roy Bhaskar in the 1970s, critical realism has gained prominence for its capacity to bridge the epistemological gap between positivist and interpretivist traditions (Creswell & Clark, 2017; Zhang, 2023). While positivism seeks to identify objective, causal relationships, and interpretivism emphasizes the co-construction of meaning through human experience, critical realism contends that reality exists independently of our knowledge of it, composed of deep structures and generative mechanisms that may or may not be observable (Pawson, 2013; Kruger et al., 2019). Critical realism acknowledges that although reality exists objectively, our access to it is always mediated by historically and socially situated knowledge (Pawson, 2013; Zhang, 2023). In this light, research must go beyond empirical descriptions or surface-level correlations to uncover how and why particular outcomes occur within specific contexts. This philosophical commitment underpins my adoption of a realist evaluation methodology, which offers a coherent strategy for translating critical realist ontology into empirical inquiry (Cockburn et al., 2020).

Realist evaluation views policy or governance arrangements, such as collaborative REDD+ interventions, as context-dependent mechanisms that generate outcomes only when activated within conducive conditions. Rooted in theory-driven evaluation, this approach draws on the Context-Mechanism-Outcome configuration to explain how particular results emerge through the interaction of structural conditions and actor responses (Armstrong, 2019; Cockburn et al., 2020; Clement et al., 2020;

Pawson, 2013). In this framework, mechanisms refer to the resources, incentives, or constraints introduced by an intervention, while context shapes whether and how these mechanisms are triggered (Cockburn et al., 2020). This orientation is particularly relevant for studying a multifaceted CEG program in countries in the Global South, where dynamic, complex institutional and governance contexts play a pivotal role in enabling or constraining collaboration, thereby shaping how processes unfold, and which outcomes materialize in practice (Kruger et al., 2019). Hence, through realist evaluation, this thesis aims not merely to determine why collaborative governance in REDD+ evolves, but to explain how it works, for whom, and under what circumstances (Robert & Ridde, 2020).

4.2 Empirical Context

This research was conducted in Ghana, a West African country located between longitudes 3°15′W and 1°12′E and latitudes 4°44′N and 11°15′N, within the sub-Saharan belt. Covering roughly 238,533 square kilometers, it has an estimated population of 34 million (Ghana Statistical Service, 2022). Politically, Ghana operates a unitary presidential representative democracy under the 1992 Constitution, which establishes a multi-party system with the president serving as both head of state and head of government (Government of Ghana, 1992). Ecologically, Ghana is recognized as one of the sub-Saharan African countries with extensive tropical rainforest cover (FAO, 2020). Central to this ecological wealth is the High Forest Zone (HFZ), located in the southwestern part of the country (FAOSTAT, 2020) (see Figure 2). The HFZ covers roughly 7.99 million hectares, or about 34% of the country's total land area, and features high rainfall and dense vegetation, ranging from wet evergreen to dry semi-deciduous forests (Government of Ghana, 2017). The HFZ functions not only as a biodiversity hotspot but also as a key economic hub, supporting activities such as cocoa farming, timber production, and mining, while providing essential ecosystem services, including intact forest landscapes, climate regulation, water supply, and rainfall patterns crucial for agriculture (Wolff et al., 2020). Despite its ecological and economic importance, the HFZ faces one of the highest deforestation rates worldwide, currently estimated at 3.2% annually, mainly driven by agricultural expansion and intensive resource exploitation (FAO, 2020; Wolff et al., 2020). This ongoing deforestation threatens both biodiversity conservation and the ongoing provision of ecosystem services, making the HFZ a critical focal point for conservation efforts and sustainable socio-economic development (Olwig et al., 2024).

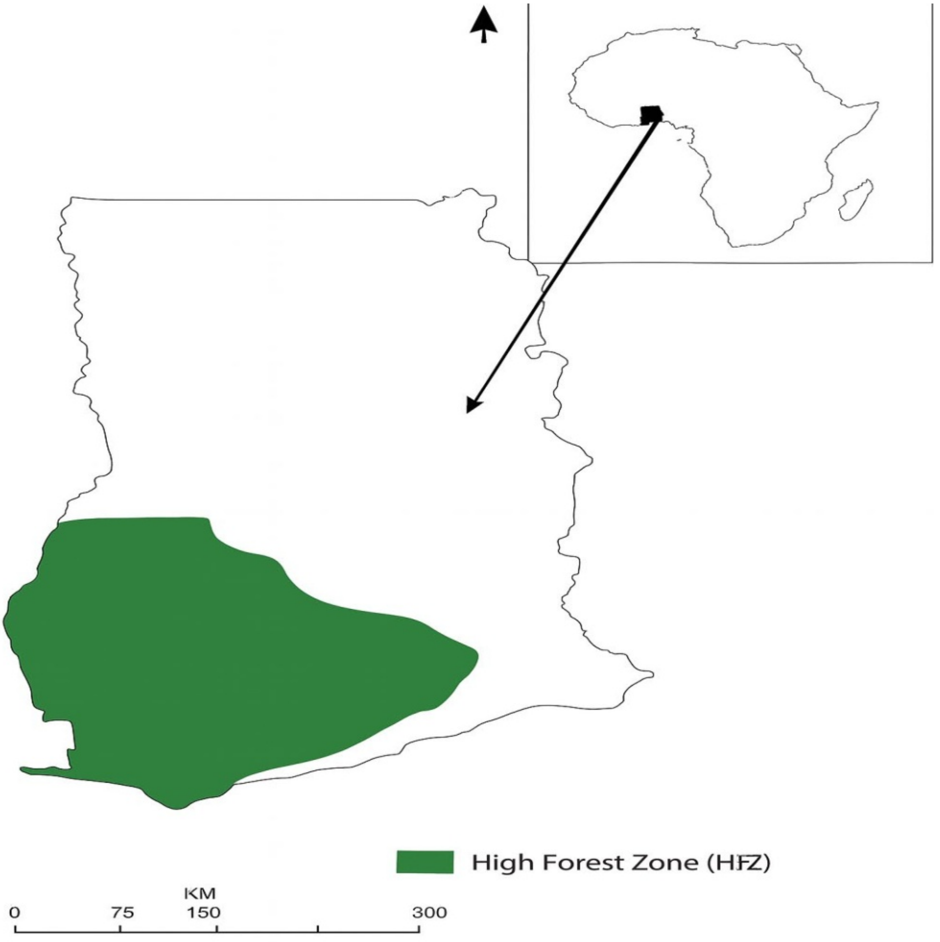

Figure 2: Map of Ghana showing the HFZ (shaded green portion of the map) (Source: Author's construct adapted from Wolf et al., 2020).

Understanding the drivers and persistence of environmental degradation in Ghana requires examining the political economy of the country's agricultural sector. Agriculture constitutes a cornerstone of Ghana's economy, providing significant employment, contributing substantially to Gross Domestic Product, supporting food security, and generating considerable export earnings (World Bank, 2022). As one of the world's leading cocoa exporters, Ghana has experienced extensive forest conversion to meet global demand, with cocoa production serving as the primary driver of deforestation and forest degradation (Brobbey et al., 2020; International Cocoa Organization, 2024; MESTI, 2024). These dynamics create a self-reinforcing cycle: while cocoa expansion accelerates forest loss, climate change, manifested in erratic rainfall and rising temperatures, threatens the long-term viability of cocoa production, placing both smallholder livelihoods and the global cocoa value chain at increasing risk (Wongnaa & Babu, 2020). Underlying these ecological pressures are profound governance constraints. Ghana's environmental and natural resource governance is characterized by a hybrid institutional architecture that combines centralized state authority with contested decentralization, marked by overlapping statutory and customary institutions (Johnson, 2021). While recent decentralization reforms emphasize community participation, forest land use governance remains dominated by the Forestry Commission through largely top-down approaches (Asiyanbi et al., 2017). Institutional fragmentation intersects with entrenched political dynamics: clientelist pressures, elite capture, and the use of resource rents to secure political loyalty have historically prioritized short-term patronage over long-term sustainability (Abdulai, 2017). At the local level, traditional authorities, as custodians of customary land tenure, act as gatekeepers to forest and land resources, yet revenues frequently flow into political networks rather than community development or conservation (Afele et al., 2024). The result is a governance landscape shaped by institutional fragmentation, tenure insecurity, elite capture, and the subordination of environmental priorities to immediate political and economic interests (Olwig et al., 2024).

To address these governance challenges, Ghana emerged as an early frontrunner in sub-Saharan Africa's REDD+ implementation, joining the World Bank's FCPF Carbon Fund in 2008 (Nukpezah & Alemagi, 2020). Following the approval of its Readiness Preparation Proposal in 2010 and access to readiness financing in 2012, the country advanced its national strategies and implemented pilot interventions (Government of Ghana, 2016). Building on this foundation, the Ghana Cocoa Forest REDD+ Programme (GCFRP) was launched in 2017 as the country's flagship subnational REDD+ program and one of the world's first commodity-based emission reduction programs (Government of Ghana, 2017). The GCFRP adopts an integrated landscape approach to reconcile competing land uses by harmonizing agricultural, forestry, and other land-use activities through multi-level collaborative governance processes (Osei, 2025). This is implemented via the Hotspot Intervention Area (HIA) governance mechanism, which brings together government agencies, private sector companies, CSOs, ENGOs, traditional authorities, and local communities to establish clear landscape visions, build local capacity, and maintain transparency and accountability through inclusive participatory governance (FCPF, 2022; Government of Ghana, 2017). The application of multi-level collaborative governance to landscape REDD+ program design and implementation represents an institutional innovation in Ghana that is evolving within a weak governance context. Yet despite its significance, limited empirical research has examined the GCFRP to understand the conditions that enabled or constrained effective cross-sectoral and multi-level coordination in this debilitating and challenging governance context (e.g., Kumeh et al., 2025; van Der Haar et al., 2023).

4.3 Qualitative Research Design

In this thesis, two qualitative research designs were employed (George & Bennett, 2005; Yin, 2018) to empirically investigate the conditions under which collaborative governance influences both the process performance and policy outputs of REDD+ CGR programs in the context of subnational REDD+ implementation, as well as at the national and local levels in Ghana. Qualitative research is especially useful for answering "why" and "how" questions related to complex policy and governance arrangements, particularly within specific sociopolitical contexts (Creswell & Poth, 2018). It enables a nuanced exploration of the lived experiences, perceptions, and interactions of diverse actors, offering deep insight into how governance processes are constructed, interpreted, and enacted within particular institutional environments (Denzin & Lincoln, 2017). Such an approach is indispensable for unpacking the often-implicit power relations, institutional logics, and informal practices that shape collaborative processes, dimensions that are frequently obscured or oversimplified in quantitative analyses (Mason, 2017). Compared to experimental or large-N designs, qualitative methods are better equipped to capture the fluid, iterative, and context-dependent nature of governance in practice, particularly within the politically and institutionally complex landscapes characteristic of many countries in the Global South (Miles et al., 2014).

However, qualitative case study research faces inherent limitations, especially regarding the generalizability of findings beyond specific cases (Flyvbjerg, 2006; Yin, 2018). While the in-depth analysis of Ghana's GCFRP offers rich contextual insights, these may not be universally transferable to all REDD+ contexts. To address this concern, the study pursues analytical generalization, aiming to demonstrate the IFCG framework's applicability and propose adjustments that enhance its suitability for jurisdictional and integrated landscape approaches to REDD+ programs across the Global South (Tisdell et al., 2025). By identifying causal mechanisms linking contextual preconditions, drivers, collaborative dynamics, process performance, and policy outputs, this research offers analytical insights transferable to commodity-dependent tropical forest countries operating under similar challenging governance contexts, including Côte d'Ivoire in West Africa, Indonesia in Southeast Asia, and Peru in South America (Boyd et al., 2018; Brockhaus et al., 2017; Irawan et al., 2019; Reed et al., 2020; UN-REDD Programme, 2022). Ultimately, despite the limitations inherent to qualitative case study research, this approach offers an indispensable, in-depth understanding of the complex, politically embedded realities of collaborative governance in the context of REDD+, insights that are often inaccessible through quantitative methods alone (Creswell & Poth, 2018; Mason, 2017).

In the first research design, a literature review methodology was employed to systematically synthesize evidence from prior studies on REDD+ governance across diverse Global South contexts by applying the IFCG framework. This meta-synthesis seeks to identify specific challenges that hinder effective collaborative governance in subnational REDD+ implementation.

The second design utilized an embedded case study approach (Yin, 2018) to examine both the national-level designation process and local-level implementation practices of program activities under the GCFRP. The GCFRP represents a critical case (Flyvbjerg, 2006), strategically important for assessing the IFCG framework's analytical strengths and weaknesses in weak governance contexts, as the underlying assumptions of this Western-developed framework and the program's ability to deliver intended results in such challenging contexts remain empirically uncertain. The GCFRP is treated as a least-likely case of CEG, in which the assumptions underlying the IFCG, originally developed in Western, industrialized contexts, are critically examined within a governance environment shaped by complex contextual and institutional conditions that introduce significant uncertainties regarding its applicability (cf. Flyvbjerg, 2006). Drawing on a comprehensive analysis of the emergence and designation processes of the GCFRP at the national level (Articles II and III), this thesis critically assesses the IFCG framework's ability to address the complex realities of REDD+ implementation in countries within the Global South, offering a nuanced view of its analytical strength and practical application limitations. Article IV examines the Kakum Cocoa Agroforestry Landscape Project (KCALP), a flagship pilot intervention within the Kakum HIA in the Assin South District of southwestern Ghana, focusing on collaborative implementation practices at the local level. Figure 3 below illustrates the priority implementation areas of the GCFRP within Ghana's HFZ, with particular emphasis on the Kakum HIA, the selected local case study for this thesis.

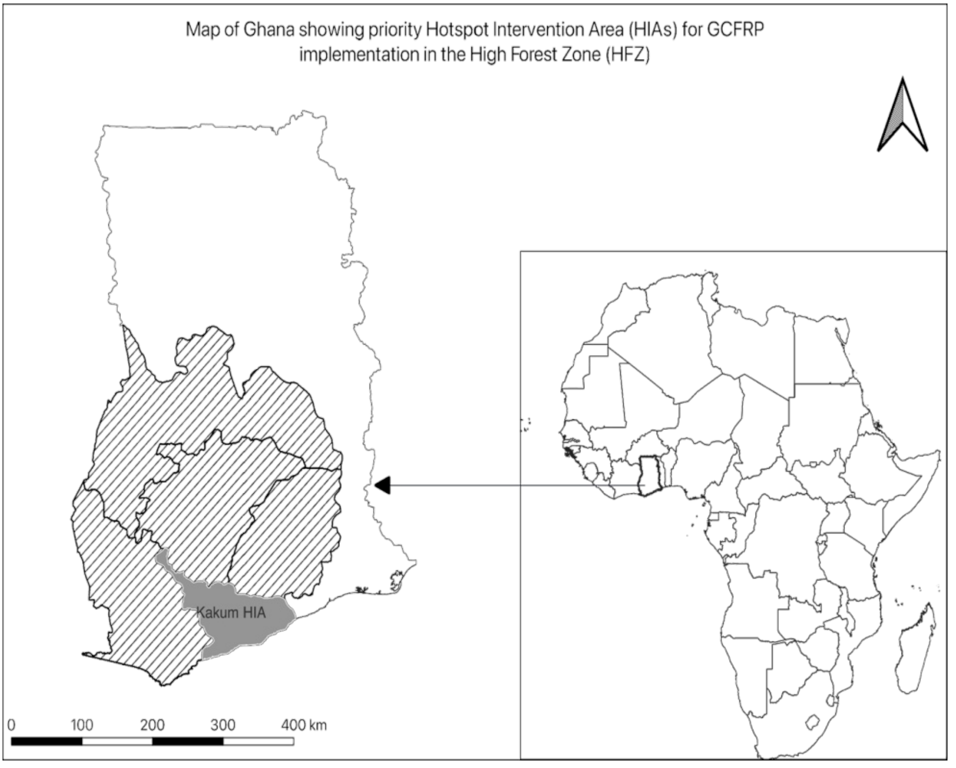

Figure 3: Map of Ghana showing priority Hotspot Intervention Areas (HIAs) for GCFRP implementation in the High Forest Zone (HFZ) (Author's own construct).

4.4 Data Collection Procedures

This thesis employs a multi-qualitative research method that incorporates a qualitative literature review (Article I) with extensive empirical fieldwork at both national and local levels in Ghana. Article I conducts a literature review across six databases: Web of Science, Scopus, PubMed, ResearchGate, Google Scholar, and Research Rabbit to situate the case study findings within the broader scholarly discourse on collaborative governance in REDD+ initiatives to better understand the specificities of the challenges faced in the Global South when designing and implementing collaborative governance in such multifaceted environmental program based on the IFCG framework. Articles II, III, and IV employ triangulated fieldwork methods, which include document analysis and semi-structured interviews. As argued by Poth and Shannon-Baker (2022), such methodological triangulation enhances the analytical robustness of qualitative research by allowing for the convergence of insights across diverse sources and perspectives.

4.4.1 Literature Review

Article I employs a literature review methodology to systematically meta-synthesize findings from previous studies on subnational REDD+ implementation across diverse Global South contexts, providing a comprehensive overview of current knowledge, key challenges, and research gaps through the lens of the IFCG framework. Meta-synthesis approaches have become valuable for aggregating evidence from environmental science research, enabling researchers to identify patterns and knowledge deficits across multiple studies through systematic procedures for searching, appraising, extracting, and analyzing data (Mengist et al., 2020). Unlike traditional narrative reviews, qualitative meta-studies employ structured methodologies that can be either confirmatory or exploratory, generating new insights through the synthesis of qualitative research within complex multidisciplinary fields (Habersang & Reihlen, 2025).

In multidisciplinary fields like environmental governance, especially regarding REDD+ implementation, meta-synthesis offers significant benefits by consolidating diverse evidence from diverse geographic and institutional settings to develop comprehensive understandings of governance challenges and dynamics (Morita & Matsumoto, 2023). This approach enables us to go beyond insights from individual case studies toward a unified overview of current research on collaborative governance within the REDD+ context. To ensure methodological rigor and transparency, this literature review adhered to established protocols for systematic evidence synthesis, including well-documented search strategies across multiple databases, detailed inclusion and exclusion criteria, and structured data extraction aligned with the IFCG framework (see Appendix A). The review process was guided by the adapted Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) 2020 guidelines (Yahya et al., 2022), which facilitated the use of systematic flow diagrams and visual documentation to clearly depict each stage of the review process (Article I).

4.4.2 Document Analysis

The empirical research began with a comprehensive document-based phase designed to establish a robust contextual and institutional foundation for the empirical research. The rationale for this phase was to understand the broader historical, political, and institutional foundations that shape forest land use governance in Ghana, particularly in the forest and cocoa sectors. To this end, the study commenced with an extensive review and analysis of relevant documents. These included national legislation and administrative frameworks governing land use, forest resources, and cocoa production, such as the Forestry Commission Act (1999), Forest Protection (Amendment) Act (2002), Timber Resource Management Act (1998), and the 1992 Constitution of the Republic of Ghana. Additionally, REDD+-specific strategies and programmatic materials, such as Ghana's REDD+ Strategy (2016–2035) and the GCFRP implementation plan, along with related institutional arrangements, were closely examined. In addition to national government policy documents, the analysis drew on key GCFRP-specific documents detailing its institutional arrangements, governance structure, forest reference levels, and monitoring frameworks, as well as tree tenure reforms, established benefit-sharing mechanisms, the final implementation plan and guidelines, and a range of reports related to the local-level KCALP intervention. Notable among these were the Safeguards Implementation and Monitoring Report, the Framework Agreement for the Implementation of the GCFRP in the Kakum HIA, and the KCALP Implementation Progress Report. Access to these materials was achieved through a combination of online archival searches, institutional repositories, and direct engagement with key actors. I obtained relevant national policy and legal documents, including legislative acts, REDD+ strategies, and institutional frameworks, through government websites, digital libraries, and, in some cases, through follow-up email correspondence and in-person visits to agencies such as the Forestry Commission of Ghana (FC), Ghana Cocoa Board (COCOBOD), and implementing ENGOs and CSOs. This ensured a comprehensive collection of foundational texts that informed institutional and governance mapping. A complete list of documents analyzed is included in Appendix B.

4.4.3 Semi-structured Interviews

To explore the diverse interpretations underpinning the design and implementation of the GCFRP, I employed semi-structured interviews as the primary data collection method (Bryman, 2016; Creswell & Poth, 2018). This approach is particularly well-suited to capturing rich, contextualized insights into stakeholder perspectives, especially within complex, multi-actor governance processes (Kvale & Brinkmann, 2009). The interviews included actors involved in distinct phases and levels of the GCFRP, enabling a multi-scalar understanding of both national-level policy formulation and local-level implementation dynamics. The in-depth document analysis (4.4.2) helped to map key actors, trace evolving participation patterns, and identify tensions in role assignments and decision-making structures. The document review performed two distinct functions in informing the interview protocol design. First, it identified specific institutional arrangements, governance structures, and policy mechanisms within Ghana's REDD+ program that warranted empirical investigation. Second, it informed the operationalization of the IFCG framework's core components: system context elements, drivers of collaboration, collaborative dynamics, and policy outputs. This enabled the development of interview manuals (see Appendix C) specifically designed to probe stakeholder perceptions of participation quality, evolving actor roles, power asymmetries, and perceived legitimacy in the GCFRP of collaborative processes. This iterative integration of the IFCG framework strengthened the coherence and theoretical grounding of the data collection strategy, enabling systematic examination of how the framework's components manifest within the GCFRP's governance architecture and local-level collaborative implementation dynamics.

The first set of interviews consisted of national-level expert interviews. A total of ten interviews were conducted with individuals occupying strategic or leadership roles within government agencies, including the FC, COCOBOD, national ENGOs, CSOs, and private sector actors. These expert interviews are understood as a specific type of semi-structured interviews designed to elicit knowledge from individuals with specialized institutional or technical expertise (Bogner et al., 2009), which informed both Articles II and III included in this thesis. They provided insight into the strategic intentions behind the GCFRP's institutional design, the challenges of inter-organizational coordination, and the expectations placed on decentralized governance mechanisms.

The second round of fieldwork comprised twenty semi-structured interviews conducted at the local level, specifically within the Kakum HIA in the Assin South District. I focused on gathering insights from stakeholders directly involved in implementing the GCFRP within the region, providing a detailed understanding of local-level dynamics and perspectives. These interviews focused on actors directly involved in implementation, including traditional authorities, local government officials, local CSOs and ENGO staff, field officers of private cocoa companies, and community members. Interviews explored their roles and responsibilities in the GCFRP, their motivations for participating, and their perceptions of how collaborative governance processes affect their agency, accountability, and inclusion in REDD+ decision-making. All interviews were conducted face-to-face using a semi-structured, conversational approach, allowing flexibility to pursue emerging themes and to adjust the flow of discussion to each respondent's knowledge and experiences.

All national-level interviews were conducted in English, while local-level interviews were conducted in a mix of English and Twi-Akan, depending on the participants' language preference. Initially, the interview materials were transcribed verbatim for content analysis. Microsoft Word's automated transcription function was used for this purpose. The transcriptions were subsequently reviewed to ensure accuracy and serve as the foundation for content analysis. This process entailed repeated listening to the audio to make necessary corrections and refining the transcript until it accurately reflected the original data.

The interviews lasted an average of 45 minutes, with durations ranging from 30 minutes to 90 minutes. While the interviews provided rich, multi-layered insights, several limitations should be acknowledged. One notable limitation pertains to representativeness at the local level. Specifically, only three of the four traditional authorities bordering the Kakum Conservation Area were willing to participate, which may not fully capture the diversity of perspectives among traditional authorities in the program area. Additionally, the presence of a researcher affiliated with an international academic institution may have influenced participants' openness, particularly regarding sensitive issues such as power dynamics and politics. My positionality as a Ghanaian researcher facilitated access to information, as I am a native speaker of Twi-Akan and am familiar with the structures, programs, and processes at different governance levels in Ghana. However, I recognize the potential influence of my background and academic training. As an outsider from a developed country, I was aware of the power asymmetries that may have influenced the way respondents engaged with the research, how they interpreted the questions, and how I subsequently analyzed their responses. To address these dynamics, in line with Berger's (2015) recommendations, I adopted a reflexive approach throughout the research process. I remained vigilant about my assumptions and biases, ensured transparency in data interpretation, and triangulated interview insights with project documents to enhance the robustness of my findings.

Table 2. Overview of Interview Participants

Stakeholder Level	**Category**	**Number of Interviews**	**Affiliation**
NATIONAL	Government institutions	4	Forestry Commission (FC), COCOBOD
	National civil society organizations (CSOs)	2	Nature Conservation Research Center (NCRC), Solidaridad West Africa Network
	Environmental Non-governmental Organizations (ENGOs)	3	Proforest Ghana, Tropenbos Ghana, A Rocha Ghana
	Private Sector	1	World Cocoa Foundation
LOCAL	Local government authorities	4	Planning Office (Assin South), Forest Service Division (FSD), Cocoa and Health Extension Division (CHED), Wildlife Division (WD)
	Traditional authorities	3	Chiefs and elders within Kakum HIA

	Field Officers of National CSO	1	NCRC
	Field Officers of National ENGO	1	Tropenbos International Ghana
	Private sector	2	Olam Food Ingredients Limited ECOM Agroindustrial Company Limited
	Community Representatives	9	Farmer cooperatives, lead farmers, HMB, sub-HIA/CREMA, and CRMC executive members.
TOTAL		**30**	

4.5 Data Analysis: Theory-Driven Qualitative Content Analysis

The data analysis employed a theory-driven content coding approach (Bhattacharya, 2015; Fisher & Aguinis, 2017). In Article II, five overarching system context factors were delineated deductively from the IFCG theoretical framework (Emerson et al., 2012): resource conditions, policy and legal frameworks, socioeconomic and cultural characteristics, political dynamics and power relations, and the history of conflict impact the four essential drivers of collaborative governance: uncertainty, interdependence, consequential incentives, and initiating leadership for the emergence of the GCFRP. Specifically, the study investigated how contextual conditions created the necessity for collaboration (uncertainty and interdependence), established the motivational basis for stakeholder engagement (consequential incentives), and enabled or constrained the mobilization of collaborative action (initiating leadership). In Article III, the primary analytical focus was on the dynamics of collaboration, examining how the three interactive conditions of principled engagement, shared motivation, and capacity for joint action influence procedural performance and policy outputs in REDD+ design.

Articles II and III employed an iterative, two-phase content coding process combining inductive and deductive strategies (Azungah, 2018) to balance empirical discovery with theoretical guidance. In the first phase, an inductive coding approach was adopted to allow the data to speak for itself. Interview transcripts, documents, and field observation notes were read multiple times to gain a comprehensive understanding of the material, noting recurring words, phrases, and concepts. Initial codes were generated that captured stakeholder perspectives in their own terms, independent of predetermined theoretical categories. This open coding process, conducted using QSR International NVivo software version 2020 (QSR International, 2020), produced a preliminary codebook of empirically grounded themes reflecting the lived experiences, perceptions, and interpretations of REDD+ stakeholders. The inductively derived themes subsequently informed the refinement of the coding structure and provided a grounded empirical basis for the subsequent deductive phase. In the second phase, a deductive approach was employed to systematically map the inductively derived codes against the IFCG framework's core components: system context conditions, drivers of collaboration (Article II), collaborative dynamics, and policy outputs (Article III). This deductive phase assessed the alignment between emergent themes and theoretical constructs, integrating empirically grounded insights with the framework's analytical categories. The analysis then moved iteratively between inductive and deductive modes, refining codes and strengthening theoretical interpretation. This cyclical process ensured both empirical sensitivity to contextual nuances and theoretical rigor in the analytical framework.

Unlike Articles II and III, Article IV employed deductive coding from the outset, using Agrawal and Ribot's (1999) decentralization framework as the primary analytical lens. The analysis began by operationalizing the framework's three core dimensions into specific coding categories with clear definitional criteria. "Actor representation" encompasses codes for the composition of decision-making bodies, selection processes, and the inclusion of marginalized groups. "Scope and nature of decentralized powers" included codes for decision-making authority, resource allocation, implementation autonomy, enforcement capacity, and dispute resolution mechanisms. "Accountability" covered codes for downward accountability mechanisms such as grievance procedures, term limits, independent monitoring, participatory reviews, and third-party auditing.

All data were then systematically coded according to these predetermined categories through multiple rounds of close reading and analysis. This deductive approach was methodologically appropriate because the research explicitly aimed to assess how institutional design features within the multi-level REDD+ CGR influenced its perceived local legitimacy in the Kakum HIA, where the KCALP pilot intervention under the GCFRP was implemented. This deductive coding analysis enabled a rigorous evaluation of the depth and quality of decentralization reforms, thereby complementing the IFCG framework's limitations by emphasizing structural and institutional design features critical to legitimate collaborative governance in REDD+ contexts characterized by historical power asymmetries and weak institutional capacity. Representative stakeholder quotations illustrating key findings within each analytical dimension were subsequently selected and integrated into the results section to provide empirical support for the analytical claims.

4.6 Ethical Considerations

Social science research involving human participants requires careful attention to ethical principles to ensure credibility, integrity, and the protection of participants. Core principles such as voluntary participation, informed consent, anonymity, confidentiality, and privacy guided the design and conduct of this thesis (Gillam & Guillemin, 2018). No personal data revealing participants' racial or ethnic background, political opinions, religious or philosophical beliefs, or other sensitive identifiers were collected in this thesis. As a result, formal ethical approval under the Swedish Ethical Review Act (Act 2003:460) was not required for this thesis (for an overview, see: https://etikprovningsmyndigheten.se). Similarly, the study fell outside the scope of formal ethical review in Ghana, where there is currently no centralized national ethics authority or commission overseeing scientific research. Instead, ethical oversight is provided through a network of institutional ethics review committees, which guide research conduct within individual organizations. Nonetheless, the study adhered to good practices and protocols concerning data collection, storage, analysis, and reporting, in line with the recommendations of the Swedish Research Council (2017).

A fundamental principle of ethical research is obtaining informed consent, ensuring that participants are fully aware of the research purpose, procedures, potential risks and benefits, and their rights, including the right to withdraw at any stage without consequence (Gillam & Guillemin, 2018; Swedish Research Council, 2017). Written and signed informed consent was obtained from all participants, both at the national policy level and among local implementation stakeholders. Consent forms detailed the study's objectives, data storage and use, participant rights, and provided contact information for the researcher and the institution. Participants also gave explicit consent before any audio recording of interviews. All interviews were conducted in an informal, conversational manner, and participants' views were explicitly acknowledged as not necessarily reflecting their organizations' positions. Participants were informed that they could access and use the thesis results in their own work and were guided on where to find the published study.

The political and institutional context of REDD+ in Ghana is multi-layered, involving national government agencies, international organizations, ENGOs, CSOs, private sector actors, traditional authorities, and local communities. Particular care was taken to navigate political sensitivities, hierarchical power structures, and potential risks associated with participation. For example, interviews with government officials were scheduled through formal institutional channels and conducted in official settings to respect bureaucratic protocols, while discussions with community members required prior engagement with traditional authorities to honor local governance hierarchies. Sensitive topics such as benefit-sharing disputes, land tenure conflicts, and power imbalances among stakeholders were approached diplomatically, with assurances of confidentiality and anonymity to encourage candid responses. Additionally, interview questions were carefully framed to avoid positioning respondents in ways that might jeopardize their relationships with funding agencies, government bodies, or community leaders. In contexts where participants expressed concerns about potential repercussions from criticizing institutional arrangements or powerful actors, the researcher emphasized voluntary participation and the right to withdraw at any time, ensuring that data collection did not expose participants to professional or social risks.

Ensuring confidentiality and anonymity was therefore critical (Swedish Research Council, 2017). All personal data were anonymized using pseudonyms or codes (e.g., GA-01, CSO-01, PS-01), and both oral and transcribed data, including field notes, were stored on encrypted, password-protected devices. However, participants were informed during the consent process that their organizational affiliations would be disclosed in research results to provide the necessary institutional context for understanding stakeholder perspectives and collaborative dynamics within Ghana's REDD+ governance architecture. This approach was explicitly discussed with participants, who were given the opportunity to withdraw or request additional anonymization if organizational identification posed professional or social risks. While individual attribution remained protected, the disclosure of organizational affiliations may have influenced some participants to exercise caution when discussing sensitive issues such as power imbalances, inter-organizational conflicts, or critiques of the Ghanaian government. To mitigate potential self-censorship, the research employed informal, conversational interview techniques that fostered trust and emphasized that specific statements would not be attributed to named individuals. These combined measures enabled participants to share candid and nuanced perspectives. Although some information could not be obtained due to political constraints, the ethical protocols facilitated the collection of rich, credible, and contextually grounded insights into the collaborative processes involved in the GCFRP design at the national level and implementation practices at the local level within the Kakum HIA.

With the research design and methodology clearly established, the next chapter presents, organizes, and discusses the results systematically based on the four articles included in this thesis.

5. RESULTS OF THE STUDY

This chapter synthesizes the key empirical findings from the four appended articles, presenting results sequentially from Article I to Article IV to demonstrate how each contributes to addressing the overarching research aim.

Article I: "Reviewing Key Challenges to Effective Collaborative Governance Dynamics in Subnational REDD+ Implementation across the Global South through the Integrative Framework for Collaborative Governance." Unpublished Manuscript.

Misharch Kwadwo Osei, Anna Zachrisson, and Jewel Andoh

Article I relates to addressing Research Question 1 to assess the applicability of the IFCG framework in the context of REDD+ programs in countries in the Global South. This research conducts a literature review to systematically synthesize findings from prior studies on the governance of subnational REDD+ initiatives across various Global South contexts using the IFCG. Through this meta-synthesis, the study identifies critical knowledge gaps and key challenges that impede the effectiveness of collaborative governance in subnational REDD+ implementation. The guiding research question of the literature review was: *How applicable is the IFCG framework for understanding the challenges of effective collaborative governance dynamics in subnational REDD+ implementation across Global South contexts?* The literature review was conducted following an adapted version of the PRISMA guidelines to ensure transparency and rigor (Yahya et al., 2022; Imran & Almusharraf, 2023). A detailed protocol, including explicit inclusion and exclusion criteria, was jointly developed by the researchers (see Appendix A). This protocol helped minimize bias and facilitated formal registration of the review. A comprehensive keyword search strategy was developed to systematically search across six selected international academic databases (see Article I).

The systematic search across six electronic databases yielded a total of 3,574 articles spanning publications from 2007 to February 2025: Web of Science (1,347), Scopus (824), PubMed (84), ResearchGate (557), Google Scholar (571), and Research Rabbit (191). The search concluded in February 2025, with no supplementary materials identified thereafter.

Two authors independently conducted the screening procedure in Rayyan, a web-based collaborative platform that supports blinded assessment and systematic decision documentation (Ouzzani et al., 2016). The initial de-duplication removed 688 duplicate studies characterized by identical or highly similar titles, encompassing different versions and preprints from the same author(s). An additional 575 records were deemed ineligible due to access barriers, such as paywalls or a lack of institutional subscriptions, leaving a pool of 2,311 articles for further analysis. Subsequently, we implemented five predefined eligibility criteria to extract relevant peer-reviewed empirical investigations: (1) English-language publications; (2) empirically grounded, method-guided research with clearly identified research sites and methodological approaches, thereby excluding conceptual works, book chapters, conference abstracts, technical reports, and grey literature without methodological rigor; (3) primary research excluding review articles; (4) publication timeframe of 2007 to February 2025; and (5) explicit attention to subnational REDD+ implementation. These criteria resulted in 2,156 exclusions, with the majority rejected due to the absence of subnational REDD+ implementation focus—specifically, jurisdictional or integrated landscape REDD+ programs (criterion 5). The screening procedure yielded 155 publications requiring a comprehensive full-text assessment. Two authors conducted independent full-text evaluations utilizing the IFCG framework as an analytical lens to determine eligibility. Through rigorous application of the inclusion criteria, 112 studies were deemed ineligible. The resulting 43 publications satisfying all review requirements proceeded with analytical synthesis. Drawing upon the IFCG's theoretical propositions, the included studies underwent thematic analysis to consolidate findings into overarching conceptual categories. A Microsoft Excel-based matrix structure enabled systematic categorization and interpretive coding throughout this meta-synthesis process.

The findings identify four key challenges that hinder the effective functioning of collaborative dynamics in subnational REDD+ implementation: (i) systemic context-related challenges, (ii) excessive global requirements, (iii) inadequate resources, and (iv) challenges related to collaborative governance arrangement designs. Together, these weaken the three components of collaborative dynamics: principled engagement, shared motivation, and capacity for joint action. Additionally, while collaborative approaches to REDD+ implementation have gained significant attention among policymakers and practitioners, critical knowledge gaps remain in the theoretical and research literature on collaborative governance in the context of REDD+ to determine whether and how such governance arrangements can be designed and implemented, and the conditions that support high performance in this context.

Article II: Osei, M. K. (2025). Exploring System Context Contributing to Emerging REDD+ Collaborative Governance Regime in Ghana: Stakeholders' Perceptions at the National Level. Environmental Management 75, 505–523. https://doi.org/10.1007/s00267-024-02085-y

Article II contributes to addressing Research Question 2. It examines how a collaborative governance approach has evolved in the implementation of REDD+ in Ghana, with particular emphasis on the role and impact of broader system context conditions on the drivers of collaboration. Anchored in the IFCG framework (Emerson et al., 2012), the study investigates how broader system context conditions specifically, forest resource conditions, legal and policy frameworks, socio-economic and cultural characteristics, political dynamics and power relations, and histories of conflict, create enabling or constraining conditions for the four essential drivers of collaboration: leadership, consequential incentives, interdependence, and uncertainty for the initiation of the GCFRP initiative. Drawing on semi-structured interviews with national-level stakeholders and document analysis, the study reveals that deteriorating forest conditions, climate change, and market pressures have generated consequential incentives and heightened uncertainty, which, in turn, have catalyzed interest in novel governance arrangements. The FC's mandate and position within existing institutional structures have allowed it to assume a key leadership role in brokering cross-sector collaboration. Moreover, the interdependence of actors across the cocoa and forestry sectors, exacerbated by overlapping mandates, fragmented land-use regimes, and complex tenure systems, has led to a mutual recognition of the need for shared governance solutions.

Crucially, the findings indicate that national-level stakeholders perceived an emergent multi-level REDD+ CGR with the potential to transform local land-use management. By fostering meaningful participation and enhancing accountability in forest governance and benefit-sharing mechanisms, they believed the GCFRP could begin to address long-standing institutional barriers to inclusive decision-making and promote greater social equity in local governance practices.

From a theoretical perspective, applying the IFCG framework offers valuable insights into how system context shapes the emergence and nature of collaborative governance in REDD+ initiatives. While in many developed countries collaborative governance tends to emerge in relatively stable and well-resourced institutional environments, in the context of Ghana's GCFRP, a more complex and constraining system context, marked by fragmented authority, limited state capacity, and competing land tenure arrangements, has, paradoxically, served to propel the four essential drivers for initiating and implementing collaboration. These include a shared recognition of interdependence, perceived crisis around deforestation and forest degradation, incentives for resource mobilization, and leadership committed to cross-sector coordination. Thus, rather than inhibiting collaboration, the challenging system context has intensified the need for collective action, making collaborative governance not only relevant but necessary. However, the study also highlights certain limitations of the framework, particularly in explaining how collaborative arrangements initiated at higher levels translate into legitimacy and effectiveness at the point of implementation. Although the IFCG foregrounds the role of system context for the performance of REDD+ CGRs, it places less emphasis on power asymmetries and structural inequalities that persist in weak governance environments. Therefore, while the GCFRP highlights the significance of context in shaping the origins, objectives, and success of REDD+ CGR at the national level, the long-term sustainability and perceived legitimacy of its implementation at the local level depend on how inclusive, accountable, and responsive these collaborative arrangements are to local needs.

Article III: Osei, M. K. "Evaluating Perceived Process Performance and Outputs in the Formation of a Collaborative REDD+ Governance Program in Ghana." Under review, *Society & Natural Resources*.

Article III also contributes to addressing Research Question 2 by exploring the effects of collaboration dynamics, as framed by the IFCG, on perceived process performance and policy outputs in the GCFRP designation process at the national level. Drawing on qualitative analysis of semi-structured interviews and document reviews, the study examines how the three interactive components of collaboration dynamics — principled engagement, shared motivation, and capacity for joint action — have influenced both the process performance and the success in generating agreement on the resulting policy outputs of the GCFRP designation. The findings reveal that the collaborative process fostered a shared vision, built trust, and developed joint capacity among stakeholders, enabling the creation of innovative strategies and the implementation of widely supported plans. This dynamic was instrumental in securing a US$50 million Emission Reductions Purchase

Agreement, positioning the cocoa sector to transition toward a climate-smart industry. The perceived success of the GCFRP is closely tied to cross-sector collaboration to attract international funding, strong government leadership, and the active involvement of competent participants across sectors. A crucial insight from the article is the pivotal role of individual participants who provide backbone support, offering essential resources, knowledge, and coordination. Their contributions significantly enhance the collaborative governance process, ensuring the sustainability and success of the GCFRP.

Furthermore, the collaborative process within the GCFRP has significantly contributed to the development and support of key policy outputs. Notably, the innovative HIA governance framework emerged as a promising model to facilitate multi-level engagement among the government, the private sector, and local communities. The HIA framework was designed to promote tailored, locally specific solutions while encouraging collective decision-making. Additionally, the introduction of climate-smart cocoa initiatives was a crucial outcome, combining environmental sustainability with economic incentives for smallholder cocoa farmers. Other innovative policy outputs include the establishment of joint monitoring systems to track deforestation and land-use changes in real time, as well as the creation of six community-led agroforestry projects to operationalize the HIA governance framework. Overall, the collaborative governance has helped to drive policy changes in land tenure and benefit-sharing arrangements, foster innovation, and strengthen trust among stakeholders, ultimately supporting the GCFRP's objectives of reducing deforestation and promoting sustainable cocoa production.

However, despite these successes, some national-level stakeholders identified several challenges that could undermine the legitimacy and effective implementation of the GCFRP outputs on the ground. These challenges include entrenched power imbalances, political interference, and weak local capacity, all of which threaten to erode the program's legitimacy and effectiveness at the local level. The perceived legitimacy of the GCFRP is crucial to its success, as it underpins effective governance and successful implementation. While the GCFRP has created valuable opportunities for cross-sector collaboration rooted in a shared interest in addressing societal challenges such as deforestation and promoting sustainable development, aligned with the self-interests of various actors, the complexities of translating policy outputs at the national level into tangible local outcomes are evident, particularly in the face of local challenges. Additionally, the critique of the IFCG framework highlights its lack of rigorous specification for theory testing and empirical validation across disciplines. The framework remains ambiguous about how key elements such as leadership, institutional arrangements, and shared/joint/mutual understanding integrate into the broader framework, influencing everything from drivers to collaboration dynamics to outputs. This vagueness complicates the iterative application of the IFCG within REDD+, where these elements are crucial to shaping outcomes. The findings from this article underscore the importance of institutional design or governance arrangements that address the power dynamics between collaborating actors and their ability to relinquish decision-making authority to local actors. Furthermore, addressing accountability challenges over time is critical to shaping the perceived legitimacy and success of governance processes on the ground.

Article IV: Osei, M. K. "Institutional Design and Perceived Local Legitimacy in Ghana's Multi-level Collaborative REDD+ Governance." Submitted Manuscript.

Article IV addresses Research Question 3 by exploring how the institutional design of multi-level REDD+ CGRs shapes local actors' perceptions of legitimacy. The analysis employs a triangulated methodology, combining document analysis, field notes from participant observation, and twenty in-depth, semi-structured interviews conducted across three communities involved in implementing the KCALP within the Kakum HIA. To provide a more nuanced understanding of how collaborative projects envisioned under the GCFRP are realized in practice at the local level, this article draws on Agrawal and Ribot's (1999) decentralization framework to examine how the institutional design of the GCFRP influences local perceptions of legitimacy, focusing on three key dimensions: actors, power, and accountability.

The findings presented in Article IV highlight the significant challenges posed by the introduction of the multi-tiered HIA governance structure, which has notably eroded the GCFRP's legitimacy at the local level. A primary constraint on the program's legitimacy is the perception that the HIA constitutes an inappropriate institutional arrangement for local implementation. Specifically, the establishment of community-led collaborative forums, primarily facilitated by civil society CSOs and ENGOs, has failed to gain legitimacy locally. These forums, often dominated by local elites and lacking internal legitimacy, have replaced roles traditionally performed by local government and customary authorities. However, this shift has not resonated with the deeply ingrained community norms of representation and accountability, which these traditional and democratic institutions once embodied. This issue is further compounded by the failure of the national coordinating agencies (i.e., FC and COCOBOD) to delegate sufficient decision-making power and financial resources to local entities. Moreover, their disregard for established policy and implementation guidelines has contributed to a recentralization of REDD+ forest governance. Despite efforts to establish community-led representation, these processes have proven inadequate in conveying the views and needs of local people to the national-level agencies, thereby weakening downward accountability. The analysis underscores critical tension in the implementation of the GCFRP. While the creation of community-led forums is intended to enhance local participation, it inadvertently undermines the legitimacy of established democratic and customary institutions. This disconnection has been exacerbated by the reluctance of the national coordinating agencies to devolve meaningful decision-making authority or allocate the necessary resources to local bodies.

Drawing on Agrawal and Ribot's (1999) decentralization framework, Article IV provides valuable insights into how collaborative governance arrangements in REDD+ can be structured to enhance both legitimacy and long-term effectiveness, particularly in complex, hybrid institutional environments. The framework's focus on three key institutional design features — actors, powers, and accountability — serves as a critical complement to the IFCG framework. While the IFCG framework offers valuable structural and procedural guidance, it falls short of providing concrete direction on how CGRs can be designed and implemented to strengthen legitimacy in diverse local contexts. By integrating Agrawal and Ribot's framework, this thesis provides a more comprehensive approach to designing context-sensitive, collaborative governance that achieves the intended outputs.

6. CONCLUDING DISCUSSION

This chapter summarizes and synthesizes the key findings of this research by critically examining the most significant results in relation to the three research questions and their contribution to fulfilling the overarching aim of the thesis. In doing so, the chapter highlights the thesis's key contributions, draws out relevant policy implications for REDD+ implementation, and offers recommendations for future research directions.

To achieve the overall study aim, this study employed two qualitative research designs, progressing from an overview of current research on collaborative governance in REDD+ implementation across diverse Global South contexts to identify knowledge gaps and key challenges, to localized realities within Ghana's cocoa-forest landscape. Article I established the empirical/contextual foundation through a literature review to systematically synthesize evidence from 43 empirical studies across Global South settings. It identified four categories of challenges hindering collaborative dynamics in subnational REDD+ program implementation, including challenges related to the system context, burdensome global requirements, resource limitations, and challenges related to collaborative arrangement design. These challenges collectively undermine the three essential collaborative dynamics components: principled engagement, shared motivation, and capacity for joint action. Critically, Article I revealed substantial theoretical and empirical gaps regarding collaborative governance functioning in resource-constrained, politically complex environments characteristic of Global South countries, particularly concerning external financing dependency, power asymmetries, and design-related issues diminishing collaboration effectiveness. Applying the IFCG framework, the meta-synthesis showed that fostering collaboration remains a key challenge for REDD+ implementation, while highlighting limited research using established collaborative governance frameworks needed to understand how such governance structures can be designed and implemented, and the conditions that support high performance in REDD+ initiatives. These findings are further developed by the subsequent empirical study of the GCFRP, which served as an important case for examining why and how collaborative governance in REDD+ emerges, how it functions, and for whom in Ghana's weak governance context, marked by resource constraints, competing land-use claims, tenure insecurity, and corruption.

An embedded case study design was used to explore how the broader systemic context, collaborative dynamics, and institutional design influenced stakeholders' perceptions of the quality of the governance process and policy outcomes resulting from GCFRP designation. Three main research questions were addressed, with the findings presented in three empirical articles (II, III, and IV). Articles II and III share the same theoretical framework (IFCG; Emerson et al., 2012; Emerson & Nabatchi, 2015a, 2015b), while Article IV adds the Agrawal and Ribot (1999) decentralization framework to complement the IFCG.

Articles II and III affirm the utility and analytical strength of the IFCG framework while also revealing certain critical factors, particularly relevant to REDD+ implementation in the Global South, that remain underemphasized or absent in the framework's original formulation. Together, these studies offer new empirical insights into how system context, collaboration drivers, and process-level factors within collaboration dynamics shape both the formation of the GCFRP and stakeholders' perceptions of its procedural performance and policy outputs.

System context as paradoxical driver of collaboration

The findings from Article II underscore the pivotal role of broader system context conditions in shaping the key drivers that prompted the emergence of the GCFRP. The analysis reveals that the complex and often debilitating governance context characterizing forest land use in Ghana's HFZ profoundly influences the development of collaborative governance arrangements under REDD+. Specifically, high rates of deforestation, compounded by escalating climate change impacts, have intensified uncertainty regarding future forest resource availability. Widespread poverty, high dependence on forest-based livelihoods, entrenched power asymmetries, persistent marginalization of local communities in forest decision-making, and longstanding land-use conflicts have heightened the interdependence between state and non-state actors operating within the cocoa-forest landscape. In this context, REDD+ offered consequential incentives, particularly access to international climate finance and legitimacy on global platforms, which galvanized key governmental bodies such as the FC and COCOBOD to assume initiating leadership roles in launching the GCFRP. The presence of enabling political and legal frameworks at both national and international levels rendered collaboration not simply advantageous but imperative for addressing these entrenched governance and sustainability challenges.

These findings from Article II contradict insights from Article I, the meta-synthesis, which identified that adverse system context elements directly undermine the effective functioning of collaborative dynamics in subnational REDD+ programs across diverse Global South contexts. Article II instead demonstrates the paradoxical role of system context in commodity-based carbon emission programs such as the GCFRP: the very governance deficits that constrain collaboration, deforestation pressure, tenure insecurity, institutional fragmentation, and resource scarcity, simultaneously impacted the four essential drivers: uncertainties, interdependence, consequential incentives, and initiating leadership that propel the emergence and initiation of GCFRP. Overall, the findings from Article II demonstrate how the broader systemic context activated the four foundational drivers of collaborative governance theorized by Emerson et al. (2012) and Emerson and Nabatchi (2015a), thereby affirming the analytical relevance of the IFCG framework for explaining the emergence of collaborative governance in REDD+ contexts in the Global South. The majority of stakeholders at the national level widely acknowledge that collaboration in designing and implementing REDD+ mechanisms offers an instrumental strategic approach to reconciling competing interests, sharing knowledge and resources, and formulating integrated responses to complex socio-environmental challenges. Collaboration is particularly valued as a necessary response to pressing uncertainties linked to climate change, deforestation-related risks to cocoa supply chains, and declining agricultural productivity. Importantly, it is also seen as a means to unlock international climate finance and achieve global sustainability targets under frameworks such as the Paris Agreement. These pressures and opportunities collectively led to the formation of the GCFRP, which now stands as a leading example of a multi-level REDD+ CGR capable of transforming forest land use governance in Ghana's HFZ.

Comparable findings from IFCG studies in sectors like health and social forestry in the Global South further emphasize the critical role of system context in shaping both the emergence and effectiveness of collaborative processes (e.g., Emerson, 2018; Hayter & Nisar, 2018; Lawasi et al., 2024). In contrast, collaborative governance in the Global North often unfolds within relatively stable institutional environments marked by democratic maturity, high levels of interpersonal and inter-organizational trust, and sustained financial and administrative capacities (Ansell & Gash, 2008; Emerson & Nabatchi, 2015a; Douglas et al., 2020; Dressel et al., 2020; Mattor & Cheng, 2015; Ulibarri et al., 2020). In such contexts, collaboration tends to emerge organically as a normative governance approach. Conversely, collaborative governance in REDD+, including initiatives for collaborative natural resource management and conservation in many countries in the Global South, is often driven by systemic governance challenges. These collaborations are typically reactive, externally driven, and incentivized, primarily aimed at addressing entrenched institutional weaknesses, unlocking donor funding, and fulfilling global policy commitments (Fisher et al., 2020; Myers et al., 2016; Musavengane et al., 2019; Turnhout et al., 2017).

External incentives and strategic use of policy windows

However, the findings from Article II point to the importance of incorporating two additional system context factors, particularly critical in shaping collaborative governance within REDD+ initiatives in Global South settings: sustained political will and the strategic use of policy windows to mobilize and align diverse stakeholders' interests. In the GCFRP case, it was not REDD+ itself that created the window of opportunity; instead, it was the combined pressure of ambitious Nationally Determined Contributions under the Paris Agreement and supply chain sustainability commitments, particularly those from the private sector to establish deforestation-free cocoa supply chains, that generated momentum for collaboration. These imperatives catalyzed a convergence of interest among state and non-state actors, positioning REDD+ as the most viable and legitimate platform for joint action. In this context, REDD+ became the governance mechanism through which pre-existing interdependencies could be acknowledged, negotiated, and coordinated. It offered an institutional structure capable of accommodating diverse interests while addressing systemic governance and sustainability challenges in Ghana's HFZ. The program thus reflects more than a technical response to climate and deforestation pressures; it represents a governance innovation enabled by international and sectoral policy signals, underpinned by shared vulnerabilities. Collaborative governance in this setting emerged not as a normative ideal but as a pragmatic instrumental necessity, driven by external pressures, strategic leadership, and the urgent need for coordinated solutions.

As demonstrated in Article III, the perceived procedural performance and policy outputs of the GCFRP designation process largely depend on international climate finance requirements that mandate cross-sector collaboration in REDD+ programs. These are critical factors influencing the quality of collaborative dynamics, which in turn shape both procedural performance and policy outcomes in REDD+ design. The formation of the GCFRP was thus a strategic process aligned with international sustainability agendas, particularly those associated with the World Bank's FCPF and emerging deforestation-free cocoa supply chain pledges. In this respect, the program embodies what Emerson and Nabatchi (2015a) describe as an externally driven, initiated CGR, in which collaboration is driven by external mandates, especially to secure grants or policy directives. The case of GCFRP formation aligns with findings from Bruun & Rubin (2023), who note that external funding and normative pressures often drive CGRs in the Global South. Consequently, participation in the GCFRP, particularly in the early stages, was often motivated by a desire to comply with donor expectations, access climate finance, or align with corporate sustainability standards. This externally driven CGR influenced structural and procedural arrangements, which played critical roles in convening stakeholders and formalizing collaborative platforms across multiple levels of governance.

Article III speaks directly to Article 1, identifying burdensome global requirements and resource constraints as key challenges that limit REDD+ collaborative dynamics. The empirical analysis demonstrates how international climate finance requirements, while providing essential resources and legitimacy, simultaneously shape collaborative processes in ways that privilege donor expectations over local priorities and technocratic coordination over equitable participation. This finding substantiates the theoretical insight that the IFCG framework inadequately addresses external financial dependency as a foundational condition shaping collaborative governance in Global South environmental programs. The GCFRP case reveals that international funding requirements do not merely support collaboration but actively structure it, determining who participates, what issues receive attention, and which outcomes are valued.

Collaborative dynamics and leadership

While the impetus for cross-sector collaboration in the GCFRP was largely externally driven through international climate finance and global sustainability commitments, its practical success hinged on the presence of highly skilled and dedicated individuals embedded within participating organizations. These actors, often positioned at the nexus of technical expertise, policy entrepreneurship, and network brokerage, played critical roles in translating abstract REDD+ ambitions into contextually grounded and actionable strategies. Their efforts were instrumental in producing key innovative policy outputs, including the design of climate-smart agroforestry interventions, the negotiation of seemingly equitable benefit-sharing arrangements, the development of forest monitoring systems, and the driving of institutional innovations such as the HIA governance model and multi-stakeholder platforms. Notably, their leadership and strategic coordination also contributed to the successful negotiation of a USD 50 million Emission Reductions Payment Agreement with the World Bank's FCPF, as discussed in Article III. Their capacity to navigate inter-organizational complexity, build trust among diverse stakeholders, broker cross-sectoral agreements, and leverage resources underscores the crucial, yet often underappreciated, role of human agency in collaborative governance.

Article III's emphasis on the critical role of skilled boundary-spanning individuals addresses a gap identified in Article I: while the meta-synthesis revealed widespread capacity limitations across REDD+ programs, it could not explain how some initiatives overcome these constraints. The GCFRP experience shows that strong involvement of key government agencies (i.e., the FC and the COCOBOD) combined with the facilitative roles of skilled and competent individual participants, particularly those strategically positioned to navigate inter-organizational complexities and translate global frameworks into locally relevant strategies, can partially offset systemic capacity constraints. However, this dependence on key individuals also creates sustainability risks. This insight aligns with a growing body of REDD+ literature emphasizing that, beyond formal structures and incentives, the presence of credible, skilled, and trusted individuals is often decisive in determining the effectiveness and durability of collaborative arrangements (Dawson et al., 2018; Myers et al., 2018). In contexts marked by fragmented authority, overlapping mandates, and contested land tenure, as is common in many countries in the Global South, these boundary-spanning individuals are essential for bridging institutional divides and enabling cross-sector coordination (Sawathvong et al., 2024). These insights also resonate with recent findings from CEG literature across other resource sectors and from the Global North, which increasingly emphasize how the presence of capable, well-connected, and strategically positioned actors can transform collaboration from a procedural formality into substantive and impactful collective action (Cristofoli et al., 2022; Ulibarri et al., 2023; Zambrano-Gutiérrez et al., 2023).

Institutional design and local legitimacy

While Articles II and III emphasize the importance of system context, collaboration drivers, and collaborative dynamics, both the procedural performance and high-quality policy outputs in the GCFRP designation process, Article IV reveals that the institutional design chosen for implementing the GCFRP program activities at the local level has substantially eroded the program's perceived legitimacy at the local level. The creation of the HIA governance structure, touted as a collaborative, inclusive model, failed to reflect the normative expectations of legitimacy within local communities. It marginalized traditional authorities and elected district officials, despite their entrenched socio-political roles, while central state agencies such as the FC and COCOBOD retained control over core decisions, resources, and oversight. Although the initiative adopted decentralization rhetoric, absolute authority remained centralized, reinforcing pre-existing vertical hierarchies. Moreover, power asymmetries among government agencies, private sector actors, ENGOs, and CSOs continued to structure participation and influence the distribution of authority and accountability relations, often privileging technocratic control over equitable collaboration within the GCFRP governance structure. Article IV directly addresses the fourth challenge category identified in Article I: deficiencies in the design of collaborative arrangements. While Article I is a meta-synthesis that reveals that institutional design choices frequently undermine collaborative dynamics in the implementation of subnational REDD+ programs across the Global South, it cannot fully explain the mechanisms by which design features erode local legitimacy. Article IV provides this explanation by demonstrating that, despite formal procedural compliance with collaborative norms, the HIA governance structure informally reproduced centralized control and marginalized locally legitimate authorities, thereby failing to generate downward accountability. This finding exposes a critical limitation in the IFCG framework identified through the two-level analysis: by foregrounding contextual and procedural requirements while underemphasizing structural design, power dynamics, and political contestation, IFCG theory cannot adequately explain why collaborations that appear procedurally sound often fail to achieve local legitimacy in politically complex, resource-dependent contexts.

In this context, complementing the IFCG framework with the decentralization framework proved analytically beneficial for understanding whether and how design features within multi-level REDD+ CGR affect its perceived local legitimacy. While the IFCG framework offers valuable insights into the procedural dimensions of collaboration, it tends to underemphasize the political contestations, power asymmetries, and authority struggles that frequently shape the governance of donor-driven environmental initiatives such as REDD+, particularly in Global South countries (Bruun & Rubin, 2023; Chorito & Assefa, 2024; Lawasi et al., 2024). These are critical dynamics that remain insufficiently addressed within the original formulation of the IFCG framework (Pells, 2015). The integration of decentralization theory proved essential for understanding how institutional design choices in externally driven CGRs become sites where power is exercised and normalized, often reproducing rather than transforming existing hierarchies. This pattern reflects a more profound and persistent critique that has emerged as REDD+ has evolved from isolated pilot initiatives to jurisdictional and now landscape-level governance models. Scholars such as Agrawal and Ribot (1999) have long cautioned about the risk of 'institutional substitution,' in which externally favored actors, often ENGOs or newly created multistakeholder platforms, displace historically legitimate and locally accountable institutions, undermining downward accountability and local political legitimacy. As Article I shows, these concerns have only intensified as landscape approaches, while rhetorically framed as integrated and participatory, increasingly reproduce and even deepen long-standing tensions. Unlike jurisdictional approaches, which at least nominally align with subnational government structures, landscape programs frequently sideline or bypass established authorities, such as traditional leaders and elected district assemblies, by centering governance around donor-sanctioned, multi-stakeholder platforms led by civil society organizations and ENGOs. This dynamic is clearly evident in GCFRP and in REDD+ implementation experiences in many countries of the Global South (Chorito & Assefa, 2024; Di Gregorio et al., 2019; Green & Lund, 2015; Myers et al., 2018; Sarmiento Barletti et al., 2020).

In these contexts, externally driven CGR often appear technocratically efficient but are viewed by local actors as elite-driven and detached from customary norms of legitimacy. While such models may enhance donor confidence and project coordination, they tend to entrench centralized control, especially where core decisions remain concentrated within powerful bureaucracies such as Ghana's FC and COCOBOD. Consequently, participation risks becoming a procedural formality rather than a transformative mechanism of empowerment. This thesis highlights a critical paradox: the discourse of collaboration is increasingly mobilized to legitimize externally designed, top-down governance structures that reproduce rather than resolve entrenched power asymmetries. Far from enabling inclusive forest governance, these arrangements institutionalize a façade of participation while structurally marginalizing local actors from substantive decision-making authority. This reinforces the need for frameworks, such as decentralization theory, to critically interrogate the political dimensions of collaboration and to expose the limitations of dominant theoretical frameworks, such as the IFCG, which tend to foreground procedural design while neglecting the contested and hierarchical realities of environmental governance in Global South countries.

Toward contextually embedded collaborative governance

The GCFRP experience underscores the importance of contextually grounded approaches to collaborative governance in countries in the Global South. The IFCG framework is developed and applied mainly in Global North contexts, where institutional capacity, societal structures, and governance norms differ significantly from those in the Global South. The unique institutional and societal preconditions in these contexts—such as entrenched power asymmetries, diverse stakeholder interests, and variable capacities of local actors—shape both the opportunities and constraints for establishing effective collaboration. The findings from this thesis highlight that achieving high-performing, high-quality policy outputs in collaborative REDD+ governance arrangements in Ghana's challenging, debilitating weak governance contexts requires institutional arrangements explicitly attuned to local realities, including socio-political hierarchies, customary authorities, and resource-use dynamics. Collaborative governance frameworks imported from Global North experiences may fail to account for these complexities, risking limited legitimacy, weak local ownership, and ineffective implementation. The GCFRP illustrates that context-sensitive institutional design is therefore essential to translate procedural soundness into outcomes that are both locally legitimate and sustainable.

These findings resonate with experiences from other REDD+ countries characterized by weak governance, where jurisdictional and landscape approaches are being implemented to address commodity-driven deforestation and promote sustainable development, including Côte d'Ivoire, Cameroon, Indonesia, Brazil, Peru, and Vietnam. These countries exhibit strikingly similar patterns, including weak institutional capacity, donor dependency, top-down externally initiated arrangements, reliance on international climate finance, and burdensome global requirements embedded in predetermined institutional structures (e.g., Macdonald et al., 2023; Ravikumar et al., 2015; Rodriguez-Ward et al., 2018; Sanders et al., 2017). In such settings, collaborative arrangements frequently prioritize external accountability over downward accountability, where CEG initiatives' become arenas where power is not only exercised but also normalized through the institutionalization of specific knowledge systems and authority structures, constraining local ownership and autonomy while imposing standardized governance frameworks that often misalign with local institutional capacities and socio-political realities (Forsyth & Sikor, 2013; Nightingale, 2020). Taken together, these insights underscore that effective collaborative governance in the Global South contexts cannot rely solely on generic frameworks or Global North models. Instead, institutional design must be embedded within the specific social, political, and ecological landscapes of implementation. Context-aware approaches are not merely supportive; they are central to achieving procedural effectiveness, fostering meaningful inclusion, and securing durable governance outcomes. The GCFRP thus serves as a representative case illustrating how context-sensitive design can reconcile the tension between externally driven technical requirements and locally embedded governance dynamics, ultimately shaping both the legitimacy and sustainability of collaborative forest governance.

Beyond commodity-linked emission reduction initiatives, transnational conservation programs offer instructive comparisons that illuminate both shared challenges and distinctive features of REDD+ governance. While research on hybrid governance in African conservation demonstrates that sharing authority with traditional authorities can enhance state capacity through negotiated rule harmonization and combined enforcement systems in contexts such as the Great Limpopo Transfrontier Conservation Area (Dahlberg, 2024), this thesis finds that such positive outcomes are contingent on specific conditions. REDD+ programs like the GCFRP, despite sharing some governance challenges with transnational conservation areas—including cross-border coordination complexities, competing land-use claims, and weak institutional alignment—operate under distinctive constraints that fundamentally shape collaborative dynamics. Unlike established transnational conservation programs that often evolve through bilateral or regional negotiations among states, REDD+ initiatives are externally initiated, performance-based mechanisms tightly coupled with global carbon markets and international climate finance architecture. These arrangements impose burdensome global requirements for measuring, reporting, and verifying emissions reductions while prioritizing external accountability to international donors over downward accountability to local communities. Consequently, even when REDD+ programs facilitate cross-sectoral coordination, they may struggle to enhance governance capacity or achieve legitimate policy outputs when they lack local ownership and operate within predetermined institutional frameworks that inadequately adapt to local sociopolitical and tenure realities. These comparative experiences reinforce the central argument: the success and legitimacy of collaborative governance arrangements for REDD+ schemes depend not only on external technical requirements but appropriate locally embedded institutional design attuned to the context, the reliability of financial flows, and genuine opportunities for local actors to shape governance processes rather than merely participate in externally defined structures (e.g., Sarmiento Barletti et al., 2020).

6.1 Summary of Key Contributions

This thesis makes both theoretical and empirical contributions to the field of CEG in REDD+ implementation within Global South settings, with a particular focus on the GCFRP. Theoretically, the thesis offers several key insights. First, it demonstrates the relevance and applicability of the IFCG beyond its original institutional context. As theorized by Emerson et al. (2012) and Emerson and Nabatchi (2015a, 2015b), the IFCG has become foundational for understanding how collaborative governance arrangements form, function, and develop. However, this widely cited framework was mainly developed, applied, and validated in the advanced democratic contexts of the Global North, settings characterized by dispersed political authority, protected stakeholder autonomy, and legitimacy derived from deliberation where multiple stakeholders voluntarily identify shared interests, negotiate roles, and reach consensus-driven solutions (Ulibarri et al., 2023). These assumptions often do not hold in relatively stable democratic contexts, such as Ghana, where different institutional contexts influence the emergence, design, and dynamics of collaborative governance.

Ghana's GCFRP presents a critical case for examining whether frameworks developed in the Global North can be effective in contexts with significantly different institutional conditions. In contexts marked by competitive clientelist politics, centralized decision-making, and weak cross-sectoral and multi-level coordination, the drivers, dynamics, and practices of REDD+ CGRs vary significantly from those assumed in the original framework. Notably, this study finds that CGRs in such settings are often initiated through external, hierarchical, or top-down mechanisms that encourage or enforce stakeholder participation, rather than developing organically from a shared, bottom-up recognition of a problem. Here, government agencies, international organizations, and multilateral climate funders serve as primary conveners, fundamentally changing the power dynamics, legitimacy structures, and operational pathways that the IFCG assumes. This externally driven form of collaboration differs from IFCG's assumptions of organic, horizontal participation, revealing both the usefulness and the limitations of the framework. Therefore, the Ghanaian case highlights the importance of adapting, rather than directly applying, collaborative governance theory to Global South contexts, with implications for understanding REDD+ and climate governance initiatives in similarly constrained institutional environments. These findings contribute to the growing body of scholarship that demonstrates clear links between specific system contexts and the initiation style of environmental CGRs (Berthod et al., 2023; Imperial, 2023; Zachrisson et al., 2018; Zambrano-Gutiérrez et al., 2023).

A second key contribution of this research is the identification of the critical contextual elements that influence not only the drivers but also directly the dynamics of collaboration in REDD+ CGRs. Though the IFCG framework recognizes the importance of system context, it provides limited insight into which contextual elements are most influential in specific settings. Analyzing the GCFRP, a commodity-based emissions reduction initiative operating at the landscape level, shows how unique economic, political, and institutional conditions both restrict and enable collaborative governance. Cocoa production supports the local economy but also causes most of the forest loss. This dual situation creates a setting where cocoa interests are deeply rooted in local economic and political elite networks. At the same time, multinational sourcing firms control procurement channels and face increasing international pressure to address illegal forest encroachment and environmental damage across their supply chains. Additional factors complicate this landscape: a long history of sustainable commodity programs, past unsuccessful efforts to implement sustainable forest management policies, strong environmental advocacy groups, including civil society campaigns directly challenging the environmental impacts of multinational cocoa companies, and growing political pressure, both domestically and internationally, to reduce cocoa-related deforestation. These intertwined contextual factors generate interdependence and distinct incentives for government agencies, civil society organizations, environmental NGOs, multinational cocoa firms, and local communities, shaping their engagement across the state, market, environmental, and civil sectors. Importantly, this research finds that the landscape-based REDD+ approach—based on the idea that results-based financing can change land-use patterns across subnational areas—became a viable opportunity for cross-sector collaboration when stakeholders recognized the repeated failure of isolated, unilateral efforts to combat deforestation. This shared understanding fostered a consensus on the cocoa-driven deforestation problem and built enough mutual trust to enable coordinated action. The GCFRP illustrates how specific contextual elements influence not only the formation of CGRs but also their collaborative dynamics. The program includes multi-stakeholder deliberative spaces, jointly developed visions and strategies, aligned policy actions, pooled resources, structured conflict resolution processes, and shared monitoring systems. These institutional features depend heavily on strong leadership, a solid political commitment at the national level, strategic efforts to recruit capable leaders to foster a collective vision, and international climate financing mechanisms that promote cross-sector cooperation. By pinpointing these key contextual elements, this research enhances the IFCG framework's ability to explain how specific economic, political, and institutional conditions influence collaborative governance in commodity-focused environmental programs, particularly in Global South contexts.

The third theoretical contribution of this thesis is to critically evaluate the usefulness and limitations of the IFCG framework in countries in the Global South, especially within the context of landscape REDD+ programs. While the IFCG framework provides valuable insights into the enabling and constraining factors of collaborative governance in REDD+ initiatives in the Global South, this thesis identifies three main theoretical gaps that limit its explanatory power in these contexts. The IFCG recognizes leadership as important but does not sufficiently theorize how leadership functions across nested scales, from community to national to international levels, or how different leadership types (formal, informal, technical, and political) interact to influence collaborative outcomes in externally funded programs. In landscape REDD+ initiatives, such as the GCFRP, leadership dynamics are far more complex than the framework suggests, with multiple forms of leadership operating simultaneously and sometimes in tension across various governance scales. Second, the framework underestimates the importance of economic incentives and results-based financing mechanisms in maintaining collaborative processes. The findings from this thesis demonstrate that economic benefits, considered consequential incentives and one of the essential drivers of collaboration within the IFCG framework, actively shape collaborative motivation, stakeholder engagement, capacity development, and the long-term sustainability of collaborative arrangements. In resource-limited Global South settings, where opportunity costs of conservation are high and competing livelihood needs are urgent, the promise and delivery of tangible economic benefits critically affect whether collaborative governance can be sustained beyond initial enthusiasm. Third, and most importantly, the IFCG framework fails to sufficiently examine entrenched power dynamics within REDD+ governance and other internationally funded environmental programs. In line with Pells (2015) and Lawasi et al. (2024), this thesis demonstrates how externally driven, hierarchical initiation, in which international donors and national governments mandate participation, can lead to superficial, performative forms of collaboration. Instead of genuine engagement toward sustainable landscape governance and emission reductions, such top-down approaches tend to produce tokenistic participation that primarily fulfills procedural requirements for accessing international climate finance. These formalistic collaborations meet administrative needs but lack the substantive power-sharing, inclusive deliberation, and equitable benefit distribution that characterize authentic collaborative governance.

In addition to its theoretical insights, this thesis makes several significant empirical contributions to the literature on REDD+ governance and CEG. Landscape-scale REDD+ programs are inherently collaborative, yet there is limited empirical evidence on how these institutional arrangements are actually designed and function in practice. By focusing on the Ghana GCFRP, this thesis offers rare, field-based insights into the concrete processes through which collaboration develops under complex conditions in the Global South. First, the study uncovers the practical mechanisms by which collaboration emerges in high-stakes commodity landscapes. The research documents how converging pressures, including supply chain accountability demands on multinational cocoa buyers, civil society environmental campaigns, and international climate finance requirements, created conditions where collaboration became essential and strategically necessary rather than optional. This finding challenges idealized notions of collaboration that arise solely from shared values, showing instead how external pressures and the recognition of interdependence drive collaborative formation in practice. Second, the study highlights the often-overlooked role of bridging actors and boundary organizations in facilitating translation between international climate finance requirements, national policies, corporate sustainability commitments, and local realities. The research emphasizes the vital role of specialized individuals and organizations involved in technical capacity building, conflict mediation, information brokering, and trust-building, which are crucial for operationalizing landscape collaboration but are often underdefined in policy guidance. These empirical insights offer practical guidance for policymakers, development practitioners, and funding agencies designing landscape-scale environmental programs in the Global South. The research offers practical guidance on structuring collaborative processes that acknowledge rather than conceal power imbalances, designing financing mechanisms that foster rather than undermine collaborative motivation, and identifying early warning signs when collaborative governance is becoming merely procedural rather than substantive.

6.2 Policy Implications

The findings of this thesis yield several important policy implications for policymakers, practitioners, and international actors involved in designing and implementing collaborative governance arrangements in REDD+ initiatives, particularly in contexts with complex institutional landscapes and capacity constraints.

Recognizing and Responding to System Context Conditions

CEG does not occur in a vacuum; instead, it is deeply embedded within broader political, institutional, and socio-economic conditions. This thesis highlights the importance for implementers and decision-makers to recognize and respond proactively to contextual shifts, such as political transitions, donor priorities, or changing institutional arrangements, which impact both the feasibility and legitimacy of collaborative arrangements. Adaptive strategies and regular context assessments are essential to ensure relevance, continuity, and effectiveness.

Securing the Engagement of Competent and Committed Individuals

The success and sustainability of collaborative processes depend significantly on the presence of skilled, respected, and committed individuals who can mobilize stakeholders, mediate divergent interests, and foster trust. This thesis highlights the critical role that such actors play in shaping collaborative dynamics, particularly in resource-constrained settings. Therefore, policies should prioritize mechanisms to identify, support, and retain these individuals through adequate training, institutional recognition, and long-term support.

Investing in Building Collaborative Capacity

Building meaningful collaboration requires sustained investments in time, trust-building, and facilitative leadership. Skilled facilitation plays a significant role in fostering deliberation, managing power asymmetries, and ensuring inclusive participation. Donors and policymakers must therefore allocate sufficient timeframes and resources to support collaborative capacity development, including iterative dialogue platforms, conflict resolution mechanisms, and opportunities for joint learning and reflexivity.

Designing Adaptive, Inclusive, and Fit-For-Purpose Institutional Structures

Institutional design is not merely a technical exercise but a profoundly political process that influences who participates, whose knowledge counts, and how decisions are made. The findings suggest that institutional structures that align with local norms of legitimacy and promote both vertical coordination and horizontal inclusiveness are more likely to generate legitimate and effective governance outcomes. Institutional arrangements should therefore be context-sensitive, flexible enough to evolve, and embedded in broader frameworks that enhance accountability and legitimacy.

Ensuring Secure and Sustainable Financing Mechanisms

Collaborative governance initiatives, particularly in the context of REDD+, require consistent and transparent financing to operate effectively. This thesis demonstrates that funding uncertainties and top-down resource allocation can erode trust, limit local ownership, and perpetuate asymmetries in decision-making. A key implication is the need for financial arrangements that are predictable, equitably distributed, and capable of supporting local-level implementation. This includes the ability to manage funds locally, as well as mechanisms for accountability and oversight.

6.3 Future Research

To advance progress toward NDC commitments under the Paris Agreement, many REDD+ countries that have entered the implementation phase are increasingly adopting collaborative governance frameworks to operationalize jurisdictional and landscape REDD+ programs that integrate climate mitigation with sustainable development (Angelsen et al., 2018; Furumo & Lambin, 2020; Turnhout et al., 2017). However, designing and implementing collaborative governance in multifaceted environmental programs such as REDD+ faces significant challenges in the weak governance contexts that characterize many of these REDD+ countries. The case of the GCFRP underscores the crucial role of context-specific elements, including the state of forest resources, prevailing international and national policy frameworks, political commitment, and the presence of windows of opportunity, in shaping the feasibility and realization of collaborative governance approaches to REDD+ implementation (Osei, 2025). These contextual elements of CEG strongly influence the key drivers of collaboration, as well as the form, processes, and performance of such interventions. Building on these insights, future research would benefit from comparative case study designs that examine how collaborative governance takes shape under differing national and sub-national preconditions, while also developing methods to investigate sensitive issues such as corruption, power asymmetries, and misuse of authority. Integrating quantitative approaches, such as surveys, alongside qualitative methods could enhance the ability to systematically capture these dynamics. Such research would provide a deeper understanding of the specificities of Global South contexts, inform the tailoring of governance arrangements to local realities, advance theoretical debates on CEG, and offer practical guidance for the design and implementation of REDD+ initiatives in diverse settings.

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APPENDICES

APPENDIX A: PROTOCOL FOR LITERATURE REVIEW (Article I)

1. Background

Since its inception in 2007, REDD+ governance has progressed from isolated pilot projects to subnational jurisdictional and integrated landscape programs that require cross-sectoral and multi-level coordination to address systemic drivers of deforestation, particularly those emanating from outside the forest sector and driven by global demand for forest-risk agricultural commodities such as cocoa, coffee, palm oil, beef, and soy, while promoting sustainable development. However, implementing these subnational REDD+ programs involves significant governance challenges, including coordinating diverse actors with competing interests, aligning policies across different levels, resolving land tenure conflicts, and ensuring fair benefit-sharing. In response, many REDD+ countries have adopted multi-stakeholder partnerships, multistakeholder platforms, multistakeholder engagement, multi-sectoral and multilevel collaboration, stakeholder participation, and deliberative engagement, approaches similar to collaborative governance designed to address these challenges and design effective, efficient, and equitable jurisdictional and landscape REDD+ programs. Despite the widespread use and recognized importance of collaborative governance for the success of these initiatives, designing and implementing effective collaborative governance in the context of multifaceted environmental programs in the Global South faces substantial challenges with a lack of systematic insights into the challenges and enablers for effective REDD+ collaborations and remains an underexplored area in the evolving literature.

2. Research Aim

Given this gap in systematic analysis, we conduct a literature review to meta-synthesize empirical evidence from prior studies on governance in subnational REDD+ programs implementation across Global South contexts, applying the Integrative Framework for Collaborative Governance (IFCG) (Emerson et al., 2012) to identify specific challenges of collaborative governance and knowledge gaps in the context of REDD+ in countries in the Global South.

3. Guiding Research Question

We formulated the central research question guiding the literature review as follows: How applicable is the IFCG framework for understanding the challenges of effective collaborative governance dynamics in subnational REDD+ implementation across Global South contexts?

4. Search Keywords and Databases

We identified relevant prior empirical articles on REDD+ governance by employing a search strategy that integrates synonyms corresponding to the core elements of collaborative dynamics, as conceptualized within the IFCG, as follows:

(Infiltrat* "REDD+" AND AND "REDD+" AND ("collaborative governance" OR "governance performance" OR " collaboration dynamics" OR "principled engagement" OR "shared motivation" OR "capacity for joint action" OR "multi-stakeholder engagement" OR "participatory processes" OR "balanced representation" OR "inclusive participation" OR "stakeholder participation" OR "inclusive decision-making" OR "deliberative engagement" OR "consensus building" OR "collective commitment" OR "stakeholder buy-in" OR "legitimacy" OR conflict resolution" OR "dispute resolution" OR "equity in benefit-sharing" OR "benefit distribution" OR "transparency" OR "accountability" OR "trust-building" OR "social capital" OR "resource availability" OR "technical capacity" OR "capacity building" OR "leadership" OR "facilitation" OR "governance arrangements") AND ("information sharing" OR "knowledge exchange" OR "knowledge systems" OR "learning processes") AND ("cross-sector coordination" OR "multi-level coordination").

A comprehensive literature search will be conducted across six databases: Scopus, Web of Science, PubMed, ResearchGate, Research Rabbit, and Google Scholar. These six databases were selected to ensure comprehensive coverage of peer-reviewed and grey literature relevant to REDD+ governance and collaborative processes. Scopus and Web of Science are multidisciplinary databases offering extensive peer-reviewed content. PubMed was included to capture public health or environmental governance perspectives. Google Scholar, ResearchGate, and Research Rabbit were used to identify relevant empirical studies not indexed in traditional databases, which is particularly useful for capturing research across diverse Global South contexts.

5. Data screening and extraction – Eligibility Criteria

Criteria	Eligibility (Inclusion)	Exclusion	Review Consideration by Researchers
Duplication	One publication from any one selected database was retained.	All publications with identical authors and titles retrieved from multiple databases were excluded.	Duplicates were screened using Rayyan, a web-based platform for systematic reviews. Manual verification ensured retention of the most complete and peer-reviewed version.
Timeline	Published between 2007 and the end of February 2025.	Published before 2007.	Publications were filtered by date range across databases before review.
Published Language	English-language publications.	Publications not available in English.	Only publications available in English were screened and included.
Literature Type	Peer-reviewed journal articles and review papers.	Blogs, essays, preprints, editorials, conference papers, book chapters, and books, and not	Literature type was verified using publication metadata and indexing criteria to

		a literature review.	ensure credibility.
Subject Area	Studies addressing REDD+ policy, governance, implementation, or evaluation.	Studies unrelated to REDD+, including those focused solely on unrelated environmental or policy topics.	Relevance to REDD+ was determined through screening of titles, abstracts, and keywords.
Focus on Collaborative Dynamics	Title, keywords, or abstract must indicate an analytical focus on at least one element of collaborative dynamics (i.e., principled engagement, shared motivation, or capacity for joint action), as outlined in the IFCG model (Emerson et al., 2012).	Articles lacking an explicit focus on collaborative governance or treating such elements as peripheral themes were excluded.	Each abstract and article was independently reviewed by two researchers. Inclusion required alignment with predefined conceptual criteria on collaborative dynamics. Disagreements were resolved through discussion.

Source: Modified from Imran & Almusharraf (2023).

6. Data Analysis and Synthesizing Information

To synthesize the findings of the selected studies, we will employ a qualitative thematic analysis approach. A coding matrix will be developed in Microsoft Excel to systematically organize and categorize recurrent themes, enabling the identification of patterns and cross-cutting issues relevant to collaborative dynamics in REDD+ governance.

APPENDIX B: LIST OF PROJECT DOCUMENTS CONSULTED

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APPENDIX C: INTERVIEW GUIDES

Part I: National Level (Articles II and III)

A. Personal Background

1. Can you please introduce yourself and provide some background on your involvement in REDD+ implementation?
2. How would you characterize your organization? (e.g., Government Agencies, Civil Society Organizations, Environmental NGOs, Private Sector).

B. System Context Factors

1. Overall, what are the main drivers of deforestation in the High Forest Zone?
2. Why are forest resources in the HFZ critical for the success of the REDD+ initiatives?
3. To what extent do you believe the activities aimed at reducing deforestation are addressing the underlying causes of deforestation? Please explain.
4. How would you characterize the power dynamics among stakeholders? Have there been instances of power imbalances and conflicts?

a. What challenges related to the control and use of forest resources have you encountered that affect REDD+ implementation?

b. Can you provide examples of situations where conflicts arose over the use or management of forest resources in the High Forest Zone (HFZ) and how these conflicts were resolved?

c. Are there established mechanisms for addressing conflicts related to resource access and usage in the HFZ?

5. How would you describe the overall goal and significance of collaboration on REDD+ in the context you are working in?

a. What do you collaborate on? (i.e., main objectives)

b. Describe the areas or issues that are the focus of the collaboration.

6. Could you provide insights into the existing legal and regulatory frameworks related to REDD+ and how they influence collaboration?

C. Drivers of Collaboration

1. Describe when and how this collaborative project emerged.

a. Which organization or people initiated the collaborative project?

b. Can the individuals who initiated the project be characterized as facilitators, champions, coordinators, or enthusiasts for stakeholder engagement?

c. What were the backgrounds of those in leadership roles?

d. How well did the leadership do in bringing diverse stakeholders, the relevant and affected actors, together?

e. How effective was the leadership in maintaining the focus and integrity of the collaborative process as intended?

f. How well did the leadership succeed in creating opportunities and securing resources for joint action?

2. How did public and private stakeholders feel mutually dependent on each other to fulfill their ambitions in the HFZ?

a. Can you elaborate on the roles and responsibilities of different stakeholders in the local REDD+ implementation?

b. What attracts private sector involvement in REDD+ initiatives, and how does this contribute to interdependence with public entities?

c. Are there examples where the private sector has been uniquely positioned to provide resources that are challenging for the public sector to supply?

3. What goals do the participants have, and why do the different stakeholders participate in the collaboration?

a. How is the GCFRP initiative funded?

b. How did incentives such as financial gain, funding sources, or global market conditions affect different participants to collaborate?

4. Have you identified any potential risks of deforestation and forest degradation for your organization?

a. How do stakeholders currently access and utilize data on deforestation trends in the region?

b. What challenges have you encountered due to incomplete or outdated information on deforestation rates, and how has it impacted collaboration in REDD+?

c. Was there any specific knowledge, be it local or Indigenous, or data estimates of deforestation's effects that formed the foundation for the collaboration?

D. Collaborative Dynamics

1. Which diverse types of organizations or actors participated in the collaborative process from the start?
2. Who are the key stakeholders involved in the GCFRP projects you have been part of, and how were they identified and selected?
3. What was the pre-existing level of trust among the partners before the start of the collaboration? What degree of confidence did you have in the Forestry Commission and Ghana COCOBOD?
4. In what manner did you ensure a collective formulation of goals and GCFRP project design?
5. What are the responsibilities assigned to each partner involved in the collaboration, particularly those of the private partners?
6. What is the organizational structure of the collaboration project? What is the rationale behind this organizational arrangement?
7. How frequently do you meet?
8. Could you elaborate on how decisions are made?
9. Has every partner exerted an equal level of influence within the collaboration? To what extent does the governance process ensure the inclusion of all actors?
10. How did you balance the needs and interests of local communities and the economic and ecological objectives pursued by the public and private sectors?
11. How do you integrate traditional knowledge and practices of local communities into REDD+ and collaborative efforts?

12. Have there been occasions where you have experienced disagreements or conflicts with your fellow partners? If so, what measures were taken to address or resolve those disagreements?
13. What communication channels exist for sharing information with local communities?

E. Policy Outputs

1. What concrete outputs have emerged as a consequence of the collaboration? (e.g., submission and approval of the Emission Reductions Programme for the GCFRP, approval of the Emissions Reduction Payment Agreement (ERPA), plans for pilot projects development).
2. What is your overall perception of collaborations?

a. How would you describe your level of satisfaction with the progress made thus far?

b. Would you describe involvement in collaborations as positive or negative?

3. Is there anything else you would like to add about GCFRP collaboration in the HFZ that we have not discussed yet?

Part II: Local-Level (Article IV)

Background Information for all Interviewees

1. Personal and Professional Background

- Can you please introduce yourself and describe your role in the Kakum Cocoa Agroforestry Landscape Project (KCALP)?
- How long have you been involved in this project?

2. Organizational Context

- Can you briefly describe your organization’s involvement in this project?
- What are your organization's main goals and objectives in participating in this project?
- If/How has your organization’s role evolved?

A. KCALP Project Partners

1. In your own words, could you briefly describe the main objectives of this project?

a. Were these objectives agreed upon by all stakeholders?

2. Can you describe the institutional structure of the KCALP project?

a. How many different organizations participate in the collaborative project? (Write in number)

b. How were these different stakeholder groups (e.g., government agencies, NGOs, local communities) involved, identified, and engaged?

c. How are roles and responsibilities distributed among different stakeholders?

- Follow-up: Was there any actor who was not represented in the collaboration?
- Follow up: Does the collaborative have subcommittees or work groups? If so, could you describe the different subcommittees or work groups involved in the collaborative effort and how they operate?
- Follow up: Do you participate in a subcommittee or workgroup?
- Follow-up: How are roles and responsibilities divided among different actors?
- Follow-up: In what policy area(s) do the different subcommittees or workgroups collaborate?

3. How do the different sub-committees or work groups involved in the project coordinate their activities?

- Follow-up: Are there formal agreements or informal understandings guiding this coordination?

4. Can you describe how decisions are made?

a. Could you describe the formal decision-making structures in place within the Kakum landscape? Would you say they are hierarchical, consensus-based, or organized differently?

b. Who are the leading local actors and institutions involved, and what roles do they play in these decision-making processes?

c. How are representatives from different stakeholder groups selected? Follow-up: In your view, how do local institutions represent their communities, and is there a distinction between representation and participation that matters in this context?

d. How do you decide which local actors or institutions to collaborate with?

e. Who are you accountable to, and what responsibilities do you hold? Follow-up: Which actors would you say have the most influence over decision-making authority in the project?

f. How do community-led representative committees contribute to project decisions?

g. Have strategies like Free, Prior, and Informed Consent (FPIC) and the Grievance Redress Mechanism helped in promoting understanding and support among local communities?

5. In your opinion, what are the main corruption risks associated with this project?

a. Are there specific areas (e.g., resource allocation, contracting) where these risks are more prevalent?

b. Have there been any concerns or allegations of corruption related to this project?

- Follow-up: How were these concerns addressed or investigated?

c. How do you assess the overall level of transparency and accountability in this project?

d. How is the project monitored for signs of corruption or misuse of funds?

- Follow-up: Are there any gaps that could lead to corrupt practices?

Collaboration Dynamics

1. How would you characterize/describe the collaboration?
2. Who provides funding for the collaborative effort? How is the funding distributed among actors and committees? For what purposes is the funding used?
3. Is there a facilitator for the collaborative effort? If yes, how effective are they in their roles?
4. How would you describe your relationship with the organizations/partners involved in implementing the project?

a. What strategies are used to facilitate open dialogue between different stakeholders in the project?

b. Do you trust the other partners involved in the project?

c. Do you trust the TAs and farmers who depend on forests for livelihoods? Follow-up: What influences this trust?

5. How is information shared among the actors involved in the project?

a. Are there any barriers to effective communication?

6. How do you manage the diverse interests and expectations of different stakeholders?

a. Can you give an example of a conflict that arose and how it was resolved?

b. What are some of the main challenges faced by collaboration?

c. How have these challenges been tackled?

Policy Outputs

1. In your opinion, what concrete outputs or deliverables have resulted from the KCALP collaboration so far?

Follow-up: Have these outputs led to any notable policy changes or institutional shifts in REDD+ implementation?

2. How have these outputs and outcomes been communicated to relevant stakeholders, including local communities and the broader public?

Follow-up: What mechanisms have been used to ensure transparency and inclusivity in sharing these results?

3. Beyond formal deliverables, what do you see as key intangible benefits of the collaborative process (e.g., strengthened relationships, shared learning, capacity building)?

Follow-up: How do these benefits contribute to the perceived success or legitimacy of the project?

4. What kind of feedback, positive or critical, have you received from local communities regarding the KCALP project's design and implementation?

Follow-up: Are there particular elements that communities have expressed satisfaction or dissatisfaction with?

5. In your view, have there been noticeable changes over time in how stakeholders engage with REDD+ processes through KCALP?

Follow-up: What factors, internal or external, do you think have influenced these changes in participation?

6. To what extent do you think the project's outputs and outcomes reflect the values, priorities, and interests of various stakeholders involved?

Follow-up: Have there been any tensions or trade-offs in balancing these interests?

7. What types of additional support (e.g., technical, financial, institutional) would be necessary to sustain or scale the impact of the project in the long term?
8. Is there anything else you would like to share about your experience with KCALP, especially in terms of how the project has been designed, implemented, or received by local actors?

B: Community Representatives: (HMB, Sub-HIA, CREMA, and CRMC Committee Members)

1. What powers or authority do the HMB, Sub-HIA, CREMA, and CRMC have to respond to the needs of local communities?
2. What additional powers or responsibilities do you think would help these local HIA actors perform more effectively? Could you please elaborate?
3. Can you describe your collaboration with the project partners, the District Assembly (including the District Forest Department), and traditional authorities?
4. What role do the HMB, Sub-HIA, CREMA, and CRMC play in the implementation of the KCALP project under the GCFRP?
5. Are you involved in the decision-making process?

a. How do you perceive your involvement in the design of the project?
b. Can you describe a specific instance where you participated in a decision about the project?
c. Do you feel that your inputs and needs have been adequately incorporated into the project design? If yes, how?
d. Are there any barriers that have prevented you from participating more fully in decision-making? If so, what were they?

e. What mechanisms are in place for you (community representative) to voice your concerns?

6. In what ways does the project meet the needs and priorities of local communities and farmers? (Probe with, for example, resources, training, capacity building, technology, etc.)

7. Have you faced any challenges or issues with the project that you believe were not sufficiently addressed?

8. Do you believe and support the HIA's capacity for implementing collaborative forest land use governance?

9. Can you explain how representatives are selected for the HMB, Sub-HIA, CREMA, and CRMC?

C: Traditional Authorities

1. Why do you choose to collaborate with external actors such as ENGOs, CSOs, government agencies, or companies in the REDD+ project?

a. Do you feel that traditional perspectives and local knowledge are adequately respected and integrated into land use planning?

b. What do you see as the main benefits of this project?

c. Do you have access to funding for the project? If so, how is the funding allocated or distributed within the community?

2. Can you describe your role as a traditional authority within the current HIA governance structure?

a. How would you describe your role in the HIA governance structure?

b. Has your authority or influence in local decision-making changed since the HIA was introduced? In what ways?

c. How are you involved in decision-making processes, and how do you influence which community needs are addressed?

d. Do you feel the program recognizes and supports your role in land and resource governance?

e. Do you feel your ability to meet community needs has been strengthened or reduced under this governance structure?

3. Do you feel that community members still trust your leadership under the current arrangement?

a. What contributes to that trust, and whose interests do you believe you represent in the HIA context?
b. Do you believe you have sufficient influence in shaping decisions and policies related to the REDD+ project?
c. What would you like to see improved in terms of how traditional leaders participate in or influence project outcomes?

4. Do you feel that the decision-making processes under the HIA are fair to traditional leaders and their communities?

a. Are your views and those of the community genuinely considered when key land use or forest-related decisions are made?
b. Are there any areas where you believe your voice should carry more weight?
c. Do you support the goals and activities of the GCFRP and the Kakum project?
d. What aspects of the program do you find most valuable or aligned with your priorities as a traditional leader?

5. How satisfied are you with this project overall?

a. What benefits have you or your community experienced from participating in the GCFRP so far?
b. What aspects of the program do you find most valuable or aligned with your priorities as a traditional leader?
c. Are there any aspects of the GCFRP that you are concerned about or would like to see changed?
d. Do you trust the intentions and actions of the government and project partners involved in the GCFRP?
e. What would need to improve for you to continue supporting the project long-term?

6. Is there anything else you would like to share about your experience with the project that we have not discussed yet?

D: Local Government Authorities (District Forest Department, Planning Office, Wildlife Division)

1. How was your department first informed about the project and its objectives?
2. How well do you understand the project's goals and objectives in the Kakum landscape?
3. Can you share information about the local actors and institutions you collaborate with in the Kakum landscape, and how you are working together?
4. Can you explain how your department collaborates with project partners, the local community representative, and other local HIA actors in the Kakum landscape to implement projects?
5. How are representatives chosen from the different stakeholder groups?
6. How would you characterize the role of local government authorities in the decision-making process for the GCFRP, and what influence do they have on the outcomes in practice?
7. Is there a facilitator who guides the collaboration with local actors and decides with whom you work on the ground?
8. Can you describe the process of selecting stakeholders to be involved in the project?
9. Can you tell me who you see yourself representing in your role under the current governance structure?
10. In your role, how do you ensure that local voices are heard, and how do you follow up on their needs and interests?
11. Can you describe who the local government institutions are accountable to under the new governance arrangements and how this accountability is implemented?
12. In your view, do the current governance structures give local actors enough influence to ensure that community needs are truly heard and acted upon?
13. How do you perceive the capacity of the HIA to foster collaboration among local stakeholders for REDD+ project implementation?

Follow-up:

- To what extent do you think local actors support the HIA and its role in collaboration?

- Are there areas where you feel the HIA's approach to fostering collaboration could be improved?
- What changes or improvements would you suggest to make the HIA more effective in strengthening local stakeholder collaboration?

14. Is there anything else you would like to share about your experience with the project that we have not yet discussed?