



Embedding Governance and Accountability in Sustainable Forest Management: The Case of REDD+ Implementation in Ghana.

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Use of Artificial Intelligence (AI)

The authors declare that we have not used AI in producing any parts of this report. All works used have been duly acknowledged.

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Executive summary

The introduction of the Reducing Emissions from Deforestation and Forest Degradation (REDD+) project in 2007 by the United Nations Conference of the Parties in Bali, Indonesia, as part of the Paris Agreement, was aimed at addressing deforestation, reducing greenhouse gas emissions and mitigating climate change by incentivising countries to conserve forests. Under the United Nations Framework Convention on Climate Change (UNFCCC), developing countries can receive results-based payments for reducing emissions through REDD+ activities.

Over the years, a number of countries have been engaged in this results-based project, with Ghana becoming the second African country, following Mozambique and the first in West Africa, to receive payments from the World Bank's Forest Carbon Partnership Facility (FCPF). The FCPF disbursed \$4,862,280 to Ghana, acknowledging the reduction of 972,456 tons of carbon emissions during the initial monitoring period. In light of project's success in Ghana, this report, therefore, focuses on exploring and understanding the governance and accountability mechanisms that have made the REDD+ implementation in Ghana successful. The report employs a qualitative research design, utilising semi-structured interviews with stakeholders in the REDD+ space, focus group discussions with four beneficiary Hotspot Intervention Areas (HIAs), and insights from strategic documents on REDD+ from January 2024 to March 2025. These pieces of data are analysed using thematic analysis.

In relation to the objective of understanding the governance and accountability mechanisms in REDD+ implementation, the findings suggest that the Forestry Commission's laws and traditional authorities' by-laws worked in synergy to ensure regulatory compliance and combat unlawful exploitation of forest resources, thereby promoting sustainable forest management. However, stakeholder engagement is hindered by power dynamics which negatively impact decision-making and project implementation. While the dominant governance pertaining the REDD+ project relies on the government's political and coercive authority, it also encourages community participation by involving traditional authority necessitated by the land ownership and tenorial system in Ghana. On account of the existing land ownership system, the REDD+ governance mechanism includes a bottom-up approach to programme planning, which includes the accountable stakeholders, namely; the traditional authority, the local assemblies,

farmers, the Government, COCOBOD, Forestry Commission, Cocoa Processing Companies, Civil Society Organisations and Non-Governmental Organisations, who collaboratively supervise the execution and advancement of forest conservation initiatives. The findings reveal differing views among stakeholders on the REDD+ verification mechanisms, stemming from a limited understanding in this domain, despite the existence of an external verification mechanism by REDD+ funders to ensure consistency between project aims and implementation outcomes.

Furthermore, the findings on stakeholder perceptions and experiences indicate that, although collaboration is central to the implementation process, the level of inclusion and participation of some stakeholders in accountability structures remains low. This underscores the need for sustained capacity building to support the project.

The developmental outcomes and social benefits in the Hotspot Intervention Areas from funds received from this project have also deepened the trust in the project and commitment to the project's objectives. On the findings regarding the enablers, one enabler of the success of the REDD+ in Ghana is the use of the collaborative approach from its inception. However, alternative land uses, such as illegal small-scale mining, hamper the gains made under this project, with bureaucratic hurdles and delays in information dissemination being some shared barriers to programme effectiveness. Regarding the MRV, the findings suggest that the Measurement, Reporting and Verification framework is a key pillar to the success of the REDD+ project but requires a collaborative approach among all the accountable stakeholders to implement. However, there seems to be low involvement of accountants largely due to inadequate training and capacity to engage in the MRV process.

This report, therefore, highlights that REDD+ has achieved positive outcomes based on its collaborative and inclusive approach in setting up and implementing governance and accountability mechanisms. However, to ensure REDD+ outcomes are preserved and to inspire lasting behavioural changes, stakeholders emphasised the need for sustained capacity-building initiatives and long-term incentives. Effective monitoring and accountability structures are deemed insufficient by community stakeholders, accentuating the need for stronger enforcement and regular audits to ensure REDD+ objectives are achieved and reported transparently. Enhancing the MRV (Measurement, Reporting and Verification) capacity of

internal stakeholders through targeted training would improve project implementation, which is essential for effective REDD+ governance and accountability.

The emergence of the International Public Sector Accounting Standards Board (IPSAS) Sustainability Reporting Standard (SRS)'s *Climate-related Disclosures* underscores the need to involve accounting professionals not only in the management of REDD+ funds but also in understanding the nuances of the REDD+ programme and the MRV processes. Therefore, positioning the accountancy profession in this space is very critical to how accountants respond to making an impact in the environmental space. This is important because, considering their roles, certification and reputation in varied organisations, they are strategically positioned to do more. The legitimacy that the profession holds as a public interest institution requires a responsibility to just not be responsible for the technical requirements of the profession, but also for the social and environmental aspects as well. In the REDD+ space, there are therefore various opportunities for the accounting profession to play an active part in the accountability efforts. Currently, the only finance professionals involved in this process are those working for the funders, which could mean that if/when the funding is withdrawn, they may exit the project not only with financial benefits but also with transferable skills that could have been disseminated to other professionals, to ensure the project's sustainability.

To play a more active part in the REDD+ space, specifically, the district accountants and internal auditors could be more active in the REDD+ project implementation by playing a mentorship and Coaching role to the Hotspot Intervention Areas (HIA) Treasurers, who have limited accounting knowledge. This capacity building would strengthen the governance and accountability mechanisms even when the funding ends. Generally, the professional accountancy organisations (PAOs) should be more active during the policy implementation phase, not just at the time of implementation. This will allow them to consistently ask accountability-related questions in the implementation of climate change-related projects and have more environmental and carbon accounting training embedded in their professional curriculum and their Continuous Professional Development programs.

1.0. REDD+ accountability

1.1. Introduction

Climate change is primarily driven by increasing CO₂ and GHG emissions, exacerbated by agricultural and forestry practices, particularly in developing countries (Morita & Matsumoto, 2023). Forest destruction and land use change contribute significantly to GHG emissions, accounting for approximately 24% and leading to loss of biodiversity (Morita & Matsumoto, 2023). In Ghana, approximately 135,000 hectares of forest are converted annually for cocoa plantation expansion, highlighting the urgent need for sustainable practices (Andoh & Lee, 2018). Forests play a crucial role in mitigating climate change by absorbing and storing CO₂, thereby stabilising the climate (IUCN, 2021). The introduction of REDD+ in 2007 aimed to address deforestation and reduce GHG emissions by incentivising countries to conserve forests. REDD+ seeks to mitigate climate change by reducing deforestation and forest degradation, ultimately lowering GHG emissions and increasing carbon removal from the atmosphere (Andoh et al., 2022). In light of the project's success in Ghana, this study focuses on the governance and accountability of the REDD+ implementation in Ghana, given that in January 2023, Ghana became the second African country, following Mozambique and the first in West Africa, to receive payments from the World Bank's Forest Carbon Partnership Facility (FCPF). The FCPF disbursed \$4,862,280 to Ghana, acknowledging the commendable reduction of 972,456 tonnes of carbon emissions during the initial monitoring period from June to December 2019.

This research is situated within the broader context of sustainability accounting, with a specific focus on the REDD+ project. Climate change is driven primarily by the increasing amount of carbon dioxide (CO₂) and other greenhouse gases (GHG) with agriculture and forestry practices among the major drivers of global emission especially in developing countries. It has been estimated that forest destruction and land use change account for 24% of GHG emissions and loss of biodiversity. Specifically, in Ghana, there has been a conversion of approximately 135,000 hectares of forest annually for cocoa plantation expansion (Andoh & Lee, 2018). With this essential natural resource undergoing such depletion, it has become imperative for global discourse and action, resulting in several international conventions, protocols, and interventions to address these issues and achieve sustainable forest management (Andoh et al.,

2022). The importance of climate action at the macro level has also brought sustainability and ecological responsibility in business to the fore.

One action for mitigating climate change is to protect the forest system. According to the International Union for Conservation of Nature (IUCN) (2021), forests absorb and store carbon dioxide (CO₂) in their biomass, thereby reducing the carbon content in the atmosphere, which in turn aids in stabilising the climate. Typically, the REDD+ project sought to provide economic motivation to developing countries to aid in efforts to halt forest cover losses and reduce carbon emissions (Andoh et al., 2022). Thus, one key characteristic of this project is the financing of the costs of the policy processes, implementation process and actions that may bring the necessary change in the forest sector (Streck, 2012). The REDD+ project since its initiation, requires partnerships with multiple stakeholders to ensure that the project deliverables are achieved (Shin et al., 2022). These partnerships call for an attitude of governance and accountability. However, the issues surrounding leakages as the governance and implementation of the project progresses have also been a cause for concern for several stakeholders, which requires a deeper understanding (Streck, 2021).

The main purpose of this research project is to understand the governance and accountability mechanisms, relationships, and reactions of the multiple stakeholders in implementing the REDD+ project in Ghana.

1.2. Research objectives

The following are the objectives of this project:

1. To investigate the governance and accountability mechanisms embedded in the REDD+ project.
2. To explore the perceptions and experiences of stakeholders involved in the REDD+ implementation regarding governance, accountability, and outcomes
3. To identify enablers and challenges in the REDD+ implementation, particularly focusing on addressing leakages and enhancing effectiveness in reducing deforestation

4. To understand the implementation of the Measurement, Reporting and Verification (MRV) framework under the REDD+ and the role of accounting and accountants in this process

1.3. Research approach

The data collection tools employed for this study are semi-structured interviews and focus group discussions, to help to elicit the viewpoint and lived experiences of participants. Interviews provide a useful way for researchers to learn about the world of others, taking note of different cultural meanings and different worldviews, and providing a rich set of data (Qu & Dumay, 2011). The interviews adopted a flexible, participant-centred approach that encouraged open discussion, and prioritised participants' voices, with researchers using follow-up questions to clarify responses.

The sampling approaches used are purposive sampling and snowballing sampling, as there was a need to target individuals with sufficient knowledge of REDD+ activities. Our selection of participants through purposive sampling and relying on their recommendation of other knowledgeable individuals in the REDD+ space (snowballing sampling) gave us an assurance that the collected data was reliable. Interviews were therefore conducted till the point of saturation, where 21 participants had been interviewed, and the likelihood for new themes to emerge from more interviews was low (Kerr et al, 2010). Before conducting the interviews, ethical clearance was obtained from the Research Ethics Committee at the Faculty of Business, Law and Politics at The University of Hull, United Kingdom. Ethical procedures were upheld to ensure confidentiality, and participants' identities were protected. Participants were given letters of informed consent and information sheets that provided them with a general overview of the study, information about the research team, and an explanation of their rights to participate freely or decline participation without any consequences.

The stakeholders involved in the REDD+ Project were interviewed; this included the REDD+ Office under the Forestry Commission, officials of the World Bank as funders, NGOs and Private sector companies involved in the REDD+ process and some HIA leaders. One key stakeholder is the community in which these interventions are being conducted. Thus, we chose 4 communities in which the project is being implemented, to really understand the community experiences beyond the other stakeholder experiences. These were conducted in various

communities and district areas within 4 HIAs of the forestry landscape in Ghana, namely, Atiwa, Juaboso-Bia, Sefwi Wiawso and Kakum. A total of 21 interviewees, consisting of community leaders (traditional authority-7, district assembly leaders-5) and district/municipal authorities (municipal planning officers-5, district accountants-2, HIA treasurers-2), as well as, four focus group discussions in 4 of the major communities of implementation within each HIA, to gain a better understanding of the social, economic, and political environments in and around the implementation of the project. During the interviews and focus group discussions, questions pertaining to the general implementation process, answerability, enforcement, and outcomes of the REDD+ project were asked. However, accountants were specifically asked questions on the monitoring, reporting, and verification (MRV) framework.

Data analysis

In analysing the data, this study adopts content coding of the interviews using an Excel spreadsheet to manually categorise the raw data into first-order and second-order themes. The recorded interviews were transcribed and used alongside the field notes. After transcription, they are coded to get the themes. Following Miles et al. (2014), this study adopts the inductive thematic data analysis approach for the first four research objectives to identify patterns and themes directly from the data without imposing presuppositions or a predetermined coding structure. This involves cleaning and familiarising with the data, content coding of the data and categorisation of similar themes. The data analysis process and interpretations followed an iterative process of moving back and forth between documents, literature, codes and themes to eliminate confirmatory bias. Reliability in the coding process was ensured through the research team assigning the inductive coding to two of the authors, while the other authors reviewed. The two authors independent coding ensured inter-coder reliability, thereby mitigating biases. The inter-coder reliability was 80% after the first independent coding by the two researchers, after which a meeting was held to discuss. A re-review of the first and second-order codes moved the inter-reliability to 90%. As such, meeting reviews of the coding and theme generation ensured high reliability. Aside from meetings regarding the coding process, throughout the project, the research team was mindful of biases associated with qualitative research and held frequent meetings to discuss approaches employed to mitigate potential risks.

Table 1a: Stakeholder groups information table

Interviewee	Code For Analysis	Date Of Interview	Duration Of Interview
Forestry Commission official	FC 1	Jan 16, 2024	01:00:04
Forestry Commission official	FC 2	March 5, 2025	00:51:36
Forestry Commission official	FC 3	March 7, 2025	00:43:14
Community member	COMM 1	January 23, 2024	00:52:00
Community member	COMM 2	January 23, 2024	00:59:39
Community member	COMM 3	January 23, 2024	00:46:37
NGO	CSO 1	January 26, 2024	01:00:00
NGO	CSO 2	February 28 2024	00:56:09
NGO	CSO 3	March 1, 2024	00:52:09
Private Sector	PS 1	February 6, 2024	00:57:17
World Bank	Funder 1	March 4, 2025	00:38:58
World Bank	Funder 2	March 7, 2025	00:41:43

Table 1b: Stakeholder groups information table—community engagements

Stakeholder Groups	Number of Participants	Participant Code	Interview Duration
Municipal Planning Officers	5	MPO1	00:58:43
		MPO2	
		MPO3	01:07:56
		MPO4	00:42:49
		MPO5	01:21:01
Assembly Members	5	AM1	00:52:55
		AM2	
		AM3	
		AM4	
		AM5	00:27:03
Traditional Authority	7	TA1	00:57:31
		TA2	
		TA3	
		TA4	00:29:16
		TA5	00:23:45
		TA6	00:46:41
		TA7	
District Accountants	2	DA1	00:46:41
		DA2	00:25:55
HIA Treasurers	2	TRE1	00:06:36
		TRE2	00:06:20
Total	21		

Table 1c: Focus groups information table

Focus Groups	Number of Participants	Male	Female	Code	Interview Duration
Community 1	10	7	3	FG1	00:30:17
Community 2	8	5	3	FG2	01:03:21
Community 3	11	6	5	FG3	00:59:18
Community 4	7	6	1	FG4	01:02:25
Total	36	24	12		

2.0. REDD+ governance and accountability literature review and theoretical lens

2.1. The REDD+ project

REDD+ represents the suite of interventions that seek to reduce emissions from deforestation and forest degradation while incorporating the role of conservation, sustainable forest management and enhancement of forest carbon stocks in developing countries (Andoh & Lee, 2018; Saeed et al., 2018). Countries that intend to undertake REDD+ activities are required to develop a national strategy that articulates measures aimed at addressing the drivers of deforestation and forest degradation, and other associated issues, including land and tree tenure, forest governance, gender, and safeguards. In Ghana, the government has implemented measures to advance sustainable forest management within the country. One such initiative is the initiation of the Community Forest Resource Management Programme (CFRM) in 2002, which was later officially introduced and extended to include 26 districts across the country (Nukpezah & Alemagi, 2020).

2.2. REDD+ governance and the role of stakeholders

Effective governance is essential for the success of REDD+. Weak governance within REDD+ highlights the potential for private interests to undermine conservation efforts, leading to issues such as illegal logging and forest degradation (Corbera et al., 2011). However, concerns also arise from the delayed and ineffective implementation of REDD+, casting doubt on its overall impact and categorising it as a passing trend in conservation. Key challenges include the neglect of investments in agricultural systems within REDD+ (Foley et al., 2011), the failure to significantly reduce deforestation rates despite prioritisation (Forest Declaration Assessment Partners, 2022), and the mixed reports on its effectiveness in reducing emissions (Foley et al., 2011). Involving indigenous peoples and local communities is crucial within REDD+, yet there's a need to enhance community capacity and address criticisms of expert-oriented approaches that overlook local forest management practices (Aryal et al., 2024). Transparency and inclusion of multiple stakeholders face obstacles such as limited information disclosure and complex benefit-sharing plans, leading to financial irregularities and conflicts (Cadman et al., 2017). Overall, the effectiveness of REDD+ hinges on addressing governance challenges, enhancing stakeholder participation, and striking a balance between conservation goals and sustainable development.

2.3. Accountability

Accountability in the context of REDD+ revolves around compliance with established rules and procedures promoting environmental sustainability goals, including emissions reduction and forest protection (Corbera & Schroeder, 2011). Additionally, discussions on accountability often touch upon questions of liability for non-compliance and the associated penalties for irresponsibility. Both Amaeshi et al. (2016) and Bebbington et al. (2018) highlight that firms respond to shared expectations and institutional arrangements, both formal and informal. Additionally, Corbera and Schroeder (2011) and Shum and Yam (2011) note that institutional inefficiencies within larger governance processes may contribute to the high incidence of deforestation and degradation of flora and fauna. In developing countries facing institutional voids, accountability challenges arise due to weaknesses in governance arrangements (Adomako et al., 2019; Liedong et al., 2020). Weakness in accountability can lead to governance failures and provide fertile ground for corruption (Uberti, 2016). For example, the customary governance arrangements in Ghana, where authority over stool lands lies with chiefs and tribal councils, have contributed to challenges in land administration due to accountability gaps (Abdulai, 2017; Lawer et al., 2017).

One of the major risks associated with the REDD+ programme is leakages, which may not be wholly unavoidable but must be managed properly, so that it is not a counterproductive endeavour. Leakages have been defined to be *“the decrease or increase of GHG reductions and removals outside of a project or programme boundary that is either directly or indirectly attributable to the intervention implemented within those boundaries”* (Atmadja & Verchot, 2012, p. 313). Streck (2021) describes these leakages as spillovers that could be positive or negative, and the impact could be direct (primary GHG leakage) or indirect (secondary GHG leakage).

Monitoring, Reporting, and Verification (MRV) frameworks have gained importance, especially as they help minimise information asymmetries that create adverse selection and moral hazards in incentivised climate change strategies, such as REDD+ (Neeff et al., 2017). REDD+ thrives on functional MRV frameworks (Palmer Fry, 2011). This is because MRV frameworks help to monitor carbon emissions and removals resulting from REDD+ activities (Kim et al., 2021). Specifically, measurement may entail collecting information regarding GHG emissions; reporting may include compilation of GHG emissions information into

formats accessible to users; and verification may be in the form of establishing reliability through the periodic subjection of the reported GHG emissions information to independent review. Done well, the verification aspect of the MRV framework goes a long way to providing feedback for future climate mitigation initiatives. A key feature of a robust MRV system is that it should be built on general monitoring and reporting principles such as completeness, accuracy, consistency and transparency (Tang et al., 2018). Singh et al. (2016) posit that there are three types of mitigation-related MRV: MRV of GHG emissions, MRV of mitigation actions, and MRV of support. Effective mitigation of climate change requires integration of all aspects of the MRV framework: measurement (M), reporting (R), and verification (V). REDD+ countries adopting efficient MRV have received results-based payments (RBPs) for carbon emissions reduction outcomes (Kim et al., 2021).

However, most REDD+ countries have limited capacity to effectively implement REDD+ MRV (Andoh & Lee, 2018; Kim et al., 2021). Interestingly, although accounting principles have been adapted in MRV systems, the skills required for the development of effective MRV systems, such as carbon accounting and budgeting, as well as the integration of financial and climate change information systems, are lacking in the accounting profession (ACCA, 2011). With the accountancy profession's vast amount of experience in providing assurance over information, the development of new knowledge and mechanisms that will reshape skills necessary for climate reporting and measuring of science-based climate initiatives such as REDD+, would go a long way to provide the confidence and trust in the capabilities of and integrity of the profession.

3.0. Contextual background of REDD+ in Ghana

The initiation of efforts towards crafting a national REDD+ strategy for Ghana began in 2008 when the country joined the Forest Carbon Partnership Facility (FCPF) REDD+ Readiness Programme facilitated by the World Bank. Ghana's submission of a Readiness Plan Idea Note (R-PIN) and the subsequent approval of its REDD+ Readiness Preparation Proposal (R-PP) in 2010 paved the way for securing funding from the FCPF (Forestry Commission, 2016). This financial support was instrumental in carrying out readiness activities starting from 2012. The R-PP serves as a blueprint for REDD+ readiness implementation and outlines the key processes, systems and frameworks which Ghana needs to complete in order to enable the country to implement the REDD+ process (GOG, 2010).

In the preparation of Ghana's R-PP, an assessment was conducted to identify the drivers of deforestation and forest degradation. This assessment aimed to identify the root cause of environmental challenges, providing critical insights to inform subsequent decision-making. From this, 13 strategic options were deemed suitable for addressing the identified drivers. These strategic options were further analysed during the strategy development process and resulted in the selection of the priority national and sub-national REDD+ programmes. Ghana's REDD+ Strategy has been designed to meet the requirements of the Warsaw Framework on REDD+ and other decisions of the Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) (Johnson, 2021). In developing the national REDD+ strategy, attention has been paid to national circumstances and developmental aspirations. The process took cognisance of major national policies, including the national climate change policy (MESTI, 2013) and the revised Forest and Wildlife Policy of Ghana (Ministry of Lands and Natural Resources, 2012).

3.1. Ghana's approach to REDD+ implementation

Ghana has adopted a nested approach for implementation of REDD+ in a phased programmatic approach with an initial focus on the High Forest Zone and scaling up to cover the other distinct major ecological zones of the country, such as the Savanna Zone. The proposed measures and interventions targeted at addressing the drivers of deforestation and forest degradation are linked with the production and supply chains of major commodities and defined by clear ecological boundaries. With Ghana acknowledging that the actions required to achieve REDD+

are complicated and multi-dimensional, a National REDD+ Strategy was meant to serve as a guide and framework for achieving REDD+ in a well-coordinated manner by pursuing a broad set of actions to tackle deforestation and forest degradation at the landscape level (Forestry Commission, 2020). This strategy is envisioned as a 20-year working document, subject to periodic review as new ideas and an enhanced understanding of REDD+ emerge from research and on-the-ground implementation of REDD+ activities in Ghana (Forestry Commission, 2016).

REDD+ implementation in Ghana is a collaborated effort between the Forestry Commission (FC) and Ghana Cocoa Board (COCOBOD). In developing and coordinating this programme, there has been a departure from conventional institutional practices such as the single sector focus which normally characterise programmes of this nature. Other collaborations in the implementation process include the involvement of some cocoa and chocolate companies in the world, such as Mondelēz International, Olam, Touton, and the local and traditional authorities. The REDD+ programme covers an area of 5.92 million hectares in the southern parts of Ghana. The programme encompasses diverse tropical forest sub-types within the West Africa Guinean Forest biodiversity hotspot. It intersects with 92 administrative districts and 7 regions, including Eastern, Central, Ashanti, Western, Western North, Bono, and Ahafo Regions, which are major cocoa-producing areas of the country (Forestry Commission, 2020).

To prioritise interventions, areas were selected based on assessments of cocoa production dominance, forest threat levels, and the presence of key stakeholders capable of implementing programme activities at the district level. These designated HIAs are governed by multi-tiered governance structures that involve local communities, farmers, and traditional authorities (Forestry Commission, 2018). Implementation targets at least six HIAs spread across the landscape. The selection of these initial HIAs was driven by the involvement and commitments of key stakeholders, including private sector cocoa companies and NGOs, who act as primary investors and implementers. These HIAs are strategically important for achieving programme objectives related to forest protection and cocoa production (Forestry Commission, 2020).

In January 2023, Ghana became the second African country, following Mozambique, to receive payments from the World Bank trust fund for reducing emissions resulting from deforestation and forest degradation (World Bank Group, 2023). The World Bank's Forest Carbon

Partnership Facility (FCPF) allocated approximately 4.8 million US dollars to Ghana in recognition of the country's efforts in reducing 972,456 tonnes carbon emissions in the Cocoa Forest Mosaic landscapes for the first monitoring period of the programme (Allanic, 2023). This recognition is especially crucial for mitigating the effects of climate change globally. Ghana's status as the world's second-largest cocoa producer highlights the significance of this achievement. This is because cocoa production, which is a major driver of the country's economy, significantly contributes to deforestation and forest degradation, particularly in the southern and western regions of the nation.

4.0. Presentation of empirical findings

Sections 4 and 5 present the main findings with regard to the study's research objectives. Specifically, this study examines governance and accountability mechanisms, as they are critical to the effectiveness, sustainability, and success of the REDD+ project. It also assesses the perceptions and experiences of stakeholders regarding governance, accountability, and outcomes of the REDD+ programme, identifies the enablers and challenges, and finally, it examines the MRV framework under the REDD+ project and the role of accounting and accountants.

Summary of Findings

THEME	SUB-THEME	EVIDENCE
Implementation Process	❖ Multi-stakeholder Approach, ❖ Evolving complexities vs initial expectation of a simple process, ❖ 3 phases Approach, & ❖ Political support and will is essential.	<i>"One key thing I admire about the whole process has been how inclusive it's been. They've tried to include a broad spectrum of stakeholders right from the inception"...(CSOs)</i>
Accountability Mechanisms	❖ Collaborative supervision ❖ Verification. ❖ CSOs very critical in initial engagements, local community	<i>"The committee leaders make sure the laws are enforced. Every community has its committee, and they are responsible. We the community members, have the responsibility of abiding</i>

	ownership/empowerment in the 3 rd phase,	<i>by the laws” (Accountants’ Rep)</i>
Outcomes	Results-based Outcomes: Carbon and Non-Carbon Benefits.	
Challenges of Implementation-	❖ Contradiction on management of leakages under REDD+, ❖ Efficiency issues ❖ Window dressing efforts, the core problem still exists.	<i>“the effectiveness of the REDD+ is not really evident yet but through continuous education and sensitisation, the project will improve. The negative impacts of climate change will be mitigated overtime”.</i>
Role of Accountants	❖ They play a more passive role ❖ Avenues to move from Spectators to Participants ❖ External perception of the accounting role limited to the financials.	Interviewee 1: <i>“we have no idea of what really happens about it. But that’s exactly what we are talking about, accounting for something.”</i> Interviewee 2: <i>“I have no idea how MRV ensure transparency and accuracy in REDD+ initiatives.”</i>

4.1. REDD+ governance mechanisms

The section presents the empirical findings on the first research objective. The major sub-themes regarding governance mechanisms include regulatory compliance system, stakeholder engagement, and centralised organising system.

4.1.1. Regulatory compliance

Regulatory compliance pertains to the regulations and guidelines established at the local level to oversee the actions of communities and stakeholders engaged in forest management, conservation efforts, and sustainable land utilisation. It involves a set of procedures that ensures that the objectives of the REDD+ are enforced. These mechanisms mainly include by-laws and local policies established by the municipal assemblies to ensure compliance. The following quotations from different stakeholders highlight this:

There are by-laws put in place by the Assembly that have provisions to ensure the implementation of the various activities (DA2).

Forestry Commission has laws to prosecute unauthorised deforestation. The traditional authority has laws for offenders (FG1).

The committee leaders make sure the laws are enforced. Every community has its committee, and they are responsible. We as community members, have the responsibility of abiding by the laws. These committee leaders are backed by the chiefs, which makes it easier to summon the offender at the chief's palace (TA1).

The regulations established by the Forestry Commission permit the prosecution of illegal deforestation and play a vital role in promoting sustainable forest management. Likewise, the involvement of traditional authorities in upholding local customary and by-laws against offenders underscores the synergy between customary practices and formal regulations, which can be crucial for effective conservation efforts in various local settings. The regulations and by-laws provide for sanctions such as paying a fine or issuing a warning to offenders, yet unauthorised land-use has not been thoroughly curtailed.

4.1.2. Stakeholder engagement

Stakeholder engagement is a governance mechanism to bring together different interest groups to engage in idea generation and conceptualisation, decision-making, and implementation. This

initiative is developed around national working group comprising a deputy minister from the Ministry of Lands and Natural Resources, serving as co-chair, as well as representatives from traditional authorities, the private sector, local communities, and the Forestry Commission. Additionally, the broader stakeholder consultative fora in the various implementation communities include district assemblies, traditional chiefs, NGOs, and other social and environmental pressure groups. The following quotations demonstrate this:

We are dealing with a plethora of local communities, different interests at stake, Different private sector entities, civil society organisations (FC 1).

One key thing I admire about the whole process has been how inclusive it's been. They've tried to include a broad spectrum of stakeholders, right from the inception, ranging from traditional authorities, local communities, academia, almost everybody is included (CSO 3).

And then they make sure they gathered information from the grassroots and then brought some representatives of all these stakeholders at the national level to [actually] dialogue and come up with some key information...I would say decision making has been a major outcome at the community and district level to be able to dialogue and contribute effectively (CSO 2).

This underscores the participation of diverse stakeholders in advancing environmental protection and sustainable land management. A key similarity lies in the cooperative endeavours between formal organisations and local communities aimed at achieving environmental sustainability. Additionally, the relevance of effective stakeholder engagement relates to the tenurial ownership structure in which traditional authorities, families, and individuals own 80% of land in Ghana. Thus, REDD+ planning and implementation, as well as benefit sharing negotiations, require the participation of the community of stakeholders who grant legitimacy and social license.

However, stakeholder engagement faces challenges regarding power dynamics among the different stakeholder groups, which adversely affects the quality of the decisions and effectiveness of project implementation. Specifically, power dynamics involve the exercise of influence, authority, and power among the various stakeholders engaged in the decision-making and implementation of the REDD+ initiative. While the government of Ghana through the Ministry of Lands and Natural Resources exercises the most power during negotiations and implementation, other stakeholders like the HIC and district assemblies possess significant influence. The following statements by the representative of a civil society organisation highlight this:

There are always competing demands when it comes to community engagement and even stakeholders (CSO 3).

There are [several] policies that are contradicting each other and there are [several] institutions whose mandate contradict each other, and they do not really understand themselves working together as institutions (CSO 3).

Thus, the strategy to encourage broader participation and engagement has also resulted in tensions and conflicts due to the divergent interests represented at various stages of the REDD+ lifecycle.

4.1.3. Centralised organising system

The dominant role of the government (Ministry of Lands and Natural Resources) has resulted in a centralised organising system. This governance strategy emphasises the coordinating role of the government in organising and bringing different stakeholder and interest groups together, which has resulted in improved and effective implementation.

Once the funds are there and it's being driven by the political view, it's easier to drive everybody on board because at the end of the day, the government has the power to manoeuvre and then to mainstream and even make the decisions, so for me, I think yes, it has worked better compared to other programmes (CSO 3).

The land ownership agreements or arrangements that we have in Ghana, where government owns just about 20%...you know 80% of lands are owned by families, individuals, means that every step of the way we [need] to do a lot more consultation (FC 1).

While the centralised organising system is based on the political and coercive power of the government, there is also an emphasis on promoting community participation through representation from various traditional authorities, as families and individuals own most of the land in Ghana.

4.2. REDD+ accountability mechanisms

The findings regarding REDD+ accountability mechanisms encompass the following second-order themes: accountable stakeholders, collaborative supervision, and verification.

4.2.1. Accountable stakeholders

The nature of land ownership and the existing tenorial system have promoted the accountable stakeholders' mechanism within the REDD+ accountability framework. Specifically, accountable stakeholders encompass all individuals, groups, organisations, and institutions that have vested interest in, are impacted by, or contribute to the design, execution, monitoring, and

outcome of implementation. These include the traditional authority, assembly members, farmers, the Government, COCOBOD, the Forestry Commission, Cocoa Processing Companies, CSOs and NGOs. Thus, having a broad representation of stakeholders, as discussed in the stakeholder engagement mechanism, is a strategy to promote inclusivity, acceptance, and legitimacy. Additionally, the system of tenurial ownership in Ghana has raised land tenure challenges because of the involvement of the different local communities and the multiple, and often contradictory interests at stake.

The higher-level traditional authorities, who are [involved] in decision making, I don't know. There hasn't been any big forum that I don't see them [traditional authorities] there. They are always there. They work with the queen mothers. They even had some sensitisation in the whole country for all queen mothers about restoration (FC 1).

To address this, the REDD+ governance mechanism includes a bottom-up approach to programme planning based on active participation of traditional authorities.

4.2.2. Collaborative supervision

Collaborative supervision refers to the collaborative process among diverse stakeholders to supervise, assess, and evaluate the advancement and execution of initiatives pertaining to forest conservation, carbon sequestration, and community involvement. Collaborative supervision provides domains of responsibility to accountable stakeholders, which guarantees that the REDD+ project is implemented transparently, responsibly, and efficiently. Thus, the accountable stakeholders have specific obligations, including compliance monitoring and enforcement. This theme is highlighted in these statements:

Local government, that is, the assembly, because they formulate the by-laws. But all the actors should be held accountable because they all play a part. Traditional authority because they are the implementers and custodians of the lands (FG1).

COCOBOD is key to ensure accountability because they have to educate the farmers [on the REDD+ project] (FG3).

We are motivated by what we are told by the leaders of the project and the benefits as well. This is what promotes collaboration. We honour invitations to programmes organised by REDD+ by attending. We come back and inform our people. This is what promotes collaboration (TA 2)

The above quotations underscore the significance of collaboration among stakeholders in the management of environmental and agricultural initiatives. They converge on the domain of

responsibility by emphasising the contributions of various stakeholders in promoting accountability. A notable similarity is the acknowledgement of traditional authorities as stewards of the land, while COCOBOD and local government entities are identified as essential in educating farmers and developing by-laws, respectively. The distinction between them lies in their specific duties: the first quotation emphasises the assembly's function in establishing legal frameworks and ensuring stakeholder accountability, whereas the second quotation concentrates more specifically on COCOBOD's role in farmer education. Collectively, they illustrate how various actors play different yet complementary accountability roles to promote effective land management and environmental governance.

4.2.3. Verification

The theme of verification involves the procedures and frameworks employed to evaluate, authenticate, and substantiate the advancements of REDD+ initiatives. There is an inconsistency in the awareness of the verification mechanism, as indicated in the following quotes:

I am not aware of any verification mechanism involved in the REDD+ project in this district (DA 1).

The planning unit of the assembly is responsible for any monitoring of [REDD+] activities, if any, in the project area (DA 2).

These statements demonstrate partially convergent views regarding awareness of the verification mechanism. This may be due to a lack of understanding of the verification mechanism, or the absence of a verification mechanism may account for this. However, there is an external verification mechanism by the REDD+ funders to ensure consistency between project aims and outcomes of implementation, as shown in the following statements:

World Bank itself has a lot of measures in place to check that funds are used advisedly for the purpose for which they have been released (FC 1).

We wouldn't have still been getting this kind of international support. And I'm not sure the international support we are getting are also based on only reports without verification (CSO 3).

And we also found out that the whole REDD+ process came up with a robust architecture which we call the Warsaw framework, which was going to help us be accountable, help us come up with the right baselines for verification, also help us to respect people and their environments (FC 1).

These statements reveal the existence of an external verification mechanism by the REDD+ funders, however, community stakeholders are oblivious to these mechanisms.

4.3. The perceptions and experiences of stakeholders involved in the REDD+ implementation regarding governance, accountability, and outcomes

This section highlights the empirical findings with regard to the second research objective, which focuses on the perceptions and experiences of stakeholders involved in the REDD+ implementation regarding governance, accountability, and outcomes. The main sub-themes concerning the perceptions and experiences of stakeholders involved in the implementation of REDD+ regarding governance and accountability include governance and accountability structures, governance and institutional roles, community engagement and capacity building, developmental outcomes and social benefits, and monitoring, reporting and accountability structures.

4.3.1. Governance and accountability structures

Stakeholders reported diverse perceptions and experiences related to the governance and accountability framework supporting REDD+ implementation. While these frameworks are generally seen as essential for promoting transparency, fair participation, and proper oversight, their perceived effectiveness and fairness differed notably among different stakeholder groups.

In terms of perceptions of transparency and decision-making, many local communities and civil society organisations have reported limited access to information concerning REDD+ processes, especially those pertaining to funding flows, project selection, and benefit-sharing mechanisms.

A private sector stakeholder highlighted this in the quote below.

There was always this conflict between [us] and Forestry Commission because the same piece of land Forestry Commission wanted it to remain under forestry so that they can always have the trees, and we wanted the trees to be removed so that cocoa farmers can have more cocoa (PS 1).

A community elder also noted as follows:

The Forestry Commission exercised the most power during the negotiations and implementation (TA 1).

Various community members viewed the REDD+ governance structure as a top-down initiative that impacts their traditional land use practices and livelihoods.

A community member pointed out that:

Project leaders met and sensitised the entire community about the project. From there, we, as a community, selected our local leaders. There were leaders appointed at the Zonal and District level...Local level-based leaders make sure we understand and implement the policies of the project. The Zonal level executives take care of the challenges we encounter whenever we are implementing policies (FG1).

However, the government actors generally regarded governance structures as well established.

An interview with the regulatory representative highlighted this as follows.

REDD+ process came up with a robust architecture which we call the Warsaw framework, which was going to help us be accountable, help us come up with the right baselines for verification, also help us to respect people and their environments.

Regarding stakeholders' experiences with participation and inclusion, there were mixed findings. Local communities and farmers often emphasised the lack of genuine participation in governance and accountability processes. Although formal participatory mechanisms are in place, many stakeholders consider them not entirely inclusive. In some communities, stakeholders report significant issues with disorganised governance structures, characterised by unclear roles and responsibilities among various REDD+ implementation stakeholders. This confusion hampers cooperation among local authorities and forest stakeholders, leading to delays and conflicts in decision-making processes.

On the contrary, government officials and donors often perceive stakeholder engagement as adequate, citing local consultations and policy dialogues as evidence. An official elucidates this viewpoint as follows:

The architecture and design are the one that takes the longest time. Because every bit of it is consulted to the core. Everyone involved must be a signatory and agree. Even as implementation goes on, along the way, you find some cracks start forming up, about not considering some other players. It is a continuous process; it cannot be reversed unless you redesign the ERPA. But you can ensure that you are using it as lessons learnt, as you are going forward (Funder 2).

This raises concerns about the lack of engagement with this key stakeholder.

There was a shared view that accountability mechanisms, like grievance redress systems, were often ineffective or rarely used. A community member highlights this as:

The 3% allocated for traditional authorities from the benefit-sharing plan is given to the paramount chief in the area. This makes it difficult for the sub-chiefs to get their share after playing their roles in the project. They sometimes become discouraged because of how the money is shared. If the 3% can be shared in such a way that the sub-chiefs wouldn't have to go to

the paramount chief for theirs, that will be encouraging. Again, the Functional Units (CEC, CRC and Corporate Management Board) mentioned are not paid. They do not have the logistics to work in the HIA. There is no motivation since they do not get any reward for performing their task. The board members lack financial support. This makes it difficult for them to perform their task. They sometimes feel reluctant to perform their task since there is no reward for them (FG Comm 2)

This emphasises the absence of a suitable grievance mechanism in the accountability process. It also underscores the need for improved benefits sharing mechanisms that recognise all involved stakeholders.

4.3.2. Governance and institutional role

Stakeholders' perceptions of governance and institutional roles in REDD+ implementation show both appreciation for coordinated efforts and concern over role ambiguity and institutional overlap. The success of REDD+ governance depends on how clearly roles are defined and the extent of collaboration among institutions at all levels.

Community members and farmers valued the coordinated efforts of key stakeholders. The following quotations highlighted this.

Forestry Commission provides education, as well as seedlings for replanting. Civil and social groups also provide seedlings and education as well. Farmers are planting more trees on their farms to also help carbon reduction (AM 2).

COCOBOD and cooperative groups educate farmers on best farming practice. The community has been involved in the planting of more trees to support the REDD+ project (AM 5).

However, in all four communities, the roles of different institutions in REDD+ are often confused or overlapping, leading to inefficiencies and frustration among stakeholders. An interviewee highlighted this as below:

Forestry Commission, COCOBOD, CSOs, HMB are all responsible for data verification.

This indicates role ambiguity and institutional overlap.

4.3.3. Community engagement and capacity building

Many community members acknowledged efforts to involve them in REDD+ consultations and awareness campaigns. However, they often described these engagements as underdeveloped in all four communities. In some communities, a notable gap exists in

awareness and engagement with REDD+ activities. Community members express a lack of understanding of how REDD+ projects affect their land or livelihood, suggesting that project activities are not well communicated. Stakeholders observed that some institutions lacked the capacity or mandate to perform their roles effectively. This was especially clear at subnational levels, where local communities were expected to carry out REDD+ activities without sufficient resources or training.

An interviewee explained the main challenge with the REDD+ as:

Late release of funds to undertake REDD+ activities. Inadequate training of key officers.

Several community members, including planners and district accountants who were interviewed, voiced their frustration regarding the lack of training and resources to support them in effectively performing their roles.

4.3.4. Developmental outcomes and social benefits

Stakeholders' perceptions of REDD+ are heavily shaped by the extent to which the programme achieves visible and fair developmental results. Although REDD+ is mainly a climate mitigation measure, its success is often assessed based on the social and economic benefits it provides to participating communities.

Many community members and local leaders reported that REDD+ projects had supported alternative livelihoods, such as sustainable agriculture. The quotations below highlight this.

Farmers were reluctant to plant trees in the cocoa farms when the project was initiated in our community. Things have changed now. Farmers now plant trees in their cocoa farms and have adopted modern ways of farming. This has ensured massive growth and has resulted in increased yield (FG Comm 2).

The project has helped in implementing best practices in farming. The project has been effective at reducing deforestation, bush burning and other activities and the regulations on that are now enforced...the weather has improved; heat has reduced Awareness and education has improved. Farming production has improved (TA1).

We have also been introduced to Climate Smart Cocoa which looks at the modern way of coca farming. It ensures that we use the recommended agrochemicals recommended by COCOBOD. Also, we have noticed changes due to the trees... We have seen changes since 2020. Our cocoa trees survive the dry season or the hot weather. Many farmers who went through rehabilitation have new cocoa farms. This is a testimony of the significant impact the project has on the people living here (FG2).

In all the communities we visited, the initiatives resulted in improved access to education, and infrastructure. These co-benefits were highly valued by communities and contributed to positive perceptions of the programme. A community member explained this as follows:

The project completed some school buildings in the community and provided them with desks. Others were provided with pipe-borne water, improving their living standards (FG3).

Another community member in a different district put it this way:

The project has provided some communities with pipe-borne water and has ensured the reduction in tree-cutting activities in our area. We are grateful and will appreciate it if more is done in our community.

However, little change was observed in the two other districts where we conducted this research. This difference indicates that REDD+ benefits are distributed unevenly.

4.3.5. Monitoring, reporting, and accountability structures

Stakeholders generally acknowledged the existence of monitoring systems, particularly those utilising satellite data and forest inventories. However, numerous local actors expressed a sense of disconnection from these systems, citing the absence of community-based monitoring initiatives and limited feedback regarding the outcomes. Below are quotations from community members highlighting this:

To know the amount of carbon funds earned, two indicators were used. They were social and environmental indicators. The social indicator talks about the actions or activities we have to do as farmers before we can benefit from the project. These activities included the governance structure, involvement of stakeholders or traditional authority, and having a management plan. The effectiveness of the management plan is crucial in earning marks. The activities of CSOs and their relationship with the REDD+ project also earn marks. These are the activities and actions under the social indicator. With the environmental indicator, we learnt that a gadget is sent into the atmosphere to record the amount of carbon. We are not privy to the figures available currently concerning the carbon as farmers. The figures are disclosed to the management board (FG2).

I am not privy to any structured framework as such under the REDD+ project. I feel an association should be formed, like the Environmental Protection Association, in our community to educate and monitor how effective the MRV framework is. We do not have the technological gadgets for the measurement of the carbon in the atmosphere, and I feel that act falls under measurement (FG4).

In conclusion, integrating community feedback reveals a complex picture of REDD+ implementation that requires enhanced governance, better integration of agricultural and

environmental policies, more inclusive community engagement, equitable distribution of benefits, and robust monitoring and accountability to ensure effective outcomes. Addressing these issues comprehensively can lead to more sustainable and effective REDD+ programmes that are beneficial to all stakeholders involved.

Regarding reporting mechanisms, the MRV framework was considered robust by government and donor stakeholders, while local communities perceived it differently. An interview highlighted this as:

I have limited understanding on that, but the measurement is what is used to determine the funding available to the area (MPO5).

We need more training to understand the framework (DA 2).

These highlight the need for a framework that considers Ghana's local contexts to empower local community-based accountability.

4.4. Identifying enablers and challenges in the REDD+ implementation

In the previous sections, we provided insights into the governance and accountability mechanisms embedded in the REDD+ project and presented findings on the perceptions and experiences of stakeholders involved in the REDD+ implementation regarding governance, accountability, and outcomes. This section reports our findings on the third research objective, which is to 'identify enablers and challenges in the REDD+ implementation' and, in doing so, addresses the following third research objective of this study. The major sub-theme regarding the enablers is stakeholder collaboration, while the challenges include contradictory land use practices and bureaucratic hurdles.

4.4.1. Activities embedded in the REDD+ project to ensure that strategies and mechanisms adopted are enforceable and achievable

The empirical findings reveal that the REDD+ project stakeholders are conversant with the collaborative approach intended to translate the strategies and mechanisms into a reduction in deforestation. For instance, in response to what activities are embedded in the REDD+ project that promote collaboration, an accountant indicated that collaboration is made possible through:

Sensitisation programmes. Business forums. Townhall meetings. General assembly meetings

However, several stakeholders expressed dissatisfaction with the level of stakeholder collaboration. In some communities, traditional authorities felt excluded from key decision-making processes. Some respondents reported that their contributions were often overlooked despite occasional consultations. Other respondents noted slightly better collaboration but emphasised the need for sustained engagement beyond project inception. Nevertheless, concerning approaches employed to successfully implement the REDD+ initiative, two participants highlighted the following:

“Committees have been put in place for various implementations; the local communities report to the committees, and the committees report to the Assembly; to ensure sustainability and accountability to safeguard the purpose of the REDD+ activities”.

“Constituting a governance structure with functional units serving as communication channels, including the Community Resource Management Committee, Community Engagement Core to the HIA Management Board. We use the radio station and information centres to disseminate information to the farmers. We include chiefs in the project as they are leader of the communities, as well as cooperatives. Annual meetings are held where stakeholders are invited to account to the people, to ensure transparency and build trust”.

Therefore, communities have adopted diverse community-level approaches, all in the bid to sustain the project.

4.4.2. Land-use practices in conflict with the objectives of the REDD+ project

Land-use practices that do not align with the objectives of REDD+ were identified as a major challenge to its implementation. These practices often involve restrictions on forest activities that push deforestation and degradation into adjacent areas, creating a leakage effect. Participants observed that farmers, facing restrictions, expanded agricultural activities into nearby unregulated lands. In one community, for instance, similar leakage issues were noted, but emerging agroforestry initiatives were seen as potential mitigation measures. A participant serving as a funder rep noted that:

“Because they know that there’s leakage, so there needs to be consistency. The idea of it all is to create a consistent approach at landscape so that we keep these trees standing forever because you keep receiving payment for it. But if this year you receive and you do projects at community level, and two years down the line, you bring down all the trees that you receive payments

for, it doesn't work that way. So, it's consistency and knowing that it's a lifelong behavioural change instrument that is being used here.” (Funder 2)

Assembly members from some communities emphasised the need for sustained capacity-building initiatives and long-term incentives to ensure REDD+ gains are preserved. In one community, concerns were raised that short-term incentives failed to inspire lasting behaviour changes, casting doubt on the programme's sustainability. Another problem associated with the REDD+ project is illegal small scale mining, also known as *galamsey in Ghana*, which participants indicated:

“As we are trying to reserve the forest, people are also trying to destroy like the galamsey. We have consistently made them understand that for here, no galamsey and they still keep on coming. I sometimes pity my Chief Executive Officer because people will be luring him” (AM 5).

“Unfortunately, our sister Assemblies, actually a lot of them are involved in massive galamsey and they destroy the water bodies at that end and you know, it runs through a lot of assemblies and it's affecting some of the work. Even water to water some of the plants becomes a problem in those areas” (AM 2).

4.4.3. Bureaucratic hurdles

Other challenges in the implementation of REDD+ are prominently noted in some communities, where bureaucratic hurdles and coordination issues are prevalent. Weak institutional structures and governance voids, which hindered REDD+ implementation was highlighted by interviewees. Traditional authorities in one community noted conflicts between local government bodies and forest authorities, leading to administrative bottlenecks. In another community, respondents mentioned delays in information dissemination and overlapping mandates that caused confusion in project execution. Participants generally emphasised a lack of clear policies regulating REDD+ processes, while those from participating communities observed poor integration of customary land practices into REDD+ governance frameworks.

4.5. MRV framework under the REDD+ project and the role of accounting and accountants

The previous section concluded that even though some enablers were in place to ensure the successful execution of the REDD+ project, some challenges counteracted the efforts of implementing stakeholders. Consequently, this section extends the empirical findings of section 3 by examining how the implementation of the Measurement, Reporting and Verification (MRV) framework under the REDD+ project has influenced REDD+ processes. Also, the section presents participants' perspectives on the role of accounting and accountants in the REDD+ process. Thus, this section addresses the fourth research objective of this study, which is to understand the implementation of the MRV framework under the REDD+ project and the role of accounting and accountants in this process'.

4.5.1. Implementation of the MRV framework under the REDD+ project

The MRV framework is highlighted as a cornerstone for successful REDD+ execution in all communities. The major sub-themes from the thematic analysis include triple-factor implementation and collaborative implementation. First, the triple-factor implementation refers to the application of the three dimensions of measurement, reporting, and verification sequentially or concurrently for effectiveness. This means that the failure to implement any of the dimensions would erode or even hinder the effectiveness of the MRV framework. For instance, participants involved with community planning activities highlighted the following:

If we are to pick one component out of the MRV, I'm sure its effectiveness would be questionable. Let's say we want to protect our natural resources and imagine we are doing only reporting. ... without any measurement and verification, I'm sure the project wouldn't have been here. So, I think that's why in the knowledge of those who developed the model, they brought that framework as a collective thing to actually see a realistic impact or outcome of this strategy (MPO3).

I think if these three issues, that is the measurement, reporting and verification has not been put into place, the project wouldn't have been implemented effectively. As typical Ghanaians as we are, we always want supervision. But because these programmes are put into place, they are there, they ensure check and balances. They are able to implement the project effectively and when the project is, the main goal is to preserve the environment, of course (MPO5).

The second sub-theme, which is collaborative implementation, refers to achieving MRV effectiveness through the participation and engagement of key stakeholders of the REDD+

project. Stakeholders such as assembly members play a crucial role in facilitating the reporting mechanisms within the MRV framework. They help gather data, ensure that accurate reports are generated and submitted, and integrate local indigenous knowledge with the scientific approaches prescribed by the MRV framework. These activities enhance the accuracy and relevance of the reports churned out. However, some stakeholders, including the Forestry Commission, rely significantly on external consultants for the execution of MRV-related tasks. This raises concerns about sustainability and capacity building within the community. In some communities, challenges related to the MRV framework's implementation include limited technical capacity and a lack of adequate training for assembly members who are tasked with reporting duties. A participant from a community planning committee also highlighted certain challenges:

There is a coordination challenge. Forestry Commission is doing something, Assembly is doing something, the HIA-LMB; they are also doing something so the collaboration becomes a challenge. There are reporting lines. We report directly to the Forestry Commission, so there should be a mother organisation to coordinate this reporting and make it one so that you appreciate the objectives and the deliverables as far as the project is concerned. Else, somebody is doing this, it is helping or supporting somebody's work, and when you are measuring the whole thing, it becomes difficult.

Taken together, the findings suggest that the limited collaborative implementation effectiveness of the MRV framework appears to be weak and unsustainable. Effective collaborative implementation would require training and capacity building of key stakeholders involved to enhance the process of measuring, reporting, and verifying the REDD+ programme implementation.

4.5.2. Role of accounting and accountants in the MRV process

The analysis of the role of accounting and accountants in the MRV process includes themes such as evolving accounting focus and low participatory engagement. First, the evolving accounting focus refers to the enhanced and broader scope of accounting to cover issues and domains beyond the traditional preoccupation with reporting and disbursement. For instance, the traditional perception of the accounting role manifested in an interview with a funder representative:

Accounting has moved to the next level... What is happening previously and it's still happening, the systems are designed in such a way that we've been

trained to limit ourselves to just reporting and disbursement. This is a traditional thinking of the accounting profession within Ghana (Funder 1).

The sub-theme of low participatory engagement refers to the limited participation and engagement of accountants in the MRV process. The findings highlight the lack of, or limited knowledge and participation of, accountants in the REDD+ MRV process. While some stakeholders recognise that accountants should be actively involved in the REDD+ project, the data focuses attention on the passive role of REDD+ accountants and treasurers, who often come across as mere spectators:

We have no idea of what really happens about it. But that's exactly what we are talking about, accounting for something.

I have no idea how MRV ensure transparency and accuracy in REDD+ initiatives.

Thus, the stakeholders recognised avenues to move REDD+ accountants and treasurers from passive participants to active participants:

Training on modalities and technicalities of REDD+ and its implementation process is needed. There should be software including templates to disseminate information on all levels, to ensure proper implementation of the REDD+ activities. There should be training for accountants and enrol them to guide other actors in the implementation and reporting process.

Training is needed on how carbon credits are generated, and issues on sustainability and green finance. Syncing REDD+'s standard of reporting into current reporting to generate better reports. Integrating environmental expenditure to make our reporting better.

5.0. Discussion

This section presents a discussion of the study's key findings, based on its objectives. Particularly, the discussion highlights the meanings and implications of the findings in the context of the extant literature to uncover convergence, gaps, and theoretical reflections.

5.1. REDD+ governance and accountability mechanisms

The framework of the REDD+ programme suggests a form of governance regarding an established framework of norms, practices, behaviours, and structures that guide policies related to climate change and deforestation (Thompson et al, 2011). Corbera and Schroeder (2011, p.2) see REDD+ as a *“governance process with multiple actors, interests and activities, involving several sources of formal and informal power and authority (UN bodies, multilateral organisations, governments, but also community and indigenous organisations), which all influence each other”*. For instance, issues of land tenure, distribution of benefits, leakages, and the degree and levels of participation by a community of stakeholders are framed and operationalised by the underlying governance mechanisms.

Regulations on forestry management, climate change, and sustainable environmental use are a critical part of the REDD+ governance mechanism. There are formal regulations set by international standards and agreements, which include basic rules such as results-based finance, national forest monitoring system, safeguards, etc., under the Warsaw Framework for REDD+ (Morita & Matsumoto, 2023). However, this study highlights local by-laws established by the Forestry Commission, a decentralised governance institution, and traditional authorities to guide the behaviours and actions of affected parties and stakeholders. As traditional chiefs control the majority of land in Ghana due to their custodial rights (Lesniewska & McDermott, 2014), their role in safeguarding forestry resources is critical to the REDD+ governance framework. Finally, the logic of decentralisation in politico-administrative governance in Ghana means that the REDD+ governance arrangement leans towards a bottom-up approach, particularly in terms of monitoring, reporting, and verification of forest carbon and emissions reduction.

Stakeholder engagement is arguably the most critical dimension of the REDD+ governance framework. It involves a multi-stakeholder partnership, which is broadly accepted as an effective approach for sustainability and governance (Corbera & Schroeder, 2011; De Bakker,

2019). Additionally, stakeholder engagement aligns with the REDD+ accountability mechanisms, including accountable stakeholders, collaborative supervision, and verification. For instance, Osei (2025) indicates that collaborative governance with regard to stakeholders working together to design, implement, and manage REDD+ initiatives is an effective strategy to address challenges embedded in REDD+ governance.

A profound concern in the REDD+ programme has to do with the divergent and often conflicting logics among stakeholders, which create contested interests and claims (Corbera & Schroeder, 2011; Osei, 2025). To address this challenge, Government of Ghana acts as a centralised organising system that brings together various stakeholders. Thus, we note that the effectiveness of stakeholder engagement, collaborative supervision, and distribution of responsibility in programme implementation depends largely on the government's organising function.

5.1.1. Perceptions and experiences of stakeholders regarding REDD+ governance, accountability, and outcomes

Achieving REDD+ objectives depends on collaborating with various stakeholders (Shin et al., 2022). The UN-REDD+ guidelines emphasise the need for full and effective participation of all relevant parties, notably indigenous peoples and communities reliant on forests (FCPF, 2012). The guidelines also highlight that engagement should be inclusive, culturally sensitive, and gender responsive. Our finding reveals that various stakeholders have diverse perceptions and experiences related to the REDD+ implementation. Although the governance and accountability frameworks supporting REDD+ are widely considered crucial for ensuring transparency, fair participation, and proper oversight, perceptions of their effectiveness and fairness vary significantly among different stakeholder groups. For example, some stakeholders have limited perceptions of transparency and involvement in decision-making. These differences often stem from limited access to information concerning REDD+ processes, especially those pertaining to funding flows, project selection, and benefit-sharing mechanisms. This finding aligns with Boutthavong et al. (2017), who reported in their study in Laos that stakeholder decision-making roles were uneven, with the central government and development partner organisations predominantly acting as the main decisionmakers in most of the project activities. Similar findings were also reported by Paudel and Karki (2014) in Nepal and Almanza-Alcalde et al. (2022) in Mexico.

Additionally, stakeholders' experiences with participation and inclusion were mixed, with local communities and farmers often emphasising the lack of genuine participation in governance and accountability processes and the government officials seeing the participation as being adequate. This finding is similar to the findings reported by Cadman et al. (2016) in Nepal and Papua New Guinea, where they reported that although REDD+ governance structures were formally established, many stakeholders felt excluded from meaningful participation. Dugasseh et al. (2024) also reported a similar finding in their study of the Juabuso-Bia Hotspot Intervention Area in Ghana. They noted that efforts to include women in leadership roles appeared tokenistic, and little progress was made to enhance land and tree tenure for vulnerable groups.

These findings suggest that governance and accountability frameworks alone are insufficient. They need to be supplemented with authentic inclusion, which involves actual power, meaningful information sharing, and acknowledgement of local institutional norms and customary rights. Without these elements, REDD+ could lead to disillusionment, diminished legitimacy, and poor outcomes.

The effectiveness of REDD+ governance hinges on the clarity of institutional roles and the degree of collaboration across all levels of governance (Osei, 2025; FCPF, 2012). Our findings reveal both appreciation for coordinated efforts and concern over role ambiguity and institutional overlap. On one hand, there is widespread appreciation for the increasing coordination among community members, farmers, and governmental agencies, which has improved policy alignment, knowledge sharing, and cross-sector dialogue. This demonstrates a growing institutional maturity of REDD+ governance arrangements. This is similar to the findings reported by Korhonen-Kurki et al. (2019). However, our findings reveal that in all four communities from which we collected data, the roles of different institutions in REDD+ are often confused or overlapping, leading to inefficiencies and frustration among stakeholders. Kengoum et al. (2022) have also identified this tension between coordination and confusion as a challenge in REDD+ implementation in the DRC.

This finding indicates that successful implementation depends not only on multilevel collaboration but also on a well-defined institutional framework which helps achieve a balance between inclusiveness and functional clarity. Additionally, the findings indicate that while many community members acknowledged ongoing efforts to involve them in REDD+ consultations and awareness campaigns, their overall perceptions of the programme are

strongly shaped by the extent to which REDD+ delivers *tangible and equitable developmental outcomes*. Although REDD+ was originally designed as a climate mitigation mechanism, its success on the ground is increasingly judged through the lens of *co-benefits*—particularly livelihood improvements, access to social services, and fair benefit-sharing (Madeira et al., 2012). Where promised benefits have been delayed, poorly communicated, or unequally distributed, communities have perceived REDD+ as externally driven and extractive, undermining both legitimacy and participation (Wong et al., 2021).

This relationship between participation and perceived fairness underscores a key social dynamic in REDD+: participation is meaningful to communities not only as a process but as a pathway to *recognition and reward*. Awareness campaigns and consultations, while valuable for information exchange, are often viewed as insufficient if they are not followed by concrete livelihood gains or transparent benefit-sharing (Korhonen-Kurki et al., 2019; Myers et al., 2018). These findings highlight the significance of *result-based legitimacy* in environmental governance. For many rural stakeholders, REDD+ legitimacy is not derived from abstract global climate goals but from observable local outcomes—such as improved agricultural support, alternative livelihoods, and equitable compensation.

In practice, this means that awareness campaigns and participatory processes must be embedded within broader benefit-sharing and accountability frameworks. Simply informing or consulting communities without delivering tangible results risks reinforcing perceptions of tokenism. Conversely, linking participation to demonstrable developmental gains can strengthen both trust and long-term commitment to REDD+ objectives.

5.1.2. Enablers and challenges in the REDD+ implementation

The findings indicate that REDD+ project stakeholders are generally well-acquainted with the collaborative approach designed to translate policy strategies and mechanisms into measurable reductions in deforestation. This awareness reflects the widespread dissemination of REDD+ principles and the emphasis on inclusive governance. However, despite this familiarity, many stakeholders voiced dissatisfaction with how collaboration is enacted in practice. In several communities, traditional authorities reported feeling sidelined from critical decision-making processes. Some respondents noted that while consultations were occasionally held, their input was often disregarded or undervalued. This finding echoes the concerns raised by Myers et al. (2018) and Korhonen-Kurki et al. (2019), who argue that collaboration within REDD+

initiatives often remains more rhetorical than substantive, with local actors frequently marginalised from meaningful participation in key decision-making processes.

REDD+ aims to mitigate climate change by reducing deforestation and forest degradation, ultimately lowering GHG emissions and increasing carbon removal from the atmosphere (Andoh et al., 2022). Our findings indicate that REDD+ restrictions on forest activities inadvertently led to the displacement of deforestation to nearby areas, thereby creating a leakage effect. Similar patterns have been documented (see Streck, 2021). This highlights the complex trade-offs between conservation objectives and socio-economic realities, as local households often rely on forest resources for subsistence and income. To reduce leakage, multi-level coordination is required to align REDD+ project boundaries with broader landscape and national land-use planning frameworks.

Other challenges identified include bureaucratic obstacles and poor coordination among implementing agencies, which impede the effective achievement of REDD+ goals. While the initiative encourages collaboration across sectors, conflicts between forestry departments and government agencies often lead to administrative delays and inconsistencies in policies. Similar issues have been noted in other REDD+ settings, where fragmented governance and limited inter-agency communication lead to weakened policy coherence (Ravikumar et al., 2015). Overcoming these institutional barriers involves simplifying administrative processes, clearly defining roles, and enhancing both vertical and horizontal coordination to promote timely and consistent implementation.

5.1.3. MRV framework under the REDD+ project and the role of accounting and accountants

The MRV framework is critical and important for the effectiveness and sustainability of the REDD+ programme, especially as a pre-requisite for result-based payments (Köhl et al., 2020). In Ghana, the implementation of the MRV as a third phase requirement confronts many challenges, including limited collaborative effectiveness, limited accounting focus and low participatory engagement. First, the limited collaborative effectiveness stems from the lack of capacity and training of stakeholders engaged in the MRV process. While a study by Yang et al. (2025, pp. 7-8) indicates that Ghana has “achieved higher implementation levels in both the Measurement (M) and Reporting (R) categories” demonstrating ‘strong MRV capacities’, this is mostly due to the high use of external consultants who have strong capacity in the MRV

process rather than based on the competence of local stakeholders. This raises legitimate concerns about the sustainability of the MRV process as a REDD+ required framework if there are no concerted efforts to develop local stakeholders, especially accountants, treasurers, and others directly involved. As noted by Gupta et al. (2012, p. 729), effective “MRV systems will be those that exhibit responsiveness to local needs and diversity, where the local is actively re-enrolled in knowledge infrastructures and practices of environmental governance”.

Furthermore, this study suggests a broader and evolving role of accounting in carbon and environmental accountancy beyond the traditional focus on financial reporting and measurement. Indeed, carbon and environmental accounting is recognised to promote a simplification of complexity and provide critical insights into the design and impact of the REDD+ MRV framework (Gupta et al., 2012). Finally, the limited participatory engagement of accountants stems from inadequate knowledge and lack of training on the MRV process.

6.0. Conclusion, policy implications and recommendations

6.1. Conclusion

This study sets out to achieve five research objectives. This first objective examines governance and accountability mechanisms. The second objective assesses the perceptions and experiences of stakeholders regarding governance, accountability, and outcomes of the REDD+ programme. The third objective identifies the enablers and challenges in the REDD+ implementation. Finally, the fourth objective examines the MRV framework under the REDD+ project and the role of accounting and accountants.

Regarding the first research objective, empirical findings reveal robust governance structures, which are critical for the success of climate change initiatives like REDD+, emphasising the need for transparent, inclusive, and effective governance mechanisms. Collaboration and shared responsibility among stakeholders, including the Forestry Commission, local government, communities, farmers, district accountants, HMB treasurers, CSOs, NGOs, and funders, are crucial for achieving sustainable forest management, mitigating climate change, and meeting global environmental goals. Evidence also suggests that capacity-building initiatives have been sporadic, and stakeholders particularly emphasize the need for regular training and resources to enhance local involvement and empowerment.

Regarding the second research objective, stakeholder perceptions indicate that governance and accountability are considered essential for the implementation of REDD+. Nevertheless, the perceived effectiveness of these systems varies among different groups. National institutions and donors generally regard these systems as operational and subject to continuous improvement, whereas local communities, Indigenous peoples, and civil society organisations often express concerns regarding exclusion, transparency issues, and inadequate enforcement. Themes such as ambiguous institutional roles, limited community participation, deficiencies in capacity building, and underutilised accountability tools emphasise the necessity of implementing more inclusive, responsive, and context-sensitive governance strategies. Enhancing participatory governance, increasing local capacity participation, and ensuring transparent monitoring and reporting are fundamental for establishing an effective and equitable REDD+ framework. Addressing perceptions and experiences is vital not only for improved implementation but also for the legitimacy and sustainability of REDD+.

In terms of the third research objective, stakeholders emphasized the need for sustained capacity-building initiatives and long-term incentives to ensure REDD+ gains are preserved. The community feedback underscores the need for stronger enforcement and regular audits to ensure REDD+ objectives are achieved and reported transparently. Integrating community-level feedback with academic insights reveals a complex picture of REDD+ implementation that requires enhanced governance, better integration of agricultural and environmental policies, more inclusive community engagement, equitable distribution of benefits, and robust monitoring and accountability to ensure effective outcomes. Addressing these issues comprehensively can lead to more sustainable and effective REDD+ programmes that are beneficial to all stakeholders involved. Strengthening participatory budgeting, building technical capacity, and enforcing compliance measures will help ensure that REDD+ financial resources are managed effectively and equitably.

The fourth research objective involves the MRV framework implementation and the role of accounting and accountants. The major findings revealed MRV implementation challenges, including limited collaborative effectiveness, a narrow accounting focus, and low participatory engagement. The over-reliance on external consultants with limited local participation due to limited capacity and skills regarding the MRV process poses a challenge to programme sustainability.

6.2. Implications and recommendations

This study seeks to understand the embeddedness of Governance and Accountability in Sustainable Forest Management within the REDD+ implementation in Ghana. Based on the empirical findings from the research objectives, the following policy and recommendations are suggested.

6.2.1. Implications and recommendations for the Forestry Commission

The Forestry Commission is the lead agency responsible for coordinating and implementing the REDD+ programme in Ghana. Therefore, the Commission should strengthen governance and accountability mechanisms, especially in enforcing regulatory compliance to prevent leakages and develop the capacity of local-level stakeholders, such as district assemblies, traditional councils (chiefs), and farmers. For instance, as chiefs are the custodians of land in Ghana, they need to be educated to understand the amended clauses in the Land Act, 2020 (Act 1036), in order to promote sustainable land administration. Similarly, farmers and the

communities can be educated to partner with the Commission in preventing spillover GHG leakage. Building local capacities would also strengthen various stakeholder management processes, including collaborative supervision, monitoring, reporting, and verification mechanisms. Additionally, the Commission working through the government should invest in local development and social impact projects in all 4 Hotspot Intervention Areas (HIAs) of the forest landscape (Atiwa, Juaboso-Bia, Sefwi Wiawso and Kakum). Evidence of positive non-carbon impact in these HIAs would increase the acceptance and social license of the REDD+ programme in Ghana.

6.2.2. Implications and recommendations for the district assemblies

The district/municipal assemblies, as the decentralised agencies for public administration and local development in Ghana, could play the following roles to enhance the effectiveness of the REDD+ programme. First, the assemblies can enhance the efficiency of stakeholder engagement at the grassroots level among farmers, the Cocoa Board, the Forestry Commission, and other stakeholders. Effective stakeholder engagement that ingrains collaborative supervision and community engagement into REDD+ processes would promote grassroots ownership and sustainability. Secondly, the assemblies should strengthen their monitoring, regulatory compliance, and collaborative supervisory capacity, especially against illegal small-scale encroachment into forest protected zones and prevent leakages. Thirdly, the treasurers of the assemblies should be provided with further training and capacity building in the MRV process to enhance their contribution to REDD+ accountability and environmental governance.

6.2.3. Implications and recommendations for non-governmental/civil society organisations

Non-governmental and civil society organisations constitute important pressure groups which encourage environmental stewardship and sustainability. Thus, based on the findings, these groups can contribute to the effectiveness of the REDD+ programme in the following ways. First, NGOS/CSOs can mobilise public opinion towards sustainable forestry management by embarking on mass education regarding the growing impact of carbon emissions and deforestation on livelihoods, cultural heritage, and community resilience. Also, the NGOs/CSOs could lobby the Government to establish a community consultative process to promote transparency and accountability in the disbursement of both carbon and non-carbon

benefits. This would help address the current situation where some local stakeholders feel no direct impact from the REDD+ programme.

6.2.4. Implications and recommendations for the government

As the government constitutes the centralised organising system, it needs to provide additional resources to train and build the capacities of statutory bodies such as the Forestry Commission, COCOBOD, district/municipal assemblies, and the Environmental Protection Agency (EPA) to support effective REDD+ programme implementation. For example, because small-scale miners regularly invade forest-protected zones, which erodes the carbon gains from the REDD+, the monitoring and enforcement role of the EPA is critical to weed out licensed miners who break their permit condition as well as those without permit. Additionally, the government must play an enhanced role in land administration in partnership with the traditional chiefs who possess custodial ownership of the majority of lands in Ghana. In many ways, land administration, especially in the High Forest Zones, should be considered an environmental governance issue. This would require the government to, through existing regulations, exercise pre-emptive rights over all forest protected zones to prevent chiefs from selling such lands for environmentally destructive projects.

6.2.5. Implications and recommendations for the accounting profession

In building the capacity of some stakeholders, accounting professionals should not be left behind. The MRV used in this REDD+ space provides opportunities to position the accountancy profession to take a more active part in how accountants respond to making an impact in the environmental space. With the emergence of The International Public Sector Accounting Standards Board (IPSAS) Sustainability Reporting Standard (SRS), *Climate-related Disclosures* requires public sector reporting to align with global best practices, ensuring that climate-related public policy programmes are reported on for primary users of financial information to support accountability (IPSASB, 2025), hence the need to involve accounting professionals in the REDD+ programme and the MRV processes. District accountants are perceived to only play an oversight role in the management of the district share of REDD+ funds at the district level; however, there is a need to extend this oversight role to the community and HMB level to assist the treasurers and to engage more deeply with the intricacies of the REDD+ programme. This thus helps deepen the understanding of the accountant in the environmental space through the professional curriculum and continuous

professional development programmes to continually build capacity through the Institute of Chartered Accountants, Ghana (ICAG). Ghana's REDD+ experience highlights broader challenges for Africa's accounting profession. For example, there is a need for improved benefits-sharing mechanisms that recognise all stakeholders involved. This involves transparent financial reporting, fair allocation, designing systems that track both financial, environmental, and social benefits, while ensuring accountability at all levels of implementation. Additional challenges include managing the complexity of working within multi-stakeholder governance frameworks, which entail aligning financial reporting with policy goals and legal requirements, as well as addressing inconsistencies between REDD+ and other sectoral policies. Ghana's REDD+ experience also emphasises the importance of specialised training in environmental and sustainability accounting, which is also important for implementing the MRV framework. Finally, some targeted training programmes of district accountants in the HIAs would be useful to help them understand the programme and how to position themselves as active participants in the REDD+ space.

6.3. Potential limitations to recommendations

The potential limitations relate to the possible barriers, such as enforcement challenges and contextual variability. Specifically, on the recommendation relating to ICAG being more proactive in their curriculum design and CPDs, it is essential to note that not all district accountants may be chartered accountants and hence may not have any direct relationship with the Institute. Thus, the influence of the ICAG may be limited to accountants who are its members. Additionally, because the various HIAs are at different levels of REDD+ implementation, the recommendations for training and capacity building would have to differ. This poses a potential enforcement challenge due to the variability in maturity and levels of implementation across the HIAs.

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