



Ghana's landscape approach to REDD+: Is it decentralizing or recentralizing power?

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ABSTRACT

This paper examines the devolution of powers over land, trees, and carbon through an institutional innovation in Ghana known as the Hotspot Intervention Area (HIA) governance mechanism. HIAs, which form a core part of the Ghana Cocoa Forest REDD+ (Reducing Emissions from Deforestation and Degradation) Programme (GCFRP), employs a “landscape approach” to reduce deforestation, focusing on devolving power and distributing carbon and non-carbon benefits to local communities. We apply decentralization theory and the concept of “bundles of power” to assess which powers have (not) been decentralized through HIAs. Our analysis draws on the pilot case of the Juabeso Bia Landscape, combining 13 focus groups, 21 key informant interviews, and a review of written documents to examine: 1) the internal organization of the JBL HIA itself, and 2) how this interacts with the wider national and international landscapes of governance and climate finance. We found that the HIA governance mechanism has formally established four-tier decision-making structure that grant multiple decision-making roles and assign land and forest resources protection responsibilities to committees within local Community Resource Management Areas (CREMAs) and high-level HIA bodies. However, in practice, the powers devolved to these entities are largely confined to the internal operations and administrative functions of the established committees and landscape management board within the HIA. Meanwhile, Ghana's broader legal structures and the priorities associated with accessing international carbon finance are reinforcing the authority of external actors, such as multilateral finance institutions, in governing land, trees, and carbon within the study localities. The study highlights that devolving the power to distribute carbon finance locally, without a corresponding devolution of rule-making power over natural resources to community-based institutions, risks reinforcing rather than transforming existing power structures. This imbalance constrains local actors' ability to determine how their land, tree and carbon are managed to meet their own needs and priorities. Broader, cross-institutional policy reforms are required to enable local communities to renegotiate their rights to access and benefit from land and forest resources.

1. Introduction

The 2013 Warsaw Framework for Reducing Emissions for Deforestation and Degradation and carbon enhancement (REDD+) provides a pathway for stakeholders to address deforestation, biodiversity loss, and climate change while improving rural livelihoods. However, precisely how to achieve this, and which part of this broad agenda should take priority, has been widely debated ever since (Arhin, 2014; Benjaminsen and Kaarhus, 2018; Ece, 2021; Johnson, 2021). For many policymakers

working across forest and land-use sectors in low-income countries, REDD+ is an opportunity to attract international finance to implement institutional reforms to achieve their emissions reduction targets (McFarland, 2015; Vijge et al., 2016). Concurrently, some policymakers and development practitioners have sought to leverage REDD+ to address the uneven involvement of the rural poor in land-use governance, as a major barrier to equitable land and forest use (Bayala et al., 2024; Pani and Mishra, 2022; Ribot et al., 2010; Teye, 2011). Emerging research has identified tensions between the design of institutions to

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achieve short-term climate and environmental targets and the types of institutional transformations needed to reconfigure entrenched power relations (McDermott et al., 2023). This resonates with increasing calls for sustained analysis of power in emerging institutions for implementing REDD+, aiming to reveal how power is, or is not, devolved to local communities in managing and benefiting from their land and forest resources (Boer, 2020; Hermawan et al., 2023; Johnson, 2021, Ramcilovic-Suominen and Nathan, 2020).

This paper contributes to these debates by examining the “bundle of powers” devolved to local communities both within, and outside of, the Ghana Cocoa Forest REDD+ Programme (GCFRP). Ghana, and the GCFRP in particular, provides an excellent context to examine these dynamics. Within Ghana, local communities have long fought to (re) gain the authority to manage and benefit directly from their land, forest and tree resources (Amanor, 2012; England, 1993; Hausermann et al., 2018; Yaro et al., 2022). Drawing on colonial institutional legacies (Hansen, 2022), Ghana’s post-colonial governments have progressively expanded their powers and exerted control over land and forest resources, including trees in the country’s off-reserve areas (Kumeh, 2023). The paper examines institutional innovation under the GCFRP by foregrounding it in the country’s struggle to devolve significantly greater power to local communities to manage their land and forest resources (Adjei et al., 2020; Teye, 2011; Wildlife Division, 2000).

Drawing on the literature on power, property rights and decentralization theory (Agrawal and Ostrom, 2001; Larson & Soto, 2008; Ribot et al., 2006), the paper analyses the “bundles of power”, including the power to make rules and allocate resources (Agrawal and Ribot, 1999), required for newly created institutions within the HIA governance mechanism to conduct their internal operations and politically engage with the state to improve their access and control over land and forest resources. To illuminate the impact of institutional innovations, and ground this in a broader historical context, we distinguish between 1) the creation and internal organization of institutional innovations themselves, and 2) how they interact with the wider institutional landscape at the national level. Using data from focus group discussions and key informant interviews with various actors involved in establishing Ghana’s first HIA, the Juabeso/Bia Landscape (JBL) HIA, we parse out not only the forms of power that have been transferred by the state and other actors implementing the HIA to local communities but, crucially, those left untouched and their implications for land use governance transformation in the country.

The GCFRP is the world’s first emissions reduction program based on a “landscape approach” to sustainable commodities production (Van der Haar et al., 2023). “Landscape approaches” are broadly understood as governance strategies that engage multiple stakeholders and encompass multiple land uses within a defined land area as a means to balance environmental and social objectives (Reed et al., 2017). Reflecting this multi-sectoral focus, the GCFRP draws on funding from multiple sources, including private-sector investments in sustainable cocoa and international carbon finance (NCRC et al., 2020). The latter includes a World Bank performance-based payment of up to USD 50 million for reducing 10 million tons of carbon emissions over the five years, 2019 to 2024 (MLNR, 2017a). Ghana introduced HIAs as a mechanism in 2017 to meet this carbon reduction target and transmit associated carbon payments to participating communities. The HIA aims to devolve decision-making power and financial benefit to local communities through existing decentralization-oriented mechanisms such as Community Resources Management Areas (CREMAs) (NCRC et al., 2020). Under HIAs, CREMAs are clustered and scaled up into a central landscape management body, the HIA Management Board (HMB). When formed, the HMB serves as an intermediary for land users and local communities within the HIAs (see Section 3).

To examine the powers (not) devolved by the HIA governance mechanism, we foreground institutional innovation in decentralization theory to construct an analytical framework for assessing which powers are devolved, for whom, and for what, through the HIA mechanism

(Section 2). Section 3 introduces the broader historical context and contestations over power within Ghana’s institutional frameworks. We review the literature on REDD+ and the HIA as an institutional mechanism to support decentralization, characterising the Juabeso Bia Landscape (JBL) HIA and outlining our methods in Section 4. Section 5 presents the findings from applying our analytical framework. The paper ends with discussion and conclusions that position our findings in the broader debates on institutions and the governance of land use transformations.

2. Parsing out power in institutional innovation for resource governance

This paper foregrounds power in institutional innovation based on an adaptation of decentralization theory. It adopts a broadly conceptualized view of institutional innovation as the introduction of new rules, structures, and processes to govern resources (Raffaelli and Glynn, 2015). In many forest-rich countries of the tropics, forest resources are owned and controlled by the central state, and policy instruments such as REDD+ are often used to that very end (Ramcilovic-Suominen and Nathan, 2020). This reflects, in part, a legacy of colonialization and the ongoing struggle to transition from indigenous forms of social organization and governance to a nation-state-centric approach (e.g. Scott, 1998). Over the last few decades, crises of national indebtedness, among other factors, have pressured governments to decentralize state control (Lund, 2016). Such decentralization is often promoted as a means to achieve more effective and equitable land and forest resources management (Larson & Soto, 2008; Libert-Amico & Larson, 2020). However, research into decentralization programmes enacted by numerous tropical countries finds they are often incomplete and highlights the need for closer attention to precisely what forms of power and accountability are (not) devolved to local actors (Lund et al., 2017; Mawutor and Hajar, 2022; Ribot et al., 2006).

Some scholars (e.g., Agrawal and Ostrom, 2001; Schlager and Ostrom, 1992) have argued for understanding devolution in terms of a “bundle of property rights.” It is the full bundle of rights taken together that influences the incentives that people face, shape the actions they take, and influence on-the-ground outcomes. Sikor et al. (2017) add a distinction between authoritative rights (allocation and definition), control rights (management, exclusion, transaction, and monitoring), and use rights (direct and indirect). Other studies argue for expanding thinking beyond property rights towards a broader “bundle of powers” (Agrawal and Ribot, 1999; Peluso and Ribot 2020; Ribot and Peluso, 2003). Such works highlight how local actors may gain, maintain, and control others’ ability to benefit from land and forest resources without owning them (Peluso and Ribot, 2020), indicating that a more dynamic set of factors may explain when and if institutional innovation will be effective, equitable, or both. It also calls attention to how capacity, or a lack of it, influences newly created institutions’ ability to engage politically or foster collaboration (Woodhill, 2010).

Agrawal and Ribot (1999) operationalize the concept of a “bundle of powers” by identifying four specific forms of power that shape control over land and forest endowments. First is rule-making power, i.e. the power of actors to create rules, norms, policies, and frameworks to govern land and forest resources rights. The meaningful exercise of rule-making power, in turn, requires enforcement power, i.e. the power to implement the established rules. Both rule-making and enforcement power also require resource allocation power, defined as adequate access to, and control over, material and human resources. Finally, conflict management power enables actors to interpret rules, settle disputes, and administer justice. Many studies suggest that to achieve “effective devolution”, institutional innovation needs to devolve “adequate”, “real”, “substantial”, or “meaningful” powers to local actors across the suite of powers (Agrawal and Ribot, 1999; Libert-Amico and Larson, 2020; Omala and Aglanu, 2020). According to Agrawal and Ribot (1999, p. 494) institutional reform aimed at transferring power(s) to local

communities is effective “only when it enables local actors to gain control over and govern their land and forest resources by themselves.”

Emerging studies on forest conservation conflicts postulate that conceptualizations of power need to be understood reflexively (e.g., Kenrick et al., 2023; Kumeh, 2023). They argue that power devolution is contested, and often used by a wide range of actors, e.g., governments, NGOs, and the private sector, to reconfigure rather than relinquish external control over local resources. Studies of forest authorities in Cameroun, Ghana, India, Indonesia, Mexico and Tanzania demonstrate their governments have ostensibly transferred various forest management tasks and duties to local communities while preserving their hegemonic positions (Erbaugh, 2019; Gutiérrez-Zamora and Hernández Estrada, 2020; Mawutor and Hajjar, 2022; Nuesiri, 2016). This “responsibilization” occurs without such authorities sufficiently considering the power resources local communities need in order to improve their institutional capacity, competence and ability to apply indigenous knowledge for effective land-use governance (Mustalahi et al., 2020; Mustalahi, 2020).

The recent rise of REDD+ and associated revaluation of forests for forest carbon create new frontiers for such partial devolution of power (s) and its associated contestations. Some studies suggest that REDD+ has simultaneously catalyzed efforts to incorporate community involvement while also creating strong incentives for powerful actors such as the state to misrecognise community tenure rights, tokenize local communities involvement in decision-making (Isyaku et al., 2017; Ramcilovic-Suominen and Nathan 2020) and recentralize state power (Asiyanbi and Massarella, 2020; Lund et al., 2017; Phelps et al., 2011; Ramcilovic-Suominen 2019). International priorities for carbon accounting, in particular, have been critiqued for overriding broader REDD+ environmental and social objectives (Phelps et al., 2010; Ramcilovic-Suominen et al., 2021). While Ghana’s GCFRP has operationalized a more diversified funding structure that aims to complement carbon finance with private finance for sustainable cocoa (Van der Haar et al., 2023), it remains to be seen how this new institutional innovation may variously decentralize or recentralize power and why.

This paper therefore applies the analytical framework, advanced above, to assess the role of GCFRP in the decentralization and/ or recentralization of power. Firstly, we assess the bundle of powers devolved, or centralized, through the establishment and internal organization of various committees within HIAs as an institutional innovation for governing resources at the forest-farm nexus in Ghana. We distinguish in particular between the power to make rules governing land and tree resources, and power over the internal operations of new institutions and the internal allocation of financial resources. Secondly, we analyze how different institutions and actors within the broader international and national governance arena create competing pressures to decentralize and recentralize power within and beyond the HIA.

To situate the local landscape-based analysis, the next section begins with a historical overview of Ghana’s national-level legal and policy frameworks governing forest and tree resources. These begin with the centralizing of state power followed by more recent administrative and legislative changes focused on decentralizing some of this power. This historical context is critical for situating recent REDD+ innovations (reviewed in Section 4) within longer-term struggles for control over land, forests, and trees in the country.

3. The Broader Governance Context and the HIA Mechanism in Ghana

3.1. Devolution of power dynamics pre-HIAs

The colonial (1874 – 1957) and post-colonial state institutions (post-1957) instituted some key legal decisions to govern access to land and tree resources in Ghana (Hansen, 2022; Kumeh, 2023; Obeng-Odoom, 2012). Table 1 is an overview of key institutional developments, the resources they target, and their implications for those who wield

Table 1

Key landmarks in the alteration of control over forest and tree resources in Ghana.

Timeline	Institutional instrument (norm, policy, legislation)	Resource targeted	Implications for allocation of authority
Pre-1927	A mix of informal institutions, e.g., taboos, norms, sanctioned by traditional chiefs and earth priests	Land, timber and non-timber forest products	Traditional authorities and local actors controlled land and forest resources.
1927	<i>Formal legislation. Cap 157, Forest Act, 1927</i> provides conditions for creating forest reserves through traditional authorities byelaws and state legislation: i) ownership of lands in forest reserves is not affected; ii) either the landowner(s) or government can manage the forest reserve for the benefit of the former.	Land and timber	Shared control over forest reserves between the state and traditional authorities.
1962	<i>Formal legislation. ACT 124, Concessions Act, 1962.</i> Section 16 vests: i) lands and timber resources within forest reserves in the President in trust for and on behalf of relevant stools (traditional authorities) in the area; ii) all timber on any land to the President in trust of Ghanaians.	Land and timber	The state gains, while traditional authorities and local actors lose, control over forest reserves and naturally regenerated trees in off-reserve areas.
1993	<i>Administrative procedure. Collaborative Forest Management Unit</i> creation to better engage local communities in manage forest resources	Timber and non-timber forest products	Traditional authorities and local authorities may contribute to managing forest and land resources on shared values and interests with the state.
1998	<i>Formal legislation. Act 547, Timber Resource Management Act, 1998</i> provides for trees planted or owned by individual or groups to be excluded from the grant of timber rights.	Timber	Local actors have control over planted trees, but must defer to the state for authorization.
2000	<i>Administrative: CREMA Concept or Innovation</i> introduced by the Wildlife Division on the principle that “[Th]e control of access and benefit from wildlife whether by the individual or collectively must be determined by those who live with the resource’.	Land, timber and non-timber forest products, including bushmeat.	Local actors may exercise control over land, tree and wildlife resources upon formal recognition from the state.
2019	Administrative: HIA institutional innovation introduced by the Forestry Commission, COCOBOD to improve land use management and create a mechanism for interacting with the forest carbon resource.	Carbon	State assumes de facto control over carbon resources in a target landscape in trust for the people.

(continued on next page)

Table 1 (continued)

Timeline	Institutional instrument (norm, policy, legislation)	Resource targeted	Implications for allocation of authority
2023	Formal legislation: Wildlife Resources Management Act, 2023 (Act 1115).	Land, timber and non-timber forest products, including bushmeat.	Local actors can exert control over land, tree and wildlife resources that are duly recognized and conferred with a certificate of devolution by the state.

authority to control access to such resources.

As Table 1 demonstrates, until 1927 traditional authorities wielded the authority to control access to all land and forest resources. Following much resistance from traditional authorities and local actors on the Gold Coast (now Ghana), the introduction of the Forest Ordinance (1927) by the country's British Colonial Administration gave the state shared authority over land and resources (Hansen, 2022). The 1962 Concessions Act (ACT 124) further concentrated state control by vesting all naturally growing trees 'in trust' to the President, including trees growing on farms. The bifurcation of land and tree ownership remains an unresolved source of tension and struggles between the state and traditional authorities (Agyei et al., 2019; Isyaku et al., 2017).

In 1993, this process of increasing centralization began to shift with administrative and legislative additions aimed at more participatory approaches to forest decision-making. The Community Resource Management Area (CREMA) concept was introduced in 2000, initially focused on wildlife management. CREMAs were adopted as a foundational building block to create multi-tier institutions for the premier GCFRP HIA in the JBL. Since 2023, CREMAs are legally recognized in Ghana with the Wildlife Resources Management Act, 2023 (Act 1115).

3.2. REDD+ and Ghana's Hotspot Intervention Area (HIA) Governance Mechanism

In 2008, Ghana received funds from the World Bank Forest Carbon Partnership Facility (FCFP) to develop a national REDD+ framework. The acceptance of this international finance allocated substantial power to various actors – such as government institutions, NGOs and cocoa companies – to influence priorities in REDD+ landscapes. This included, first and foremost, the priority to reduce forest-related emissions, but also an obligation to develop mechanisms for receiving REDD+ funds, and meet timeframes defined by the World Bank for project implementation. Long-term struggles over land and tree tenure, which has been raging for decades, became inconsequential and needed to be reframed to accommodate the terms of the finance. For example, although Ghana has definitive, albeit conflicting and contested, formal rules on land and tree ownership (Agbosu, 1983; England, 1993; Hansen, 2022; O'Sullivan et al., 2021), it lacked a legal framework on carbon (Asare, 2013; Osafo, 2012). The HIA institutional innovation, therefore, emerged as a mechanism for galvanizing broad stakeholder participation in landscape planning and management, and facilitate the transfer of international forest carbon revenues from national implementing bodies to local communities (Van der Haar et al., 2023; MLNR, 2017b). Debates about how to secure access to the carbon finance, and whether this process dovetailed with, or sidestepped, long-standing stakeholder demands for reforms granting local communities greater control over naturally regenerated trees on their farms, largely became an afterthought.

The main mechanisms for climate mitigation within the GCFRP are avoided deforestation, forest and farm regeneration through tree retention and climate-smart cocoa production. A typical HIA covers 209,000–377,000 ha (MLNR, 2017b), entailing different actors with

multiple land use options such as conservation areas or forest reserves, cocoa and food crop farms, and, in some cases, artisanal and small-scale mining (CFI Secretariat et al., 2024). As an institutional innovation, developing an HIA involves creating new landscape management structures and processes.

With regards to structures, HIAs are multi-tiered, entailing at least four decision-making centres (Fig. 1). At the base of the HIA governance structure are CREMAs. Within the broader context of decentralized resource management struggles in Ghana, CREMAs were introduced in the 2000s to devolve resource management rights from the state to forest-fringe communities by empowering them to retain and manage forest areas around wildlife reserves (Wildlife Division, 2000, 2004). An established CREMA has two decision-making bodies: a community resource management committee (CRMC) at the village level and a CREMA Executive Committee (CEC), as an inter-village decision-making body. Technically, the CRMC is the functional unit of an HIA as it is the point for village-level consensus building and delivery of land use interventions. CECs as second-tier decision-making bodies comprise elected members of several CRMCs, who represent the CREMA. When established properly, CREMAs draw their power from their internal constitution and bylaws at the district level of the central government administration (Wildlife Division, 2004). The MLNR, in coordination with Ghana's Wildlife Division (WD) of the FC, may issue a certificate of devolution that recognizes CREMAs as semi-autonomous entities.

The HIA institutional innovation scales up CREMAs by introducing two higher-level decision-making bodies: Sub-HIA Executive Committees (SHEC) and an HIA Management Board (HMB) (Fig. 1). HMB members are elected by SHEC members, while CEC members elect the SHEC. When established, the HMB signs a framework agreement with the Forestry Commission (FC) and Ghana Cocoa Board (COCOBOD). The framework agreement is also endorsed by cocoa and chocolate companies and NGOs, who commit as an HIA Consortium to implement the HIA governance mechanism by developing and implementing a landscape management plan through investment in local actors, especially cocoa farmers within the HIA (MLNR, 2017b). Representatives of the HIA Consortium in collaboration with the representatives of the HMB form an overarching body, the HIA Implementation Committee (HIC), which not only provides technical inputs for running the HIA and has the authority to influence community-level benefit sharing associated with the HIA. Six priority HIAs, involving various consortium members, are at various stages of development in the country (Forestry Commission, 2023). We examined the Juabeso/Bia Landscape the first HIA to be formed.

4. Methods for the Juabeso/Bia (JBL) case study

4.1. Case study description

The fieldwork for this paper focuses on the Juabeso/Bia (JBL HIA, see Map in Fig. 2), whose HMB was established in 2019 (Climate Change Directorate, 2019). Three reasons informed our choice. Firstly, the JBL has a long history of community-based landscape management through CREMAs, starting with Kwamebikrom CREMA, created by the Wildlife Division and other civil society organizations in 2006. HIA implementers revamped legacy CREMAs while creating new ones in building the JBL HIA. Secondly, forests and land resources in the JBL are characterized by intense contestations over land between the Ghanaian government, traditional authorities and local communities. The contest manifests in encroachment for artisanal mining and food crops and cocoa production in forest reserves and associated clashes between local actors and forestry authorities in the JBL (Boni, 2006; Kumeh, 2023). Thirdly, despite the significant contributions of the JBL to cocoa production, food insecurity remains a fundamental challenge in the landscape (Kumeh et al., 2021; MLNR et al., 2023). These characteristics typify many of the conditions often associated with the cocoa-forest landscapes, or the forest-farm nexus, in Ghana. This makes the JBL

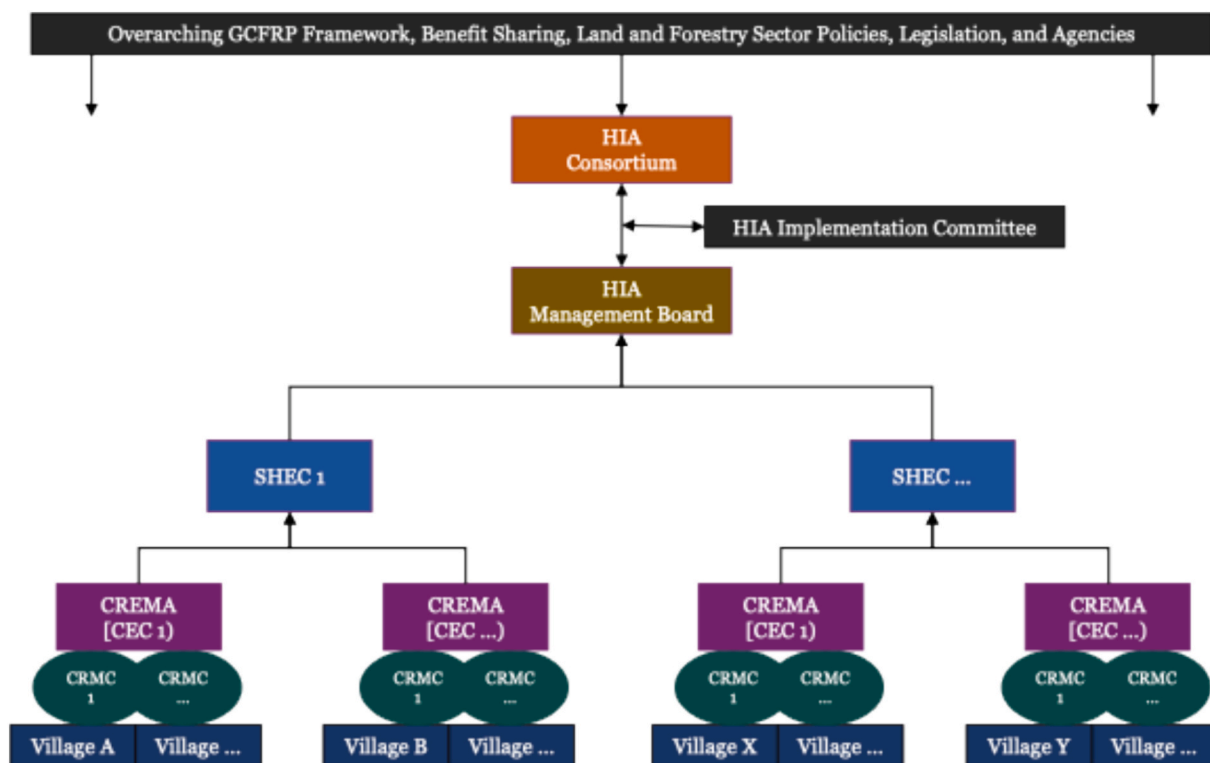


Fig. 1. An overview of the JBL HGM, delineating the levels of our analysis. CRMC = Community resource management committee, CEC = Community CREMA Executive Committee, CREMA = Community resource management area, SHEC = Sub-HIA Executive Committee, HIA = Hotspot Intervention Area.

landscape a good case to examine how the transfer of power through HIAs as institutional innovations for achieving emissions reduction targets influences local actors' ability to address the various contestations and counteractions that imperil their local livelihoods and well-being.

The Juabeso/Bia HIA was initiated under the Partnership for Productivity Protection and Resilience in Cocoa Landscapes (3PRCL) project, supported by the Partnership for Forests, a development organization, funded by the United Kingdom (UK) Foreign Commonwealth and Development Office. The JBL HMB was formally launched in 2019, with the signing of its framework agreement between its HMB, the FC and COCOBOD. Touton SA (cocoa company) and local and international non-governmental organizations, notably the Nature Conservation Research Centre (NCRC), Tropenbos Ghana (TBG), Solidaridad West Africa and SNV (Dutch NGO), play(ed) various roles in the JBL HIA process (Climate Change Directorate, 2019). These include capacity-building workshops for farmers, the supply of cocoa and shade tree seedlings, and the establishment of village savings and loan associations for farmers. These activities are part of the non-carbon benefits available under the GCFRP (Dugasseh et al., 2024; MLNR, 2017b).

The other benefit concerns carbon payments, of which in early 2023 the government of Ghana received USD 4.9 million from the World Bank for reducing 970,000 tCO₂e across all six HIAs between June and December 2019 (World Bank, 2023). According to the GCFRP benefit-sharing framework (Forestry Commission, 2020), HIAs are entitled to 69% of carbon payments. The GCFRP management cost is allocated 4% while government entities are entitled to 27%. Three percent of carbon monetary payments are transferred into a buffer fund. The remaining 69% of the carbon payments then treated as 100% and further distributed as follows: registered farmer groups (58%), HIA communities (39%) and traditional authorities (3%) (Forestry Commission, 2020 p.28). This benefit-sharing model not only differs from those defined by the constitution for natural resources but also models for the country's widely recognized modified taungya system and

public-private landscape restoration schemes (Acheampong et al., 2016; Forestry Commission, 2020b).

The JBL HIA currently comprises six SHECs, i.e., Asuobia, Asuopri, Debe-Sukusuku, Krokosue/Asempanye, Juaboso and Manzan. Each Sub-HIA has two or more CREMAs and in some cases "non-CREMA communities". The latter are areas where the consortium partners have yet to establish CRMCs and CECs. Where they exist, traditional leaders serve as patrons for CREMAs (Climate Change Directorate, 2019). The various institutional structures such as CREMAs, SHEC, and the HMB have local constitutions that define the powers available to them and moderate their activities within the HIA.

4.2. Data collection and analysis

The primary methodologies employed in this study are the analysis of written documents, focus groups, and semi-structured interviews. Written documents analysed include the Constitutions of CREMAs, Sub-HIAs, and the HMB. We also analyzed the framework agreement signed between the JBL HMB and other stakeholders, and the broader GCFRP benefit-sharing framework (Forestry Commission, 2020). Adhering to established ethical standards and practices commonly applied in similar research, including informed consent, respect for participant's autonomy, and sensitivity to local norms, we conducted semi-structured interviews and focus group discussions (FGDs) with different actors (Table 2) to understand local perspectives on the CRMCs, CECs, SHECs, and the HMB, NGOs, and public agencies.

Respondents and participants were drawn from five of the six sub-HIAs, all except Manzan where it was extremely difficult to organize CREMA members. We focus our analysis on CREMAs since they play a pivotal role in HIA. We selected participants across three categories to unpack changes in power devolution via the HIA as well as variation within and between communities in levels of involvement with the HIA. These categories are: 1) legacy CREMAs which are CREMAs that existed before the HIA; 2) new CREMAs instituted as part of the HIA

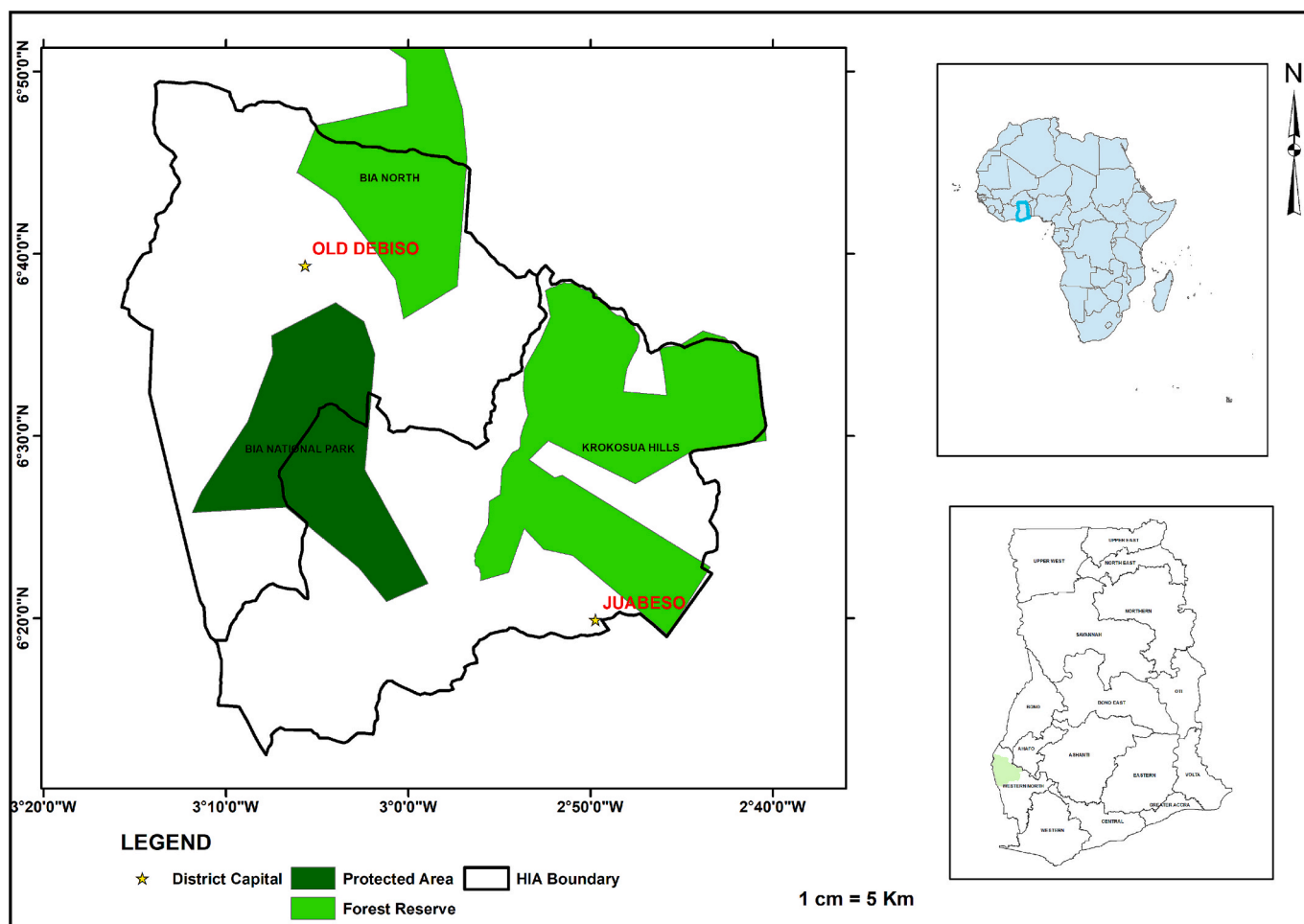


Fig. 2. A map of the JBL landscape.

Table 2

List of actors interviewed.

Actors	Interviews	Focus Group Discussion
CREMA and non-CREMA communities	6	13
CREMA, Sub-HIA and HIA Executives	6	–
Public officials (forestry, cocoa and district assembly)	3	–
Non-governmental organizations	4	–
Cocoa companies	2	–
Total	21	13

Note: Four interviews and one focus group were not recorded because the actors involved did not consent to it.

implementation, and; 3) non-CREMAS, communities within the HIA that do not have a formal CREMA established and no recognizable CRMCs or CECs.

In addition to FGDs in four (4) “non-CREMA” communities, we also covered the Asuo Bia Nkyirima CREMA, Asuopri CREMA, Elluokrom CREMA, Juabeso District CREMA, Krokosua Hills CREMA,

Kwamebikrom Stool Lands CREMA, and Yamatwa-Ntwewora CREMA. The FGDs in CREMA communities had 5–11 participants, while “non-CREMA” communities had 14–32 participants.¹ We complemented the FGDs with key informant interviews of selected CECs, SHEC and HMB executives, and other actors involved in the JBL (Table 2). The interviews and focus groups covered several issues, including the respondents/participants involvement in CRMCs, CECs, Sub-HIA and HMB decision-making processes, their awareness of the power available across the various levels, enablers and barriers to their participation in HIA processes.

We analyzed our data analysis by coding the transcripts from the interviews and focus groups in NVIVO version 1.7, focusing on the power typologies relating to rule-making, enforcement, resource allocation, and conflict management, as established in Section 2. We distinguish between these powers in terms of whether they address the internal operations of CRMCs, CECs, SHEC, and the HMB or provide them with the forms of authority required to influence access and control over forests and land resources. Regarding carbon benefits as a main driver of the HIA institutional innovation under the GCFRP, we reflect on the benefit-sharing framework and not HIA’s experiences of carbon

¹ All community inhabitants are technically CREMA members; however, in practice, they often referred to a few active individuals as the ‘CREMA people’. This was different for non-CREMA members and explains why there were more focus group participants in such areas. We allowed more time for discussions in non-CREMA to enable as many participants as possible to contribute to the discussions.

payment, which occurred after our data gathering. In reporting our findings, we build on Section 3 to first outline the broader historical and institutional context in the JBL into which the HIA institutional innovation is being implemented, examining how the bundles of power related to the HIA establishment and internal operations (Section 5.1). We then analyse how these have, so far, influenced wider institutions that shape patterns of access and control over land, forest, tree and carbon resources in the JBL (Section 5.2).

5. Pressures towards decentralizing and recentralizing power under the JBL HIA

5.1. The historical and institutional context

Local actors in the JBL are the autochthonal Sefwi people, as well as migrants from other parts of Ghana (Boni, 2000, 2006). Farming is a dominant source of local livelihoods, with cocoa being the primary cash crop (GSS, 2021). Generally, traditional rulers are custodians of the land, controlling local farmers' access to farmlands through a range of time-limited agreements (Kumeh et al., 2021). Since the centralization of state power beginning in the colonial era, state forest reserves now cover about 79.50%² of JBL HIA's estimated 243,561 ha land area (MLNR et al., 2023). While traditional authorities wield allodial rights over most forest-reserve lands in the area, the state holds the legal authority to make and enforce rules, allocate resources, or manage conflicts over resources in the same space.

The historical expansion of state power over trees, first on reserves and then across the landscape, is a widely documented source of contestations, struggles, and counteractions between local actors and formal institutions (Hansen, 2022; Nkansah-Dwamena, 2023). Within the JBL, local actors such as (cocoa) farmers use various mechanisms to contest the state's appropriation of their rights to control and benefit from their lands in forest reserves and trees in off-reserve areas. These include deliberately destroying the saplings of naturally regenerated trees on their farms, desiccating established trees on farms, and encroaching on forest reserves to farm food crop, or cocoa (Ashiagbor et al., 2022; Brobbey et al., 2020; Kumeh et al., 2021; Kumeh, 2023).

Beginning in 2006, Ghana's Wildlife Division (WD) introduced the new institution of CREMAs to the JBL in collaboration with a few NGOs around the Bia National Park (a UNESCO Biosphere), mainly to provide livelihood opportunities to local communities and enable them secure access and control over wildlife that enters their designated area (FAO, 2018; Partnership for Forests, 2020). Four CREMAs were formed by early 2010, i.e., Elluokrom, Krokosua Hills, Kwamebikrom Stool Lands and River Asuopri (Asare et al., 2013). Previous analysis of some of the CREMAs in the JBL suggests they are largely ineffective due to many factors such as a lack of legal recognition and a failure to devolve full bundle of powers to local actors, poor access to funds to manage projects, especially when projects that develop them end, and a poor supply of benefits to local actors (Asare et al., 2013; FAO, 2018; Mawutor and Hajjar, 2022; Mawutor and Hajjar, 2024). These factors shape CREMA members' access to power to make rules and mobilize resources to enforce them within their institutional set-up. At the same time, they may also influence CREMA members and their executives' ability to advocate for broader structural reforms to strengthen their ability to regain and consolidate their access to and control over resources from the state. We examine next how the scaling up and federation of CREMAs under the HIA institutional innovation has influenced these power dynamics.

² The JBL has seven forest reserves/national park, which cover 193,616 ha, i.e., Bia National Park, Bia Tributaries North, Bia Tawya, Bonsam Bepo, Krokosua Hills, Manzan and Sucusuku (Climate Change Directorate, 2019, p. 14).

5.2. Power realignment through the JBL HIA

5.2.1. CREMAs as the basis of JBL governance: A trojan horse for tree tenure reform?

The JBL HIA was initiated in 2017. Its first three years were funded by the Partnership for Forests, through UK Aid, and members of the JBL HIA Consortium of cocoa companies (Touton), NGOs, and government representatives (Van der Haar et al., 2023). During this time, ten (10) CREMAs were established/strengthened as the basic "governance units" of the JBL HIA. Above this, at the HIA level, the JBL actors established an HMB with 13 members, elected from six Sub-HIA Executive Committees (SHECs) with 42 members, drawn from 10 CREMA Executive Committees (CECs) across CREMA Resource Management Committees (CRMCs) and a non-CEC (see Fig. 1).

The first four of the ten HIA CREMAs are the legacy CREMAs predating the HIA establishment. The remaining six CREMAs were formed over several years. These include the Asuo Bia Nkyirima and Juabeso District CREMAs, which were funded by a loan from the World Bank's Forest Investment Programme, and the Sucusuku Torya, Manzan, Debe and Yawmatwa Ntwewora CREMAs. These ten CREMAs together cover a limited portion of the JBL. NGO key informants reported plans to create CREMAs for the the uncovered communities as well, but this had not yet occurred at the time of this study due to a lack of funding by various organizations working on the HIA governance mechanism in the JBL.

CREMAs draw power from their local constitutions after they are gazetted as bylaws by their host district assemblies, the lowest unit of decentralization and decision-making in public administration in Ghana (Wildlife Division, 2004). The constitutions of CREMAs, e.g., Asuo Bia Nkyirima, articulate 'the duties/powers of the CREMA are to': i) "make rules and regulations regarding natural resources use", ii) "enforce rules and regulation on natural resources management", "control access to and regulate natural resources use in CREMA communities", and "share benefits that accrue to CREMAs equitably." However, these broader powers over resources are contingent on a Certificate of Devolution (CoD) by the sector Minister. As the GCFRP documentation states:

'CREMA provides a clear process and mechanism by which to ensure that landowners and land users have the right to manage and derive economic benefits from forest resources through the establishment of a CREMA and the issuance of a certificate of devolution [CoD] by the sector Minister' (MLNR, 2017b, p. 64).

With the launch of the JBL HIA, the initial focus of the CREMAs, and higher-level SHECs, and the HMB, has been on drafting constitutions to enable decision-making around the expenditure of external donor and private sector funding for carbon and cocoa that meets externally defined sustainability criteria. In other words, the focus is on devolving decision-making power over how the allocated funds are spent, or internal 'resource allocation power', and more generally the internal operations of the institution. To this end, these multi-level constitutions outline the following institutional roles: i) to admit or suspend group members, as well as expand membership to non-CREMA villages in the landscape, ii) distribute REDD+ funds and mobilize other funds through various mechanisms such as levying members, soliciting external grants, organizing income-generating livelihoods, and use such funds to participate in CREMA/HIA-related decision-making and support their membership, and iii) establish ad-hoc committees and resource them to tackle emergent issues and concerns within the CREMA. In addition to these roles, the FC has empowered the HMB, from 5th December 2019, on the basis of the signed Framework Agreement, to act on behalf of, and in the interest, of CREMAs and non-CREMA areas in the JBL (FC, 2019, p. 2).

Some NGO key informants anticipate that establishing CREMAs may serve as a 'trojan horse' that could later enable local communities to assert their rights over trees. However, this would require, firstly, that the state grant them CoDs. As reflected in the following quote, some

state actors appear to be resisting such devolution:

“The traditional Forestry Commission is concerned that creating CREMAs all over the landscape will undermine their authority over trees-on-farms and other areas, as CREMAs technically devolve rights over such resources to the CREMA executive committee. This has become a point of contention and a serious barrier to securing certificates of devolution for CREMAs in the JBL” (NGO 5 – February 2023).

Until recently, CREMAs had been limited by their status as administrative instruments. In 2023, they gained legal recognition through a new Wildlife Resources Management Act, 2023 (Act 1115). However, while the ACT provides legal recognition for the establishment of CREMAs, it does not offer a clear legal basis for farmers to claim rights to trees on farms. Meanwhile, some state actors have argued that HIAs, in the future, should abandon the CREMA model in favor of a “zone” approach³ (Climate Change Directorate, 2019, p. 24). Unlike CREMAs, “zones” within the “zonal approach” have no explicit pathway to recognition by state agencies in charge of land and forest resources management. At the same time, the process of shifting to a zonal approach is less bureaucratic than creating CREMAs, suggesting that speed and convenience may be factors motivating proposals to shift in this direction. During the data collection, some stakeholders were concerned “the zone approach” effectively removes all legal avenues CREMAs may provide for devolving legal rights over naturally regenerated trees to farmers:

“There is a lot of confusion about using CREMAs within HIAs. Apart from questions about organizations not using the right procedure to create CREMAs, we have had discussions where some people are afraid that establishing more CREMAs will take away their power to control who can access trees in off-reserve areas. This informed the shift to ‘zones’, for example, in the Asunafo-Asutifi HIA.” (NGO 5, February 2023).”

Various actors have also pointed to the role of external donors in thwarting the devolution of rule-making power through CREMAs, due to their tight time frames to achieve pre-defined HIA objectives. For example, a respondent observed how NGOs “*rushed to create and pool CREMAs together hastily to establish the JBL HMB to meet donor and carbon finance requirements*” (NGO 2 – Oct. 2021). As a result, they argued, the Wildlife Division was disinclined to recommend such CREMAs for a certificate of devolution (CoD) by the Ministry of Lands and Natural Resources.

Apart from the overall devolution of power to CREMAs being constrained, many communities in the JBL lack CREMA representation entirely: “NGOs, government agencies, and companies who created the HIA had limited funds to reach such areas” [NGO1, G1 – Jan. 2022]. The JBL HIA does not devolve any direct power to these unorganized, non-CREMA communities. Nevertheless, non-CREMAs are subject to the “authority and decisions” of the HMB. NGOs involved in creating the JBL HIA observed that some “non-CREMA executives” have been granted seats in higher-level decision-making. However, we could neither establish how the non-CREMA executives were (s)electd nor the CREMA equivalent mechanisms by which they exercise different powers required to mobilize, solicit input, or provide feedback to the local actors they ostensibly represent.

5.2.2. The decentralizing and recentralizing forces of external finance

The role of the HIA, as a mechanism for capturing external finance, exerts both decentralizing and centralizing forces. The following quote

³ This proposal is now implemented in HIAs outside the JBL. Instead of forming CREMAs and scaling them up, implementers now form zones and elect a Zone Executive Committee from which representatives are scaled up to the HMB.

from an NGO key informant highlights how some international donors may push for carbon benefits to go to local communities.

“There are companies who are interested in the carbon... For instance, [non-profit foundation] ... have access to big money from donors; and the donors want the carbon payments to go to the farmers.” (NGO 2 – October 2022).

In line with this external interest in local benefits, the GCFRP has developed a benefit-sharing framework that specifies that local actors receive about two-thirds (66.3%) of performance-based carbon payments (Forestry Commission, 2020). This is an improvement on the 5% of timber stumpage fees that forest-fringe communities are entitled to, but struggle to access, in the context of timber resources in the JBL and Ghana more broadly (Kumeh and Abu, 2019).

However, the very precise 69.3% figure for community benefits belies the complexities of where these funds will ultimately land. Although no carbon payments had been distributed during our data gathering, some observations can already be made. The GCFRP Framework specifies that, of the 69.3% of benefits distributed locally: 58% of the net benefits to local actors are to be used to procure inputs and distribute to registered farmer groups within the HIA; 39% be invested in community projects while the remaining 3% is transferred to traditional authorities (Forestry Commission, 2020, p. 21-22). The channeling of 58% of payments to registered farmers’ groups is likely to exclude a sizeable number of CREMA members who are not registered members of cocoa farmer cooperatives, as one CRMC, SHEC, and HMB executive put it: “*less than a third of cocoa cooperative members within our community are CREMA members*” (B6 – Jan. 2022). This unequal carbon payment sharing among local farmers may create future conflicts. Meanwhile, the Ghanaian government has allocated 26.2% of REDD+ funds for its internal operations. This is separate from a management fee of 4% allocated to the Climate Change Unit (REDD+ Secretariat) of the Forestry Commission. Yet, no such provisions are made for running the internal operations of CRMCs or CREMAs although they are the functional unit of HIAs.

This unequal distribution of money for governing the HIAs need to be understood in the context of many other inequalities across scales of JBL HIA decision-making. Taken together, these inequalities create pressures for centralizing power.

The HMB, as the HIA’s top decision-making structure, is the body that deals directly with the FC, COCOBOD, Touton SA, and different NGOs within and beyond the JBL HIA Consortium. The HMB likewise appears to be gaining visibility through its engagement with external actors. In contrast, “CREMAs”, as one local NGO key informant puts it, “*are increasingly overshadowed and neglected in the landscape because different groups prefer to avoid complexity by simply dealing with the leadership of the HMB*” (NGO 4, Jan. 2023).

This creates a form of upward accountability that, according to our research, was not matched by evidence of downward accountability to the lower-level SHECs, CECs and CRMCs. Numerous focus group participants and key informants across all scales of the HIA, including CRMCs, CEC, SHEC, and HMB members, as well as NGOs, critiqued the internal operations of HIA structures as variously “top-down”, from the HIA Implementation Committee and the HMB to local communities, “non-representative”, “lackluster”, or “collapsed” (B8, H7 – Jan. 2022; NGO 3, Oct. 2021). Most participants of focus groups in the various villages across the JBL reported being unaware of HIA governing bodies beyond the local CRMCs and CREMAs.

Respondents from all four-tiers of the HIA expressed concerns about a “*lack of legitimacy and recognition with their constituents and external actors operating in the landscape*” (B8.1, H6.2 – Jan. 2022). Some CRMC members attributed this to a lack of identity cards to “*demonstrate or prove they were CREMA/HIA members or executives*” (H1, B6 – Jan. 2022). A range of respondents also cited “*a lack of resources to organize meetings and educate various people about the duties of the CREMAs, HMB and HIA as a whole*” (H1 – Jan. 2022). While the constitutions of CREMAs, SHECs

and the HMB prescribe members meet periodically – i.e., monthly CRMC, CEC executive meetings, and annual CREMA General meetings – transport costs in particular were raised as “a major constraint to the operations of CRMC, CEC, SHEC and HMB executives” (B8, B14, H1, H9 – Jan 2022). These costs increase as a member moves from the CRMC to HMB levels of decision-making. Therefore, one may expect CRMCs to be more effective in exercising their powers to organize village-level meetings. However, this did not prove to be the case, suggesting other factors may also be constraining participation in HIA processes. Apart from the Asuo Bia Nkyirima CREMA, the remaining CECs had not held a meeting within three months of our interviews and focus groups. Some CRMC members contrasted this with “regular, weekly meetings within community fire volunteers groups” (B14 – Jan. 2022) and “monthly meetings of their village cocoa farmers’ cooperative” (B6 – Jan. 2022) to buttress their point that the internal operations of their CREMAs are ineffective.

A number of respondents also pointed out challenges regarding the durability of the external funding and support that was provided. For example, representatives of two CECs observed during focus groups that external actors, who established their CREMAs, had “installed electric boreholes for the CECs to sell water and raise income to cover their meetings and operations” [B6, B8 – Jan. 2022]. Both boreholes (Juabeso District and Asuo Bia Nkyirima) were defunct during our data collection, with focus group discussants attributing it to poor management by their leaders. Unlike the CRMCs, CECs and SHECs, HMB members reported they convene sporadically but face “difficulties in gathering input and providing feedback from external events and training due to poor mobile service and a lack of funds to organize their constituents.” [H1 – Jan. 2022]. The Bia West District Assembly triangulated many of the observations and reports about CREMAs in the landscape. In its medium-term development plan, the Assembly observed that despite being increasingly recognized by various institutions, “CREMAs were inefficient, unorganized, had vacant, unfilled posts in CRMCs and CECs, over-reliant on external institutions all while lacking sustainability plans” (BWDA, 2018).

Analyses of the annual budgets of the district assemblies in the JBL provided contrasting results on how they support CREMAs to exercise the bundle of powers provided for their internal operations. Whereas the Juabeso District Assembly had no budgetary allocations for their CREMAs, the Bia East and Bia West District Assemblies have committed in their annual budgets to support CREMAs, albeit not clarifying how much they plan to invest in CREMAs (BWDA, 2022, 2023). HMBs and SHEC were not mentioned in any of the budgets reviewed, covering 2020–2024. The documentation of support for CREMAs by the Bia East and Bia District Assemblies is promising given an earlier landscape assessment of financial flows in the JBL found no support for district assemblies to CREMAs in the landscape (Pamerneckyte et al., 2020).

Overall, our findings suggest that the JBL HIA has functioned primarily as a mechanism for receiving and allocating external funding for reducing forest carbon emissions and meeting external standards for sustainable cocoa. In line with this function, it has achieved a degree of internal resource allocation power. The inclusion of CREMAs in the HIA governance mechanism has been viewed by some as a mechanism for also devolving rule-making power over land and forest resources to local communities. However, the failure of state actors to issue HIA CREMAs with Certificates of Devolution, combined with recent changes in CREMA legislation and the shift away from HIA CREMAs to “zones” makes such devolution unlikely.

An examination of the different ways in which external funding is driving both decentralization and recentralization helps further explain these trends. We find that there is significant demand from external donors for money to be distributed to farmers. However, this has not translated into sufficient investments in local HIA institutions to enable adequate governance of resource distribution. At the same time, funders’ short time frames and external environmental priorities have made the higher-level HMB the *de facto* HIA power broker. The HMB, however, is removed from the villages where land use interventions occur. Meanwhile, the sustainability of the entire HIA institutional structure is

in question. Given the reliance of CREMAs on external actors and funding for their internal operations, and how poorly they have fared in later funding cycles (FAO, 2018), it appears that scaling the CREMA model up into a more complex architecture to meet the needs of climate finance risks weakening rather than strengthening CREMA’s powers. The result is that local actors continue to be largely excluded from legally accessing and exerting control over, tree and carbon resources in the JBL.

6. Discussion and conclusions

This research combines decentralization theory, and associated conceptions of a ‘bundle of powers’ (Agrawal and Ribot, 1999; Mawutor and Hajjar, 2022, 2024), with a critical look at how external actors and institutions create simultaneous pressures to decentralize and recentralize different forms of power. We apply this theory to the power dynamics in Ghana’s HIA institutional innovation, examining what powers it devolves to local actors in Ghana’s JBL and what powers it decentralizes, or centralizes. We find the focus of external actors on devolving the resource allocation power associated with the establishment and internal operations of the innovation, may serve to legitimize the further concentration of international and national rule-making power over land and forest resources. The result is that the Ghanaian government, under international donors’ constraints, has retained considerable control over forest and carbon resources without addressing existing claims and contestations for rights to forest and tree resources within the JBL.

These dynamics are evident, firstly, in the limited support the Ghanaian government provides to CREMAs in the JBL by way of formal recognition, undermining local actors’ ability to access material resources to rally their members and build political momentum to operate effectively. They also manifest in the state and other actors’ reluctance to apply CREMAs as developed by the Wildlife Division; instead, shifting towards a ‘zone’ model that lacks a legal mechanism to devolve resource rights to local communities. Together, these factors considerably limit the “bundle of powers” devolved to local actors within the HIA governance mechanism in the JBL, while constraining the CREMA members’ ability to exercise the “bundle of powers” conferred by their constitutions to organize their members, and to make and enforce various local laws to allocate resources within their immediate jurisdiction.

Recent work by Manara and Pani (2023, p. 9) indicates that “withholding material or political support for local actors is a mechanism states use to destabilize the distribution of power”. In addition to destabilizing efforts to redistribute power, our findings in the JBL HIA suggest that the lack of substantial political and material support for CREMAs also enables the Ghanaian government to consolidate power over local actors’ access to carbon resources without their explicit consent. Without far-reaching changes to build more robust and self-sustaining CREMAs, it is difficult to see how farmers and local communities, under existing conditions of the JBL HIA, will ever exercise the limited bundle of powers provided for in their constitutions let alone strive for substantial substantive reforms to better recognize their authority to access and control their local resources on their terms.

More generally, our research sheds light on the ambivalent dynamics of decentralization and recentralization in contemporary forest governance. Although on the surface, the institutional innovation within the GCFRP suggests a push a “landscape approach” rooted in participatory, landscape-level governance (NCRC et al., 2020), our findings indicate a deeper continuity with long-standing patterns of selective devolution. What appears as decentralization, through the multi-tier governance structures involving communities, is, in some respects, a manifestation of “responsibilisation,” whereby local communities are tasked with conducting forest resources management duties without commensurate power over the resources, rules, or finances (Gutiérrez-Zamora and Hernández Estrada, 2020; Mawutor and Hajjar, 2022; Mustalahti et al., 2020; Ramcilovic-Suominen and Mustalahti 2022). This mirrors

critiques of REDD+ governance elsewhere (Asiyanbi, 2016; Isyaku et al., 2017; Moeliono et al., 2020), where local communities are mobilized as tools or instruments of global climate targets but lack agency in influencing the institutional terms of engagement. The double movement of decentralization and recentralization is, therefore, a defining feature of the HIA governance mechanism in that it enables state authorities, based on ambiguity over carbon rights, to establish ultimate authority over both carbon rule-making and benefit sharing pathways. This demonstrates how REDD+ and associated nature-based solutions, and carbon projects may reinforce rather than dismantle centralized power hierarchies, especially when financial payments begin to materialize.

Our findings also highlight externally designed institutional innovations, such as the HIA governance mechanism, are seldom implemented in a vacuum. On the contrary, they appear to be reworked through pre-existing governance relations, often leading in outcomes that diverge from their stated participatory aspirations (cf. Cleaver, 2017). Within the JBL HIA, we observe that while community-based institutions are nominally involved in decision-making, their influence over strategic, core aspects such as the definition of carbon rights and their allocation between different stakeholders, remain on the margins. Thus, rather than a rupture, the JBL HIA, and by extension the HIA model, is a restatement of previous resource governance frameworks under new global imperatives. As such, the nascent carbon economy does not inherently redistribute power, nor does it adequately connect carbon rights with rewards (Karsenty et al., 2014). Alternatively, it becomes a new pathway and terrain over which power is contested and reconfigured. The JBL case, thus, contributes to the budding scholarship on how REDD+ risk entrenching elite control over the carbon economy (Asiyanbi and Massarella, 2020; Asiyanbi, 2016; Karsenty et al., 2014; Lund et al., 2017). Moreover, it accentuates how the informal recognition and control over “carbon rights” by the state may not automatically translate into community entitlements to “carbon benefits” on their own terms. This is because such a recognition currently enables the state to serve as both a gatekeeper and arbiter of carbon benefit sharing, enabling it to recentralize authority over time.

Finally, our findings highlight the need for caution and concern regarding the impacts of institutional reforms designed primarily to meet short-term, target-oriented carbon finance and externally defined goals. As illustrated in our findings, and demonstrated elsewhere (e.g., Mawutor and Hajjar, 2022, 2024; 2018) successive waves of such externally driven projects have done little to empower CREMAs to exercise the powers their constitutions provide or pursue more embedded reforms that improve their control over local resources (cf. Asiyanbi and Massarella, 2020). Hickey and Mohan (2005) suggest that institutional innovation is more likely to enable local actors to secure the power resources to function effectively and access their local resources when pursued as part of a more embedded political reforms. In the context of the JBL HIA, the global interest in carbon presents an opportunity for local actors to (re)negotiate who has control over, and access to, benefits from forests and trees in the country. This is the context within which HIAs are situated and this must be recognized in order to pursue more embedded reforms that strengthen local actors’ claims to their land and forest resources. This contrasts with the current approach, which primes and mobilizes local actors in the JBL to achieve GCFRP targets and secure funds for onward redistribution without enabling them to secure meaningful control over their forest and carbon resources.

These lessons extend well beyond the specific case of Ghana. It suggests that a more thorough examination of the interactions between forms of power associated with institutional innovations themselves, and the contextual arenas into which such innovations land, is critical to more effective and equitable innovations.

CRedit authorship contribution statement

Eric Mensah Kumeh: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data

curation, Conceptualization. **Mark Hirons:** Writing – review & editing, Formal analysis, Conceptualization. **Constance L. McDermott:** Writing – review & editing, Supervision, Conceptualization. **Sabaheta Ramcilovic-Suominen:** Writing – review & editing, Supervision, Methodology, Investigation, Funding acquisition, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability

The data that has been used is confidential.

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