



## Towards more inclusive community landscape governance: Drivers and assessment indicators in northern Ghana

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### ABSTRACT

Community-based approaches to landscape governance are considered more legitimate, equitable, and inclusive ways to manage natural resources and more effective in achieving conservation and livelihood goals than centralised and top-down approaches. In Ghana, the Wildlife Division of the Forestry Commission devolved decision-making authority over natural resources through the Community Resource Management Area (CREMA) governance system. While there is a growing body of literature on the CREMA governance model, few studies have examined the inclusiveness of its decision-making processes. This study aims to fill this gap by identifying the drivers that hinder or foster the inclusiveness of community governance in the Western Wildlife Corridor of northern Ghana and developing a set of inclusivity assessment indicators. Based on data collected through key informant interviews, focus group discussions, and observations, we found that several stakeholder groups remain at the margins of the CREMA governance system and feel excluded, particularly Fulani herders, women, and youth. Based on our findings and the literature, we present a set of assessment indicators for inclusive CREMA governance. However, these indicators are unlikely to be fully met because of persisting socio-cultural barriers and power asymmetries. We argue that measures such as capacity building, empowering marginalised social groups, promoting their participation in decision-making, and a bottom-up approach towards creating CREMAs are needed to improve the inclusiveness of CREMA governance. Beyond the CREMAs, the inclusivity indicators developed in this study have broad applicability to environmental and landscape governance.

### 1. Introduction

In sub-Saharan Africa, balancing the demands of livelihoods, development, and conservation makes it urgent to develop effective and inclusive governance arrangements that benefit all stakeholders (Best et al., 2021; Kusters et al., 2020). Governance is a participatory and decentralised exercise of power (Pitseys, 2010), particularly in the case of community-based natural resource management (Adeyanju et al., 2021). With the emergence of integrated approaches to natural resource governance, local community participation is now considered crucial for successful conservation and natural resource management (Agyare et al., 2015; Baddianaah and Baaweh, 2021; Wali et al., 2017). This goes together with increasing awareness of the importance of considering the

diverse opinions and interests of all stakeholders when making conservation and natural resource management decisions (Zabala et al., 2018). Community-based natural resource management models have gained prominence over centralised and top-down approaches that offer mixed results in terms of conservation-livelihood synergy (Agyare et al., 2015; Baker et al., 2018; Johnson et al., 2021; Stone and Nyaupane, 2014).

According to good governance principles, natural resource governance involves local people and values their knowledge to foster local leadership and enable more inclusive decision-making about land and natural resource use at local and landscape levels (Baddianaah and Baaweh, 2021; Baker et al., 2018; Baruah et al., 2016). The landscape governance concept emerged as an alternative approach to natural resource management and is increasingly gaining traction in response to

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the multitude of private and public institutions, civil society organisations, and local actors with divergent perceptions and interests in natural resource management that intervene in multifunctional landscapes (Görg, 2007; Beunen and Opdam, 2011; Buizer et al., 2016; Ros-Tonen et al., 2018; Kusters et al., 2020). Landscape governance combines formal, semi-formal, and informal negotiation and adaptation processes (Endamana et al., 2010; Van Oosten, 2013; Kusters et al., 2018) to decide who can use land and natural resources, on which terms, and how benefits are shared. These processes are iterative (Reed et al., 2020) and constitute channels for consultation and complex decision-making between stakeholders operating in different sectors and at different levels and scales (van Oosten, 2013). At this level, one of the major challenges is inclusive decision-making, which is crucial for natural resource governance at the landscape scale (Ros-Tonen et al., 2018).

Inclusive decision-making intends to avoid marginalisation, especially of the weakest and most vulnerable stakeholders, who nevertheless affect and are affected by landscape dynamics and management (Best et al., 2021; Omoding et al., 2020). Certain communities or social groups remain on the margins of governance processes, unable to participate, share their knowledge, or express their concerns (Ban et al., 2013; Best et al., 2021). Therefore, the effective participation of all relevant stakeholders, including marginalised ones, in resource allocation and benefit-sharing decisions is essential to ensure inclusive decision-making and concerted landscape governance (Borrini-Feyerabend et al., 2013; Omoding et al., 2020).

In Ghana, Community Resource Management Areas (CREMAs) constitute a community-based natural resource management model introduced by the Wildlife Division of the Ghana Forestry Commission around national parks and wildlife reserves to engage local communities in landscape resource governance and reduce pressure on wildlife (Agyare et al., 2015; Asare et al., 2013; Baker et al., 2018; Foli et al., 2018; Mansourian et al., 2019; Murray and Agyare, 2018). With the support of other stakeholders at the national and district levels (state agencies, district assemblies, civil society organisations, and, occasionally, private sector actors), groups of communities are in charge of the governance of their landscapes through inclusive decision-making processes. Governance mechanisms were put in place to ensure bottom-up decision-making (Foli et al., 2018; 3.2). As such, CREMAs became models of decentralised landscape governance in which local communities were vested with power from the central government, which enshrined their autonomy from the state (Baruah, 2017; Mawutor and Hajjar, 2022). Through this devolution, CREMAs obtained a number of powers, including the power to define the rules of access to resources, to make decisions on the landscape, to enforce laws, and to adjudicate land-use conflicts. Examples include the allocation of hunting and logging permits, trade in bushmeat, and the implementation of benefit-sharing arrangements (Asare et al., 2013; Foli et al., 2018). These powers are often not clearly stipulated in the texts governing CREMAs (constitutions, by-laws) or are not exercised. However, the adoption of the new Wildlife Resources Management Bill on 28 July 2023 by the Ghanaian parliament provides stronger legal backing to the CREMAs, consolidates the governance authority of local communities over wildlife resources and protected areas, strengthens wildlife and flora protection through higher penalties for wildlife offences, and improves wildlife and natural resource governance by harmonising this law with existing legislation.<sup>1</sup>

All functional CREMAs are authorised to hire their own staff and generate income from natural resource management to encourage communities to actively contribute to reconciling conservation and livelihood objectives (Agyare et al., 2015; Asare et al., 2013; Mawutor and Hajjar, 2022). However, community-based natural resource

management approaches often face several challenges, the most recurrent of which are competing land uses and resource use and leadership conflicts (Reed et al., 2016). Even more so, the inclusiveness of governance arrangements appears to be a major challenge for community-based landscape governance initiatives (Foli et al., 2018; Johnson et al., 2021). Indeed, equity of voice and participation of all key stakeholders in decision-making are often missing in landscape governance (Omoding et al., 2020).

The CREMA approach has the potential to manage landscape resources sustainably and consensually by empowering local communities in governance processes (Baddianaah and Baaweh, 2021). Foli et al. (2018) found that the CREMA design aligns with several principles for integrated landscape approaches (Sayer et al., 2013). As such, CREMAs are promising entry points for implementing such approaches (Foli et al., 2018; Ros-Tonen et al., 2018). However, in the face of persistent resource contestations and conflicts within these spaces (Baddianaah and Baaweh, 2021; Baruah et al., 2016), the inclusiveness of decision-making processes needs to be questioned. As Kusters et al. (2020) argue, inclusive decision-making is the first criterion for sustainable and inclusive landscape governance. However, some CREMAs lack transparency, democracy, and accountability in decision-making processes (Asare et al., 2013). Therefore, the main objective of this study is to analyse the inclusiveness of decision-making processes at the CREMA level, using the CREMAs of Builsa Yening, Sanyinga Kasena Gavera Kara (SKGK), and Moagduri Wuntanluri Kuwomsaasi (MWK) in northern Ghana as case studies.

Several studies have highlighted governance issues and challenges in CREMAs (Adeyanju et al., 2021; Asare et al., 2013; Baddianaah and Baaweh, 2021; Baruah et al., 2016; Foli et al., 2018), addressing changes in land management (Adeyanju et al., 2021; Ahmed and Gasparatos, 2020), and investigating community perceptions on CREMAs governance and expectations on their outcomes (Agyare et al., 2015; Murray and Agyare, 2018). However, few authors have analysed the inclusiveness of decision-making. Existing research on issues such as accountability (Baruah, 2017; Asare et al., 2013), transparency (Asare et al., 2013), and participation (Agyare, 2013) has not examined to any great extent the conditions that foster or prevent inclusion. This study aims to fill this gap by identifying the drivers that foster exclusion and developing a set of inclusivity assessment indicators that can also be applied in other environmental governance settings.

The main research question guiding this study is, “How is the CREMA governance model organised in terms of inclusiveness of the decision-making process, and what inclusivity indicators can be derived from the analysis?” Sub-questions include: What mechanisms are in place to ensure inclusive decision-making? How do local actors perceive the inclusiveness of the decision-making process? What drivers foster exclusion? Based on what criteria can the decision-making processes be made more inclusive?

The rest of this paper first describes the methodology employed (Section 2) and presents the theoretical and contextual background of the CREMA governance and decision-making model (Section 3). The results section presents findings on the composition of the CREMA governance bodies studied (Section 4.1), the perceptions of local population groups of the inclusiveness of the decision-making mechanisms (Section 4.3), and factors that lead to exclusion (Section 4.3). These findings serve as a basis for distilling inclusivity assessment indicators (Section 4.4). The discussion (Section 5) compares the findings with the broader literature and highlights the study’s implications. The concluding Section 6 answers the research questions and proposes recommendations that could help improve the inclusiveness of the CREMA governance system.

<sup>1</sup> URL: <https://mlnr.gov.gh/index.php/wildlife-resources-management-bill-2022-passed/>, accessed 22 November 2023. The full text of the law was not yet available online at the time of writing.

## 2. Methodology

### 2.1. Study area

This research is part of the Collaborating for Operationalising Landscape Approaches for Nature, Development and Sustainability (COLANDS) initiative led by the Centre for Forestry Research (CIFOR) in partnership with the universities of British Columbia and Amsterdam and local organisations in the countries of implementation – Ghana, Zambia, and Indonesia (Reed et al., 2020). The study involved six communities across three CREMAs (two per CREMA) in northern Ghana's Western Wildlife Corridor (WWC) (Fig. 1). The three CREMAs were chosen from the six in the WWC because they already had their devolution certificates and functional governance structures in place when the research began (2019). Furthermore, they are from different districts and have their own constitution, rules, and challenges. Lastly, studying three distinct CREMAs (out of six) enables uncovering a range of perspectives on the inclusivity of landscape governance while also considering a representative spatial sample of the landscape. The communities are Fumbisi and Kunyinsa in the Builsa Yenning CREMA (which has ten communities), Yizesi and Zukpeni in the Moagduri Wuntanluri Kuwomsaasi (MWK) CREMA (with ten communities), and Nakong and Kwapun in the Sanyiga Kasena Gavara Kara (SKGK) CREMA (nine communities). Selection criteria included distance to forest reserves, their role in the CREMA as the seat of the CREMA Executive Committee (CEC), and ease of access. As the communities in each CREMA experience the same CEC operating dynamics and all have a Community Resource Management Committee (CRMC), these two communities per CREMA were sufficiently representative (large and small size; being a seat and not being a seat of the CREMA CEC; location at the forest fringe and further away from the forest reserve) to enable covering the dynamics of governance at CRMC level and issues of inclusion of social groups in decision-making processes.

### 2.2. Data collection

The data was collected from April to May 2021 and April 2022, using key informant interviews and focus group discussions. The key informant interviews were held with respondents involved in the governance of CREMAs or deemed important in the context of this work. Purposive (snowball) sampling has been used to select a total of 14 interviewees representing state agencies (4), NGOs (2), District Assemblies (2), CREMA Executive Committees (3), and traditional chiefs (3). Semi-structured interview guides were used for these interviews (see Supplementary Material, Appendix A). As the study focused on the governance of CREMAs, the Wildlife Division (WD) was the focal contact point that enabled us to identify other stakeholders who could provide us with the specific information we needed. Each interviewee indicated one or more other stakeholders deemed relevant to our study. Next, focus group discussions (FGDs) were organised with different groups that use landscape resources, including marginalised groups (Fulani), to complete qualitative data collected during individual interviews. These focus groups were held with farmers (six FGDs), Fulani pastoralists (four FGDs), forest product operators (six FGDs), women (six FGDs), elders (six FGDs), and youth (six FGDs) to take account of all opinions of landscape stakeholders and consider gender, age and ethnicity aspects. The selection of participants considered the inclusion of women, young people (18–40 years), and elders (60 years and over).<sup>2</sup> Thus, 34 focus groups were realised across the three study CREMAs, comprising six people each (see Supplementary Material, Appendix B, for the focus

<sup>2</sup> For the identification of young and old people, we asked the leaders of the target communities to identify those they consider to be young and those they consider to be old. Thus, the age ranges obtained are those suggested by the communities.

group protocols), based on six FDGs in each of the communities of Fumbisi, Yizesi, Nakong, and Kwapun, and five FDGs in each of the communities of Kunyinsa and Zukpeni (where no Fulani groups were found). The participants were selected through convenience sampling, in consultation with the Community Resource Management Committee (CRMC) leaders, applying criteria including knowledge of the functioning of the CREMA and availability.<sup>3</sup> In addition, document analysis, including policies, CREMA by-laws, peer-reviewed articles on CREMA, and observations made during data collection, made it possible to collect information on the actors and social groups included or excluded from the governance of landscape resources.

Literature used to develop a set of inclusivity indicators was found through a search on Scopus and Google Scholar by applying the search terms [(inclusiveness OR inclusivity) AND “Landscape governance” AND Indicators] and [(Inclusiveness OR Inclusivity) AND “Natural resource governance” AND “Indicators”] in Title, abstract, and keywords. Likewise, a search on Google Scholar and ResearchGate was done trying terms like [(“landscape governance” OR “landscape approach”) AND (inclusiveness OR inclusivity) AND indicators] and “inclusive governance”. Then, the most relevant articles published between 2012 and 2022 were selected based on reading the abstracts and checking the outlines. Thus, the full text of 13 articles related to landscape governance, natural resource management, and sustainable development has been analysed to identify indicators or conditions relating to inclusiveness (Table 1).

Ethical consent for this study was obtained from the Amsterdam Institute for Social Science Research (AISSR) of the University of Amsterdam. We adhered to cardinal ethical principles, including honesty, transparency, objectivity, openness, integrity, sincerity, impartiality, caution, confidentiality, and responsible publication (Resnik, 2015). During data collection, community protocols were respected: the chief was the first person to be visited, and the work did not begin before receiving his authorisation. Following local customs, we offered kola nuts or money to buy them. After the usual introductions, we clarified the aims and voluntary nature of the study to all research participants, and the research team ensured that each participant agreed to participate in the study based on informed consent. In addition, we asked for verbal consent before taking photographs or audio recordings. By agreeing to participate in the study, the participants consented to the use of the data and information provided for scientific purposes (thesis, articles), but with strict respect for anonymity. No participant authorised the disclosure of their identity. Thus, no reference to the identity or private life of the participants has been made; they have been kept confidential and personal data is stored separately from research data in secured databases of the University of Amsterdam. This data is available on request.

### 2.3. Data processing and analysis

The data collected was processed using the qualitative data analysis software package NVivo, which allowed the coding and classification of the data by concepts and classes. The classes comprised the nine actor groups interviewed (youth, women, elderly, farmers, pastoralists, forest operators, CEC and CRMC leaders, Chiefs, and institutional actors). The

<sup>3</sup> In the specific case of the Fulani pastoralists, collaboration with the CRMCs enabled us to identify four villages near to which groups of Fulani had settled. Generally, Fulani in northern Ghana settle on the outskirts of villages (see Tonah, 2006) and can stay in a place for quite some time before moving on completely or becoming partially sedentary (see Benkahla and Mason, 2017). Each of these groups self-identified as Fulani pastoralists and was asked to consent to carry out focus group discussions with them. This was facilitated by the fact that the first author could approach them in their own language (Fulfulde) and conduct the interviews in Moore, which was spoken and understood by both the researcher and the interviewees.



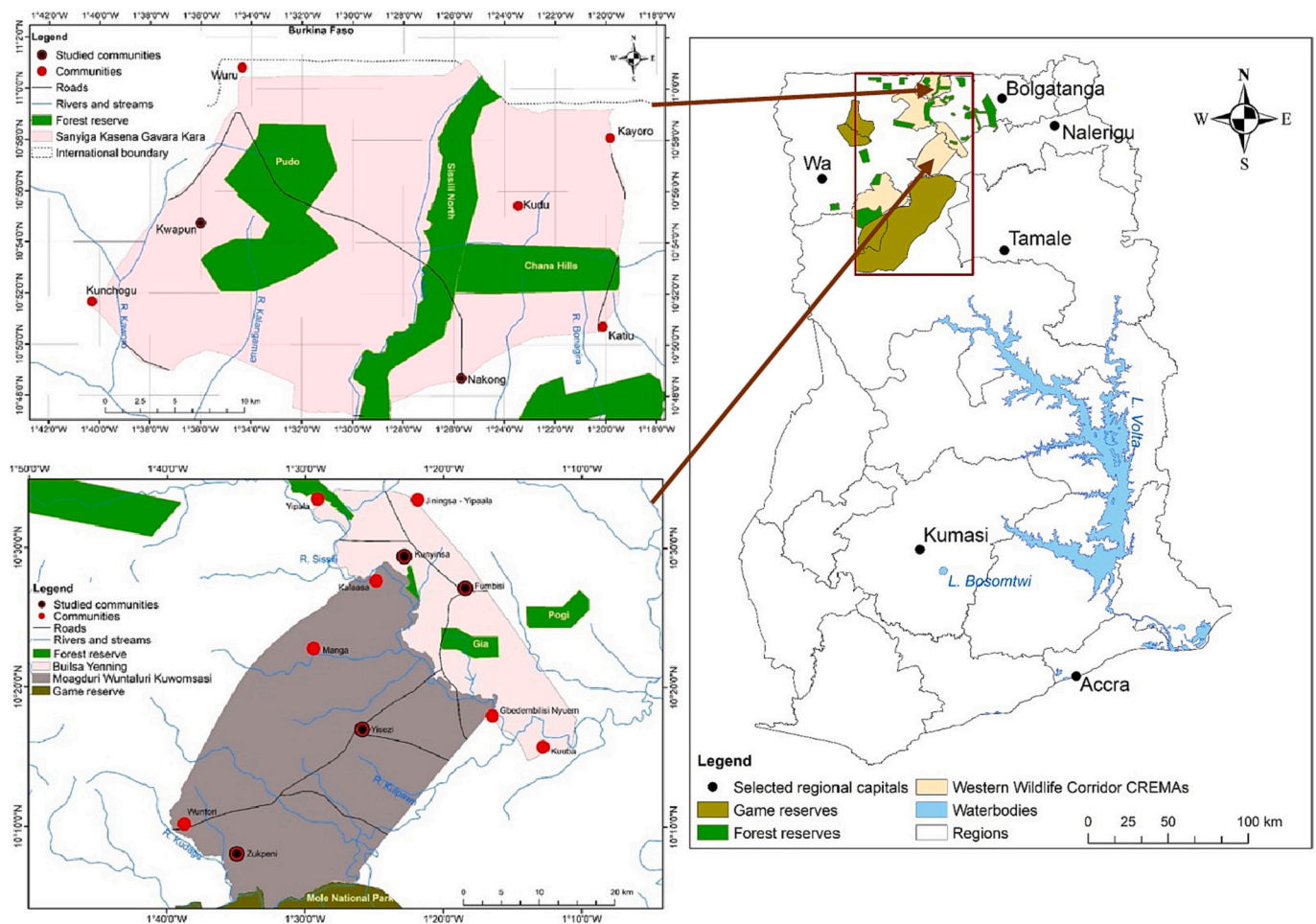


Fig. 1. The study area.  
 Source: Made for the authors by Kwabena Asubonteng based on information from the Ghana Forestry Commission

data relating to the inclusiveness concept for each group of actors was coded and placed in the corresponding class (see Supplementary Material, Appendix C, for the codebook). In this way, all the data provided by the actors of the same class was displayed in a single file to facilitate reading and their classification in themes. This allowed for thematic and comparative analyses. The themes identified relate to the decision-making mechanism and the composition of decision-making bodies, the perception of local stakeholder groups on the inclusiveness of the decision-making process, and the factors of exclusion.

The analysis was conducted by combining inductive and deductive reasoning. Based on focus group discussions and key informant interviews, the factors that condition inclusiveness in CREMA decision-making processes were identified and used to develop inclusivity indicators. These indicators were compared and combined with those identified based on the literature.

### 3. Theoretical and contextual background

#### 3.1. Inclusive landscape governance

Although discussed from different perspectives, the inclusiveness concept has been mainly associated with development, recognising the need to include marginalised groups in social, political, and economic processes to enhance human well-being, environmental sustainability, empowerment and autonomy (Gupta et al., 2015; Hickey et al., 2015; LaRose, 2016; Pouw and Gupta, 2017; Ros-Tonen et al., 2019). Inclusive development integrates three main components: social, environmental,

and relational inclusiveness, emphasising the inclusion of marginalised social groups in access to natural resources, acknowledging their dependence on natural resources for their livelihoods and adaptation to climate change (Gupta and Vegelin, 2016; Pouw and Gupta, 2017; Ros-Tonen et al., 2019). Thus, inclusiveness has become essential for sustainable development and landscape governance as it creates the conditions for a consistent contribution to the sustainable development goals (SDGs). Fig. 2 illustrates the relationship between inclusive landscape governance, inclusive development, and sustainable development.

This study focuses on inclusive decision-making processes in the context of landscape governance at the community level as one of the major criteria for sustainable and inclusive landscape governance and joint reflection on problems and desired future landscapes (Kusters et al., 2020; Ros-Tonen et al., 2018). An inclusive decision-making process at the landscape level means that all key stakeholders, including marginalised and vulnerable groups, have the opportunity to voice their opinions and concerns and amend decisions that will affect them. In other words, the inclusiveness of decision-making processes reflects the quality of governance.

In landscape governance and integrated landscape approaches based on seeking compromise and balance between competing land uses, inclusiveness means that all key stakeholders, from the most powerful to the weakest, are equitably integrated into decision-making. Each stakeholder should be able to make their voice heard to promote their engagement in landscape negotiations and planning and diversity of contributions to governance (Lockwood et al., 2010; Ros-Tonen et al., 2021). This is not simply a matter of ‘invited’ or ‘symbolic’ participation

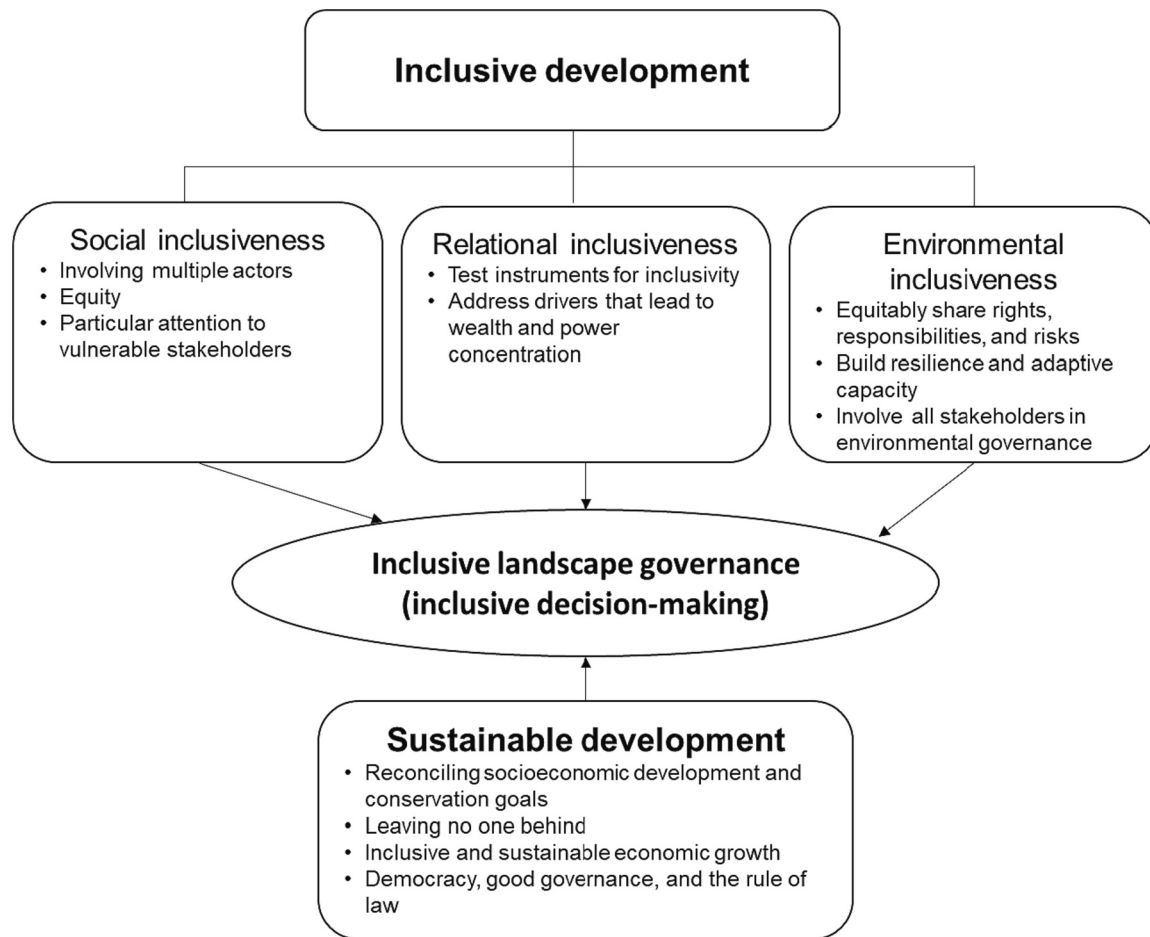


Fig. 2. Relationship between inclusive landscape governance, inclusive development, and sustainable development. Source: Authors' construct drawing from Gupta and Vegelin (2016) and UN (2015)

(Ros-Tonen et al., 2021) but requires a deeper consideration of the conflicting values and interests of the various actors, as well as the legitimisation of the aspirations, knowledge, and customary rights of marginalised stakeholders (Arts et al., 2017; Best et al., 2021; Gupta et al., 2015; Kozar et al., 2014; Ros-Tonen et al., 2019, 2021).

Stakeholders encompass all individuals and organisations with a direct or indirect interest in using, benefitting from, and managing landscape resources, even if they are unaware of their interest in their governance (Grimble and Wellard, 1997; Renard, 2004). The weight of different stakeholders varies according to their social influence, property rights over the resources, and role in their management (Grimble and Wellard, 1997; Schlager and Ostrom, 1992). This implies the necessity to choose which stakeholders should be included in decision-making processes. In this study, the key stakeholders are those whose actions directly affect the landscape and those who directly benefit from its resources (Renard, 2004). This includes local communities, government institutions, and non-governmental organisations (NGOs).

Several studies on natural resource governance consider inclusiveness as a principle of good governance. For instance, the study by Lockwood et al. (2010) frames natural resource governance as a process guided by eight core principles that include inclusiveness: the other principles being legitimacy, transparency, accountability, fairness, integration, capability, and adaptability. With specific regard to landscape governance, McCall and Dunn (2012), Kozar et al. (2014), Kusters et al. (2020), and Best et al. (2021) highlighted six main criteria of good landscape governance, including accountability, transparency, equity, collaboration, coordination, and inclusiveness. These and other studies cited above provided input for the inclusivity indicators listed in Table 1.

To understand to what extent landscape governance is inclusive, it is important to know how the governance processes are organised and how this influences the decision-making and behaviour of the stakeholders in the landscape. For this reason, we now turn to the CREMA governance system in Ghana, which is the subject of this study.

### 3.2. The CREMA governance system

Multiple actors with competing interests co-exist in tropical landscapes. Although they are expected to govern natural resources together, local communities have long been marginalised in decision-making processes (Best et al., 2021; Kusters et al., 2020; Reed et al., 2020; Timoti et al., 2017). In Ghana, the CREMA system places local communities at the centre of natural resource governance outside forest and wildlife reserves.<sup>4</sup> As a form of community-based natural resource management, the CREMA governance system combines customary values and land tenure rules with a democratic landscape governance process (Asare et al., 2013; Osei-Tutu, 2017; WD, 2000; see also 5.1). It transfers management authority to local communities and genuinely involves all key stakeholders in natural resource governance (Adeyanju et al., 2021; Baker et al., 2018).

Two CREMA governance bodies facilitate natural resource use planning, democratic decision-making, community-based management, and benefit sharing for all stakeholders (Asare et al., 2013). These bodies

<sup>4</sup> In Ghana, forest and wildlife reserves fall under the jurisdiction of the Forestry Commission's Forest Services and Wildlife Divisions, respectively.

**Table 1**  
Inclusivity indicators identified in the literature.

Indicator	Definition	Author
Participation	Refers to taking part in a decision-making process. It is often used in relation to the involvement of poor, marginalised or local people in development or landscape governance mechanisms.	Angraeni et al. (2019), Best et al. (2021), Kusters et al. (2020), Pouw and Gupta (2017), Ollivier de Leth and Ros-Tonen (2021)
Legitimacy	Relates to the acceptability of a decision, a fact, the authority of a physical or moral person, or the position of the governors in relation to the governed.	Best et al. (2021)
Ownership	Relates to the adoption by beneficiaries/the target group of an initiative or system of natural resource governance.	Best et al. (2021)
Local knowledge	Involves the cultural values, social norms, knowledge, and practices of local communities to be considered in the governance processes.	Best et al. (2021), Gupta et al. (2015), Gupta and Vegelin (2016), Ros-Tonen et al. (2019, 2021)
Transparency	The availability and accessibility of information about the decision-making rules and mechanisms.	Kozar et al. (2014), Kusters et al. (2020), McCall and Dunn (2012)
Accountability	Considered as a principle of good governance, it refers to the responsibility and obligation to report.	Kusters et al. (2020), McCall and Dunn (2012), Kozar et al. (2014), Larson et al. (2022)
Equity	The balancing of power and influence between stakeholders in decision-making. It implies a better consideration of the interests of the most vulnerable/disadvantaged in governance processes.	Kusters et al. (2020), Zafra-Calvo et al. (2017), Ros-Tonen et al. (2019), Gupta et al. (2015), Gupta and Vegelin (2016), McCall and Dunn (2012), Kozar et al. (2014), Raymond et al. (2022)
Capacity	The knowledge and technical skills of local people, especially marginalised ones, to defend their rights and participate in decision-making processes.	Kusters et al. (2020)

are the CREMA Executive Committee (CEC) and the Community Resource Management Committee (CRMC). The CEC is the supreme body that coordinates and supervises CREMA actions at the landscape level (Agidee, 2011; Asare et al., 2013; Foli et al., 2018). The CRMC is the decision-making body established in each CREMA community and represents all social groups in the community. It functions as the liaison between the CEC and the communities that belong to the CREMA (Asare et al., 2013). It is responsible for drawing up the CREMA constitution that stipulates the organisational setup of the CREMA and the rules of access and use of natural resources, implementing CREMA activities, and ensuring the application of rules governing the use of natural resources at the community level. The CRMC typically consists of 5–13 men and women (Agyare, 2013), including representatives of the chief, the landlord, the District Assembly, the Unit Committee,<sup>5</sup> youth, women, hunters, herders (Fulani pastoralists), public workers, herbalists, and chainsaw operators (key informant interviews, April–May 2021; April 2022). This composition testifies to the will to involve all community groups in decision-making and institutional bodies, irrespective of gender, age, and ethnicity. The policy that underpins the

<sup>5</sup> The Unit Committee is the lowest level of decentralised statutory governance in Ghana, responsible for tasks like revenue raising, organisation of communal labour, registration of births and deaths, and the implementation of development activities in geographic units of 500–1000 inhabitants in rural areas, and 1500 inhabitants or more in urban areas (Derkyi et al., 2013).

development of CREMAs recognises the critical role that women play in the exploitation and conservation of landscape resources (WD, 2000, 2004) and that their involvement in natural resource governance processes greatly contributes to their success and sustainability (Agarwal, 2001; Coleman and Mwangi, 2013; Leisher et al., 2016). Therefore, it supports and encourages their inclusion at all levels of CREMA decision-making.

Decisions taken or issues discussed at the CRMC level are reported to the CEC, which is the highest decision-making body in the CREMA governance system and is constituted of representatives of all CRMCs and institutional actors (the state, NGOs), as well as the private sector (Agidee, 2011; Asare et al., 2013; WD, 2000, 2004). Nevertheless, the characteristics in terms of gender and number of representatives of each CRMC and CEC differ from one community to another and from one CREMA to another, as shown in the results.

Structured in this way, the CREMA governance mechanism holds the potential for broad participation of all key stakeholders, sectors, and social groups in decision-making processes, thus ensuring good landscape governance (WD, 2004). It should furthermore allow for multi-level coordinated decision-making across scales and sectors, stimulate the reconciling of divergent interests, and help in the establishment of consensual land-use plans, all of which are characteristic of sustainable and inclusive landscape governance (Arts et al., 2017; Kozar et al., 2014; Kusters et al., 2020; Sayer et al., 2015). As such, the CREMA governance system allows for addressing complex challenges affecting the governance of social and ecological systems (Kozar et al., 2014).

However, as mechanisms that allow for meaningful participation and inclusion of all key stakeholders across sectors and scales, they are rarely effectively implemented (Best et al., 2021). Hence, it is opportune to ask: how inclusive is the CREMA mechanism, and how do local stakeholder groups perceive the governance of their landscape in terms of the inclusiveness of the decision-making processes?

## 4. Results

### 4.1. Mechanisms to ensure inclusive decision-making in the CREMA governance bodies

We used the composition of CREMA governance bodies as a proxy for mechanisms that should ensure inclusive decision-making. Table 2 shows a large disproportionality between the number of female and male representatives in the CREMA governance bodies. Even though the gender aspect is formally considered, the representation of women is still low across all decision-making bodies visited: at most one-third (CRMC of Zukpeni), but generally under 20% (18% overall). In contrast, the number of young people is significant in most governance bodies studied: on average, young people constitute 57% of governance bodies. This reveals both the interest of the youth in preserving landscape resources and the intention of the CREMA system to consider the aspirations of the youth.

Table 2 reveals similarities and disparities in the composition of the CREMA governance bodies. Regarding gender, all three CREMAs share a common characteristic: the dominance of men in the governance bodies. As women are poorly represented, there is a high risk of their interests being neglected or side-lined. According to the CREMA chairpersons interviewed, the numerical inferiority of women in committees, coupled with the fact that they are women (socio-cultural norms), gives them less influence in decision-making.

The differences that emerge from Table 2 relate to the position of youth in landscape governance. Although they are significantly represented at the community level in most of the CRMCs studied, their representation in the higher-level CECs attests to their lower influence at the landscape level. Thus, Table 2 shows that in the SKGK CREMA, youth occupy a prominent place in governance (85% of the CEC), while in the Builsa Yenning, their influence is medium (57% of the CEC), and in the MWK CREMA, the dominance of elders is higher, with youth occupying



**Table 2**

Composition of the CREMA Executive Committees (CECs) and Community Resource Management Committees (CRMCs) studied.

Composition	CRMC Nakong (n = 11)	CRMC Kwapun (n = 13)	CRMC Fumbisi (n = 11)	CRMC Kunyinsa (n = 9)	CRMC Zukpeni (n = 9)	CRMC Yizesi (n = 9)	CEC MWK (n = 11)	CEC Builsa Yenning (n = 14)	CEC SKGK (n = 13)	TOTAL (N = 100%)
Female	18%	8%	9%	22%	33%	22%	18%	21%	15%	21%
Male	82%	92%	91%	78%	67%	78%	82%	79%	85%	84%
Youth <sup>a</sup>	36%	62%	64%	11%	56%	56%	36%	57%	85%	57%
Elderly	64%	38%	36%	89%	44%	44%	64%	43%	15%	56%

Key: MWK = Moagduri Wuntanluri Kuwomsaasi, SKGK = Sanyinga Kasena Gavara Kara.

Source: Key informant interviews, 2021/2022.

<sup>a</sup> This categorisation of CEC and CRMC members by age only considered the two classes, youth and elderly. It is based on the number of people considered by the chairmen of these bodies to be young and those considered to be elders. However, the age ranges by category could not be obtained.

36% of the seats in the CEC. Similarly, the representation of women shows slight differences between the three CREMAs. In Builsa Yenning, women's participation in governance is higher (21% of the CEC) than in MWK (18% of the CEC) and SKGK (15%). Fig. 3 illustrates these differences.

In summary, although the CREMA governance system has mechanisms to ensure the inclusion of all social groups, women are under-represented, and the youth are mainly represented in the lower echelons.

#### 4.2. Perceptions of local stakeholder groups regarding inclusiveness of decision-making

Although most women interviewed acknowledged that they have representatives who participate in consultations and decision-making within the CEC and CRMCs, they do not feel involved and considered in the governance of CREMAs (an issue raised in 5 of the 6 FGDs). A group of women argued:

The CREMA leaders don't consider our needs, and there is nothing in favour of women (Women FGD 1).<sup>6</sup>

In their CREMA, some men, mainly CEC members, have benefited from beehives for honey production, while the women have not received any support, which they perceive as a lack of consideration.

Young people have great visibility in the CREMA committees. The chairpersons of the CECs and CRMCs interviewed stated that young people are strongly represented in most of these committees, which constitutes a strong position during discussions for decision-making. However, despite this "great representativity", the majority of young people consulted (4 of the 6 FGDs) do not feel implicated in the functioning of their CREMAs. As they said, they feel left out and are unaware of any decisions taken. As explained by one youth group:

We have representatives in the governance bodies, but we are not satisfied with how things function: nobody consults us (Youth FGD 5).<sup>7</sup>

These young people agreed to commit to their CREMA and respect its limits and rules on the condition that they would be compensated. However, the institutions responsible for implementing CREMAs failed to keep their promises of support for livestock rearing (e.g., guinea fowl and goats) and off-season farming (through water supply for irrigation). Neither the CRMC nor the CEC approached them to discuss the issues, nor did they ever consult them on any CREMA-related matter. As a result, they feel "cheated" and left out of the system.

Elders expressed a similar feeling. Most of them (5 of the 6 FGDs) affirmed that they feel excluded from decision-making processes, even though they recognise that they have representatives in committees who sit on their behalf. They consider that even if decisions are made, they do

not reflect their expectations. Among farmers, the reactions were not different. Almost all the interviewees (5 of the 6 FGDs) stated they felt excluded. This was the same for the forest operators (5 of the 6 FGDs), one group of whom argued that:

CREMA leaders have never done general meetings to consult us; we are not involved. The CREMA leaders should consult people before they take decisions (forest operators FGD 1).<sup>8</sup>

Interviewees and the chief mentioned a conflict between the SKGK CREMA leaders and the chief as an example of the leaders' lack of consultation. The leaders had unilaterally authorised land clearing within the community for the benefit of certain members, against the chief's will. The chief had to intervene to prevent the destruction of resources.

Most social groups interviewed believe they have been marginalised from the governance system, as they feel neither considered nor accountable for the decisions taken. This sense of social inequity has led to a reaction of self-exclusion on their part. No longer believing in the CREMA system, they prefer to stay away from it and remain on the sidelines. But, while some voluntarily distance themselves from the CREMA system by considering it as the property of the members of the governance committees, others have no idea of the texts and rules that govern them and often do not know about the CREMA system (see also Bempah et al., 2019). Indeed, some community groups interviewed, including the chief, highlighted that they are unaware of the existence of the CREMA system, although the community is part of the CREMA communities.

We are not aware of the existence of a CREMA system. Here, it is the traditional system of managing natural resources that works (Local leader interview 3).<sup>9</sup>

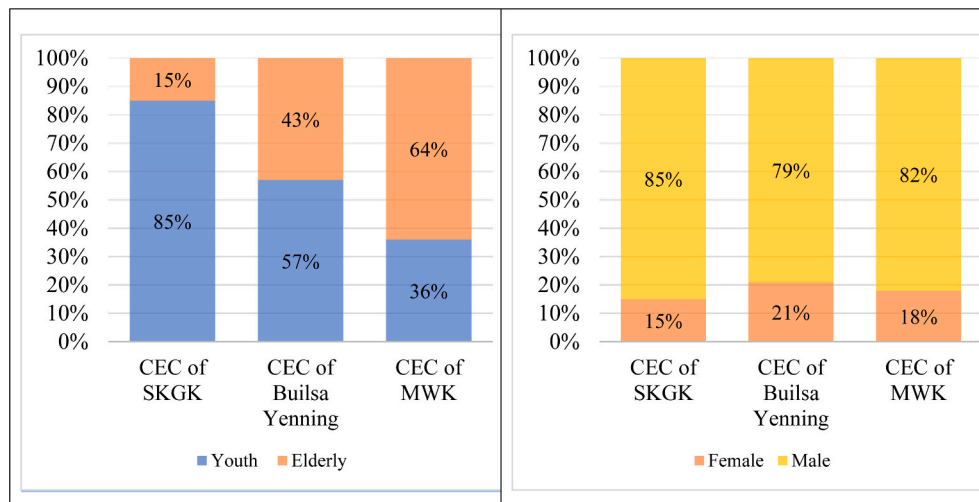
The mode of designating representatives also contributes to feelings of exclusion. The representatives chosen to speak and decide on behalf of local stakeholder groups are often not recognised by their constituencies. In the study area, some youth expressed disappointment that they had not chosen their representatives and did not know how this choice was made. Some choices were made by chiefs, according to CREMA leaders interviewed. This raises the issue of the legitimacy of some members of the CREMA decision-making committees and, at the same time, raises issues of transparency in the selection of these local leaders. Yet, legitimacy and transparency are necessary for the acceptance of an initiative by the target communities and their commitment (Lockwood et al., 2010). However, when these values are lacking, it creates a lack of trust between the people and their leaders, i.e., between the CRMCs/CECs and the communities. This factor pushes people to disengage or stay away from the governance system, as is the case for most stakeholder groups interviewed. Specifically, the youth, farmer, and forest product operator groups (in the SKGK CREMA) stated that

<sup>6</sup> Focus group discussion (FGD) held in Nakong on 19-05-2021.

<sup>7</sup> Focus group discussion (FGD) held in Yizesi on 24-05-2021.

<sup>8</sup> Focus group discussion (FGD) held in Nakong on 19-05-2021.

<sup>9</sup> Interview held in Zukpeni on 25-05-2021.



**Fig. 3.** Comparison of the CREMAs of Sanyinga Kasena Gavara Kara (SKGK), Builsa Yenning, and Moagduri Wuntanluri Kuwomsaasi (MWK), according to age and gender representation in the governance committees.

Source: Key informant interviews, 2021/2022.

they do not expect anything from their representatives (CREMA leaders). Baruah et al. (2016) and Baruah (2017) perceived the same disappointment among local communities in their studies on the CREMAs in western Ghana. In addition, according to CEC leaders, gold panners in the SKGK and MWK CREMAs refuse to get involved in CREMA governance issues out of fear of being blamed for the consequences of their activity. Thus, they do not trust that the system in place can serve their interests.

According to the institutional actors and CREMA leaders interviewed, the local governance bodies lack the knowledge and capacity to conduct inclusive governance processes. They have weak technical and financial capacities to organise inclusive consultation frameworks, even though these are essential in landscape governance. Indeed, the CEC chairs admitted that they were not able to organise meetings involving all the representatives of the CRMCs and even less so the institutional actors due to a lack of financial means, but also because they did not know how to run such meetings. According to Agyare (2013) and IUCN (2017), CREMAs' local governance committees do not have sufficient abilities to manage group discussions and, less so, cross-cultural groups. This poses a barrier to inclusive governance.

Some community leaders use their authority to take advantage of the existing system to the detriment of other community members. Respondents mentioned situations where traditional chiefs or CREMA leaders had authorised prohibited activities (for instance, logging or grazing in protected areas) for their own benefit. Some CRMCs appeared to be entirely controlled by one or two individuals with a higher level of education or a position in public or private administration. They are, therefore, considered the most knowledgeable and capable of making the right decisions. This situation, which could be detrimental to inclusive decision-making, can be seen as a consequence of insufficient capacity at the community level to conduct the CREMA process. This may be because some CREMAs were created using a top-down approach, starting with establishing CECs at the highest level rather than with CRMCs at the community level (Mansourian et al., 2019), thus creating weak embeddedness of the system in the communities, as it is the case in Zukpeni where all the groups interviewed were not aware of the existence of the CREMA system. This raises the question of elite capture of CREMA benefits by its leaders. Elite capture and the lack of representativeness, accountability, legitimacy, transparency, governance capacity, and financial means are encouraged by the top-down creation of CREMAs and constitute a source of tension (see also Baruah, 2017; Mansourian et al., 2019).

#### 4.3. Conflictual relationships and socio-environmental exclusion as drivers of exclusion

Landscapes are generally subject to diverse pressures from interest groups depending on them (Omoding et al., 2020). In many cases, they face competing resource uses and stakeholder rivalries, resulting in social conflicts and constraints to landscape management and economic development (Mensah et al., 2016; Nwangwu et al., 2020; Olaniyi, 2015; Omoding et al., 2020; Ratner et al., 2017; Snorek et al., 2017). The WWC landscape is not exempt from these rivalries and conflicts of interest.

Despite the mechanisms to encourage the inclusion of all key stakeholders in decision-making, some groups remain marginalised. These are specifically the Fulani pastoralists, whose social cohabitation with local farmer groups is often conflictual (Tonah, 2003, 2006). For several reasons, mainly rivalries over land and water use, this community of transhumant herders is systematically marginalised in the governance of natural resources or even territory, even though they are very present in the landscape and are key stakeholders to consider (Kandel et al., 2021). Furthermore, the Fulani are considered foreigners in statutory and customary law due to their different physical and socio-cultural identities and livelihoods (Bayala et al., 2023; Bukari and Schareika, 2015; Hagberg, 2001; Hagberg and Tengan, 2000). Even though the composition of the CRMC includes a representative of this stakeholder group, they struggle to be included in the study area. An interviewee mentioned the reason for this exclusion as follows:

We don't want Fulani people to be part of the CREMA system because they destroy a lot of our farms and forests, and they will take advantage of being part and allow grazing even where it is not allowed (Local leader interview 2).<sup>10</sup>

Without transcending such discriminatory considerations and tendencies, broad stakeholder representation in natural resource management and inclusive landscape governance are difficult to achieve.

Based on the interviews and observations, we grouped the drivers of exclusion into two categories:

- *Intrinsic factors* are exclusion factors internal to a given group of actors. Although there is an opportunity for each group to express and assert itself within the decision-making framework, internal barriers prevent them from doing so. These barriers relate to the lack

<sup>10</sup> Interview held in Yizesi on 24-05-2021.



of communication between CREMA leaders and the groups they represent, the elite capture of CREMA benefits by these leaders, and the loss of trust in representatives among their constituencies due to a lack of accountability and information sharing. The benefits associated with CREMAs mainly concern monetary support (individual or collective revenues from income-generating activities promoted by NGOs with donor support, access to information), study grants, access to agricultural or livestock resources, and community development projects (Asare et al., 2013; Foli et al., 2018; Ros-Tonen et al., 2014). It may also be a deliberate choice by the group not to participate because the group members do not see any interest in doing so, as with the gold panners in the study area.

- *Extrinsic factors* are barriers to inclusion external to the social group. In the WWC, these factors relate to conflicts between social groups that hinder good collaboration and peaceful co-existence. Some groups are reluctant to be involved in the same dialogue platform as others that they consider antagonistic (e.g., farmers with pastoralists).

#### 4.4. Towards a set of inclusivity indicators

Combining the evidence-based indicators derived from our fieldwork in the WWC landscape (Sections 4.1–4.3) and those derived from the literature (Table 1) results in the ten inclusivity indicators listed in Table 3. These indicators will be further explained below.

##### 4.4.1. Participation of all social groups

Inclusive decision-making requires that representatives of all key

**Table 3**  
Inclusive landscape governance indicators.

Indicators	Description	Process or/and Outcome
Participation	Stakeholders can participate effectively in decision-making that affects their landscape; mechanisms exist to facilitate their participation.	Process
Legitimacy	The rules established for landscape governance are accepted by all stakeholders affecting or affected by the governance process.	Outcome
Ownership	Meaningful engagement of stakeholders, especially local community members, who show interest in and attach value to the system.	Process
Satisfaction	Local stakeholder groups are satisfied with the process through which decisions are taken.	Process and outcome
Trust	Stakeholders in the landscape give credibility to each other, and communities trust their leaders for decision-making.	Process and outcome
Accountability	Mechanisms exist for landscape actors, including local group leaders, to be held accountable based on their responsibilities.	Process
Transparency	Information on decision-making and governance processes is available and accessible to all stakeholders in the landscape, and the selection of local management authorities is transparent.	Process
Equity	Balancing power and influence between stakeholder groups in decision-making, with particular attention to disadvantaged groups and fair distribution of responsibilities and benefits.	Process and outcome
Local knowledge	Governance mechanisms integrate local cultural values and knowledge.	Process and outcome
Capacity	Governance actors, including local communities, understand the inclusive governance processes and have the technical and financial means to initiate them.	Process and outcome

Source: Compiled by the authors based on fieldwork (2021) and literature (Table 1).

stakeholders in the landscape, both community and institutional, should participate effectively in decision-making (Kusters et al., 2020), i.e., share their views, express their interests, and have a say in the decisions. However, the CREMA governance mechanisms marginalised women and youth (see Section 4.1) and excluded pastoralist groups from decision-making. Furthermore, stakeholders such as gold panners have self-excluded from governance processes. Together with financial constraints to mobilise stakeholders, this reflects the difficulty of including all landscape stakeholders in community-based landscape governance processes.

##### 4.4.2. Legitimacy of local leaders

Legitimacy is the acceptance by a community of established rules or individuals who have been given the authority to exercise governance power (Lockwood et al., 2010). Some social group representatives in the study area were appointed without prior consultation with their constituencies (see Section 4.2), creating a precedent detrimental to recognising the authority of these leaders and the inclusiveness of the process.

##### 4.4.3. Community ownership

Feeling and taking ownership are key indicators of genuine participation and inclusion (Hurmelinna-Laukkanen and Yang, 2022) as they show community members' trust in an initiative, satisfaction with it, and commitment and involvement in the governance process of the initiative. The absence of such enthusiasm in the communities studied (see Section 4.2) reveals a weak interest among community members. Most social groups interviewed consider the CREMA initiative to be the affair of the members of the management committees. This lack of interest indicates a deficiency in the inclusiveness of the governance processes.

##### 4.4.4. Local communities' satisfaction with decision-making processes

All social groups should be satisfied with the decision-making process (Zafra-Calvo et al., 2017). Even if their vision or the decisions they would have liked are not necessarily the ones that are adopted, at least the process undertaken should make them feel that they count and are considered: they should have the feeling that their point of view counts. Otherwise, when they find no reason to be satisfied with the mechanisms by which decisions are made, they lose hope in the system, as occurred in the communities of the studied CREMAs (see Section 4.2).

##### 4.4.5. Trust between actors

Local communities should be able to trust and rely on their representatives to carry their voices and reflect their visions in decision-making bodies. Trust among landscape actors is one of the most crucial prerequisites for an inclusive multistakeholder process (Kusters et al., 2020). A lack of trust can lead to the self-exclusion of actors from the governance process (as with the gold panners), compromising the inclusivity of landscape governance.

##### 4.4.6. Accountability to local communities

Inclusive landscape governance implies that representatives of local stakeholder groups responsible for leading decision-making processes assume their responsibilities and always keep their constituencies informed. This commitment to communication and reporting is lacking in the study area (see Section 4.2), compromising the inclusiveness of the decision-making and governance processes.

##### 4.4.7. Transparent governance

Related to the previous point, the rules and decision-making processes should be known and accessible to all stakeholders in the landscape (Kusters et al., 2020). However, this study shows that transparency did not apply to the choice of local CREMA leaders in the landscape governance process. Being often confronted with a lack of transparency in selecting these leaders, the stakeholder groups consulted, particularly the youth, expressed their disappointment in this

regard (see Section 4.2). This situation constitutes a handicap for inclusive CREMA governance.

#### 4.4.8. Equity

One of the core principles of inclusive landscape governance is the equitable participation of landscape stakeholders, with the most vulnerable and marginalised being placed at the centre of attention (Bastos Lima and Persson, 2020; Gupta et al., 2015). Inclusiveness, therefore, requires balancing power and influence between actor groups, as well as in decision-making. Each stakeholder must be able to participate and express himself freely without being influenced or marginalised. Equity is also associated with recognising each stakeholder's cultural identity, values, and needs (Zafra-Calvo et al., 2017). However, the marginalisation of Fulani pastoralists in the governance dynamics of the WWC landscape reveals weaknesses in terms of equity.

#### 4.4.9. Capabilities of governance actors

Landscape governance actors must be sufficiently knowledgeable about the inclusivity concept and be technically capable of steering inclusive governance processes. The capacity to understand the importance of including all key stakeholders in decision-making, especially knowing how to do so, is crucial to facilitating sustainable, inclusive governance processes (Kusters et al., 2020), including in the WWC landscape. Both the capacity to steer inclusive governance processes and the negotiation skills among marginalised groups (e.g. women and youth) to make their voices heard were deficient (see Sections 4.1–4.3).

## 5. Discussion

Based on a case study of three CREMAs in the Western Wildlife Corridor (WWC) in northern Ghana, this study aimed to identify the drivers that foster exclusion and develop a set of inclusivity assessment indicators that can be applied in other environmental governance settings. Below, we position the findings regarding the drivers of exclusion (Section 5.1) and the inclusivity indicators (Section 5.2) in the broader literature and discuss the limitations of this study (Section 5.3).

### 5.1. Drivers of exclusion

The findings illustrated the difficulty of including all landscape stakeholders in a governance process. As Hall et al. (2011) argue, “exclusion is inevitable”. We found intrinsic and extrinsic obstacles to integrating stakeholder representatives into the decision-making bodies (Section 4.3), leading to flaws in the relationships between representatives (CREMA leaders) and the represented (social groups within the communities) and partial or entire exclusion of women, youth, and Fulani herders (see Sections 4.1–4.3). Despite the intention to include representatives of all key stakeholders in the CREMA governance committees, the results show a different reality, characterised by what Agarwal (2001) describes as “participatory exclusion”: cases of exclusion within a community involved in participatory or inclusive governance. This may negatively affect the equity and effectiveness of the approach (Agarwal, 2001).

This study of CREMAs in the WWC illustrates that inclusiveness is more than integrating representatives of stakeholder groups in decision-making bodies (Agarwal, 2001; Lockwood et al., 2010; Ros-Tonen et al., 2021). In the words of Ros-Tonen et al. (2019: 14), “[I]nclusiveness is not a state of being, but mainly a process” that involves multiple dimensions. Hence the distinction between process and outcome indicators (see Section 4.4).

Feelings of being excluded from the CREMA governance system despite being represented in the management committees resulted from a lack of accountability from leaders towards these groups. Yet, in circumstances where the effectiveness of decision-making procedures is critical for gaining authority and credibility, accountability should be a concern for governance actors (Lockwood et al., 2010). In addition, the

lack of communication and information sharing could accentuate cases of conflict or contestation over resource use in these areas. In his study on CREMAs in southern and northern Ghana, Agyare (2013) also found that the lack of accountability undermines the participation and inclusion of social groups in natural resource governance processes. Similarly, Baruah et al. (2016), in their study of a CREMA in western Ghana, argued that accountability and transparency issues reduce the capacity of CREMA to conduct management actions. Therefore, it is important that representatives consult and provide feedback to the groups they represent so that they feel involved, considered, and included in the governance system of their landscape and that their aspirations are known and considered.

Inclusivity issues can also be seen from the perspective of power relations between social groups. The social relations between Fulani pastoralists and local farmers, especially the marginalisation of the Fulani, reflect a certain dominance of the farmers over the pastoralists. This is generally supported by environmental and political discourses unfavourable to their inclusion in landscape governance processes (Kandel et al., 2021). Indeed, inclusion and exclusion models are generally shaped by dominant political and environmental discourses, which persist within societies so that they become entrenched over time and space (Kandel et al., 2021). The Fulani in the study area are considered strangers who destroy natural resources through their pastoralism activities (see Section 4.3). They are discriminated against within the host communities, which reflects social and environmental inequity and hinders inclusive landscape governance. Inequity not only compromises inclusiveness but also minimises the chances of achieving conservation objectives (Zafra-Calvo et al., 2017). This power exercised by farmer communities over Fulani pastoralists is based on collective-choice rules that assign communities the right of exclusion, i.e., the power to decide on requirements that people must fulfil to access natural resources and participate in their governance (Schlager and Ostrom, 1992). Also, the elite capture of initiatives and benefits is a means of controlling and dominating a group of people over the rest of the community (Kozar et al., 2014).

The influence of socio-cultural burdens is unfavourable to the inclusion of women in decision-making and a persisting challenge to inclusive governance in many landscapes, including in the WWC. This study shows that the involvement of women in CREMA decision-making committees is disproportionate to that of men due to prevailing traditional gender norms in Ghana that assign decision-making on the functioning of the community, including natural resource management, to the domain of men (Apusigah, 2005; Wrigley-Asante, 2011). Although there is a growing trend towards greater gender sensitivity in landscape governance processes due to lobbying by civil society organisations committed to gender equality and women's empowerment (Wrigley-Asante, 2011), exclusionary traditional rules remain a major barrier. This is evident in the differences in gender and age sensitivity between the three CREMAs studied. However, this research did not provide a reliable explanation for these differences.

The way in which institutions for collective action are formed and function can also be influenced by culture (Sagi, 2015). In some cultures, there may be a strong tradition of community-based decision-making. Forming and maintaining institutions for democratic decision-making and collective action may be easier in these cultures. Other cultures may be more hierarchical or individualistic, with decision-making power vested mainly in the power holder (usually the chief). It may be more difficult in these cultures to form and maintain institutions for collective action (Agrawal, 2001; Ostrom, 1990). In most communities in the study area, decisions made by local management committees must be submitted to the chief for approval. As the supreme authority of the community, he has the customary and legitimate right to veto the decisions made by the representatives of stakeholder groups and to impose his own view. This may explain why inequities and dissatisfaction among stakeholders may persist even if a governance system like the CREMA is inclusive by design and integrates cultural systems, values,

and local knowledge (Zafra-Calvo et al., 2017).

In sum, intrinsic and extrinsic governance factors hinder the proper functioning and inclusiveness of the CREMA system (Baruah et al., 2016). They prevent decision-making processes from being inclusive and the governance system from being effective. However, synergies and trade-offs exist between the inclusiveness and effectiveness of landscape governance (Sayer et al., 2015): even if not all the conditions for inclusiveness are met, landscape governance might have better conservation and sustainable development outcomes.

### 5.2. Inclusivity indicators as benchmarks to more inclusive landscape governance

This study identified nine evidence-based inclusivity indicators: participation, legitimacy, community ownership, satisfaction, trust, accountability, transparency, equity, and capacity (Table 3). A comparison between the evidence-based inclusivity indicators and those discussed in the literature (Table 1) revealed similarities, although sometimes the angle from which they are approached differs slightly. For example, while authors link transparency to the availability and accessibility of information (Kozar et al., 2014; Kusters et al., 2020; McCall and Dunn, 2012), local populations link it to the way their representatives are appointed. Also, some indicators, notably capacity, trust, and satisfaction, have been little and implicitly discussed in the reviewed literature (Kusters et al., 2020), whereas, in the study area, they appear as key factors determining the inclusiveness of the governance processes. Remarkably, building on local knowledge, which is much discussed in the literature on inclusive development and landscape governance (Best et al., 2021; Gupta et al., 2015; Gupta and Vegelin, 2016; Ros-Tonen et al., 2019, 2021), did not come to the fore in this study as an indicator to be considered. This is likely because this aspect is already considered in current CREMA governance mechanisms.

The set of indicators proposed does not pretend to be exhaustive but reflects the fundamental principles of inclusiveness, which are essential in community landscape governance. While developed specifically for the CREMA context, these indicators can be applied more broadly to help identify and anticipate constraints to inclusive governance. They can, therefore, be used to assess inclusiveness and adjust decision-making and governance mechanisms as needed.

It is difficult for a governance approach to meet all the conditions for inclusiveness in practice (Bastos Lima and Persson, 2020; McDermott et al., 2022). Indeed, no specific method exists to solve inclusivity issues across the landscape completely (McDermott et al., 2022). In a study conducted on seven different landscapes, Sayer et al. (2015) show that transparency is an aspect that is often lacking and that power differentials between stakeholders always prevail in landscape governance processes, making it difficult to meet the inclusivity requirements. In practice, power asymmetries often influence both the inclusiveness and conservation outcomes of landscape governance (Bastos Lima and Persson, 2020; Ros-Tonen et al., 2015; Vallet et al., 2020). So, it would be unrealistic to consider indicators of inclusiveness as a normative set of requirements to be met but rather see them as benchmarks showing the way forward for enhanced inclusion of various stakeholders, including the most vulnerable (Gupta, 2014; Gupta et al., 2015; Gupta and Vegelin, 2016; Ros-Tonen et al., 2021).

### 5.3. Limitations of the study

The results of this study revealed differences between the three CREMAs studied, particularly with regard to the consideration of gender and age in landscape governance. However, the study did not uncover the reasons for these differences, as the approach focused on identifying inclusiveness indicators. This gap could be the subject of a study based on a more in-depth comparative approach, highlighting the similarities and differences regarding inclusive governance in these CREMAs. In addition, the study did not cover all the CREMAs (three out of six were

covered), nor all the communities in the CREMAs covered (six out of 29 were covered); this gap could also be considered in other studies.

## 6. Conclusions

Aiming to assess the inclusiveness of a community-based landscape governance system in northern Ghana – the Community Resource Management Areas (CREMAs) – this paper identified drivers of exclusion and developed nine inclusivity assessment indicators. Despite potentially inclusive governance bodies, we found intrinsic and extrinsic obstacles to inclusive landscape governance and the participation of marginalised people – women, youth and Fulani herders – in decision-making processes in CREMA governance bodies. Although the CREMA system vested decision-making power over natural resources in local communities, inclusive governance systems that ensure their meaningful engagement remain a challenge. We found drivers of exclusion related to conflicting relationships, power inequities between stakeholders, and weak governance capacity of local actors. These drivers are related to a lack of accountability, transparency, and legitimacy of CREMA leaders, cultural norms regarding the authority of the Chiefs, and gender norms regarding decision-making on community issues, including natural resource management.

Participation, legitimacy, transparency, trust, satisfaction, ownership, accountability, equity, and capacity came to the fore as key indicators for inclusive landscape governance. These indicators, combined with those identified in the literature, led to the development of a set of ten indicators that can also be used to assess the inclusiveness of environmental governance more broadly.

Despite the flaws in inclusive landscape governance, the composition and structure of the CREMA governance bodies offer the potential for the inclusion of all key stakeholders in the landscape in the governance processes and create a multi-level decision-making system. To realise this potential, this study points to four recommendations. First, the implementing agencies (the Wildlife Division, NGOs, and development partners) need to build the capacity of governance actors to increase their understanding of landscape governance challenges and inclusive governance processes, the proper functioning of the CREMAs, the role and responsibilities of management committees, and the rights and duties of communities in landscape governance. Second, implementing organisations should empower stakeholders in appointing their representatives to improve transparency in the choice of leaders, facilitate accountability, enhance meaningful participation, and ensure the legitimacy of local CREMA committee members. Third, measures should be taken to enable the participation of marginalised groups in decision-making and enhance their feeling of ownership and accountability for the decisions made. These measures include coaching leaders, improving the negotiation skills of the various social groups, and organising preliminary meetings that enable each social group to develop and communicate a clear position, which its representative will submit at the meeting of the decision-making body. Finally, the CREMA governance structure could be more inclusive if the CRMCs were set up before creating the CECs at higher levels. This will allow a better apprehension of local realities, better anchoring of the initiative in the communities, and facilitate transparency in governance.

### CREdiT authorship contribution statement

**Eric Rega Christophe Bayala:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Visualization, Writing – original draft. **Mirjam Ros-Tonen:** Conceptualization, Methodology, Resources, Supervision, Validation, Visualization, Writing – review & editing. **Malaika Pauline Yanou:** Visualization, Writing – review & editing. **Houria Djoudi:** Resources, Supervision, Validation, Writing – review & editing. **James Reed:** Funding acquisition, Resources, Supervision, Validation, Visualization, Writing – review & editing. **Terry Sunderland:** Funding acquisition, Resources,



Supervision, Validation, Visualization, Writing – review & editing.

## 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.

## Data availability

Data will be made available on request.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.forpol.2023.103138>.

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