



Power and inclusion in REDD+ policy networks in the Democratic Republic of Congo

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ABSTRACT

In forest governance research, how actors' power configurations shape national policy outcomes remain understudied, particularly regarding how distinct dimensions of power interact to influence these outcomes. We examine how two dimensions of power- reputational power (visibility of influence) as a proxy of overall multi-dimensional power, and collaborative power (relational embeddedness)- interact to shape policy outcomes. We introduce a two-dimensional typology of power that integrates four distinct configurations of power within policy network theory to explain how visibility and inclusion jointly shape policy arenas. Applying this typology to our case study of forest-based climate change mitigation in the Democratic Republic of Congo (DRC), we find that: 1) visible-inclusive power dominates, yet donors' financial control risks converting inclusivity into dependency; 2) centralised agenda setting by executive government offices and international non-governmental organisations limits participation and deliberation in practice; 3) marginalisation of right-based civil society organisations and non-governmental organisations signals inequitable formal decision-making processes; and 4) business actors' structural power operates undetected and perpetuates deforestation entrenching inequitable socio-economic outcomes.

1. Introduction

This paper examines power in forest-based climate change mitigation in the Democratic Republic of Congo (DRC), focusing on how policy actors shape decisions related to national implementation of the United Nations Framework Convention on Climate Change (UNFCCC) programme on Reducing Emissions from Deforestation and forest Degradation (REDD+) (UNFCCC, 2010). REDD+ involves diverse actors with competing ideas, interests and resources. Despite UNFCCC mandates for participation to enhance the effectiveness and equity of REDD+ processes, major power asymmetries persist, influencing who has a voice and agency in decision-making processes (Brockhaus and Di Gregorio, 2014). These asymmetries are not only rooted in formal authority and resource control, but also in how actors are positioned and connected within policy networks. Exploring relational forms of power that capture how power emerges through interactions and the interests they serve, can help us better understand the inner workings of the DRC REDD+ policy domain.

Investigating how interactions contribute to the constellations of power is key for understanding power structure and explaining successes and failures in forest governance (Krott et al., 2014; Broadbent, 2024; Moon, 2025). Policy network analysis provides a useful framework to examine these structures by focusing on policy actors' positions, interactions and their role in shaping policy processes. Within this approach, power is expressed through network positions, resource exchange and agenda-setting capacity (Brockhaus and Di Gregorio, 2014; Ylä-Anttila et al., 2018; Di Gregorio et al., 2019). Utilizing policy network analysis, this paper builds on studies investigating the multi-dimensionality of power in stakeholder participation for effective land-use governance (Vallet et al., 2020; Lécuyer et al., 2024; Siangulube et al., 2023). Researchers have examined how constellations of power affect REDD+ outcomes across various contexts (Brockhaus and Di Gregorio, 2014), including information exchange in Indonesia (Moeliono et al., 2014), policy actor networking in Brazil (Gebara et al., 2014), marginalisation strategies in Vietnam (Pham et al., 2014) and Cameroon (Dkamela et al., 2014) and participation in the DRC (Pham

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et al., 2021). These studies, demonstrate the value of distinguishing between different dimensions of power, notably reputational power as an indicator of perceived influence (Bushley, 2014) and collaborative ties as a proxy for coalition building in forest and climate policy (Brockhaus and Di Gregorio, 2014). Building on this literature, this paper, examines the interplay between collaborative and reputational power dimensions in climate and forest governance in the DRC.

Political rivalries shape governance of the DRC's 155 million ha forests (Majambu et al., 2021). Since 2009, actors engaged in REDD+ policymaking with varying intensity (DRC, 2009; Aquino and Guay, 2013; Kengoum et al., 2022). Despite claims reported progress (Fobissie et al., 2014), forest loss persists (Samndong, 2018; Reyniers, 2021) and participation efforts have not resolved power asymmetries (Pham et al., 2021; Majambu et al., 2023; Malkamäki et al., 2026). We argue that analysing the interplay between reputational power and collaboration provides a more nuanced understanding on how power is structured, exercised, and who has a voice and translates into policy influence.

This paper integrates policy network theory with a two-dimensional power typology – based on reputational and collaborative power – to investigate power structures and inclusion in the DRC REDD+ policy domain. It asks: how does policy decision-making unfold in the national REDD+ policy domain in the DRC? Specifically, who are the most prominent actors and who drives REDD+ collaborative processes? What configurations of reputational and collaborative power emerge, and what do they reveal about visibility and inclusion in the REDD+ governance? The next sections outline the two-dimensional conceptual framework, the policy network analysis approach and the methods used. After the presentation of the results, we discuss the implications for REDD+ policy outcomes, forest and broader environmental policy.

2. A typology of power in REDD+ policy networks

Governance theories understand power as multidimensional and relational because policy actors need to interact, to negotiate options and shape decisions across different levels of governance. Policy networks emerge from resource interdependencies among these actors (Smith, 1997), leading to complex power configurations.

2.1. Power as relational

Power is inherently relational, whether it refers to actors' ability to impose their will despite opposition (Weber, 1947), the capability to avoid decisions to be taken by others (Bachrach and Baratz, 1962) or the ability to shape preference and beliefs against one's own interests (Lukes, 2005; Moon, 2025). Power is exercised both through cooperation and conflict (Fiske and Berdahl, 2007; Crozier and Friedberg, 1977) and can be expressed in multiple ways through coercion and control, persuasion, collaboration, contention, manipulation, empowerment and subtle forms of resistance (Scott, 1985; Barbalet, 1985; Lécuyer et al., 2024; Gaventa, 2006; Vallet et al., 2020). Power's pervasiveness across society, and its often less invisible representations have long been recognised (Foucault, 1982; Falkner, 2010). Thus, there are not only as many dimensions as sources of power, but also different ways to combine and measure power dimensions.

2.2. Reputation and collaboration as an expression of key dimensions of power

2.2.1. Power multidimensionality

In policy network studies, Knoke (1990) identifies four types of power often represented in policymaking: *coercive power* (threat and negative sanctions); *authoritative power* (command with uncontested obedience); *persuasive power* (through information); and *egalitarian power* (domination and sanction free power) (Knoke and Kostichenko, 2017). Another classification of the concept of *power* (the capacity to

influence others' behaviour or the direction of events) distinguishes between *power over* (coercion/manipulation), *power to* (empowerment/resistance), *power with* (cooperation/learning), and *power within* (sense of self-identity) (Gaventa, 2006). They illustrate how agents, structures and discourses might influence decision-making in governance processes (Partzsch, 2017; Pansardi and Bindi, 2021). Gaventa (2006) further differentiates between *visible* (observable decision-making), *hidden* (setting the political agenda) and *invisible* (shaping meaning of what is acceptable) forms of power, to which Vallet et al. (2020) include Digeser's (1992) unconscious power, which takes Foucault's disciplinary form involving society's subtle control producing actors' self-regulation. Gaventa's (2006) powercube conceptualises how these visible and less visible forms of power play out in different *spaces* and *places*. Lécuyer et al. (2024) advance the powercube conceptualisation by acknowledging the flexibilities and permutations of its elements. This means *visible*, *hidden*, *invisible* and *systemic* as forms of power (Lécuyer et al., 2024) can be leveraged by policy actors at any level (international, national and local) and in different spaces (in *closed* – behind the scenes without broad consultation or participation –, *invited* – through invitation but within set boundaries – and *claimed spaces* – self-created by actors to influence policy agendas) where power operates. Visibility, hiddenness, and invisibility represent different degrees of observability of power within policy networks, ranging from formal observable collaborative interactions to informal and norm-based influence beyond direct ties.

Visible power refers to observable power operating through rules, structures, procedures and enforcement (Barnett and Duvall, 2005; Lécuyer et al., 2024). It typically serves public or collective interests but can also aid individual legitimate interests. Visible power includes the power to sanction (coercive power), mediate rewards (reward power), prescribe behaviours (legitimate power), identify with another actors (referent power) and express expertise (expert power) (Raven et al., 1958). It can also influence through persuasion or oppression allowing dominant groups to visibly control and suppress dissent. When legitimate, visible power may manifest subtly even to actors it influences. Yet, Lukes (2005) cautioned that focusing solely on visible power may result in an incomplete and biased understanding of power relations, as harder to detect and less visible forms of power play major roles in policy making.

Invisible power is the capacity to shape meaning of what is acceptable (Gaventa, 2006). Vallet et al. (2020) emphasise its subtle yet potent force in shaping beliefs and self-perception, often keeping issues out of awareness and visible decision-making. It often also reinforces social norms and beliefs (Lécuyer et al., 2024) by contributing or perpetuating exclusion and inequality, thus necessitating strategies that transform social and political culture and individual consciousness. Invisible power operates more deeply through the shaping of norms, beliefs and perception that define what actors consider, legitimate, possible or acceptable. It also refers to actors' ability to shape agendas from behind the scenes (Falkner, 2010). It ranges from part of what Lukes (2005: 86) refers to as '*extending to some unintended consequences and as capable of being effective even without active intervention*'. This definition differs from hidden power as conceptualised by Siangulube et al. (2023) who defines hidden power as covert agenda-setting and selective exclusion operating behind formal decision-making spaces. This eludes Scott's (1985) hidden power referring to subtle resistance through strategies including 'hidden transcripts' employed by weaker actors to contest domination outside formal arenas.

Further, power can be inclusive or exclusive (Fussell, 2025). *Inclusive power* refers to extended access and participation in the decision-making of interested policy actors regardless of their background. It will more likely serve collective interests and directly addresses inequality in power relations leading to more legitimate, acceptable and comprehensive policy outputs and outcomes (Kalfagianni and Pattberg, 2013).

Exclusive power involves mechanisms that privilege selected elite interests, creating, reproducing and reinforcing power asymmetries and

inequity. This entails the capacity of a small group of powerful actors to dominate policy processes, limiting the participation and influence of others through control of resources and knowledge, the manipulation of dominant values or the use of procedural barriers to exclude certain groups from decision-making (Fussell, 2025).

We subscribe to Luke's (2005) and Scott's (1985) observations that visible power, invisible and hidden forms of power are important to understand the constellation of power in policy domains. We suggest that collaborative power can support visible and hidden forms of power, while some invisible forms of power are much harder to detect given their very nature (Falkner, 2008; Falkner, 2010). We operationalise some of the concepts described above through two measurable forms of power: reputational power and collaborative power.

2.2.2. Reputational power

Dahl (1961) and Emerson (1962) contributed to linking reputation to power. Reputational power refers to the perception of an actor's overall influence within the policy domain, shaped by beliefs about their capacities, intentions, history and mission (Carpenter and Krause, 2012; Gronow and Ylä-Anttila, 2019). It is extensively used as a proxy of overall power (Laumann and Knoke, 1987; Ingold, 2011; Kriesi et al., 2006) and encompass all sources of power incorporating elements of formal, ideational as well as relational power (Fischer and Sciarini, 2015), and performative, moral, procedural and technical reputations (Carpenter and Krause, 2012). Ingold and Leifeld (2016) argue that third-actor perceptions are often more accurate than self-perception, but they recognise that reputational power can be influenced by an actor's institutional role and structural position within the network. When assessing others' reputational power, both 'angel shifts' – overstating allies' power – or 'devil shifts' – exaggerating the opponent's power – can occur, especially in high-conflict situations (Sabatier et al., 1987; Leach and Sabatier, 2005; Gronow et al., 2023). This is partly due to factors like self-promotion or misperception, which can bias perception of influence (Fischer and Sciarini, 2015). Such biases are minimised, though, if we include the perception of every relevant policy actor in the policy domain in how we measure reputational power. Given that one encompasses the other and that actors tend to build ties with those perceived as influential (Fischer and Sciarini, 2015; Weible, 2005), reputational and collaborative power are positively correlated.

2.2.3. Collaborative power

Unlike reputational power, which is multi-dimensional, collaborative power refers to a specific form of relational power that emerges through collaboration and the power of collective action among interdependent actors pursuing shared or partially aligned goals (Ostrom, 2000). Collaboration provides the relational setting in which actors coordinate resources, knowledge, and strategic capacities, but also generate gains through increased informational diversity, material resources, and strength in numbers (Stolte and Emerson, 1976; Smith et al., 2014; Della Porta and Diani, 1999). Through embeddedness into collaboration networks actors are better able to access and pool diverse resources, and at times reach influential policy actors. Collaboration goes beyond coordination, which is the basis for coalition formation and is widely recognised as the main driver of policy change (Weible, 2005); it includes generating common understanding and sharing a joint goal (Bardach, 1996). Motivations for collaboration can vary, ranging from strategic self-interest, to trust and mutual understanding, and it can generate co-empowerment - 'power with' - among participants (Cohen, 2018; Qin, 2018; Gaventa, 2006). The formation and durability of collaborative ties are influenced by preference similarity, power asymmetries, and broader opportunity structures (Fischer and Sciarini, 2015; Kim and Roh, 2015).

Within policy network theory, exclusion from formal decision-making processes does not preclude influence, as actors may exercise indirect power through coordinated mobilization, discursive strategies, and network-based pressures on dominant actors (Castells, 2011).

Collaborative power is exercised both within and outside of formal policy processes or policy communities, most notably during instances of mobilization of environmental movements (Diani and McAdam, 2003). It is not just the domain of central actors; structurally marginalised actors use it to try to improve their positions in networks aiming to achieve influence potential (Lo Piccolo, 2025). Accordingly, coordination is necessary but not sufficient condition for collaborative power: only when coordination generate a certain level of consequential collective action does collaborative power materialise.

2.3. A typology of relational power

Building on multidimensional theories of power and policy network theory, reputational power captures a broad understanding of overall power. It therefore includes relational dimensions linked to collaborative power (Weible, 2005; Fischer and Sciarini, 2015). However, collaborative embeddedness alone does not guarantee high levels of overall influence in policy networks, as is very often the case for marginalised sections of civil society, who collaborate with like-minded organisations, but operate largely outside of formal policy processes (Diani and McAdam, 2003). While there is a positive correlation between reputational power and collaborative power, their intersection produces a two dimensional framework with four configurations: a) visible-inclusive power, which captures instances of high reputational power and high collaborative power; b) visible-exclusive power, reflected in high reputational power and low collaborative power; c) hidden-inclusive power, characterised by low reputational power and high collaboration and d) invisible-exclusive power, where low reputational power comes alongside low collaborative power (Fig. 1). Building on Gaventa (2020), Vallet et al. (2020), Lécuyer et al. (2024), Falkner (2010) and Scott (1985, 1990), these configurations distinguish how power varies across the two dimensions, and the extent to which it involves collaboration versus competition (Ashman et al., 2005; Fisher et al., 2013). While analytically distinct, these configurations are not fixed. Actors may occupy multiple positions and shift across them over time as relationships, resources, and policy context evolve. In this study we capture a snapshot of REDD+ power structures and employ this typology as an analytical simplification to investigate how power structures functions - for whom - at a given moment in the REDD+ policy domain, and possibly beyond.

2.3.1. Visible-inclusive power

Visible-inclusive power combines high reputational and collaborative power and reflects openness in policy process and broad participation in decision-making (Gaventa, 2020; Lécuyer et al., 2024). It emerges from various sources and features the cooperative aspect of 'power with' (Partzsch, 2017; Fussell, 2025). Normatively, inclusiveness involves transparency, mediated decisions, accessible policy processes and valuing diverse perspectives (OECD, 2024). But in limited democratic environments, it might simply entail compliance with imposed standards of formal consultation (Siangulube et al., 2023).

Actors in this quadrant are influential and connect to many others, shaping desires and norms through persuasion, leadership and informal collaborations in invited or claimed spaces (Gaventa, 2006). They serve collective interests and can protect marginalised voices in deliberative settings (Fishkin, 2002). These actors are expected to belong to formal REDD+ organisational structures, indicating national ownership (Korhonen-Kurki et al., 2013, 2019), and include actors for facilitating broad collaborations, such as global financing for REDD+ or realising UNFCCC REDD+ safeguards. Wealthy private actors seeking investment opportunities may also be part of this group. As such, their centrality and collaborative reach enable them to influence policy process through agenda-setting, coordination, and resource allocation. However, while this configuration can enhance participation and legitimacy, it does not necessarily ensure equitable influence or substantive policy change, as formal inclusiveness may coexist with persistent decision-making

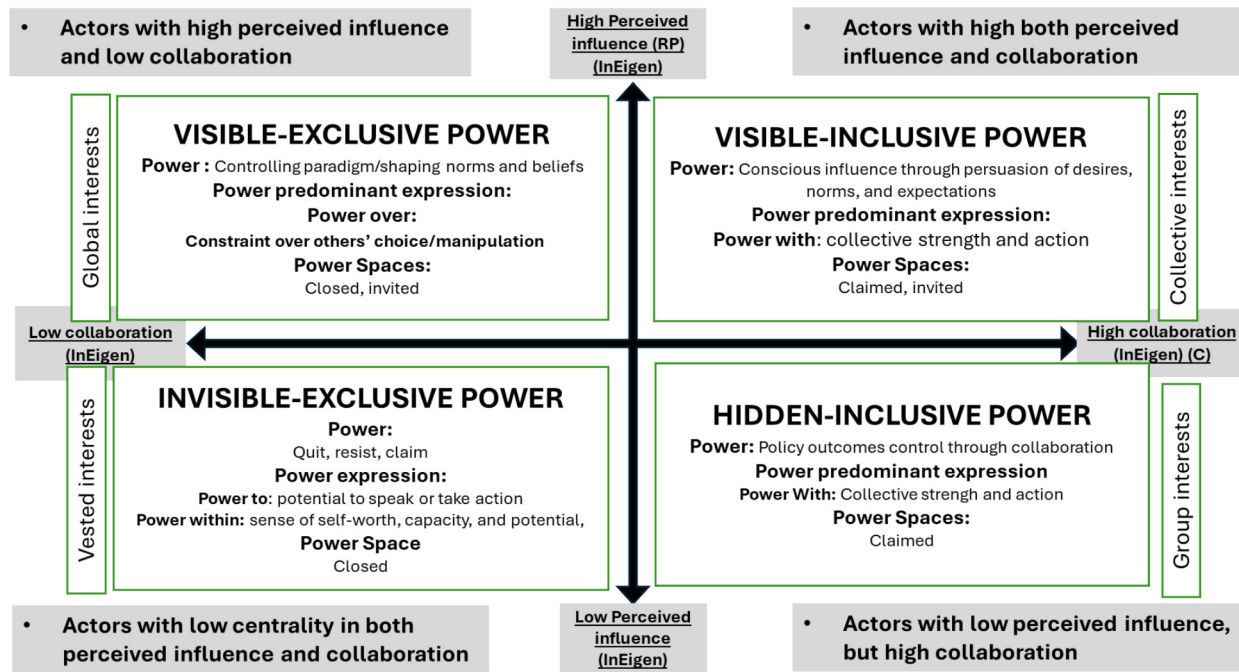


Fig. 1. Two-dimensional relational power framework (adapted from: Gaventa, 2006, 2020; Vallet et al., 2020; Lécuyer et al., 2024; Scott, 1985; Falkner, 2008).

asymmetries, and strong interests that could obstruct change.

2.3.2. Visible-exclusive power

Visible-exclusive power characterised by high levels of reputational power and low collaborative power is associated with exclusive forms of 'power to'. It involves control over paradigms, norms and beliefs and operates within closed spaces and exclusive invited circles (Lécuyer et al., 2024), often marginalising numerous actors and serving elite interests (Hammett, 2019). Even when aiming for consensual outcomes, it often leads to centralisation and dominance by a few national actors (Barnett and Duvall, 2005), which might facilitate forms of 'power over' such as control and manipulation.

Actors in the two visible power quadrants are generally more influential than those in the lower quadrants, which is reflected in higher levels of reputational power. Because this power is often associated with high-level formal policy processes, these actors are typically drawn from national governments, participants in climate negotiations, large private-sector corporations with high stakes in low-emissions transitions, and key international policy organisations (Brockhaus and Di Gregorio, 2014). Their concentrated authority and control over decision-making spaces most likely enables them to shape policy agenda and outcomes, often limiting broader participation and reinforcing existing power asymmetries.

2.3.3. Hidden-inclusive power

Hidden-inclusive power featuring low reputational power and high collaborative power applies to actors generally less powerful than those with more visible power, but retain the capacity to mobilise collectively through dense collaborative ties. This form of power reflects 'power with', as actors - often CSOs excluded and operating at the fringes of formal policy arenas - draw on solidarity, shared learning, and collective action to advance their interests (Moeliono et al., 2014; Partzsch, 2017). It includes practices such as advocacy, coalition-building, and the strategic use of information in both public and less visible arenas, including what Scott (1985, 1990) terms as 'hidden transcripts' and forms of infrapolitics. These strategies are employed to challenge dominant structures and address inequities. Serving broad group interests (Banks et al., 2015; Tortajada, 2016), it employs various strategies including quiet, persistent and protest. As such, although lacking

formal visibility, actors' collective action efforts can enable them to exert indirect influence on policy processes by contesting dominant agendas and broadening the scope of participation, targeting more powerful allies or operating through other policy actors they are selectively connected with.

2.3.4. Invisible-exclusive power

Invisible-exclusive power features low levels of both reputational power and collaboration (Fig. 1), suggesting it hosts actors with the least power resources. It is associated with processes occurring in closed spaces where actors may lack resources, agency, or interest in engaging with formal policy processes (Lécuyer et al., 2024; Gaventa, 2020) featuring a sort of 'marginal invisibility' or may be endowed with enough resources to feature forms of 'structural invisibility'. In the first case, actors may deliberately disengage, reflecting 'exit' strategies as described by Hirschman (1970), while in others, marginalisation or other structural constraints limit their capacity to participate. These actors often struggle to mobilise resources, create or capitalise on a window of opportunity (Rabe, 2004), and may include peripheral organisations, resources-constrained non-state actors, or actors with limited interest or engagement in the forest-climate policy domain. In the second case, low visibility and collaboration do not necessarily imply weak influence, as structurally powerful actors such as businesses with important resources may shape policy indirectly through market power, investment dependence, or state deference without extensive collaboration or public visibility (Falkner, 2008). As such, invisible-exclusive power may reflect both marginalisation and concealed structural influence, contributing to the exclusion of certain perspectives and reinforcing existing inequalities in decision-making processes.

3. Research design and methods

3.1. DRC national REDD+ policy domain boundary specifications

Our study employs nominalist and realist approaches to define the REDD+ policy domain boundaries, combining researchers' knowledge gained through the analysis of the formal national REDD+ organisational structure, the literature, policy and advocacy documents, activity reports, media statements and national REDD+ policy documents and

personal knowledge of the domain, key informants' and actors' self-assessment (Laumann et al., 1983 and Saunders, 2007). The main criteria for inclusion in the domain is relevance, defined as actors (organisations) that are considered and consider themselves to be part of the national REDD+ policy domain (Brockhaus and Di Gregorio, 2014). A panel of seven experts verified researchers' assessment, resulting in a final roster of 169 actors, categorised into 15 groups (see Table 3 in supplementary file).

3.2. Network survey

Field data collection occurred from May 2023 to January 2024 using a face-to-face organisational network survey. To assess reputational power, participants were asked: 'Please indicate those organisations that stand out as especially influential on domestic REDD+ policies by putting a tick after the organisations' names'. For collaboration, we asked: 'With which other organisations does your organisation regularly collaborate concerning REDD+-related issues?' Organisations are disclosed with consent, while individuals' identities remain confidential due to questions sensitivity.

The survey had a 30% participation rate. Non-participation was attributed to various reasons (see Table 3 in supplementary material). Organisations whose representatives felt uninformed about REDD+ were included if deemed influential by others and the expert panel. Social network analysis is sensitive to missing data, particularly if central actors are not interviewed (Kossinets, 2006; Borgatti et al., 2002). We evaluated potential biases from non-respondents, noting that 6 of the 15 most influential actors (see Table 2 in the supplementary material) participated. This limitation may bias social network analysis measures. While this represents less than 50% and, combined with the lower response rate, limits the explanatory power of our analysis, it has to be noted that 5 of the 15 non-respondents were sub-units of the Ministry of the Environment, with the unit responsible for REDD+ activities participating, raising the most influential organisational-level participation to 6 out of 10. The reputational power measure used in the study rely on incoming ties (nominations), which although not necessarily complete is based on all domain actors' responses.

3.3. Reputational and collaborative power measures

We operationalise REDD+ actors' power using two-dimensional measures, assessing organisation-level eigenvector centrality in both networks. Calculations were conducted using UCINET (Borgatti et al., 2002). Centrality measures evaluate actors' prominence within the network (Borgatti et al., 2002), with eigenvector centrality serving as a proxy for actors' power based on their connections' popularity (Bonacich, 2007; Borgatti et al., 2002; Scott, 2017). Eigenvector centrality is preferred over degree centrality in our case because we want to include effects linked to preferential attachment (Bonacich, 2007).

For reputational power, actors with a high score connected to influential peers are considered more powerful, attracting collaboration to influence decision-making (Weible and Sabatier, 2005). For collaborative power, we measure actors' eigenvector centrality in the collaboration network, assuming numerous collaboration ties and connections to well-connected actors translates into power through resource pooling and reshaping ideas. Consequently, eigenvector centrality in the collaboration network is a proxy for persuasion and alliance-building power, as those sought for collaboration are likely powerful. While reputational and collaborative power are directly measured through network centrality, the implication for policy influence is analytically inferred. Acronyms are used for organisations in the developments below (full names and detailed measures are provided in the supplementary materials).

4. Results

4.1. DRC REDD+ policy domain configuration

The REDD+ policy domain includes a significant presence of international actors (49%). National actors, totalling 86 members, exhibit a higher average of reputational power (21.72) and collaboration centrality measures (7.17) than international actors (83 members), whose averages are 18.09 and 4.59, respectively (Table 1). This suggests strong national policymaking ownership. National government agencies have the highest average reputational power (28), confirming their prominent role in REDD+ decision-making. Intergovernmental organisations (26.8) follow closely, indicating the influence of global climate and forest governance. National and international research institutes (22.1) and foreign government agencies (22) also hold influence. Multi-stakeholder platforms are influential as well. Domestic NGOs, representing 23.1% of the actors, are less influential overall but score highest in collaborative power (9), playing a crucial role in uniting policy actors. They are followed by national government (6.6), intergovernmental organisation (6.4) and foreign government actors (6). International NGOs and businesses each comprise 11% of the actors, but NGOs show higher reputational power (16.6) and collaborative centrality (5.3) than international businesses. International and national businesses have the lowest overall influence, with average reputational power centrality of 8.8 and 12.5, respectively, and lower collaborative power indicators (1.4 and 3.8) that are slightly higher than professional associations. The low influence of businesses is noteworthy and warrants further investigation.

4.2. Power structures in the REDD+ policy domain

In Fig. 2, actors are plotted according to the two power measures, with the median values represented at the axis intersection. The four quadrants reflect the empirical equivalent of our earlier theoretical conceptualisation of power (Fig. 1), showing visible-inclusive power (high RP, high C), visible-exclusive power (high RP, low C), hidden-inclusive power (low RP, high C) and invisible-exclusive power (low RP, low C) quadrants. As expected, there is a positive correlation between reputational power (RP) and collaborative power (C) (Pearson correlation coefficient: $r = 0.69$) (Rank and Tuschke, 2010; Berman, 2016).

4.2.1. Visible-inclusive power of national REDD+ policy leadership

This quadrant includes some of the most powerful actors with high reputational and collaborative power. We anticipated finding actors formally involved in national REDD+ policymaking such as facilitators or coordinators and key government figures.

4.2.1.1. Leadership role of national state actors. The Prime Minister's decree n°09/40 on 26/11/2009 establishes the REDD+ organisational structure, including the National REDD+ Committee (an invited multi-stakeholder space) and the REDD+ Interministerial Committee (an invited space for formal decision-making) (see figure of national level REDD+ organisational structure in supplementary material). Many of these actors populate this quadrant. The Ministry of the Environment and Sustainable Development (MEDD) formally leads the REDD+ process, as indicated by their prominent position (RP_InEigen = 0.14; C_InEigen = 0.16). Yet, the National REDD+ Fund (FONAREDD) (RP_InEigen = 0.16; C_InEigen = 0.14), a Ministry of Finance (MINFI) sub-unit managing US\$700 million in REDD+ funds since 2016, shows even higher influence.

MEDD sub-units, like the General Secretary (SG-EED) and divisions for sustainable development (DDD), forest management (DGF), forestry (DGFor) and forest inventories (DIAF) hold some importance but are less powerful than the CN-REDD+ (RP_InEigen = 0.13; C_InEigen = 0.15),

Table 1
Structure of the REDD+ policy network (More details are included in supplementary material).

Actors' categories	Total members	Memb. proportion (%)	Group resp. rate/overall (%)	Average in-degree reputational power	Average in-degree relational power (collaboration)	Average in-degree centrality (reputational power)	Average in-degree centrality (relational power-collaboration)
National government	30	17.8	24.3	28.0	6.6		
National research institutes	7	4.1	2.7	22.1	4.9		
National businesses	4	2.4	5.4	12.5	3.8		
National professional associations	6	3.6	8.1	15.7	2.8	National actors: 21.72	National actors: 7.17
Domestic NGOs (env and non-env)	39	23.1	45.9	18.7	9.0		
International ENGOs and networks	20	11.8	16.2	16.6	5.3		
Intergovernmental organisations	16	9.5	13.5	26.8	6.4		
International research institutes	7	4.1	2.7	22.1	5.9		
International prof. Associations	5	3.0	0	13.8	2.4	International actors: 18.09	International actors: 4.59
International businesses	19	11.2	8.1	8.8	1.4		
Hybrid and multi-stakeholders	1	0.5	0	21.0	5.0		
Foreign government agencies	15	8.9	13.5	22.0	6.0		
TOTAL	169	100					

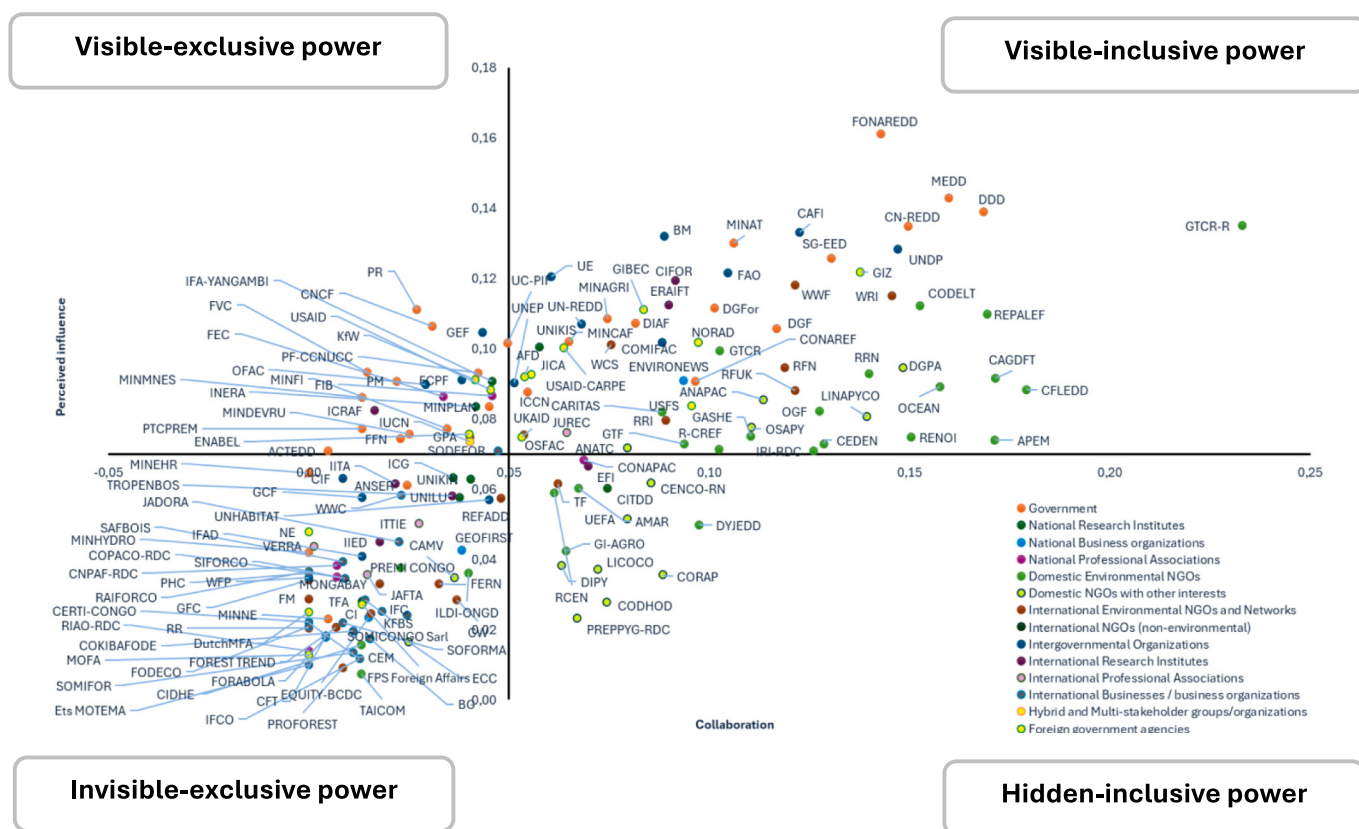


Fig. 2. The four power types. Actors are plotted according to their centrality measures. The X-axis represents eigenvector centrality of the collaborative network (C), and the Y-axis represents eigenvector centrality of the reputational power network (RP).

which handles daily REDD+ activities within MEDD. Other ministries in the Interministerial Committee including the Ministries of Land Use Planning (MINAT) (InEigen = 0.13; C_InEigen = 0.11), Agriculture (MINAGRI) (InEigen = 0.11; C_InEigen = 0.07) and Land Affairs (MINCAF) (InEigen = 0.10; C_InEigen = 0.06), as well as the Commission for Land Reform (CONAREF) (InEigen = 0.09; C_InEigen = 0.10),

oversee the agricultural and land use sectors. This reflects their leading role in formal REDD+ decision-making venues, budget allocation and formal agenda-setting, ensuring a certain degree of national ownership.

4.2.1.2. Collaborative networking, social-environmental advocacy and expert contributions of NGO platforms. The national REDD+ policy

domain comprises 39 NGOs, with 22 featuring visible-inclusive power. These NGOs typically have higher collaborative power and lower reputational power than national state actors, emphasising their role in fostering inclusivity within formal policy making. The most powerful are the umbrella organisations REDD+ and Climate Working Group Renovated (GTCR-R) (RP_InEigen = 0.14; C_InEigen = 0.23) and the Network of Indigenous and Local Populations for the Sustainable Management of Forest Ecosystems (REPALEF) (RP_InEigen = 0.11; C_InEigen = 0.17), which represent over 800 civil society organisations (CSOs) and indigenous peoples organisations and advocate for consensus in the National REDD+ Committee. Both have more collaborative power than most governmental actors, with GTCR-R's influence comparable to CN-REDD. Only three state agencies have more influence than GTCR-R.

Many umbrella NGOs, though not part of the National REDD+ Committee, engage in consultative activities through invited spaces, including CFLEDD, addressing gender issues; RRN, focusing on natural resource management; and RENOI, specialising in forest independent monitoring. Religious entity IRI-RDC and traditional leaders' entity ANATC, though less powerful, can participate in the National REDD+ Committee and Interministerial Committee when invited.

Individual environmental NGOs generally exert less influence than umbrella organisations, with exceptions like CODELT, CAGDFT and DGPA, which lead advocacy efforts for community forestry, Pygmies' rights and land use planning policy reforms. Other NGOs, like APEM, LYNAPICO, OGF, OCEAN, ANAPAC and GASHE, demonstrate collaborative power and influence. They contribute to networks like GTCR-R, REPALEF or other umbrella organisations, linking formal multi-actors including REDD+, NGO networks and local and indigenous communities while advancing their agenda.

4.2.1.3. Foreign governments, contributions to forest data, national policy and global climate initiative. In this quadrant we find key foreign governments, intergovernmental organisations, professional associations and research institutes significantly influence the policy domain by providing bilateral or multilateral support. Key contributors include the Central African Forest Initiative (CAFI) (RP_InEigen = 0.13; C_InEigen = 0.12), the World Bank (BM) (RP_InEigen = 0.13; C_InEigen = 0.09) and the Norwegian Agency for Development Cooperation (Norad) (RP_InEigen = 0.10; C_InEigen = 0.10). They represent most national REDD+ public funding, totalling US\$775 million for the Forest Investment Program and US\$700 million from CAFI, which translates into agenda-setting power. All three have higher reputational power than collaborative power.

Foreign actors also deliver REDD+ technical assistance. UNDP is involved due to funders' concerns over national 'financial expertise', specifically managing CAFI's funds, despite FONAREDD being the statutory REDD+ financial actor. Consequently, UNDP has a prominent position with slightly higher collaborative power. Limited national capacity and expertise have led organisations like FAO to lead the design of key policy documents, such as the National Forest and Carbon Reference Level and the National Agriculture Policy, which are informed by scientific data from entities like (in order of relevance) WRI on land use dynamics, CIFOR on policy design, JICA on forest inventory and OSFAC on satellite imagery. This reflects how these contributions operate as a source of power within REDD+ policy networks where, in the absence of national state authority, control over financial flow and technical expertise enhances influence on agenda-setting and facilitates their collaborative efforts.

While not directly engaging in REDD+ activities, non-African donors and intergovernmental organisations like the European Union, the UN-REDD+ programme and UNEP along with African organisations like the Central African Forest Commission (COMIFAC) maintain significant influence in the policy domain, albeit with lower collaborative scores.

4.2.2. Visible-exclusive power of top government offices and multilateral climate change actors

Actors in this quadrant are influential, though generally less so than those in the visible-inclusive quadrant. As expected, they influence political will or have interest at stake in the changing paradigm, but except IUCN, NGOs are rather absent.

4.2.2.1. National government and UNFCCC influence. By descending reputational power, we find the DRC's Presidency of the Republic (PR), which is responsible for DRC's climate change commitments under the UNFCCC, the Paris Agreement and funding agreements with CAFI; the Prime Minister's (PM) office, which oversees government policy implementation and participates in the National REDD+ Committee; the MINFI, which oversees FONAREDD and sits in the REDD+ Interministerial Committee; and the Ministry of Planning (MINPLAN), which co-ordinates development aid. These actors operate in more exclusive settings, interacting with select high-level actors, including global multilateral climate change actors.

Internationally, the UNFCCC Focal Point (PF-CCNUCC) within MEDD manages national climate reporting to the UNFCCC secretariat and liaises with the Global Environmental Facility (GEF) and the Global Climate Fund (GCF) multilateral financial mechanisms, operating within exclusive networks of high-level international and national policy actors.

4.2.2.2. Impact of foreign governments on global strategies and national REDD+ affairs. Foreign government agencies, while more marginal than the top actors, contribute to the policy domain by combining visible influence with exclusive operations to promote national ownership and impact global strategies. They operate in three different ways. In descending order of influence, USAID, the German Development Bank (KfW) provide funding and technical support (KfW through GIZ) while the Belgium International Cooperation agency ENABEL directly implements REDD+ projects. These actors aim to support government-led programmes, while avoiding interference in national affairs.

4.2.2.3. Private-sector interests in national carbon regulations. The forest carbon debate has prompted the private sector to engage in exclusive circles, leveraging government contacts to influence DRC's forest carbon regulations. FIB and FEC, the main forest related business associations in the DRC, display visible-exclusive power, advocating for unified private-sector interests in closed spaces as well as through the National REDD+ Committee. In contrast, SODEFOR (RP_InEigen = 0.07; C_InEigen = 0.05), a key forest logging company, though less influential, expands into forest carbon conservation via its sub-unit KFBS, indicating a strong interest in steering REDD+ policy directions.

4.2.3. Hidden-inclusive power through advocacy and collaboration

Actors with hidden-inclusive power have less overall influence than the previous quadrants, relying primarily on collaboration to impact national REDD+ policy decisions. Most are domestic NGOs.

4.2.3.1. Excluded domestic right-based advocacy NGOs. Several NGOs challenge REDD+ decision-makers outside formal processes, often with limited resources and marginalised from formal policy processes or operate through umbrella organisations. Environmental NGOs generally wield more influence than non-environmental NGOs, for whom REDD+ is more peripheral.

Some NGOs and CSOs access policymaking through platforms like GTCR-R, REPALEF or RENOI, which are part of the visible-inclusive quadrant. With average reputational power, and in descending order of collaborative power, these include DYJEDD, UEFA, AMAR, LICOCO and DIPY. They engage in coalition building at both the REDD+ project and national policy levels. Others are not members of these platforms, including CONAPAC, which advocates for farmers' rights, CORAP,

which conducts independent forest monitoring, and right-based NGO CODHOD and faith-based CENCO-CN, which use collaborative power for justice and equity agendas at national and local levels. International actors include Tenure Facility (TF) (RP_InEigen = 0.06; C_InEigen = 0.06), an international NGO that funds land tenure CSO projects and works with national NGOs like UEFA and PREPPYG.

4.2.4. Invisible-exclusive power of marginal actors and those working behind the scenes

In this quadrant, we would expect to find actors with the least power, – low overall reputational and collaborative power - primarily operating in exclusive spaces, with limited collaboration, resources and influence in the domain. Yet, somewhat surprisingly, we find a vast variety of actors, some with huge resources at their disposal.

4.2.4.1. Forest exploitation businesses' vested interests. Businesses, excluding SODEFOR, are prominently represented in this quadrant. Domestic and international forestry businesses dominate this group, alongside agriculture, banking, media and certification organisations. Forest exploitation companies with important resources significantly contribute to forest loss. They seem to operate through trade associations in closed spaces in the visible-exclusive quadrant but display invisible-exclusive power individually. Similarly, forest exploitation companies like BG, JAD LLC, SAFBOIS, SIFORCO, KOKIBAFODE, FODECO, Ets MOTEMA, CFT, SOMIFOR, SOFORMA, IFC and FORABOLA, with reputational power as low as 0.02, remain largely silent, or 'invisible'. Some belong to FIB and FEC, choosing discretion to safeguard their interests, while others rely on associations or government representation for protection. They are aware that in the REDD+ domain they are often labelled as the villains.

4.2.4.2. Businesses investing in carbon amid regulatory uncertainty. With REDD+ and carbon regulations under development, businesses involved in REDD+ also populate this quadrant, and again they are not resource-poor organisations. WWC leads the largest private REDD+ project in Mai-Ndombe, reportedly selling over 20 million tons of carbon credits. Other actors include SOMICONGO, which transitioned to a conservation business, while KFBS is created by SODEFOR for forest carbon. WWC is funded by private carbon equity, while SOMICONGO negotiates funding from EQUITY-BCDC, a DRC-based bank supporting carbon-related projects. Interestingly, the largest national palm oil company PHC is also exploring forest carbon investments. Thus, not only the villains that are driving deforestation, but businesses engaged in carbon mitigation efforts also choose to operate invisibly in closed spaces.

4.2.4.3. Foreign service providers and certification bodies working on technical aspects of forests and climate. Organisations like JAFTA (RP_InEigen = 0.04; C_InEigen = 0.01) offer forest data management expertise for DIAF, ITTIE (RP_InEigen = 0.05; C_InEigen = 0.03) ensures extractive sector transparency and VERRA certifies carbon credits for REDD+ projects. These suggest a limited national control over technical dimensions of forest carbon accounting.

4.2.4.4. Challenges for peripheral and resource-limited NGOs. Some NGOs are indirectly involved in REDD+ for their broader environmental work focus, lack of interest or resource constraints. TROPENBOS (RP_InEigen = 0.06; C_InEigen = 0.04), an international NGO, operates within the DRC, while others, including, in descending order of influence, IIED, a research-oriented NGO, and GW, FERN, TFA, FM, MONGABAY, CI, RR and FT which are based abroad, have weak national connections.

Several national NGOs often face resource constraints or have limited interest in REDD+, relying on umbrella organisations for passive engagement and dependence on larger entities. Except for ILDI-ONGD, a member of REPALEF, organisations like GEOFIRST invested in land use

mapping. TAICOM, COPACO-RDC, PREMI-CONGO, CIDHE and RIAO-RDC mostly focused on local initiatives in the hinterland and do not rely on any NGO platform within the National REDD+ Committee, nor do they collaborate to advocate for inclusion at the national level. Overall, these actors portray low reputational influence and weak collaborative embeddedness, hampering their capacity to shape national REDD+ agendas or participate in coalition building.

4.2.4.5. National and foreign governments disengaged in reducing deforestation plans and low visibility research. Several sectoral government actors in the REDD+ domain operate in exclusive high-level networks, remaining peripheral in influence and engagement. In descending order of influence, ministries of energy (MINEHR) and its rural electrification sub-unit (ANSER), oil (MINHYDRO) and mining (MINNE) oversee sectors contributing to forest loss according to the 2012 National REDD+ Strategy. Despite being in the National REDD+ Committee, MINNE and MINEHR's low reputational and collaborative power indicate a separation of sectoral interests from REDD+ and poor intersectoral coordination.

Moreover, a few foreign agencies like the Ministries of Foreign Affairs of Belgium, the Netherlands (Dutch MFA) and South Korea (MOFA) remain peripheral despite supporting DRC's REDD+, suggesting interventions via development agencies or a deliberate choice to lower their profile. International research organisations, including IITA (RP_InEigen = 0.06; C_InEigen = 0.02), alongside local research institutions like ICG and Universities of Lubumbashi (UNILU) (RP_InEigen = 0.06; C_InEigen = 0.04) and of Kinshasa (UNIKIN) (RP_InEigen = 0.06; C_InEigen = 0.04) do not have direct REDD+ interventions. In general, these actors combine low collaborative ties with limited reputational power in REDD+, despite their structural relevance for sectors driving deforestation.

5. Discussion

By analysing the organisational-level power relations in REDD+ policymaking, we aim to contribute to understand the constellation of power in the REDD+ national domain in the DRC. Our two-dimensional conceptual framework identifies four types of power with distinct features and pathways, resulting in either exclusive or inclusive strategies (see Fig. 3). Visible-inclusive power is dominated by formal multi-actor platforms as part of the national REDD+ organisational structure that operate mainly through invited spaces and feature inclusive strategies. Visible-exclusive power operates in closed spaces and includes high-level government actors and foreign government agencies engaging with a limited number of collaborations. Hidden-inclusive power is mainly the domain of CSOs with a social justice focus that operate peripherally, advocating for transformational change outside of formal policy processes. The invisible-exclusive quadrant contains between powerful actors with structural power working discreetly, attempting to steer and often stall policy progress to protect their interests (Falkner, 2010), as well as very peripheral actors with limited interest or marginalised actors that lack resources. Unlike prior studies focusing on visible influence, this framework captures how low-visibility actors shape outcomes. Consistent with prior studies, visible forms of power dominate, however, hidden and invisible dynamics play a stronger role in REDD+ than previously identified.

5.1. Visible-inclusive power: Formal authority, inclusion and national REDD+ ownership challenges

Key government and national non-governmental multi-stakeholder platforms managing formal collaborative national REDD+ processes can enhance participation, but this does not necessarily lead to a shared agenda and accountability. Procedural inclusion – or token participation – will neither deliver full participation nor equitable outcomes

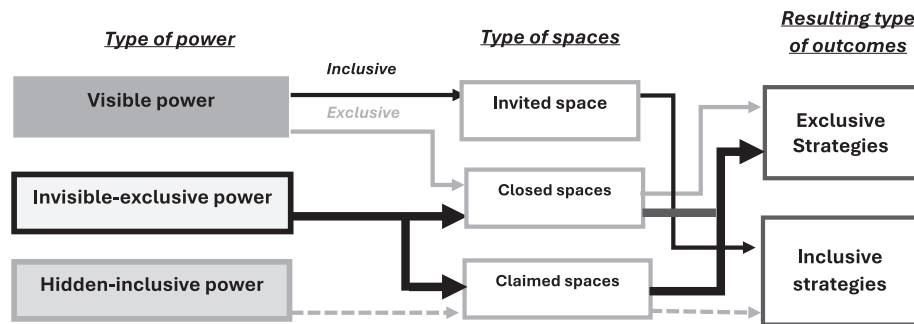


Fig. 3. Types and main features of relational power, as reflected in DRC REDD+ policy networks (Arrows indicate the spaces where each type of power operates and the resulting outcome(s)).

(Kengoum et al., 2022) (Fig. 3).

Multi-stakeholder organisations like the National REDD+ Coordination unit (CN-REDD) and the GTCR-R, along with international donor platforms like CAFI, embody the formal collaborative structure of the national REDD+ domain and play a central role in influencing REDD+ policy decisions. Their role is to create invited spaces that facilitate participation (Gaventa, 2006) beyond government actors complying with UNFCCC REDD+ standards (UNFCCC, 2010). They facilitate the presence of CSO umbrella organisations and REDD+ donors within spaces representing multiple interests. High-level national government involvement, specifically ministries responsible for REDD+ implementation such as the MEDD cabinet, indicates legal and political national ownership over the process (Di Gregorio et al., 2012; Korhonen-Kurki et al., 2013).

However, as in other REDD+ countries our findings also show that formal inclusion does not necessarily translate into effective influence on key policy actors (Pham et al., 2021; Boyoo Itaka, 2022). FONAREDD holds the highest reputational power, but compete over REDD+ leadership with CN-REDD (Peskett and Brockhaus, 2009; Pham et al., 2021) while key ministries such as mining, hydrocarbon and energy remain absent - including in policy events as shown by Pham et al. (2021) - despite contributing to drive deforestation, indicating lack of REDD+ policy integration in sectors driving deforestation (Brockhaus and Angelsen, 2012; Gakou-Kakeu et al., 2023). Irregular committee sessions and inconsistent decision-making procedures (Assembe Mvondo, 2015) weaken the voice of indigenous peoples and private-sector representatives, converting formal 'seats' into unstable influence and limiting accountability.

Furthermore, the quadrant includes international actors, such as foreign government's development agencies (e.g. Norad), key donors and researchers who influence the policy process through their control over REDD+ funding and technical assistance. While previous studies emphasise donor dominance in such circumstances (Atmadja et al., 2018), our typology highlights how this influence operates not only through visible participation, but also through structural dependence, linking visible and less visible forms of power. Also, the presence of international NGOs confirms Longhofer et al. (2016) results confirming their impact on the adoption of national environmental policies without amplifying the effect of domestic ones. This strong presence of international actors raises concerns about reduced government ownership as reliance on external resources can weaken national authority (Bernstein and Cashore, 2012).

5.2. Visible-exclusive power: High politics shaping the REDD+ boundaries and agenda

High-level state offices including the President and PM offices alongside intergovernmental policy actors linked to UNFCCC processes wield visible-exclusive power by setting broad agendas, allocating resources and defining REDD+ normative boundaries and guidelines.

These actors influence national REDD+ directions by controlling the broader development paradigm, particularly forest-based climate change mitigation, and by establishing norms that delimit REDD+ actions (Yamin and Depledge, 2004). Their dominant power lies in influencing or limiting actions via formal authority, donor control of resources and intergovernmental directives (Gaventa, 2006, 2020). This finding aligns with existing scholarship, including on international influences (Bernstein and Cashore, 2012), that emphasises how state authority and international regimes operate in closed spaces to structure access to policy domains (Leal-Arcas et al., 2025; Petri and Karlas, 2026). Instruments such as CAFI and UNFCCC reporting mechanisms formalise these boundaries, reinforcing hierarchical governance arrangements by, for example, encouraging donors to help strengthen the forest monitoring capacity of REDD+ countries (UNFCCC, 2009; Romijn et al., 2012). Such power influences the functioning of REDD+ organisational structures and multi-stakeholder initiatives located in the first quadrant (Barnett and Duvall, 2005), demonstrating how authority, finance and international directives, structure who can participate and on what terms. Operating in these closed spaces are also business actors driving deforestation as well as one engaged in national carbon markets. They prefer exclusive engagements with government actors, sidelining CSOs. This selective interaction illustrates how influence is exercised through controlled access and strategic alliances, reinforcing less collaborative forms of power alongside formal authority. Consequently, CSO in the first quadrant operate within the boundaries set by dominant actors from this quadrant, which limits the scope of REDD+ debates in formal collaborative venues through policy arrangements (Ochieng, 2010).

These dynamics highlight a key divergence from assumptions in parts of the literature providing evidence that formal inclusion leads to broader influence (Menocal, 2020). In the DRC case, visible-exclusive power can enable, but also restrict, and at times override, the influence of visible-inclusive forums, – constraining REDD+ policymaking and curbing transformational reforms (Korhonen-Kurki et al., 2019). When interests conflict, participation in REDD+ processes may resemble limited consultation rather than meaningful engagement, with direct effects on emissions reductions, benefit sharing and protection against deforestation-driven development models (REFS).

5.3. Hidden-inclusive power: Navigating power asymmetries and the subtle resistance of national REDD+ NGOs

Hidden-inclusive power is exercised by right-based national NGOs that pool resources, claim spaces and advocate their interests through collective action and internally inclusive strategies (Fig. 3). This finding aligns with existing scholarship on environmental movement networks, which highlights the role of coalition building for marginalised actors with no formal authority (Di Gregorio et al., 2012; Saunders, 2013; Satoh et al., 2025; Hensler et al., 2026). These actors often work outside formal policy processes to counter what Gaventa (2020) describe as

invisible power.

These NGOs often face ostracism as their demands challenge dominant agendas and are rejected by established actors, including state institutions. Consistent with prior REDD+ studies, CSOs are frequently excluded from formal multi-stakeholder processes, prompting them to create and occupy alternative claimed spaces such as independent monitoring platforms (Luhtakallio et al., 2022). For instance, organisations engage in transnational advocacy using social media campaigns, international partnerships, and public denunciation of inequalities to amplify concerns and re-enter national REDD+ policy debates (Malkamäki et al., 2026). They also coordinate positions through informal coalitions and advocate for vulnerable groups, while campaigning against corruption in REDD+. We show how such strategies operate through hidden-inclusive power within the policy network, combining limited reputational visibility with selective collaborative ties. Some organisations, strategically self-exclude from REDD+ umbrella platforms to avoid co-optation. These practices illustrate how influence is exercised outside policy processes or through selective embeddedness rather than formal participation.

In line with James C. Scott's (1985) notion of "weapons of the weak", some of these CSOs employ both open and subtle forms of resistance to challenge exclusion. This highlights that for REDD+ approaches to be truly inclusive they need to address structural inequalities, marginalisation of local voices and restricted access to natural resources (Berk and Lungungu, 2020).

5.4. Invisible-exclusive power, sustained exclusion and business-as-usual deforestation

Beyond a single actor type, a layered power architecture operates out of sight to preserve business-as-usual. This invisibility reveals both a) sidelined countervailing voices with very limited influence, alongside b) powerful interests driving deforestation, whether corporate actors or sectoral ministries from sectors contributing to deforestation. The latter keeps a low public profile, do not openly collaborate, but operate behind the scenes to steer policy directions, actions and inactions, consistent with scholarship on structural power (Falkner, 2010; Przeworski and Wallerstein, 1988).

The former group includes resource-limited national NGOs lacking the connections or capital to substantially affect policymaking (Pham et al., 2021), which fall under two categories. First, organisations that are marginalised through purposeful exclusion by leading national REDD+ policy actors and platforms, which is consistent with prior REDD+ studies on structural inequalities (Russo, 2019; Kengoum et al., 2022). But not all low visibility equals exclusion. The second group entails actors that deprioritise REDD+ or opt for exit when formal processes are unresponsive, echoing Hirschman's (1970) theory of resistance, which describes cases of powerlessness as intentional omission and strategic withdrawal.

Yet, invisible-exclusive power is wielded also by powerful policy actors through indirect and often undetectable means. Depicting low reputational and collaborative power, they affect outcomes mostly relying on exclusive strategies (Siangulube et al., 2023). In the DRC, resource-rich businesses involved in forest exploitation or forest conservation for carbon markets, operate behind closed doors to protect vested interests. This is consistent with scholarship on corporate structural power (Falkner, 2017; Lindblom, 1977), which highlights how firms, with minimal actions or participation, can have considerable influence on policy through market leverage and agenda setting (Lindblom, 1982; Falkner, 2008). As captured by our typology, corporate policy actors driving deforestation or wanting to capture REDD+ benefits through carbon markets, while yielding structural power appear peripheral in policy network analyses based on observable ties and aligns with Brockhaus and Di Gregorio, 2014's observations. Yet, they can exert significant power over policy outcomes, through delays in implementation, weak enforcement, or the redirection of REDD+

objectives (Di Gregorio et al., 2012). Our analysis extends this literature by demonstrating how such influence operates within policy networks despite minimal observable ties. Businesses may lobby for favourable policies, inhibit regulatory action, or shape policy priorities not just through informal interactions or alignment with government interests, but through the corporate interests in government (Chomba et al., 2016; Koh et al., 2024). These practices, truly invisible, remain outside formal collaborative arenas, reduce transparency and often inhibit REDD+ progress (Assembe Mvondo, 2015). Such internalisation of their interests within the state's agenda (Falkner, 2008) influences norms, discourses, and the functioning, or not, of national REDD+ organisational structures (Charmakar et al., 2024).

The second category of powerful actors that operate with invisible-exclusive power are ministries from sectors contributing to forest loss. We label them as silent veto players, leveraging their formal authority as well as structural power with minimal observable action (Assembe Mvondo, 2015; Majambu et al., 2021). This aligns with existing research on intersectoral coordination and policy integration challenges in environmental governance (Cejudo and Michel, 2017). Despite their formal inclusion in REDD+ governance structures such as the national REDD+ interministerial committee, these ministries simply deprioritise REDD+ policy aims due to competing economic interests or limited incentives, aligning with Karsenty and Ongolo (2012) anticipated outcome that fragile states might not be incentivized to shift towards transformational pathways. Their behaviour reflects forms of invisible power, where influence is exercised not through active participation, but through inaction, delay or resistance displaying one form of Gaventa's (1980) 'non-decision power'. As noted in studies on state behaviour, government may deploy "cunning strategies" to protect sovereignty and economic rent, effectively keeping REDD+ at the margins (Ongolo and Karsenty, 2015).

The above illustrates how invisible power can operate through institutional positioning and agenda control, reinforcing business-as-usual trajectories. As it captures these dynamics, our framework extends policy network theory by showing how actors with invisible engagement, can nonetheless shape outcomes through structural power and indirect influence. This underscores the importance of aligning sectoral incentives and governance mechanisms to address deforestation and ensure effective REDD+ implementation.

6. Conclusion

We analysed the interplay of reputational and collaborative power to understand how power shapes national REDD+ policy processes and outcomes in the DRC. The REDD+ policy domain exhibits a multidimensional power structure encompassing visible-inclusive, visible-exclusive, hidden-inclusive and invisible-exclusive forms of power. Decision-making operates in both inclusive and exclusive spaces, and without addressing power asymmetries and realigning priorities, it cannot ensure equitable outcomes. While national actors mostly exert visible-exclusive power, donors' financial control undermines national ownership. Marginalisation of right-based NGOs poses risks to participation and limits deliberation, prompting forms of subtle resistance. Business structural power operates behind closed doors, perpetuating deforestation and entrenching inequitable socio-economic outcomes. High-level government actors, major foreign donors and resource-rich businesses resort to exclusive strategies that close the policy domain, leaving dissenting voices, especially those concerned with local rights to access resources and equitable REDD+ benefits, at the margins. Our typology advances policy network analysis by linking levels of visibility and inclusion to explain how power configurations shape processes and outcomes. We show the presence of resistance to imposed priorities and how exclusion from key decision-making can coexist with formal multi-actor organisational structures. The configuration of power we revealed affects the effectiveness of REDD+ initiatives in the DRC, with the government's ability to halt deforestation constrained by the

dependence on external finance, the structural power of actors driving deforestation and the marginalisation of right-based NGOs. In particular, the complex power dynamics highlighted above underscore significant challenges to achieving equitable outcomes. Addressing power asymmetries and realigning priorities to include marginalised voices is essential for achieving transformational change. Future research could investigate policy domains and the power structures within that are successful in enabling the inclusion of marginalised voices, while delivering social and environmental justice and change away from a business-as-usual of resource extraction.

CRedit authorship contribution statement

Félicien Kengoum Djiegni: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Monica Di Gregorio:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Formal analysis, Conceptualization. **Blaise-Pascal Ntirumenyerwa Mihigo:** Writing – review & editing, Writing – original draft, Conceptualization. **Maria Brockhaus:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Funding acquisition, Formal analysis, Conceptualization.

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Declaration of competing interest

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Maria Brockhaus reports financial support was provided by Center for International Forestry Research. Maria Brockhaus reports financial support was provided by Norwegian Agency for Development Cooperation. If there are other authors, they 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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Appendix A. Supplementary data

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Data availability

Data will be made available on request.

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