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Gakou-Kakeu, J, Di Gregorio, M orcid.org/0000-0003-2545-217X, Paavola, J et al. (1 more author) (2022) REDD+ policy implementation and institutional interplay: Evidence from three pilot projects in Cameroon. *Forest Policy and Economics*, 135. 102642. ISSN 1389-9341

<https://doi.org/10.1016/j.forpol.2021.102642>

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REDD+ policy implementation and institutional interplay: Evidence from three pilot projects in Cameroon

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1. Introduction

Anthropogenic deforestation and land-use change account for 12-20% of global greenhouse gas emissions and mainly originate from tropical forest-rich developing countries (Pachauri et al., 2014). Hence, reducing emissions from the forest sector has become a priority for the international climate change regime (IPCC, 2007). Since the 2007 Conference of the Parties to the United Nations Framework Convention on Climate change (UNFCCC), an incentive mechanism to reward developing countries for maintaining and expanding forest carbon sinks known as *Reducing Emissions from Deforestation and forest Degradation* (REDD+) has been rolled out in many tropical forest-rich countries (Mustalahti et al., 2012).

As the world's second-largest tropical rainforest, the Congo Basin has enormous potential to contribute to the global REDD+ mechanism. Cameroon has one of the major forest areas and highest deforestation rates in the Congo Basin (MINFOF, 2012). The country engaged in REDD+ negotiations from early on and started readiness activities in 2008 (Alemagi et al., 2014). Embedded within the Ministry of Environment Nature Protection and Sustainable Development (MINEPDED), the National REDD+ Steering Committee leads REDD+ development in Cameroon and oversees REDD+ pilot projects implemented within local communities with support from NGOs. REDD+ pilots have proliferated worldwide, but their implementation has been mired by varied challenges. Tenure conflicts, for example, are reported from across REDD+ projects, but while in some cases such conflicts hamper project sustainability (Lasco et al., 2013), in others, REDD+ projects are successfully implemented despite unclear tenure (Resosudarmo et al., 2014). Inadequate grassroots capacity for REDD+ implementation has also been widely reported, yet capacity building efforts have yielded divergent results across REDD+ sites (Burgess et al., 2010; Luintel et al., 2013). To explain such differences in project performance and more importantly, to determine which of the identified REDD+ challenges are influential for projects outcomes in a specific setting, we

need to understand implementation typologies (Matland, 1995), ie characteristics that allow to discern the most influential factors shaping implementation outcomes, in a view to target interventions appropriately. In this study, we introduce and demonstrate how the concept of implementation typology is utilised to this end.

Equally recurrent in REDD+ projects are equity concerns, including how contentious revenue distribution in forestry institutions or social norms and rules influence REDD+ outcomes (Ostrom, 1990; Jacob & Brockington, 2017; Awung & Marchant, 2020). Indeed, interrelated institutions such as climate change and forestry rules or regulations have the potential to interact and impact each other's performances (Underdal, 2008; Bastos Lima et al., 2017). While such interactions can be mutually reinforcing, they can also be disruptive (Rosendal, 2001). Studies of institutional interactions have examined how global institutions and different international agreements on biodiversity and interventions such as the EU sponsored FLEGT initiative interact with REDD+ (Visseren-Hamakers et al., 2011; Tegegne et al., 2014; Bastos Lima et al., 2017). Multi-institutional REDD+ analyses have primarily focused on national level of policy and on REDD+ coordination with sectors such as agriculture, water or broader development aims (Kengoum & Tiani, 2013; Tegegne et al., 2014; Atela et al., 2016; Korhonen-Kurki et al., 2016). However, ground-level institutional interactions remain underexplored (Jacob & Brockington, 2017; Awung & Marchant, 2020). We address these gaps by investigating how operational-level interactions between forestry institutions and REDD+ affect REDD+ projects' outcomes in Cameroon. Specifically, we address the following research questions:

- i. What are the implementation typologies of REDD+ projects in South and West Cameroon?
- ii. Based on REDD+ implementation typologies, what are the key determinants of these projects' outcomes?
- iii. How are REDD+ projects' outcomes shaped by interactions between forest and REDD+ institutions?

Next, we set out the theoretical framework for policy implementation and institutional interplay that inform our work, and outline the research on REDD+ implementation to date. We then reason out our case study selection and lay out our qualitative material collection approach, as well as the methods used to analyse the material. We subsequently report our findings and discuss them in light of relevant literature.

2. REDD+ evidence through a policy implementation and institutional interplay lens

2.1. Policy implementation framework

2.1.1. Conceptual background of policy implementation

Policy implementation refers to the process in which actions are taken to put policies into effect (Goggin et al., 1990). It has been studied either through a top-down or a bottom-up perspective (Van Gossum et al., 2010; Jensen et al., 2018). Under the top-down approach, implementation starts with an authoritative policy decision at the central level and proceeds downwards, with top government actors being the main players (Sabatier, 1986). The top-down perspective considers clear policy goals, limited actor involvement and small policy changes as ingredients for successful implementation (Van Meter & Van Horn, 1975; Sabatier & Mazmanian, 1979). It represents a centralised and exclusive form of constellation of power with a few powerful actors at high levels of governance leading implementation (Mbatu, 2009; Hartter & Ryan, 2010). Yet the passage of legislation often requires ambiguous language, and the focus on central policy decision-makers ignores that implementation takes place locally (Matland, 1995). The bottom-up approach emphasises the role of local actors and context: policy success relies on the autonomy and skills of local policy implementers to adapt policies to local conditions (Lipsky, 1978; Berman, 1980). It envisions a devolved form of implementation, which has been a model for various decentralization programmes across Africa since the '90s (Ribot & Oyono, 2012). In theory at least, such an approach would portray a constellation of power that is less centralised and more inclusive of local interests (Ribot et al., 2006). However, overemphasising local autonomy risks disregarding the level of policy control of elected representatives (Sabatier, 1986; Ribot, 1999; Crook, 2003).

2.1.2. Matland's ambiguity–conflict framework for policy implementation

Matland (1995) proposed a framework that aims to explain the circumstances in which either the top-down or the bottom-up approach is most appropriate. Based on top-down researchers' tendency to study relatively clear policies and bottom-up scholars' inclination for policies with greater uncertainty, Matland's framework categorises implementation according to two main variables: policy ambiguity, understood as the degree of clarity of policy goals or means, and policy conflict, defined as the incongruity of views between decision-makers and implementers on policy goals, means or activities (figure 1). The framework indicates four distinct types of implementation, which help identify the most influential factor for implementation outcomes.

| | | Policy conflict | |
|------------------|------|---|--|
| | | Low | High |
| Policy ambiguity | Low | Administrative implementation Resources | Political implementation Power |
| | High | Experimental implementation Contextual conditions | Symbolic implementation Coalition strength |

Figure 1. Ambiguity–conflict framework for policy implementation (Matland, 1995)

Conditions of low policy ambiguity and conflict result in administrative implementation. With clear goals and known solutions, adequate central resources like staff and technology are the main determinant of outcomes. When low level of ambiguity is accompanied by high level of conflict, outcomes are decided by power. Such conditions are typical of political models of decision making (Allison, 1971; Halperin et al., 1974). In political implementation, when an actor or a coalition have sufficient power, they can impose their will through coercion, while when power is more balanced, actors will bargain in order to reach an agreement, which might require remuneration to change incentives (Krott et al., 2014; Prabowo et al., 2016). For policies of this type, compliance may not be straightforward. While an explicit policy exists, essential resources could be controlled by actors opposed to the proposed policy. The implementation programme would consist of securing the compliance of actors whose resources are central to policy success, and would depend on either having sufficient power to force one’s will on the others or having sufficient resources to bargain an agreement on means. Coercive mechanisms are most effective when the desired outcomes are easily monitored and the coercing agent controls the resource. The latter, however, may not be in a direct line of relationship with implementers, and coercive mechanisms can fail to bring about compliance. In these conditions, activities are directed toward reaching a negotiated agreement on actions. High ambiguity and low conflict result in experimental implementation: the context drives implementation; local actors and their resources determine the outcomes, resulting in a broad variation across sites. Policy learning from different outcomes is crucial for overall success

(Matland, 1995). Finally, symbolic implementation involves high conflict and high policy ambiguity and might result in serious implementation deficit. Outcomes are determined by competing factions at the local level and who controls available resources. Contextual features thus remain relevant for outcomes, and local power dynamics become key in determining outcomes.

2.1.3. REDD+ through a policy implementation lens

REDD+ has generated an abundance of literature on different aspects of the mechanism, covering technical, institutional and governance issues that relate to both policy formulation and policy implementation. Technical work on policy formulation included carbon stock estimates, especially the techniques for accurate estimations of carbon stocks using ground-based and remote-sensing measurements of forest attributes (Gibbs et al., 2007; Butt et al., 2013). Further studies assessed levels and risk of leakage and permanence and have proposed carbon accounting standards that fulfill REDD+ requisites (Lasco et al., 2007; Atmadja et al., 2012; Henders & Ostwald, 2012). Monitoring, reporting and verification have also been examined from an institutional perspective (Herold & Johns, 2007; Romijn et al., 2012; Birdsey et al., 2013), reviewing the progress of national monitoring institutions in tropical countries and providing context specific recommendations for further improvements. Accurate carbon estimations would support improved equity and accountability (Schmidt, 2009; Börner et al., 2010; Cattaneo et al., 2010; Brockhaus & Angelsen, 2012).

Early work on the Congo Basin identified opportunities in REDD+ to contribute to development, biodiversity conservation and governance reforms, but recognised major challenges regarding participation, benefit sharing arrangements and reduction of shifting cultivation (Brown et al., 2011). As the melting pot of forest governance reforms in Central Africa (Mbatu, 2015), Cameroon has attracted considerable research including on institutional and governance issues, raising a number of implementation problems common across REDD+ countries; below we landscape the broad literature, then focus on the implementation research to rationalise the importance of applying Matland's theory in identifying the most influential factors for REDD+ implementation.

Analyses about the institutional and policy environment for REDD+ implementation illustrated the need for increased cross-sectoral policy coherence and policy reforms around local rights and participation, as well as the need for improved access to information (Di Gregorio et al., 2012; Ngendakumana et al., 2014). Further work has highlighted the challenges of designing

effective governance structures for REDD+ given the constellations of power of state and non-state actors, and of formal and informal institutions (Awono et al., 2014; Somorin et al., 2014; Sunderlin et al., 2014). REDD+ has been found to be replicating weaknesses of previous forestry law reforms (Dkamela et al., 2014). These studies warn that implementing REDD+ policies in Cameroon is likely to be confronted with path-dependencies from forestry institutions, inadequate institutional capacity, limited engagement from agricultural actors and inadequate enforcement and monitoring systems.

Broadly, studies on REDD+ implementation align most closely with the bottom-up approach to policy implementation, identifying tenure insecurity and benefit sharing as major barriers to REDD+ implementation and main sources of conflict. For example, the Rufiji Delta forest carbon project in Tanzania indicates how statutory rules allocating land rights to the state conflict with local customary rules of the Warufiji that settled in the area two millennia ago (Beymer-Farris & Bassett, 2012). In Mount Cameroon, overlapping land ownership rules raised local concerns about how carbon benefits are to be shared, creating distrust (Awono et al., 2014). The imposition of statutory rules over customary tenure systems can pave the way for land grab and impede community participation in projects (Lasco et al., 2013; Wibowo & Giessen, 2015; Chomba et al., 2016). In the Kasigau corridor REDD+ project in Kenya, conflict emerged as elites appropriated land for ranching, leaving people landless or with land holdings too small for economic viability (Chomba et al., 2016).

How conflicts in policy implementation should be handled diverges between top-down and bottom-up views. Matland (1995) suggests that the top-down school of thoughts treats conflicts as an endogenous factor that policy designers can influence and should minimise, while the bottom-up perspective takes policy conflict as a given that cannot be manipulated, particularly when it is based on incompatibility of values (Berman, 1980). In REDD+ studies, Lasco et al. (2013) and Sunderlin et al. (2014) claim that reconciling statutory with local tenure rules is imperative for forest protection and project sustainability. Yet, Resosudarmo et al. (2014) indicate in a study on Indonesia that clarity and security of tenure are not necessary for REDD+ effectiveness. They found that reforestation programmes were feasible despite unclear tenure and that synergies between the lack of land tenure security and the customary practice of planting trees to secure land tenure could be used to incentivise tree planting. Their suggestion illustrates the bargaining mechanism that can at times overcome barriers posed by a high level of conflict, through negotiations to reach agreement on actions as opposed to agreeing on common views or values (Matland, 1995; Ugglá et al., 2016). Policy conflict hinders

participation; it is thus unsurprising that limited involvement has been reported in various REDD+ initiatives (Nantongo et al., 2019). In Cameroon, local communities, indigenous people, small forest enterprises, and people from specific ecological zones such as the savanna, are often poorly involved in REDD+ processes (Tegegne. et al., 2017; Satyal, 2018).

Policy ambiguity is also widespread in REDD+ implementation. In Papua New Guinea, lack of common understanding of REDD+ prevented communities from taking advantage of project outcomes and concentrated benefits among elites (Leggett & Lovell, 2012). Cerbu et al. (2013), Chia et al. (2013) and Lasco et al. (2013) highlight the need to reinforce the technical, managerial, and risk management capacities of local communities. However, while capacity building is a determinant factor for project outcomes when ambiguity prevails (Matland, 1995), it is less determining in instances of high policy conflict. This emphasises how assessing the type of policy implementation can help aim interventions at the most relevant determinants in each case. It also exposes the limitations of studies that have followed a unidimensional approach to REDD+ implementation analysis, following either a top-down or a bottom-up approach. The adoption of Matland's policy implementation framework combines the two and facilitates systematic comparisons of case studies and the prioritisation of the most appropriate solutions for specific contexts. However, REDD+ policy implementation does not occur in a vacuum, and to fully understand outcomes, we need to also assess how forestry institutions interact with REDD+ institutions.

For example, evidence has shown that conflicts on the distribution of revenue from forests products can lead to lack of trust in the fairness of REDD+ and impair local participation (Jacob & Brockington, 2017; Awung & Marchant, 2020). In Cameroon, incoherence between forestry policies related to community forest and REDD+ institutions has been identified as a cause of ineffective outcomes (Ngendakumana et al., 2017). We therefore expand Matland (1995) framework to consider the multi-institutional context that is relevant to forest-based climate change mitigation. An institutional interaction perspective can help us better understand how long-established forestry institutions around control of forestlands and distribution of forest revenues affect REDD+ outcomes.

2.2. Institutional interaction framework

2.2.1. Conceptual background of institutional interaction

Research on institutional interaction is closely linked to the study of the effectiveness of international institutions (Gehring & Oberthür, 2009). It emerged in the global change research

agenda when scholars drew attention to an increasing regime density (Young, 1996; G. R. Young, 1996) and the risk of treaty congestion in international systems (Weiss, 1993). It is now widely recognised that the effectiveness of specific institutions often depends not only on their own features, but on their interactions with other institutions (Young et al., 1999; O. R. Young et al., 1999). Institutions governing natural resources are sets of rights, rules, and decision-making procedures that mediate access to and control over natural resources. They determine what is permitted, forbidden or acceptable, as well as the procedures to be used in specific contexts (Ostrom, 1990; Paavola, 2007; Young, 2008). Because of the cross-sectoral nature of environmental problems and the proliferation of environmental agreements in the 20th century, many environmental areas are co-governed by multiple institutions (Gehring & Oberthür, 2008). Forest protection, for example, is addressed by biodiversity as well as by climate change and forestry institutions. Institutional interaction (or interplay) occurs when one such institution exerts influence and affects another (Young, 2002; Gehring & Oberthür, 2009).

2.2.2. Gehring and Oberthür's theory for institutional interaction

Institutional interaction involves a source institution or its component from which influence originates, and a target institution or its component, which is affected by the former (Gehring & Oberthür, 2009). Institutional interactions are *synergistic* when they improve the target institution's ability to reach its objectives and *disruptive* when one institution hinders the effectiveness of another. Interactions can occur at output, outcome and impact levels through four mechanisms (Gehring & Oberthür, 2008) (figure 2):

First, cognitive interactions happen at the output level, when ideas or information from the source institution filter into another one by modifying the decision making of actors operating within the target institution and influence its outputs. Horizontal institutional interactions between REDD+ and the Forest Law Enforcement, Governance and Trade (FLEGT) agreement in Cameroon and the Republic of Congo illustrate such positive cognitive interaction as consultations throughout the FLEGT process served as a model for multi-stakeholder engagement in REDD+ processes (Tegegne et al., 2014). Similar positive cognitive synergies between the Sustainable Development Goals (SDGs) 13, which calls for climate action, and SDG 15, which promotes the sustainable use of terrestrial ecosystems, and REDD+ were identified in Indonesia and Myanmar (Bastos Lima et al. (2017).

Second, normative interplay takes place at the output level when legal commitments to the source institution affect the decision-making and outputs in the target institution. For example,

statutory resource tenure rules impact REDD+ benefit sharing rules, which determine who will be eligible for REDD+ compensation (Awono et al., 2014). Third, behavioural interactions occur at the outcome level in three steps. Initially, the source institution produces an output such as a set of prescriptions or proscriptions. Relevant actors then adapt their behaviour in response, which may include unforeseen side effects and deviating behaviour. Eventually, the behavioural changes exert influence on the effectiveness of the target institution. For example, incentives to increase carbon sequestration under global climate change agreements can lead stakeholders to establish fast-growing tree plantations which drive loss of biodiversity, undermining the outcomes of biodiversity institutions (Jacquemont & Caparrós, 2002). Fourth, impact-level interplay exists when the impact of an institution on its target affects the target of another institution (Gehring & Oberthür, 2009). An example is an effective REDD+ scheme that increases carbon storage and enhances biodiversity conservation (Gardner et al., 2012).

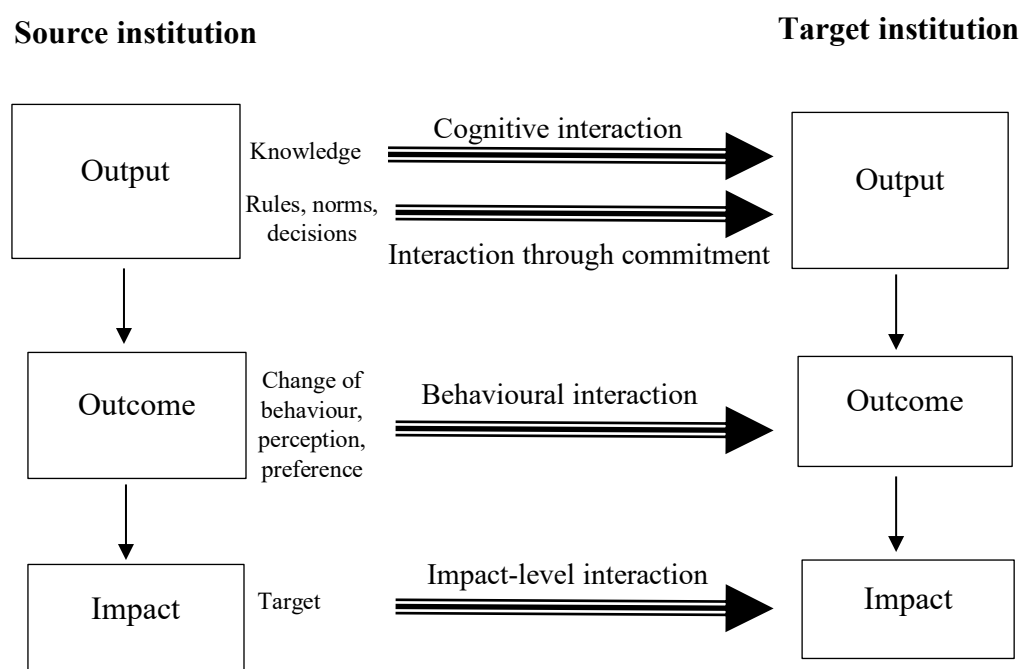


Figure 2. Causal mechanism for institutional interaction (Gehring & Oberthür, 2009)

While many studies examine output-level interplay, such as interactions at the policy level (Guy Patrice et al., 2014; Tegegne et al., 2014; Bastos Lima et al., 2017), outcome and impact-level institutional interactions have seldom been examined (Jacquemont & Caparrós, 2002).

We seek to address this gap by investigating outcome-level or behavioural interplay between forestry institutions as the source, and REDD+ as the target institution.

Specifically, we apply both theoretical frameworks to analyze REDD+ project outcomes in Cameroon as follows: First, we use Matland (1995)'s conflict-ambiguity theory to determine the policy implementation typologies of three REDD+ projects in Cameroon. We then apply Gehring and Oberthür (2009)'s theory of institutional interaction to explain how the outcomes of forestry institutions have affected the behaviour of local REDD+ actors and REDD+ projects' outcomes. In the discussion, we further explore how our evidence enriches Matland's framework and REDD+ literature.

3. Methods

Cameroon offers a rich setting for examining REDD+ projects' outcomes. With over 22 million hectares of forests (MINFOF, 2012), the country is a key player in forest-based climate change mitigation. The forestry sector is operated under the Ministry of Forestry and Wildlife and the 1994 forest law, which establishes a permanent and a non-permanent forest domain. Permanent forests encompass forest reserves, conservation sites and production forests that are subdivided into Forest Management Units (FMUs) and publicly auctioned. Selected logging operators are required to create local timber processing factories. Forest reserves include protection sites such as botanical gardens and reforestation areas. Community forests are part of the non-permanent forest estate and were introduced in line with the decentralisation process in forest governance, to transfer powers and means to local entities and improve local communities' involvement in forest management. In this study, forestry sector rules around community forestry, reforestation areas, and local timber processing are the focus of outcome-level interplay analysis.

The REDD+ process is overseen by the National REDD+ Steering Committee under the the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED). REDD+ pilot projects are implemented within local communities with support from NGOs. Project beneficiaries are local community members and those involved in project activities are also considered local implementers in the analysis. Case studies were chosen following a purposive sampling approach (Carpenter & Suto, 2008) to cover distinct ecological zones, diverse stages on the forest transition curve (Angelsen, 2007), a range of REDD+ activities, and varied sociocultural settings. The first two projects were implemented in Nkolenyeng and

Efoulan in the dense tropical rainforest of Southern Cameroon, and the third in Bana-Bapouh in the Western Savanna region.

3.1. Case study 1: Nkolenyeng

Nkolenyeng, in Dja and Lobo Division in Southern Cameroon, hosted the CED-led PES scheme project. It is located in an evergreen moist tropical forest area and has 500 inhabitants of mostly Fang ethnic group and a minority of Baka Pygmies (Letouzey, 1968; CED, 2012). The main livelihood activities include subsistence shifting agriculture, cocoa, NTFPs and hunting. Large forest areas are under logging concessions and there is one protected area and a 1,042 ha community forest established in 2005. Nkolenyeng is inaccessible by road during the rainy season, which limits access to markets. Local land use is governed by customary tenure based on ancestral and usufruct rights.

The local Association of Sons and Daughters of Nkolenyeng (AFHAN) manages the community forest with the help of the Centre for Environment and Development (CED), a national NGO. In 2009, CED with approval of AFHAN launched the Plan Vivo PES pilot project which ran until 2015 intending to slow forest cover loss and enhance carbon stocks (CED, 2012). Activities included fruit tree nurseries and the provision of 10,000 improved cocoa seedlings, and community-based carbon monitoring for submission to Plan Vivo (CED, 2012). Carbon credit revenues were shared between agricultural community activity and social benefit groups. The initiative has funded community infrastructure projects such as rural electrification and water supply.

3.2. Case study 2: Efoulan

Efoulan, also in the Dja and Lobo Division in Southern Cameroon lies in an evergreen moist tropical forest area with a population density of 30.81 inhabitants per km² (UCCC, 2014). Local people are of the Fang ethnicity with a minority of Bagyeli and Baka Pygmies. Households rely on subsistence shifting agriculture, cocoa, NTFP and hunting. A minority is involved in subsistence livestock rearing and fishing. Similar to Nkolenyeng, land use is governed by customary tenure based on ancestral usufruct rights. Forest exploitation occurs in industrial logging concessions as well as council and community forests.

Efoulan hosted an IUCN pro-poor REDD+ pilot project from 2013 to 2017 in the Fang and Baka community. A total of 30 community members were trained in tree domestication and nursery building, as well as regeneration techniques of fruit tree species such as avocado,

oranges, lemon, moabi (*Baillonella toxisperma*) and njansang (*Ricinodendron heudeloti*). The project also promoted low emission agricultural practices and provided agricultural supplies to 20 smallholders (IUCN, 2017). Beneficiary activities were monitored monthly, but the project ended before crop production could be assessed.

3.3. Case study 3: Bana-Bapouh

The third project was implemented in the 4,800 ha Bana-Bapouh eucalyptus forest reserve, a humid forest-savanna mosaic created in 1947 in the Haut-Nkam and Nde Divisions in West Cameroon (Letouzey, 1968). Bana-Bapouh is mostly covered in grasslands with elevations of up to 2,088 m and a population density of 112 inhabitants per km². Locals are mostly of the Bamileke ethnic group involved in small-scale agriculture. Slash and burn farming is less common in the grassland area. Customary tenure is based on traditional leadership, and farming rights are inherited. A minority of nomadic Bororo pastoralists live on mountain ridges and practice burning to induce grass growth for cattle. The local Bamileke community rear poultry and pigs and engage in timber milling, aquaculture, hunting and NTFPs. Originally planted to stabilise slopes to prevent landslides, in 2012 the local council took over the forest reserve management as part of the decentralisation process.

The National Participatory Development Programme (PNDP) REDD+ pilot project started in 2015 to protect the reserve. PNPD also assists local councils in the decentralisation process (PNDP, 2018). The pilot involved the restoration of parts of a eucalyptus reserve. Activities entailed tree nursery and fruit tree planting on local farms, the provision of improved crop seeds for farmers and training on grass cultivation for cattle for pastoralists. The project ended in 2018 when the planted trees were still young and vulnerable.

3.4. Data collection and analytical methods

We used a case study approach in combination with triangulation of data sources and methods (Carpenter & Suto, 2008). The fieldwork was conducted from December 2018 to March 2019 and included mixed-gender focus groups as well as key informant interviews.

Four focus groups (FG) (Tonkiss, 2012) were held with all REDD+ project beneficiaries present and were composed of: FG1) Ten Fang project beneficiaries and members of the Nkolenyeng community forests; FG2) Twelve Fang project beneficiaries in Efoulan; FG3) Seven Bamileke project participants in Bana-Bapouh, and FG4) Eight Bororos project participants in Bana-Bapouh (table 1). To triangulate the data and deepen our understanding of

the effect of forest institutions on local livelihoods, in-depth interviews (Byrne, 2012) were conducted with purposively selected local authorities and land users (Carpenter & Suto, 2008), including one traditional leader in each village, five REDD+ council officers, representatives of a private forest company and a local NGO in Djoum subdivision and five local stakeholders including two forestry officers, two council officers, and a husbandry officer in Bana-Bapouh (table 1).

In the first instance, focus group discussions aimed to determine the implementation typologies of each REDD+ project based on policy conflict intensity and ambiguity level. To assess conflict intensity in REDD+ projects implementation, participants were queried on their thoughts about projects' objectives and the activities they undertook. Their accounts also permitted to evaluate ambiguity levels. Then, for the behavioral institutional interplay assessment, participants were asked to discuss how selected forest regulations affect their livelihoods and how ensuing behavioral change influenced REDD+ projects. In the forested sites, especially with the beneficiaries of Nkolenyeng community forest, emphasis was on community forest rules. In Efoulan closer to local timber factories, participants shared their thoughts on timber processing rules. In the savanna area, Bana-Bapouh residents discussed how they have been affected by rules on reforestation areas. On average, each group discussion lasted two hours.

Interviews took one to two hours and covered participants' role in the village, their main activities, their views on climate change and REDD+ projects, and the effect of selected regulations on livelihoods.

Table 1: Research design

| Research aims | Assessment | Data sources | Field data collection | | |
|---|---|---|---|--|---|
| | | | Site 1: Nkolenyeng | Site 2: Efoulan | Site 3: Bana-Bapouh |
| Typology of REDD+ project implementation based on: -Conflict intensity and -Ambiguity level | - Alignment between implementers' views and projects' goals, means or activities -Clarity of project goals and means to implementers (project beneficiaries) | -National REDD+ strategy -REDD+ projects' documents -REDD+ projects' beneficiaries -Local authorities and key informants | -1 FG session, 10 participants (4 female, 6 males) | -1 FG session, 12 participants (5 female, 7 males) | -1 FG session with 7 male farmers -1 FG session with 8 male pastoralists - 6 in-depth interviews with: 1 traditional leader 2 forestry officers |
| | | | - 7 in-depth interviews with: 2 traditional leaders (1 per site) 1 forestry officer, 1 agricultural officer, | | |

| | | | | |
|--|---|---|--|---|
| Behavioral interactions between forestry rules and REDD+ projects: - Outcomes of forest rules and -Their effects on REDD+ outcomes | - Changes in local behavior induced by forest regulations –Effects of resulting behavioral changes on REDD+ project outcomes | -Selected forestry regulations -REDD+ projects’ documents -REDD+ project beneficiaries -Local authorities and key informants | 1 council officers 1 private forest logging company 1 local NGO (From Djoum subdivision that comprises Efoulan and Nkolenyeng villages) | 2 council officers 1 husbandry officer |
|--|---|---|--|---|

To preserve the authenticity of participants’ thoughts and words, discussions and interviews were conducted in French, the spoken language in West and South Cameroon. Before all discussions, participants were informed of the purpose of the research and made a voluntary decision to participate. Verbal informed consent was obtained as it was more appropriate for the setting. To protect the confidentiality of research participants, their names were not recorded.

Group discussions and interviews were tape-recorded and transcribed *verbatim*. Transcripts were then coded using NVivo programme (QSR 12). Narrative analysis (Gill & Goodson, 2011) was used to analyse participants’ views and understanding of REDD+ projects’ goals and activities, and evidence on the determinants of implementation typologies and interplay between different institutions.

4. Implementation typology of REDD+ pilots

Matland’s framework presents an implementation typology according to two main dimensions: policy conflict intensity and policy ambiguity level. The following sections assess these two dimensions for each of our three case studies, and culminate in the identification of the implementation type and the corresponding determinants for projects outcomes.

4.1. Policy conflict in project goals and activities

A key goal of Cameroon’s REDD+ strategy and pilot projects is to introduce alternative land management to shifting agriculture, which is considered a major driver of deforestation (MINEPDED, 2018). In all three case studies, project activities involved agricultural intensification techniques based on enhanced crop varieties and mineral fertilisers to decrease the need for burning and expanding farms (CED, 2012; IUCN, 2017; PNDP, 2018). The level of agreement of local project implementers with REDD+ projects’ goals and activities differs

across sites. As set out below, the project goals and activities were highly contested in the dense forest site of case study 1. In the forest-agriculture transition area of case study 2, there was conflict over the introduced farming practices, and in the Savanna region of case study 3, project goals and activities were much less contested.

In case study 1, community members questioned the project narrative that shifting cultivation is the main driver of deforestation and contested the farming techniques introduced to address it. Beneficiaries claimed that large scale agriculture and industrial logging clear larger forest areas than smallholder farmers:

The maximum farm size I can cultivate is 1.5 - 2 hectares, but when the big elites arrive in the village with their big means they do 25 hectares, 30 hectares at once, you see massive deforestation [...] You cannot even ask them not to, otherwise they will say that you are expelling people from the village, that you are doing witchcraft, that you are hindering development. (beneficiary)

Disagreement about promoted farming techniques was also notable. Farmers held onto their local knowledge, suggesting that burning eases clearing, eliminates shadowing of crops and fertilises the land, and that yields are higher in newly converted forestland, as explained by two beneficiaries from case study 1:

We are obliged to burn; we really do not know how we can stop burning, because we cannot work under trees and achieve good yields. (beneficiary)

They taught us some farming methods, but when we put them into practice they did not work. Take plantain, for example, they showed us ways to grow them in fallow lands and we did so but they failed, because plantain crops grow best in virgin forests [...]. When the new cocoa plants arrived everyone said it was bad cocoa, [...] this variety has so many problems. (beneficiary)

In case study 2, participants were more ambivalent about the project goal and drivers of deforestation. They neither accept nor deny that local farming practices drive deforestation. They welcomed some REDD+ project activities such as the provision of farm inputs and tree planting, but acknowledged the difficulty of clearing wooded lands without burning. While beneficiaries adopted local tree species such as Moabi, they abandoned citrus plants, which they found demanding to maintain:

Citrus need to be weeded every 2 weeks; if you take a look at the nursery outside you will see their leaves dying; they need frequent maintenance and treatment, which is laborious and costly (beneficiary)

In the less forested West region, participants from case study 3 agreed with the project goal recognising that smallholders' livelihood activities of harvesting wood for lodging and energy, pastoral bushfire lit to stimulate the growth of grass sprouts for cattle in the forest, put a strain on the forest reserve. While they found tree nursery activities quite complicated, agricultural activities resounded positively with both smallholder farmers and pastoralists:

We were taught how to select good quality seeds; in the past, we sourced seeds from harvested crops and would use them repeatedly, which was not good; now we can produce our own good seeds. We were also taught how to apply phytosanitary treatments and mineral fertiliser. (smallholder farmer)

The project recommended against bush fires and taught us how to grow grass for cattle. We had never known grass could be cultivated to feed cows, we have now learnt how to grow them. (pastoralist)

4.2. Ambiguity level in project goals and activities

Policy ambiguity manifested an opposite pattern to policy conflict. As outlined below, it was low in case studies 1 and 2, and high in case study 3.

In case study 1 all beneficiaries had a clear understanding of project goals and activities as evident in this statement:

The PES initiative was suggested as an alternative way of making profit, but by conserving the forest. [...] The forest was divided into plots and each plot had a known surface area and a management type. There were fallows, secondary forest, and conservation areas where clearing was prohibited. Verifiers were sent to the field to check; they approved full payment when prescriptions were adhered to, or less if not. The money was sent to us through project developers, then distributed across activity groups. (beneficiary)

Similarly, project beneficiaries in case study 2 were clear about the goals and activities, although they highlighted issues to do with infrequent monitoring that prevented them from raising and addressing certain issues in time.

The issue is their visits were seldom. After the training, they left and there was no close monitoring. We pushed for local coordination, offering to host a local bureau if means were put at our disposal, but it was dismissed. (participant)

In case study 3, project objectives were rather clear to most beneficiaries who explained that tree planting activities undertaken as part of REDD+ project aimed to restore the cooler weather that prevailed in the past and was lost to forest clearing; but a focus group exchange among

three farmers suggests ambiguity about whether the project goal was to improve income generation, subsistence, or capacity building:

We were taught how to ameliorate farming and cattle rearing, but I think there was a failure in the way the first harvests were handled. They should not have been shared, we should have operated like common initiative groups by reinjecting all the benefits back into the activities to upscale the project. (beneficiary)

And what would we eat? We only live out of farming...[Having no alternative income sources] (beneficiary)

These were only trials; these were pilot farms to demonstrate the teachings rather than a common initiative group... (beneficiary)

In the same site, pastoralists were perplexed about the means needed to put the training into practice. Although taught forage planting techniques as alternatives to fire use, the nomadic pastoralists were puzzled as to where they were expected to cultivate grass, having no land of their own.

We did learn how to grow grass for cattle, but where is the space to grow it? I cannot see any, and eucalyptus trees in this area absorb so much water...

To summarise, case studies 1 and 2 are instances of political implementation. In these cases, balance of power between central policy designers and local implementers will determine outcomes. Depending on power dynamics, interaction might entail coercion or bargaining and possibly remuneration. Case study 3 is an instance of experimental implementation. In this case outcomes will depend more on the local context, including the resources and skills of local implementers (figure 3).

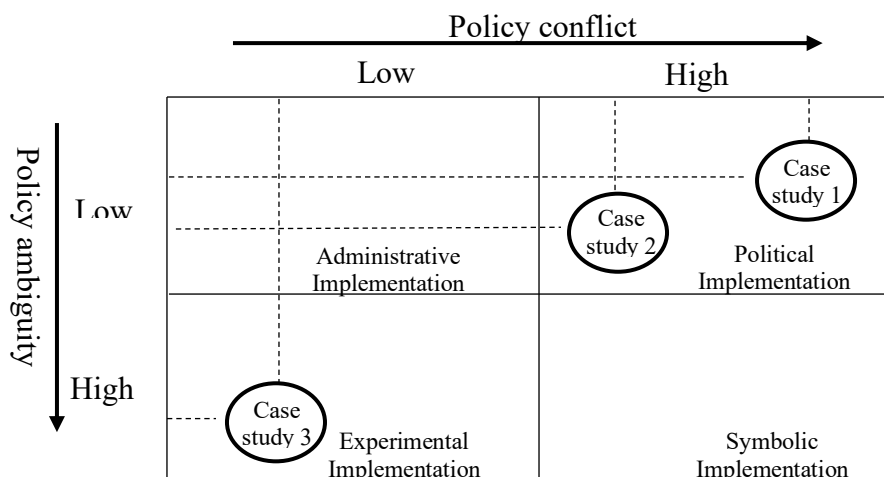


Figure 3: Typology of REDD+ implementation across three case studies

Before elucidating the implications of the identified REDD+ implementation typologies, we demonstrate below how the limited performance of these forest-related REDD+ activities is linked to interactions with preexisting forestry institutions and how these institutions can be either inhibitive or supportive of REDD+ implementation.

5. Outcome-level interactions between forestry institutions and REDD+ projects

We applied Gehring and Oberthür's theory of institutional interaction to investigate behavioural interactions between forestry rules and REDD+, outlining how their outcomes affected the behaviour of local REDD+ actors. We found that three forestry institutions have considerable impact on the effectiveness of REDD+: community forestry rules, timber processing rules and reforestation rules. We show below how these behavioural interactions largely undermined REDD+ project outcomes.

5.1. Community forestry rules and REDD+

Three features related to community forestry that affect project outcomes in our case study sites are i) the complexity of community forestry procedures; ii) their incompatibility with local norms, and; iii) the inability of forestry institutions to control encroachment by outside loggers. The 1994 Forest Law introduced community forests to meet the objectives of decentralisation, forest self-management, empowerment and rural employment (Logo, 2003; de Blas et al., 2011). However, instead of devolving power, new rules such as the requirement of central approval of community forestry management plans increased state control, weakening the ability of communities to make their own decisions and impacting livelihoods. This is most evident in the forest-rich area in the South, as indicated by these quotes:

We are not on board with this, it is all as if we have been deprived of our freedom. You have to go to the state, you have to do all the paperwork and it is costly. We had always known how the forest was shared among families here, but when they say that it belongs to the state, can someone [logging company mandated by the state] enter into the forest of a village and just start working? That just creates a disorder! We were well organised and the law created social disorganisation at the community level (Local actor from case study 1).

The frictions between statutory forestry rules and customary rules on access and uses of forest resources have further weakened local communal resource institutions leading villagers to establish private plantations within community forests and claim ownership of trees. They then sell these trees to nearby logging operators. The resulting rush in land clearing undermines forests and subsequently REDD+ outcomes as illustrated by a community leader from the South:

Villagers have developed a taste for this, you would hear them say “I worked this plot, this is my tree,”. This made them lazy, they would spend time walking in the forest in search of certain trees species, and when they find those they clear the area underneath to claim ownership of the plot. What happens then when the government authorises forest companies to extract timber in nearby areas? As they drive through the community forest to their logging sites, if they see valuable tree species they will negotiate sales with the self-proclaimed plot owners. And while the state thinks these operators are logging in the sites they were shown, they are working elsewhere instead. It is pitiful. Before we knew, all the trees were gone.” (Local actor from case study 2)

Timber theft has also spread like wildfire in the region and a new local term has emerged for unauthorised loggers: “*Warap*”, which means “*very fast, quickly done, done immediately*” (interviewee). The inability of the administration to enforce its own forest rules and control encroachment further exacerbates the problem:

These Waraps make it through all the timber checkpoints and clearance all the way to the port: Would they succeed if the government did not grant them the licenses and consignments? Then they come to the village and say we should preserve the forest. Anyway, I need money and if I find the way I will continue to deal, they will go sort it out up there. (community forest beneficiary).

5.2. Local timber processing rules and REDD+

The 1994 forest law also sought to increase local timber processing through tax incentives, restrictions on the export of unprocessed round logs, and compelling logging companies to set up local wood processing facilities. Local wood processing supports livelihoods and eases pressure on forest resources. If effectively implemented, it could also synergistically support REDD+ outcomes. However, sawmills in the Djoum subdivision of the South region closed down. People reverted to exploiting forest resources, with adverse effects on sustainable forest

management projects in the South and far-reaching ramifications on reforestation projects in the West. A forestry official from the South explained:

there was a sawmill here that hired many people, so locals were busy at work. Since the company shut down, people have been jobless and are engaging in all sorts of crimes. That is why I say that illegal practices are to some extent linked to unemployment. [...]. The sawmill that closed down was special in that it processed wood within this subdivision and employed a whole team. When timber is processed here, wood waste is collected to supply a local industry: there were charcoal makers who lived out of charcoal production. Some locals were involved in charcoal trade. Those who own a stroller would transport charcoal to the market place. Others earned money on loading charcoal on trucks for shipment to major cities. From wood waste, some could make a chair or a bed, so there was something for everybody and fewer problems; poaching or illegal logging were minimal. (forest official)

The growth of unauthorised logging has compromised the outcomes of sustainable forest management initiatives and is compounded by failures in the timber monitoring chain, which affects the domestic timber market and REDD+ reforestation projects. The domestic timber market is supplied by artisanal logging from the non-permanent forest estate, which includes community forests (Robiglio et al., 2013; Mahonghol et al., 2017). While domestic timber demand is increasing, unauthorised logging in community forests is mostly for export, which reduces domestic wood supply and increases pressure on trees planted in less forested regions. Participants from case study 3 in the savanna area reported:

The reserve is exposed, there are entry points everywhere and heavy pressures from unauthorised cuts for firewood and timber. Residents intrude in the reserve to steal wood to meet their household energy needs, for construction and to sell. (participant)

5.3. Reforestation areas and REDD+ projects

In case study 3 in the West of the country, REDD+ project outcomes have been compromised by outcome-level interaction from reforestation rules. According to the 1994 forest law, reforestation sites are to provide forest products and/or protect fragile ecosystems. The Bana-Bapouh forest reserve in West Cameroon was planted with Eucalyptus to prevent landslips. The plantation negatively affected local livelihoods, which in turn eroded adherence to REDD+ reforestation activities. Locals suggest that eucalyptus has a number of detrimental effects on both farming and animal husbandry:

“Eucalyptus sucks a lot of water, so farmers are now obliged to go down in swampy areas to create farms, and there is not enough space for everyone there.”(farmer)

“Moreover, grasses do not grow around these trees, because eucalyptus roots are not only very invasive, their leaves render the soil sterile when they shed. So now, we have to take our cattle very far away from the village to feed them.”(pastoralist)

Different forms of resistance, such as claiming ignorance, are used locally to avoid open conflict. Conversely, forest officers, who are aware of the impacts of the reserve are reluctant to act against encroachment as reported by a forest officer from the West region:

The reserve was created long ago, in 1947, and the Whites who created it did not leave any map, we cannot find the map and the boundaries, and this is also what hampers reforestation. [...]. The council does not know where the reserve lies, since the people from 1947 are no more, and when we ask the elderly they prefer to say they do not know even if they do, for fear of being told that they encroach in the reserve. The reserve has therefore been invaded and those who settled in are convinced they are on their land. We cannot expel them, where would we relocate them? So, it is a little difficult. (forest officer)

Figure 4 sums up outcome-level interactions between forestry institutions and REDD+ projects.

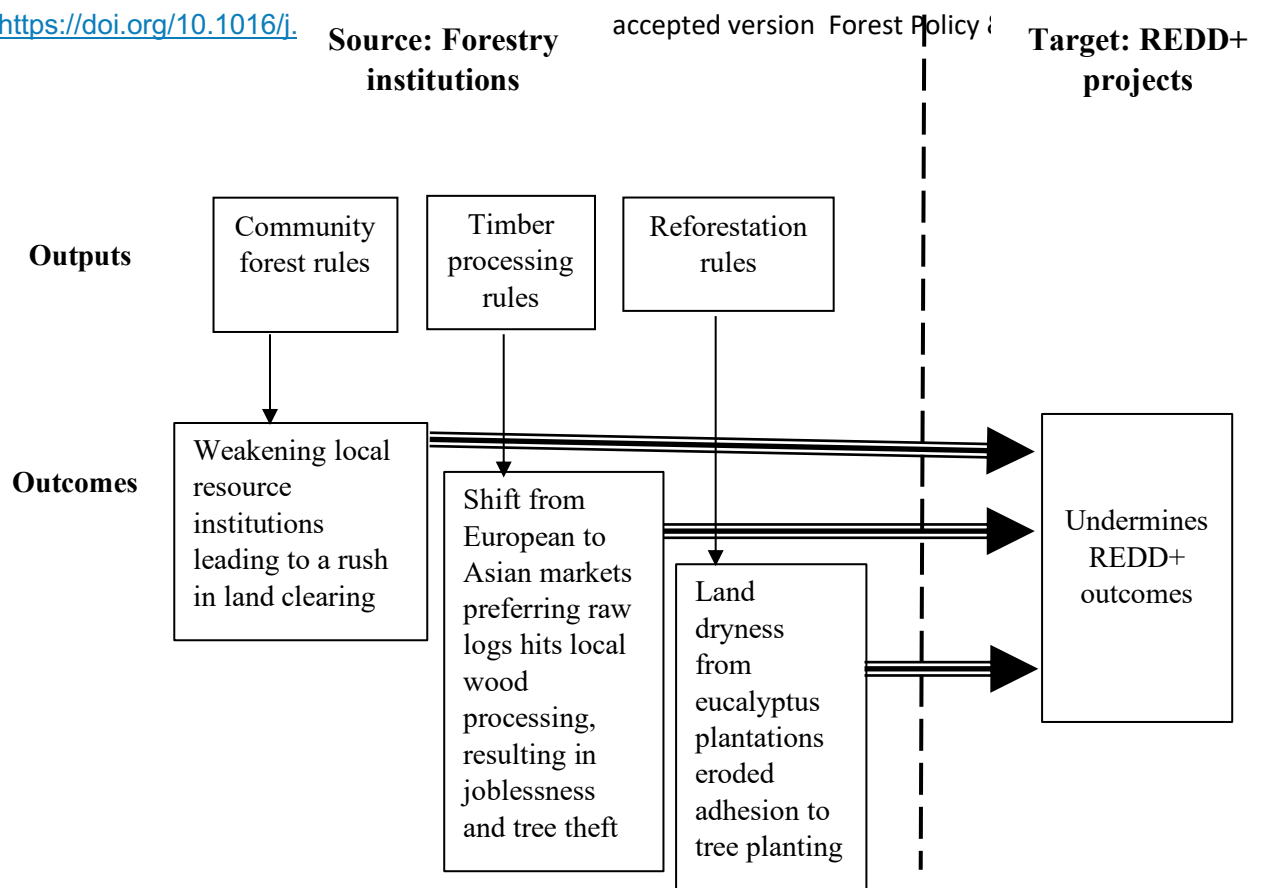


Figure 4: Outcome-level or behavioural interplay between forestry institutions and REDD+

The analysis of institutional interaction shows that central actors have been further ignoring other important drivers of deforestation that are linked to weaknesses in forestry institutions. In the two forest-rich case studies in the South of the country, the weakening of local institutions managing community forests has left a vacuum that is driving further deforestation. In addition, the failure to effectively incentivise sustainable local forestry enterprises that can provide local jobs and support livelihoods fuels further deforestation. The latter also reveals important international drivers of deforestation in addition to weakness in enforcement of forestry institutions. Finally, the use of fast growing non-native species in reforestation projects, while sensible from a productive forestry perspective, denotes another failure in terms of lack of consideration on negative impacts on local livelihoods. The above analysis shows that REDD+ implementation cannot ignore institutional failures in forestry institutions, and until these are tackled, implementation failure in REDD+ projects are likely to persist.

6. Discussion

Our evaluation of Matland's implementation typology based on the assessment of conflict and ambiguity indicates that REDD+ case studies 1 and 2 from the South fall under the political implementation, in which power determines implementation outcomes. Case study 3 from the West region represents a case of experimental implementation, in which contextual conditions determine project outcomes. However, alone they are not sufficient to fully explain implementation outcomes, because they ignore close interlinkages between REDD+ and forestry institutions.

Political implementation features low ambiguity and high conflict levels. As observed in other settings, high levels of conflict emerged from diverging framing between central and local actors of the main drivers of deforestation (Uggla et al., 2016; Isyaku et al., 2017). By blaming small scale agriculture for deforestation, central actors in practice support the interests of the large scale rubber plantation in Djoum that involved the clearing of 40,000 ha of forest, and the Nkout iron ore mining permits in forest zones and associated railroad construction at the expense of forests (Assembe-Mvondo et al., 2015; KPMG, 2013). Similar biases towards small scale drivers have been found throughout REDD+ projects (Bos et al., 2020). Conflict in this case is triggered by local actors' perceived injustice linked to such framing (Meierding, 2016). Central policy designers also seem to have limited knowledge of appropriate alternative livelihood activities. They see agricultural intensification as the way to mitigate climate change. Improved crop varieties may, however, not suit local conditions and mineral fertilisation may even contribute to the displacement of greenhouse gas emissions (Gockowski & Asten, 2012; Zhang et al., 2013; Atela et al., 2016).

According to the framework, instances of political implementation are determined by power. Depending on the balance of power between actors, project goals in the forest-rich cases can be achieved either through coercion or negotiation. In forest-rich tropical countries, central forestry bureaucracies tend to retain most power, because they control substantial resources (Wibowo & Giessen, 2015). However, in the context of voluntary REDD+ initiatives, local implementers retain a level of agency often expressed through forms of resistance such as refusing to take part in REDD+ projects altogether, in selected project activities, or failing to adopt suggested land use practices, as evident in our cases. Consequently, negotiations remain key for compliance. Policy designers' ability to broker locally appropriate solutions that preserve implementers' preferences and minimise labour would be key for eliciting compliance and improving implementation outcomes. Previous studies on REDD+ implementation in

Cameroon highlighted the need to enhance local capacity in REDD+ practices (Cerbu et al., 2013; Chia et al., 2013). While capacity building could be sufficient in instances of experimental implementation where contextual conditions and skills determine projects' outcomes, alone they are unlikely to lead to progress in the case of political implementation where projects' aims are contested.

Our case studies corroborate that policy conflict and ambiguity are often negatively correlated (Regan, 1984). One key reason is that ambiguous policies help to defuse conflicts around policy goals, because they can accommodate different views and interests under the same framing (Uggla et al., 2016). In case study 3 in Western Savanna areas, low level of conflict occurs with high level of ambiguity about REDD+ project objectives. Beneficiaries' lack of awareness about carbon credits in Bana-Bapouh resonates with the findings from Mount Cameroon where REDD+ carbon payments were not discussed to avoid disappointment in a context of funding uncertainty (Awono et al., 2014). Indeed, unfulfilled expectations has been a major problem in many REDD+ contexts and management of expectations remains a major challenge (Massarella et al., 2018). Ambiguity could be a common feature of newly introduced forest protection initiatives where implementers adjust to novel practices or venture into uncharted territories as has been the case for FLEGT (Giurca et al., 2013). Policy ambiguity is also often used politically to achieve certain outcomes, while hiding true intentions. In Ghana, for example, ambiguity around forest decentralization policies was used to disguise a drive toward recentralization from donors (Teye, 2011).

Low level of conflict in case study 3 is in part explained by well functioning customary institutions. Among the Bamileke, traditional chieftainship is deeply entrenched and the moral authority of local dignitaries high, which explains rule adherence (Fowler, 2011). The position of case study 3 on the forest transition curve (Angelsen, 2007) provides further explanation for lower levels of conflict; in the western savanna where there is less forest, slash and burn is uncommon, implying limited change to existing practices, and thus easier adoption.

In this experimental implementation case, contextual conditions are likely to determine project outcomes, which include availability and local control of resources, as well as human and social capital. Thus, in this case the institutional capacity of local authorities to support communities is central to effective REDD+ outcomes.

Overall, Matland framework has permitted to determine the implementation typologies of our three case studies based on conflict and ambiguity assessment, and to identify the factors that influence implementation outcomes in each. We have found that case studies 1 and 2 from the

South are instances of political implementation where power determine implementation outcomes (figure 1 and 3); and since power between designers and implementers is balanced due to the voluntary rather than mandatory nature of REDD+ projects, negotiation or policy designers' ability to propose solutions that meet implementers' preferences and minimise labour would be key for implementation outcomes. Our case study from the West region features experimental implementation where contextual conditions determine project outcomes (figure 1 and 3); thus resource availability and social capital would matter for project implementation. The findings further indicate how local culture and its implications for the scale of change (Mazmanian & Sabatier, 1983) influence implementation typology. In areas featuring high conflict levels in the forested South, local knowhow diverged significantly from introduced practices. The opposite occurred in the western region where limited change to local practices eased project adoption and minimised conflict. Thus, an enhanced understanding of cultural institutions that shape community behavior and influence implementation typology and outcomes would improve the understanding of REDD+ project outcomes.

Matland framework's narrow focus on factors internal to the policy domain misses important external influences that directly impact REDD+ projects' outcomes. Expanding the analysis to include institutional interplay showed how interferences from forestry regulations and their implementation failures impacted local resource availability and weakened local institutions, jeopardising REDD+ outcomes. Misguided decentralisation processes that criminalise customary forest access and fail to devolve power and resources to local actors are better understood as attempts to recentralise control of community forests which disenfranchise underprivileged forest villages such as Nkolonyeng (Oyono, 2004; Cheka, 2007; Yufanyi Movuh, 2012). Resistance to such recentralisation has been observed across tropical forest countries and translates into lack of compliance with community forest rules, leading to practices that have accelerated forest degradation and reduced the efficacy of REDD+ projects (Benjaminsen, 2014; Asiyambi & Lund, 2020). Further, the inability to incentivise sustainable local forestry enterprises providing local jobs and supporting livelihoods has also been identified as a common failure of forest conservation as well as REDD+ programmes (Epanda et al., 2019; Sene-Harper et al., 2019).

In Cameroon, the failure to enforce export restrictions of raw logs intended to incentivise local timber processing, and the shift from the European to Asian markets preferring raw logs (Kaplinsky et al., 2007; Cerutti et al., 2011; Eba'a Atyi et al., 2013) has transformed a policy that could be synergistic with REDD+ into one that worsened local living conditions and

fuelled deforestation. This has significant ramifications for reforestation projects facing growing national demand, as timber from the non-permanent forest estate is increasingly channelled towards export due to unauthorised practices and limited enforcement of forest rules (Robiglio et al., 2013). While the EU-led FLEGT agreement which tracks wood from harvest to export is potentially synergistic with REDD+ (Tegegne et al., 2014), it could also reorient trade toward unprocessed timber markets (Eba'a Atyi et al., 2013), further disincentivising local wood processing. Such unintended consequences would represent a disruptive outcome-level interplay between FLEGT and REDD+. Addressing such failures of forestry institutions should be a priority in order to both reduce conflicts and support REDD+ project outcomes

By combining a policy implementation and institutional interaction framework, this research offers a more comprehensive examination of REDD+ implementation in Cameroon that takes account not just of factors within the climate change policy boundaries, but also external influences from interrelated institutions.

While previous REDD+ studies raised a number of implementation problems recommending they be solved for successful REDD+, this study shows that not all problems are determinative for implementation outcomes, and demonstrates how influential factors for project outcomes are carved by specific implementation circumstances. We have thereby introduced a prioritization approach for addressing project implementation challenges that has the merit of maximizing the effectiveness and efficiency of interventions, and would be particularly important for economically underprivileged tropical countries that host REDD+ programs.

7. Conclusion

We analysed the implementation typology of three REDD+ projects in South and West Cameroon to identify the key determinants of their outcomes, and examined how these have been shaped by horizontal interactions from forestry institutions. We found that REDD+ projects represented political implementation in the South and experimental implementation in the West. The results suggest that central policy designers' ability to propose alternatives that meet implementers' preferences and mitigate labour implications are key to improve project outcomes in the South. In the West, the capacity of local actors, their resources and the level of social capital will matter for implementation success. Opposing views on drivers of deforestation may call for a comparative assessment of emissions profile between shifting slash and burn farming practices and improved agricultural methods supported by energy-intensive

industrial processes. REDD+ stakeholders would equally benefit from social capital assessments in project implementation sites, particularly in areas showing signs of experimental implementation.

We have also shown that to understand conflict and failures in REDD+ we need to look beyond a specific REDD+ policy domain. Environmentally-oriented sectors such as forestry institutions that pursue the identical goal of sustainable forest management can still conflict with REDD+ at the operational level. The limited devolution of power and of resources that occurred under Cameroon's approach to decentralisation has exacerbated the community forest crisis and hampered forest carbon emission reduction projects as well as forest restoration activities. We posit that REDD+ schemes would be aided by measures to improve forest governance and promote the local timber industry. Further in-depth studies on the management of institutional interactions are also required to enhance synergistic interactions and avert or minimise disruptive institutional interplay affecting REDD+.

Acknowledgement

This paper is part of a PhD study funded by the UK Commonwealth Scholarship Commission. Co-authors were funded by the UK Economic and Social Research Council (ESRC) [grant ES/K006576/1] from the Centre for Climate Change Economics and Policy (CCCEP) and by the Norwegian Agency for Development Cooperation (NORAD) [grant CCE6510500-NOR114-JL3] as part of the Global Comparative Study on REDD+. We gratefully acknowledge the fieldwork grant from the Sustainability Research Institute (SRI) of the University of Leeds. We would like to thank the Centre for International Forestry Research (CIFOR) for facilitating field activities in Cameroon. Many thanks to Anne Larson and Felicien Kengoum (CIFOR) for their comments on an earlier draft of this paper. We are grateful to all research participants and local communities from Bana-Bapouh, Efoulan, Nkolonyeng in West and South Cameroon for their involvement and for sharing their views on the issues covered.

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