

Community forestry in Cameroon: opportunity or constraint for REDD+?

Community
forestry and
REDD+ in
Cameroon

19

Mekou Youssoufa Bele, Denis Jean Sonwa and Anne-Marie Tiani
*Central Africa Regional Office, Center for International Forestry Research (CIFOR),
Yaounde, Cameroon*

Received 31 December 2020

Revised 6 December 2021

6 March 2022

Accepted 22 March 2022

Abstract

Purpose – This study aims to identify opportunities and constraints of community forestry in the context of forest decentralization in Cameroon and what can be capitalized on for sound REDD+ design and implementation.

Design/methodology/approach – A qualitative approach to data collection was used through content analysis of 1994 forestry law, reports and publications related to decentralized forest management, community forestry and REDD+ in Cameroon. Principles that govern community forest and REDD+ were highlighted and opportunities and constraints of community forestry for REDD+ projects were discussed.

Findings – Community forestry was developed principally to protect forests in order to support the subsistence and income-generating extractive activities of forest-dependent communities. Community forestry governance arrangements were not designed with the objective of achieving verifiable emissions reductions or carbon stock values. Hence, existing community forestry institutions may not address all the specific demands of REDD+ programs. However, existing community institutions and practices can be strengthened or modified to align better with climate change mitigation goals and to achieve REDD+ objectives in community forestry sites. On the other hand, REDD+ was developed principally to mitigate climate change by reducing emissions from deforestation and forest degradation principally within developing countries where the livelihoods of forest-dependent people are a central component of all forest management policies. However, despite fundamental differences between community forestry and REDD+, there is substantial synergy between their objectives, and the dual forest conservation and livelihood development focus of both programs means that policies that strengthen and support existing community forestry institutions and sites will advance REDD+ objectives. As such, REDD+ will likely to be more successful if it builds on lessons learned from community forestry.

Originality/value – This paper demonstrates how REDD+ is more likely to succeed if it builds on the lessons learned from community forestry over the past 20-plus years in Cameroon. It also discusses how REDD+ can benefit from community forestry and how some of the many challenges related to community forestry can be directly addressed by the REDD+ mechanism. Further, this paper also argues how the congruence between community forestry and REDD+ can effectively facilitate the direct use of community forestry as a tool to achieve REDD+ goals.

Keywords Climate change, Community forestry, REDD+, Synergies, Cameroon

Paper type Case study

© Mekou Youssoufa Bele, Denis Jean Sonwa and Anne-Marie Tiani. Published in *Forestry Economics Review*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

The study was embedded within a project by the Center for International Forestry Research (CIFOR). Started in July 2010, COBAM (Climate Change and Forests in the Congo Basin: Synergies between Adaptation and Mitigation) was a 5-year project funded by the African Development Bank and the Economic Community of Central African States under PACEBCo (*Programme d'Appui à la Conservation des Ecosystèmes du Bassin du Congo*). The authors express special thanks to all those who have provided them with the documents and information necessary for this paper. The authors also express special thanks to the men and women of all the community forests investigated in their research.



1. Introduction

Forests play a critical role in influencing the Earth's climate as globally important storehouses of carbon. The global sink in forest vegetation and soils is estimated at 1,200 Gt of carbon. This increases at a rate of 1–3 Gt annually. As such, forest and land-use measures have the potential to reduce net carbon emissions by the equivalent of 10–20% of projected fossil fuel emissions through 2050 (IPCC Intergovernmental Panel on Climate Change, 2007; Meridian Institute, 2009). In the tropics, the net carbon flux is close to zero, suggesting that the carbon sink is large enough to offset carbon emissions associated with deforestation. However, considering the current rate of deforestation and forest degradation in the tropics, the success of international efforts to store atmospheric carbon in forests in this part of the world depends on the long-term maintenance of those forests. According to the Stern Review (2006), reducing deforestation is the “single largest opportunity for cost-effective and immediate reductions of carbon emissions.” The United Nations Framework Convention on Climate Change (UNFCCC) leads these efforts through the promotion of initiatives on Reducing Emissions from Deforestation and Forest Degradation (REDD+). International initiatives, such as the Forest Carbon Partnership Facility (FCPF) and the UN-REDD Program, are actively supporting the implementation of REDD+ at the national level.

2. Summary of REDD+ history

In the tropics, deforestation and forest degradation are significant drivers of anthropogenic climate change. They are responsible for nearly 20% of global emissions (UN-REDD, 2011; IPCC, 2007). Tackling deforestation and degradation of tropical forests constitutes, therefore, a core of any concerted effort to combat climate change (Parker *et al.*, 2009). Traditional approaches to halting tropical forest loss have typically been unsuccessful, as deforestation and forest degradation continue unabated. Providing incentives to protect forests can be a cost-effective climate change mitigation strategy. REDD+ is a proposed multilateral policy developed within the UNFCCC aiming to incentivize developing countries to reduce greenhouse gas (GHG) emissions and increase removals by limiting deforestation and forest degradation, conserving forest carbon stocks, sustainably managing forests and enhancing forest carbon stocks. Having identified current and/or projected rates of deforestation and forest degradation, a country taking remedial action to effectively reduce those rates will be financially rewarded relative to the extent of their achieved emissions reductions (Transparency International, 2012). As such, REDD+ provides a unique opportunity to achieve large-scale emissions reductions at comparatively low abatement costs (Phelps *et al.*, 2012).

REDD+ has been evolving with time and there are still a lot of uncertainties attached to it. In its infancy, REDD+ was first and foremost focused on “Reducing emissions from deforestation in developing countries (RED): approaches to stimulate action” at COP11 in Montreal in 2005. However, in 2007, the Bali Action Plan, formulated at the 13th session of the Conference of the Parties (COP-13) to the UNFCCC, stated that a comprehensive approach to mitigating climate change should include “*policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries*”. A year later, this was further elaborated on as the role of conservation, sustainable management of forests and enhancement of forest carbon stocks was upgraded so as to receive the same emphasis as avoiding emissions from deforestation and forest degradation (UNFCCC, 2011). In 2010, at COP-16 as set out in the Cancun Agreements, REDD became REDD-plus (REDD+), to reflect the new components. REDD+ now includes (1) reducing emissions from deforestation; (2) reducing emissions from

forest degradation; (3) conservation of forest carbon stocks; (4) sustainable management of forests; and (5) enhancement of forest carbon stocks.

In December 2013, COP-19 produced what is known as the “Warsaw Framework on REDD-plus.” These decisions address a work program on results-based finance; coordination of support for implementation; modalities for national forest monitoring systems; presenting information on safeguards; technical assessment of reference (emission) levels; modalities for measuring, reporting and verifying (MRV); and information on addressing the drivers of deforestation and forest degradation. Requirements to be eligible for access to “results-based finance” were specified.

The remaining outstanding decisions on REDD+ were completed at COP-21 in 2015. With the conclusion of decisions on reporting on the safeguards, non-market approaches and non-carbon benefits, the UNFCCC rulebook on REDD+ was completed. All countries were also encouraged to implement and support REDD+ in Article 5 of the Paris Agreement. This was part of a broader Article that specified that all countries should take action to protect and enhance their GHG sinks and reservoirs (stores of sequestered carbon).

The details of a REDD+ mechanism continue to be debated under the UNFCCC and a final mechanism is, therefore, not yet in place and operating at scale. Despite this, there is substantial support for REDD+ (The Prince’s Charities International Sustainability Unit 2011). However, many issues remain unsettled, including financing to support the mechanism and provide sufficient economic incentives to stop deforestation; criteria for establishing credible deforestation baselines; technical aspects of monitoring and verifying the change in forest cover; concerns over poor governance and illegal logging; international leakage, whereby forest conservation in one country drives deforestation in another; the scale of implementation, including the debate over “national” versus “sub-national” projects; equity, including land tenure, ownership and participation of forest-dependent communities; reduced impact logging; protection of biodiversity and environmental services in non-carbon-rich ecosystems; etc.

The objective of this paper is to organize information, analyze and draw conclusions on community forestry issues relevant to the design and implementation of REDD+ strategies; that is, it aimed to identify opportunities and constraints of community forestry that can be relevant or constitute a barrier to the design and implementation of REDD+. This is very important for REDD+ practitioners or planners, as REDD+ proponents will benefit more from building on valuable experience and existing systems such as community forestry.

3. Conceptual framework for REDD+ and community forestry

REDD+ is a broad set of approaches for forest conservation and has been developed with the aim of providing developing countries with financial incentives to take action to mitigate climate change (Skutsch and McCall, 2012; Gabay and Alam, 2017). Such financial incentives also target individuals, communities and projects that demonstrate achievement of that objective (Angelsen, 2008; Bernard and Minang, 2019). This requires, in fact, a deep understanding of the current and future causes of deforestation, so that feasible and appropriate strategic options (in terms of costs, political feasibility and generation of co-benefits) can be designed and implemented (Pagiola and Bosquet, 2009; Gupta and Koontz, 2019). It can be viewed as a form of Payments for Environmental Services (PES) program, implemented within either a national or a subnational REDD+ framework (Newton *et al.*, 2012). In addition to reducing carbon emissions, REDD+ is also tasked with ensuring social benefits and is challenged to “integrate outcomes of ecological sustainability, social equity, and economic efficiency in which objectives for long-term use of the resources are well-defined so that expectations of communities and the society at large remain consistent” (Pagdee *et al.*, 2006). As a matter of fact, REDD+ is seen by many as an instrument directed at

communities and other small-scale forest owners and managers, based on the idea of PES and the experience of many small-scale forest carbon projects in the voluntary sector, such as those in Central America, for example, Costa Rica (Kaimowitz, 2008; Agrawal and Angelsen, 2009; García-López, 2019). For instance, almost all the REDD+ readiness proposals presented to the World Bank's Forest Carbon Partnership Facility (FCPF), and most of those in the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD), make reference to community forest management. As a matter of fact, community forestry was developed principally to protect forests in order to support the subsistence and income-generating extractive activities of forest-dependent communities. Community forestry governance arrangements were not designed with the objective of achieving verifiable emissions reductions or carbon stock values. Therefore, existing community forestry institutions may not address all the specific demands of REDD+ programs. However, existing community institutions and practices can be strengthened or modified to align better with climate change mitigation goals and to achieve REDD+ objectives in community forestry sites. REDD+ was developed principally to mitigate climate change by reducing emissions from deforestation and forest degradation (Figure 1). However, the development of REDD+ programs is principally within developing countries where the livelihoods of forest-dependent people are a central component of all forest management policies. As such, the main REDD+ programs (e.g. the Forest Carbon Partnership Facility and UN-REDD) view carbon, biodiversity and livelihood goals as being inseparable. These multiple conservation and development objectives are intertwined within the REDD+ discourse. Therefore, if it builds on lessons learned from community forestry, REDD+ is likely to be more successful. Identifying the congruence between community

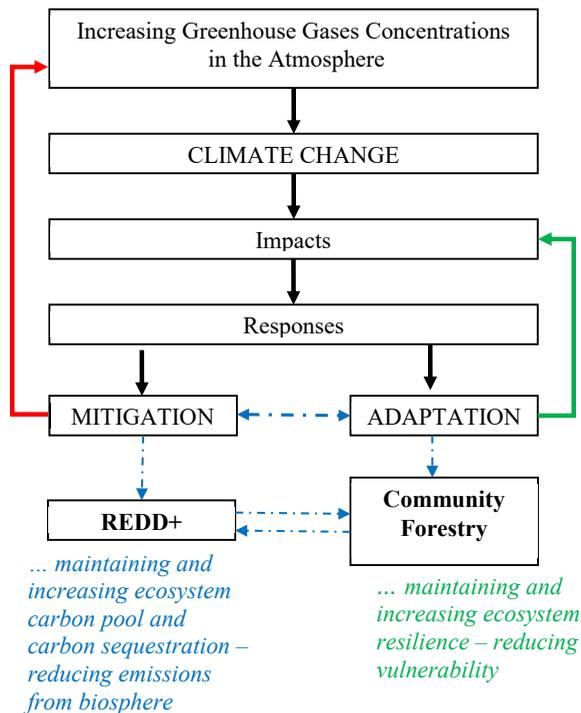


Figure 1.
Linkages between
REDD+ and
community forestry

forestry and REDD+ would effectively facilitate the direct use of community forestry as a tool to achieve REDD+ goals, as an alternative to in-country PES programs.

4. An overview of community forestry development in Cameroon

From times immemorial, local communities in Africa have managed forests and woodlands traditionally as a means to regulate the use of timber and non-timber forest resources, conserve and extend grazing areas and maintain important cultural, spiritual or historical sites, such as “sacred forests” (Alden Wily, 2012; Roe *et al.*, 2009; Shepherd, 1992). However, with the advent of the colonial era across much of Africa, land and resources were placed under the sole authority of the central state. As a result, communities were rapidly disenfranchised from local forest resources and this situation generated conflicts between them and emerging central government authorities which suffer severe resource and capacity constraints to exercise effective management control over their forest and wildlife estates (Oyono, 2004a). Having realized that these “command and control” approach created more problems, new and more people-centered approaches toward the management of forests and natural resources, in general, became increasingly important from the early 1980s in the form of decentralization. According to many theories of the 1990s, decentralization was promoted around the world as an appropriate means to involve local people in the management of public affairs so as to strengthen equity and democracy (Ribot, 2006; Larson, 2005). It was a way to implement policies and programs that reflect people’s “real” needs and preferences as central state authorities usually lack the “time and place knowledge” (Hayek, cited in Ostrom *et al.*, 1993). According to the Rights and Resources Initiative (2015), approximately 18% of global forests are currently under community ownership or administration. Many authors (e.g. Skutsch and McCall, 2012; Ngendakumana *et al.*, 2013; Newton *et al.*, 2015) have argued that such forests have the potential to fulfill the triple objectives of supporting livelihoods, biodiversity conservation and providing ecological services such as reducing emissions or increasing removals from forests.

In the context of Cameroon, decentralization was part of a wider process of externally initiated reform designed to reduce the role of the state and also as a condition of continuing international aid (Oyono, 2004a). In the forest sector, it was meant to reduce ever long state authoritarian principle in forestry (Karsenty *et al.*, 1997; Egbe, 1997; Karsenty, 1999). Under pressure from the World Bank, Cameroon initiated forest reforms in the 1990s after more than a century of colonial and post-colonial forest policies. Between the colonial period and 1994, Cameroon’s legal tenure arrangements placed forests under exclusive state ownership and management (Oyono *et al.*, 2007). This state of forest ownership and management led to inequality, marginalization, injustice, increase conflicts between stakeholders, declining contribution of the forest sector to the national economy and development; and growing threats to biodiversity (Assemble, 2006; Ekoko, 1998, 2000). Communities rights were only limited to user rights (Oyono *et al.*, 2005; Oyono, 2005). However, in 1993, a Provisional Zoning Plan introduced a meaningful change in forest tenure and defined the various “public” uses of forestry and agro-forestry areas. These reforms led to the promulgation of the forestry law 94/01 of 1994 (RoC, 1994) and its decree 95/531 of application (RoC, 1995), and along with subsequent legal and administrative instruments, constituted a major policy shift. This reform was aimed at promoting community participation in forest management and contributing to poverty reduction and the sustainable management of forests resources and biodiversity conservation (Bigombé, 2003; Oyono *et al.*, 2007; Minang *et al.*, 2007).

The new forest law divided the National Forest Estate (NFE) into Permanent and Non-Permanent Forest Estates with different management entities. Community forests are part of the “non-permanent” forest domain (Figure 2). The forestry law of 1994 defines a community forest as “a forest of the non-permanent forest estate (Figure 1), subject to a management

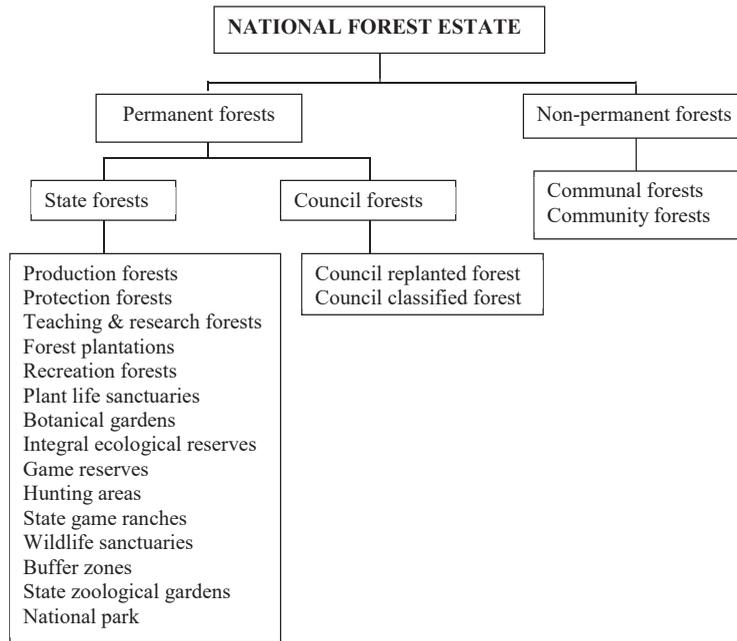


Figure 2.
Status of different
categories of classified
forests in Cameroon

agreement between a village community and the Administration in charge of forests. The management of this forest is entrusted to the village community concerned, with the technical support of the Administration" (RoC, 1995). According to this reform, an interim management agreement (after developing and validating a Simple Management Plan) is initially signed for two years, and the final renewable agreement is valid for 25 years; the maximum area that may be granted to a community is 5,000 ha; and forest products belong to the communities. However, the effective implementation of community forestry takes time, and the legal and institutional frameworks are not yet complete, particularly in the countries of Central Africa. Income-generation opportunities for local populations are one of the conditions necessary for the success and longevity of the community forestry systems in place. For instance, in Cameroon, forest and farm tree resources constitute the principal assets of the rural poor, and the most proximate opportunity for food security and poverty alleviation (Sonwa *et al.*, 2012a, b; Nkem *et al.*, 2007; Bele *et al.*, 2013). In many cases, the extraction, processing and trading of non-timber forest products are often the only employment available for the population, especially women, in remote forest areas. In addition, the carbon storage of forests also has an important potential for generating a stream of benefits for local communities, as an international mechanism for REDD+ is already in place.

5. Overview of REDD+ process in Cameroon

In Law No. 94/01 of January 20, 1994, Cameroon introduced a series of forest policy reforms to promote more sustainable and equitable management of their forests. These reforms made provisions for community and council forests, the allocation of a portion of forest royalties to municipalities as well local and indigenous communities (RoC, 1994), and a public bidding system for the allocation of timber harvesting titles stipulated in Decree N0. 95-531-PM of August 23, 1995 (Alemagi *et al.*, 2014). A zoning plan whose goal was to demarcate forests into

permanent and non-permanent domains was also a fundamental provision of these forestry reforms. Despite these reforms, the rate of deforestation and forest degradation in Cameroon remained very high. For instance, the rate of deforestation in Cameroon is one of the highest in the Congo Basin. In addition, it has been established that about 75% of the forest in Cameroon is subjected to exploitation and is degraded (Robiglio *et al.*, 2010; Alemagi *et al.*, 2014). For instance, from 2001 to 2020, Cameroon lost 1.53 Mha of tree cover, equivalent to a 4.9% decrease in tree cover since 2000, and 903 Mt of CO₂ emissions. As a corrective measure, Cameroon took interest in REDD+. In 2008, Cameroon embarked on the REDD+ readiness process. Its Readiness Plan Idea Note (R-PIN) was validated in early 2009 and its Readiness Preparation Proposal (R-PP) document was validated in 2012. Initiated since 2014, Cameroon's national REDD+ strategy was validated in June 2018 by all stakeholders and the multi-sector steering committee, which is the decision-making body of the REDD+ process (REED+ Technical Secretariat, 2019). Also, Cameroon engaged in the development of its Forest Investment Plan, its national implementation framework and an Emission Reduction Program Idea Note in the southern plateau of the country. In addition, Cameroon finally entered the final phase of the readiness preparation, which, in fact, is a stage when activities proposed in the readiness preparation proposal (R-PP) are well advanced and/or completed. As such, the readiness package was a major milestone and demonstrated a transition from REDD+ readiness preparation to the implementation of the reduction activities. In this line, a multi-stakeholders assessment was carried out to assess the progress on the Cameroon REDD+ readiness and to identify remaining gaps and further needs. For instance, the National REDD+ Strategy identified measures to address the policy and legal gaps or barriers to reducing deforestation and forest degradation or enhancing carbon stocks. It informed government's approaches to target interventions to key drivers of deforestation and address institutional gaps. In addition, an assessment of the coherence of sectoral policies and laws related to REDD+ and an analysis of land rights and carbon rights for REDD+ were achieved. To accompany the process of reform of laws including land and forestry, the development of an advocacy document (position paper for the review and amendment of existing acts) for the approval of new laws taking into account the aspects related to REDD+ have been proposed.

With regard to the reference emission level, a concept for the construction of the Forest Reference Level in Cameroon was developed. It indicated the scope and definition of the forest to consider within the framework of the REDD+ process thematic classes according to the country's national circumstances. It also made a prioritization of the carbon pools to consider in the different agro-ecological zones of the country, indicated the scale that will be national and presented the approach to consider in terms of historical data (2000–2015 for historical data and 2015–2035 for projections) with an update of rate every 5 years.

Concerning the national monitoring system, monitoring, reporting and verification (MRV) guidelines were elaborated and an MRV National Task Force was created. However, monitoring, notification and information exchange tools particularly REDD+ projects register, the Safeguards Information System (SIS) and the National Forest Monitoring System are still to be developed. In addition, efforts are still needed to be made for the feedback and grievance redress mechanism, outreach and communication with a focus on the private sector and local populations, stakeholder engagement and consultation specifically for women, youth and decentralized territorial communities; capacity building on all REDD+ themes; and the national REDD+ strategy and related strategies/documents.

6. Methodology

Content analysis was used to identify community forestry and REDD+ patterns in recorded communication in Cameroon forest policy. Content analysis was used for this paper because

(1) it was appropriate for unobstructive data collection as data could be analyzed without the direct involvement of the participants and so our presence as researchers could not influence the results; (2) it is transparent and replicable when done well, content analysis follows a systematic procedure that can easily be replicated by other researchers, yielding results with high reliability; and (3) it is highly flexible as it can be conducted at any time, in any location and at low cost and all that is needed is access to the appropriate sources.

The 1994 Forest Law (RoC, 1994) and its decree of application (RoC, 1995) and along with subsequent legal and administrative instruments, Cameroon's initial Communication to UNFCCC, Readiness Plan Idea Notes (R-PIN), draft Readiness Plan Proposal and REDD+ strategic documents were the main documents used for this paper. They were chosen because of the fact that they are major policy documents that address quite comprehensively the key issues of forest decentralization, biodiversity conservation and sustainable forest management and climate change in Cameroon. The analysis focused on interpreting and understanding community forestry and explored factors that could be relevant for REDD+ design and implementation as well as those that constitute constraints to its implementation. The analysis also explored how community forestry can effectively contribute to reducing emissions from deforestation and degradation and how some of the many challenges related to community forestry can be directly addressed by the REDD+ mechanism.

The findings presented here are based on secondary data sources rather than primary research. Literature was gathered from a range of sources, including peer-reviewed journals, published and unpublished reports, and Internet searches, solicited material sourced from experts and facilitators working in the field as well as experiences shared with colleagues.

7. Lessons learned from community forests in Cameroon

The decentralization of the management of Cameroonian forests has had both positive and negative effects. On the positive side, it has created a profitable new landscape and gave opportunities to so long socially marginalized forest communities to acquire a share of the forest and the revenue accruing from it. This is especially the case of the Pygmies who were never taken into account in Cameroonian forestry legislation and policies. The introduction of community forests has provided them with new options. Most of the pygmy communities were granted official ownership rights over a forest ecosystem. Moreover, "community forests exploitation has also curtailed the exodus of youth to the cities and the prospect of accessing their own share of the abundant forestry resources has encouraged them to stay in the villages" (Oyono, 2004a). In addition, community forests show significant potential in reducing rural poverty (Vabi *et al.*, 2003). A dynamic interaction has been created between the various actors involved in the local management of forests. The social dimensions of forestry reforms and decentralization have also empowered local communities.

However, more than 2 decades after the forestry reform in Cameroon, most community forests have not still achieved what they were created for (e.g. participation in forest management, sustainable management of forests and poverty alleviation). A number of issues have to be considered or to be revisited to make community forestry successful and thus relevant for REDD+.

7.1 *Complex and cumbersome procedures and regulations*

The application decree of forestry Law No. 94/01 of January 20, 1994, requires a village community to become a legally recognized entity and "to make itself officially recognized" in order to acquire a community forest and to manage the forestry fees. Such a legal entity could be an association, a common initiative group, a business group or a cooperative. However, in

reality, the formalization process is a huge challenge as it is complicated, time-consuming, onerous and the administration's free support mentioned by the 1994 law was never turned into practice (Nguiffo, 1998). In addition, the application process to obtain a community forest is lengthy and complex requiring forestry services at any step of the process. This is seen by some researchers, as the central state wish to take decentralization step by step, keeping it fully under control (Assemble and Oyono, 2002; Bigombé, 2003). The forest management plans also required for formal approval of community forests are technically demanding and require substantial amounts of technical assistance. A prerequisite for a forest management plan is a forest resource inventory requiring further specialist inputs. All these complex procedures and requirements make local communities seem vulnerable and captive.

7.2 State limits to management and tenure rights

In Cameroon, community forests fall under a forest classification called "non-permanent forest estate," which are forests of medium to low quality. The high-quality and high-value forest is contained within the "permanent forest estate," which falls entirely under the domain of the state and where community forestry is not permissible (Figure 1). Community forestry agreements are 25 years in length but subject to renewal every five years. However, the state can annul the agreement and take back control in case of law offences. The areas allocated for community forests are virtually always much more limited than the customary ones. As a matter of fact, the maximum area to be assumed within a community forest agreement is 5,000 ha, while traditionally, communities exercised customary tenure rights over areas far larger than this. These points highlight the fact that the zoning plan was designed without taking into account the customary institutions and forest management of local populations. In addition, a particular challenge relating to humid forests in Cameroon is the diversity and complexity of the forest structure, requiring more intricate management systems for forest management and harvesting. More importantly, community forests in Cameroon largely suffer from widespread elite capture making communities passive participants in the exploitation of their community forests.

7.3 The capture of community forests by urban elites

During the colonial and postcolonial era, the central state was the sole proprietor and manager of Cameroon forests. However, the introduction of community forests in the 1990s was seen by all forest communities as the beginning of an era of equity in access to natural resources and the end of inequity in access to benefits from forest exploitation (Oyono, 2004b). However, these community forests were captured by the external elite who suddenly and rapidly joined in local initiatives in their geographic origins, aligned themselves with the management committees, succeeded in diverting those committees from the original mandate and have set themselves up as more than resource persons for these organizations (Oyono, 2004a, b). As a result, most of the representatives of local populations involved in the decentralized management of forests are members of the elite, such as chiefs and those based outside the village, the "external elite" (Divisional Officer, Senior Divisional Officer, Mayor, etc.). However, the authoritarian nature of this interference and the many cases where committees have been taken over by these actors has discredited the process of decentralization in the eyes of the village communities (Oyono, 2004a, b).

As a whole, the current system of representation in community forests in Cameroon does not create institutions established to defend the communities' interests. Many of these representatives are motivated by individual strategies of socio-economic mobility and by what Wellstead *et al.* (2003) call subjective interests rather than by local communities' substantive interests.

7.4 Ineffectiveness of local management committees

Literature has demonstrated that the analysis of all the parties/actors involved in forest management in each community forest village, and analysis of local discourse, all indicate that the existing committees are, in most cases, ill-equipped to manage common-pool resources. This is partly attributed to the fact that the committee structures are essentially transplanted, have no social or historical legitimacy and are exogenous to local communities. While traditional institutions are constitutionally recognized as legitimate managers of common-pool resources, structures such as common initiative groups and committees were imposed on local communities and as such have superficial importance. [Agrawal and Ribot \(1999\)](#) distinguish four types of powers in relation to the decentralized management of renewable resources: “the power to make decisions and to enforce them; the power to create rules and/or modify them; the power to settle disputes with regard to the establishment of rules; and the power to enforce penalties on the basis of established rules.” Unfortunately, most committees examined in Cameroon have not received real powers, either from above or from below ([Oyono, 2004b](#)). The responsibilities transferred to the committees that bestow them with the power or authority required to support “local collective action” are weak and lack consistency.

7.5 Disruption of traditional organizations

Especially in Southern Cameroon where most of the community forests are located, traditional society accommodated community-based organizations built on solidarity, respect, blood ties, relative pluralism and social egalitarianism ([Oyono, 2004a](#)). Such community-based organizations included breakaway groups, socio-economic associations, multi-purpose aggregates and so forth ([De Thé, 1970](#); [Maquet, 1971](#)). However, the promulgation of Law No. 90/53 of December 19, 1990, on freedom of association, and Law No. 92/006 of August 14, 1992, legalizing cooperatives and Common Initiative Groups gave rise to the proliferation of rural micro-organizations in Cameroon, very often with the operational support of NGOs and bilateral and multilateral cooperation projects ([Ticha and Tchakouté, 1996](#)). As such, a village of 200 inhabitants could group together 8–10 Common Initiative Groups ([Etoungou, 2003](#)). Unfortunately, such organizations were exogenous to local communities and were not organically rooted in the collective organization of the “forest” societies onto which they have been grafted. As a consequence, there is a proliferation of open confrontations with traditional institutions, authorities and families ([Oyono, 2004b](#)). This situation has made some parts of the societies almost ungovernable.

8. Step forward for successful community forestry

Building REDD+ programs upon the aforementioned existing institutions risk perpetuating and amplifying existing problems. REDD+ should really draw lessons from community forestry experience if it wants to be successful. [Blomley \(2013\)](#) has made useful recommendations for successful community forestry in Africa. As a matter of fact, communities should be empowered, particularly in terms of (1) simple, low cost and practical procedures and guidelines for legalization of community tenure rights; (2) local community definition of forest management areas; (3) legally recognized community-level management entities; (4) community establishment of community forest management rules governing access and use; and (5) inclusion of marginalized groups that hold a stake in the resource. In addition, the composition of local management committees should accommodate traditional authorities, particularly lineage chiefs, and moral authorities. Accountability (upward and downward) should be established, reinforced and monitored; and information on failures and successes of the decentralization process disseminated. Capacity-building should also be stressed as elected bodies need the skills and knowledge required for

community forestry. These include technical aspects of sustainable forest management, record-keeping (including finances) and general skills such as leadership, governance, communication and planning. Capacity building is also required for government foresters and others who work with community forestry managers, especially in terms of extension, training and facilitation skills.

9. Synergies between community forestry and REDD+

For the long-term protection of forests, there is considerable overlap between the goals of REDD+ and community forestry. The key common goal for both is to maintain forest cover by reducing forest conversion to other land uses and to maintain forest integrity by reducing unsustainable resource extraction by creating local incentives for avoiding deforestation and forest degradation (Newton *et al.*, 2014).

9.1 Community forestry contribution to REDD+

The primary focus of REDD+ is to reduce deforestation and forest degradation and to increase forest carbon sequestration. However, in developing countries, strategies to reverse deforestation are necessarily tied to the livelihoods of forest-dependent communities. In these countries, community forestry can be an efficient and effective strategic option to address some of the main causes of deforestation and degradation, contributing to the reduction of emissions from these sources, and promote important social and environmental co-benefits. The local governance of forest resources under community forest management systems has in many cases been effective at producing improved environmental, economic and social outcomes (Charnley and Poe, 2007; Chhatre and Agrawal, 2009; Herold and Skutsch, 2011; Persha *et al.*, 2011; Newton *et al.*, 2014). Greater carbon sequestration, biodiversity conservation, reduced rates of deforestation and livelihood development are some demonstrated positive outcomes associated with community forest management (Dietz *et al.*, 2003; Ostrom, 2009; Pagdee *et al.*, 2006). Community forestry may also be a socially and politically more favorable proposition than forests managed with a focus on carbon objectives alone (Blomley *et al.*, 2008). Community forestry institutions do not necessarily depend on perpetual influxes of financial support, because the communities are incentivized by the benefits that they receive directly from the forests that they manage (Newton *et al.*, 2014). Studies and reviews in Tanzania, Uganda, Ethiopia and Guinea show that where forests are managed by communities, forest condition is improved when compared with state-managed or open-access regimes (Blomley *et al.*, 2008; Lund and Treue, 2008). In addition, according to Charnley and Poe (2007), community forest management has been associated with increased implementation of forest rights; more equitable access to, and benefits from, forest resources; increased investment in future forest productivity; greater fulfillment of local needs; improvements in living standards; alleviation of poverty; reduction of conflict between communities and government; improved control of corruption; resolution of forest management problems; and reduced instances of forest misuse by individuals. Most of these outcomes have the potential to result in greater satisfaction among forest users and an increased incentive to pursue sustainable management strategies in the long term. Chhatre and Agrawal (2009) and Persha *et al.* (2011) have identified a suite of variables associated with improved forest outcomes and characterize successful community-managed forests. Such variables include environmental, socio-economic and institutional. A stable context coupled with government efforts to reduce the cost of community collective action is also positively associated with successful community forestry (Agrawal, 2007).

Community forestry could also be a useful mechanism by which to achieve effective, efficient and equitable REDD+ design and implementation. Literature distinguished two principal mechanisms by which REDD+ could benefit from community forestry (e.g. Viana

et al., 2012; Blomley, 2013; Newton *et al.*, 2014): (1) By applying the lessons learned from the accumulated extensive experience of community forestry to REDD+ project design. (2) By enabling REDD+ programs to harness, or be appended to, the capital, assets and institutions associated with existing community forestry arrangements.

The experience from community forestry in Cameroon may help to inform the development of strong REDD+ strategies. According to Newton *et al.* (2014), community forestry is a strong platform for vertical coordination, which is a prerequisite for effective mitigation in the long term. Therefore, lessons from community forestry can undoubtedly help inform the development of forest policy with respect to communities and in the context of REDD+. However, the decentralization of forest management to local communities, the clarification of land and forest use rights and ownership, the lending of long-term support to promote the internal cohesion and capacity of community-level organizations, the clarification of benefit-sharing mechanisms at the local level and support in adding value to forest products and services (wood, non-timber forest products, carbon storage, biodiversity, etc.) are all key elements of a successful strategy to promote community forestry and ensure it supports REDD+ goals.

Most especially, common property studies of community forestry have shown how resource management is enhanced if three institutional characteristics are met: (1) Tenure security as an essential tool for communities to create rules and management plans for the medium to long term, with sustainability and future payoffs in mind. Tenure security also constitutes a legal basis on which to exclude non-local actors who may be more invested in short-term gain than long-term sustainability. (2) Creation of rules by communities that are locally relevant, easily understood and locally enforceable rather than having these rules devised and imposed by external agencies. (3) Development of mechanisms for sanctions, conflict resolution and accountability of both users and officials (Ostrom, 1990; Dietz *et al.*, 2003).

9.2 REDD+ contribution to community forestry

Given the possible scope and scale of REDD+ activities, coupled with its specific and exclusive focus on forests in developing countries, REDD+ has the potential to profoundly influence the lives of millions of forest-dependent communities (Rodgers, 2012). Predicted financial flows for emissions reductions under REDD+ could reach \$30bn (Laurance, 2008; Dulal *et al.*, 2012). As such, REDD+ has the potential to make a transformative contribution to international development goals.

In Cameroon and elsewhere in other developing countries, natural resources are central to livelihoods. As such, management decisions should have social, political and economic implications. It is assumed that REDD+ will likely generate higher benefits than alternative forest uses. Indeed, this is required in order to provide an incentive for REDD+ participation. However, providing payments through carbon markets is not sufficient to ensure that REDD+ programs work to the benefit of forest-dependent communities (Viana *et al.*, 2012; Blomley, 2013; Newton *et al.*, 2014). As a matter of fact, REDD+ may increase the financial, administrative and technical resources available to community forestry institutions and forest users, making forest conservation more financially viable and further improving the chances of community forestry success. This will entail providing a long-term, steady flow of financial resources to local communities that are able to demonstrate “verifiable” emission reductions, as a way to pay them for the global-level environmental service being carried out (carbon storage). Mainstreaming community forestry in national REDD+ Readiness processes is seen as an efficient and effective strategy to reach REDD+ goals especially as various countries are currently seeking cost-efficient options to effectively reduce deforestation so that they can access REDD+ resources. REDD+ can also foster

community forestry by providing transparency. As a matter of fact, community forestry is generally associated with local management organizations that can manage funds and distribute them, such as local associations or cooperatives. In some cases, however, the lack of capacity of their representatives or the lack of control over funds can lead to situations of inequity or inefficiency in the redistribution of benefits. REDD+ financial resources will be subject to close international scrutiny (Viana *et al.*, 2012). This will force countries to develop a transparent mechanism to channel resources to local level. However, a critical component of all REDD+ architectures is a mechanism to distribute payments from a national level to a local level, and specifically to groups involved in community-managed forests. In addition, in order to secure international funding, countries have to show real transparency and an absence of corruption in the management of the funds. REDD+ will also serve as “performance-based” type of payment, as it encourages stakeholders at all levels to continuously improve the actions aimed at reducing deforestation and degradation, in order to ensure uninterrupted payments. In addition, the national REDD+ Readiness process could be a good opportunity for Civil Society Organizations and representatives of forest communities to push for further support of community forestry from national and local governments.

However, the development and implementation of REDD+ could bring challenges to community forestry. REDD+ could reshape many forest management practices and the conservation landscapes in which community forests are located. A REDD+ focus on maximizing carbon additionality in the short-term could reduce other forest benefits. Plantations of fast-growing tree species may maximize carbon outcomes but can reduce biodiversity and access to subsistence livelihood resources (Ludwig *et al.*, 1993; Putz, 2009). Tighter control of forest use, such as prohibiting either agriculture or the extraction of forest products, could also reduce the value of community forests for subsistence livelihood strategies, income-generating opportunities or adaptive capacity (West, 2012). There are concerns that the financial opportunities associated with REDD+ may promote a recentralization of forest governance and a weakening of community forestry structures (Phelps *et al.*, 2010). According to Sandbrook *et al.* (2010), an injection of REDD+ funding may act as an incentive to governments to roll back toward a centralized forest system in order to reap rewards more centrally. Given the high financial values at stake, there is a real possibility that governments could justify recentralization by “portraying themselves as more capable and reliable than local communities at protecting national interests” (Phelps *et al.*, 2010). There have also been doubts about the effectiveness of REDD+ given the poor track record in forest governance (e.g. Corbera *et al.*, 2010).

10. Conclusion

Early at its launch in 1992, Cameroon signed UNFCCC and ratified it in 2004, thereby signifying its readiness to contribute to the reduction of GHG emissions. Reducing the rate and extent of tropical forest loss is a critical component of climate change mitigation policies. The contribution of emissions from tropical deforestation in developing countries to global climate change has also emerged as a topic of considerable discussion in recent climate negotiations. The need to reduce anthropogenic emissions has, therefore, led to a global initiative to Reduce Emissions from Deforestation and forest Degradation (REDD+). The essential aim of REDD+ programs is to create incentives for developing countries to reduce their emissions from deforestation and forest degradation by assigning monetary value to forest carbon stocks. However, strategies to reverse deforestation and forest degradation are necessarily tied to the livelihood of forest-dependent communities. For instance, in Cameroon and elsewhere in other tropical developing countries, forest ecosystems provide security portfolios for a large proportion of the predominantly rural communities whose livelihood

heavily depends on forest resources. In addition, with the promulgation of a new Forestry Law in 1994 in Cameroon, local communities were given statutory rights, authority and responsibilities of acquiring and managing a share of forests and forest revenues. Therefore, any actions to reduce carbon emissions from deforestation and degradation must be undertaken with the full and effective participation of indigenous and local communities. These communities have long-standing customary rights of forest land and have been key actors in maintaining forests that have more recently become targets for REDD+ programs. Therefore, supporting community forestry can be an effective mechanism to achieve both carbon and livelihood benefits for REDD+. However, although the underlying motivations for community forestry and REDD+ differ, there is substantial synergy between their objectives, and the dual forest conservation and livelihood development focus of both programs means that policies that strengthen and support existing community forestry institutions and sites will advance REDD+ objectives. However, for better integration of community forestry within the context of REDD+ processes, major policy reforms are needed to provide clear, secure, enforceable and non-discretionary tenure rights over trees, forests and carbon; and community-level management institutions should be granted rights to make and enforce rules that regulate access and use over their community forests. Community forest sustainable management should be included within REDD+ plans and a benefit-sharing mechanism for REDD+ in community forests across scales developed and monitored. All these provide ground to further research on community forestry and REDD+.

References

- Agrawal, A. (2007), "Forests, governance, and sustainability: common property theory and its contributions", *International Journal of the Commons*, Vol. 1 No. 1, pp. 51-76.
- Agrawal, A. and Angelsen, A. (2009), "Using community forest management to achieve REDD+ goals", in Angelsen, A., Brochaus, M., Kanninen, M., Sills, E., Sunderlin, W.D. and Wertz-Kanounnikoff, S. (Eds), *Realising REDD+: National Strategy and Policy Options*, Center for International Forestry Research (CIFOR), Bogor, pp. 201-212.
- Agrawal, A. and Ribot, J. (1999), "Accountability in decentralization: a framework with South Asian and West African environmental cases", *The Journal of Developing Areas*, Vol. 33, pp. 473-502.
- Alden Wily, L. (2012), *Customary Land Tenure in the Modern World Rights to Resources in Crisis: Reviewing the Fate of Customary Tenure in Africa*, Rights and Resources Institute, Washington, DC.
- Alemagi, D., Duguma, L.A., Minang, P.A., Numbisi, F.N., Feudjio, M. and Tchoundjeu, Z. (2014), "Intensification of cocoa agroforestry systems as a REDD+ strategy in Cameroon: hurdles, motivations, and challenges", *International Journal of Agricultural Sustainability*, Vol. 13 No. 3, doi: [10.1080/14735903.2014.940705](https://doi.org/10.1080/14735903.2014.940705).
- Angelsen, A. (2008), "REDD models and baselines", *International Forestry Review*, Vol. 10 No. 3, pp. 465-476.
- Assembe, M.S. (2006), "Forestry income management and poverty reduction: empirical findings from Congo", *Cameroon Development in Practice*, Vol. 16 No. 1, pp. 68-73.
- Assembe, S. and Oyono, P.R. (2002), "Community-based forest management in the Ouhang-Round-Cameroon region: case study of implementation hurdles and risks of sustainability", in *Paper Presented at the International Conference on 'Sustainable Mountain Development in Africa: Agenda for Action'*, Moshi, Tanzania, 19–22 August, p.15.
- Bele, M.Y., Tiani, A.M., Somorin, O.A. and Sonwa, D.J. (2013), "Exploring vulnerability and adaptation to climate change of communities in the forest zone of Cameroon", *Climatic Change*, Vol. 119, pp. 875-889.

- Bernard, F. and Minang, P. (2019), "Community forestry and REDD+ in Cameroon: what future?", *Ecology and Society*, Vol. 24 No. 1, p. 14, doi: [10.5751/ES-10708-240114](https://doi.org/10.5751/ES-10708-240114).
- Bigombé, L.P. (2003), "Decentralized forest revenue and local development in Cameroon: lessons learned from recent experiences and proposal of an enhancement programme for local capacity", in *Proceedings of the Second International Workshop on Participatory Forestry in Africa*. Food and Agriculture Organization, Rome, Italy, pp. 375-380, [online], available at: [ftp://ftp.fao.org/docrep/fao/006/Y4807B/Y4807B13.pdf](http://ftp.fao.org/docrep/fao/006/Y4807B/Y4807B13.pdf).
- Blomley, T. (2013), *Lessons Learned from Community Forestry in Africa and Their Relevance for REDD+*, USAID-supported Forest Carbon, Markets and Communities (FCMC) Program, Washington, DC.
- Blomley, T., Pfliegner, K., Isango, J., Zahabu, E., Ahrends, A. and Burgess, N. (2008), "Seeing the wood for the trees: towards an objective assessment of the impact of participatory forest management on forest condition in Tanzania", *Oryx*, Vol. 42 No. 3, pp. 380-391.
- Charnley, S. and Poe, M. (2007), "Community forestry in theory and practice: where are we now?", *Annual Review of Anthropology*, Vol. 36 No. 1, pp. 301-336.
- Chhatre, A. and Agrawal, A. (2009), "Trade-Offs and Synergies between carbon storage and livelihood benefits from forest commons", *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 106 No. 42, pp. 17667-17670.
- Corbera, E., Estrada, M. and Brown, K. (2010), "Reducing greenhouse gas emissions from deforestation and forest degradation in developing countries: revisiting the assumptions", *Climatic Change*, Vol. 100 No 3, pp. 355-388, doi: [10.1007/s10584-009-9773-1](https://doi.org/10.1007/s10584-009-9773-1).
- De Thé, M.P. (1970), *Des Sociétés Secrètes aux Associations Modernes: La Femme dans la Dynamique de la Société Bété*, EPH, Paris, pp. 1887-1966.
- Dietz, T., Ostrom, E. and Stern, P.C. (2003), "The struggle to govern the commons", *Science*, Vol. 302 No. 5652, pp. 1907-1912.
- Dulal, H.B., Shah, K.U. and Sapkota, C. (2012), "Reducing emissions from deforestation and forest degradation (REDD) projects: lessons for future policy design and implementation", *International Journal of Sustainable Development and World Ecology*, Vol. 19 No. 2, pp. 116-129.
- Egbe, S. (1997), *Legal constraints to community-based management in Cameroon*, WWF-CPO, Yaoundé, p. 12.
- Ekoko, F. (1998), *The political economy of the 1994 Cameroon Forest Law*, Working Paper No. 3, Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 41.
- Ekoko, F. (2000), "Balancing politics, economics and conservation: the case of the Cameroon forestry law reform", *Development and Change*, Vol. 31 No. 1, pp. 131-154.
- Etoungou, P. (2003), "Decentralization viewed from inside: the implementation of community forests in East Cameroon", *Environmental Governance in Africa Working Paper Series (WRI)*, No.12, World Resources Institute, Washington, DC, p. 28.
- Gabay, M. and Alam, M. (2017), "Community forestry and its mitigation potential in the Anthropocene: the importance of land tenure governance and the threat of privatization", *Forest Policy and Economics*, Vol. 79 C, pp. 26-35.
- García-López, G.A. (2019), "Rethinking elite persistence in neoliberalism: foresters and technobureaucratic logics in Mexico's community forestry", *World Development*, Vol. 120, pp. 169-181.
- Gupta, D. and Koontz, T.M. (2019), "Working together? Synergies in government and NGO roles for community forestry in the Indian Himalayas", *World Development*, Vol. 114, pp. 326-340.
- Herold, M. and Skutsch, M. (2011), "Monitoring, reporting and verification for national REDD + programmes: two proposals", *Environmental Research Letters*, Vol. 6 No. 11, pp. 11-10.
- IPCC (Intergovernmental Panel on Climate Change) (2007), in Pachauri, R.K. and Reisinger, A (Eds), *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the*

- Fourth Assessment Report of the Intergovernmental Panel on Climate Change.*, Intergovernmental Panel on Climate Change (IPCC), Geneva, p. 104.
- Kaimowitz, D. (2008), "The prospects for Reduced Emissions from Deforestation and Degradation (REDD) in Mesoamerica", *International Forestry Review*, Vol. 3 No. 3, pp. 485-495.
- Karsenty, A. (1999), "Vers la Fin de l'Etat forestier? Appropriation des Espaces et Partage de la Rente Forestière au Cameroun", *Politique Africaine*, Vol. 75, pp. 147-161.
- Karsenty, A., Mebenga, L.M. and Pénélon, A. (1997), "Spécialisation des Espaces ou Gestion Intégrée des Massifs Forestiers?", *Bois et Forêts des Tropiques*, Vol. 251 No. 1, pp. 43-54.
- Larson, A.M. (2005), "Democratic decentralization in the forestry sector. Lessons learned from Africa, Asia and Latino America", in Colfer, C.J.P. and Capistrano, D. (Eds), *The Politics of Decentralization. Forests, Power and People*, Earthscan, Center for International Forestry Research, pp. 32-62.
- Laurance, W.F. (2008), "Can carbon trading save vanishing forests?", *Bioscience*, Vol. 58 No. 4, pp. 286-287.
- Ludwig, D., Hilborn, R. and Walters, C. (1993), "Uncertainty, resource exploitation, and conservation: lessons from history", *Science*, Vol. 260, p. 17.
- Lund, J.F. and Treue, T. (2008), "Are we getting there? Evidence of decentralized forest management from the Tanzanian Miombo Woodlands", *World Development*, Vol. 36 No. 12, pp. 2780-2800.
- Maquet, Jacques (1971), *Power and Society in Africa*, World University Library, London.
- Meridian Institute (2009), "Reducing emissions from deforestation and forest degradation (REDD): an options assessment report", p. 1.
- Minang, P.A., Bressers, H.T.A., Skutsch, M.M. and Mccall, M.K. (2007), "National forest policy as a platform for biosphere carbon management: the case of community forestry in Cameroon", *Environmental Science and Policy*, Vol. 10, pp. 204-218.
- Newton, P., Fournier, M., Cornwall, M., DeBoer, J., Rosenbach, D., Schaap, B., Stock, R., Whittemore, J., Yoders, M., Brodnig, G. and Agrawal, A. (2014), *Community Forest Management and REDD+*, Program on Forests (PROFOR), Washington, DC.
- Newton, P., Nicholas, E.S., Endo, W. and Peres, C.A. (2012), "Consequences of actor level livelihood heterogeneity for additivity in a tropical forest payment for environmental services programme with an undifferentiated reward structure", *Global Environmental Change*, Vol. 22 No. 1, pp. 127-136.
- Newton, P., Schaap, B., Fournier, M., Cornwall, M., Rosenbach, D.W., DeBoer, J., Whittemore, J., Stock, R., Yoders, M., Brodnig, G. and Agrawal, A. (2015), "Community forest management and REDD+", *Forest Policy and Economics*, Vol. 56, pp. 27-37, doi: [10.1016/j.forpol.2015.03.008](https://doi.org/10.1016/j.forpol.2015.03.008).
- Ngendakumana, S., Bachange, E.G., Van Damme, P., Speelman, S., Foundjem-Tita, D., Tchoundjeu, Z., Kalinganire, A. and Bandiaky, S.B. (2013), "Rethinking rights and interests of local communities in REDD+ designs: lessons learnt from current forest tenure systems in Cameroon", *ISRN Forestry*, 830902, doi: [10.1155/2013/830902](https://doi.org/10.1155/2013/830902).
- Nguiffo, S. (1998), "In defence of the commons: forest battles in Southern Cameroon", in Goldman, M. (Ed.), *Privatizing Nature: Political Struggles for the Global Commons*, Pluto Press, London, pp. 102-119.
- Nkem, J., Santoso, H., Murdiyarto, D., Brockhaus, M. and Kanninen, M. (2007), "Using tropical forest ecosystem goods and services for planning climate change adaptation with implications for food security and poverty reduction", *Journal of Semi-arid Tropical Agricultural Research*, Vol. 4 No. 1, pp. 1-23.
- Ostrom, E. (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, New York.
- Ostrom (2009), "A general framework for analyzing sustainability of social- ecological systems", *Science*, Vol. 325, pp. 419-422.

- Ostrom, E., Schroeder, L.D. and Wynne, S.G. (1993), *Institutional Incentives and Sustainable Development: Infrastructure Policies in Perspective*, Westview Press, Boulder, CO, p. 288.
- Oyono, P.R. (2004a), *Institutional Deficit, Representation and Decentralized Forest Management in Cameroon: Elements of Natural Resource Sociology for Social Theory and Public Policy. Institutions and Governance Program*. World Resources Institute. Washington, DC, p. 68.
- Oyono, R. (2004b), "One step forward, two step back? Paradoxes of natural resources management decentralisation in Cameroon", *Journal of Modern African Studies*, Vol. 42 No. 1, pp. 99-111.
- Oyono, P.R. (2005), "Profiling local-Level outcomes of environmental decentralizations: the case of Cameroon's forests in the Congo Basin", *Journal of Environment and Development*, Vol. 14 No. 2, pp. 317-337.
- Oyono, P.R., Kouma, C. and Mala, W. (2005), "Benefits of forests in Cameroon. Global structure, issues involving access and decision-making hiccoughs", *Forest Policy and Economics*, Vol. 7, pp. 357-368.
- Oyono, P.R., Ribot, J.C., Assembe, S. and Bigombé Logo, P. (2007), *Improving Decentralized Forest Management in Cameroon: Options and Opportunities from Ten Years of Experience*. Governance Brief, Center for International Forestry Research, Bogor, Indonesia, p. 12.
- Pagdee, A., Kim, Y.S. and Daugherty, P.J. (2006), "What makes community forest management successful: a meta-study from community forests throughout the world", *Society and Natural Resources*, Vol. 19, pp. 33-52.
- Pagiola, S. and Bosquet, B. (2009), "Estimating the costs of REDD at the country level", MPRA Paper 13726, University Library of Munich, Germany, (accessed 22 September 2009).
- Parker, C., Mitchell, A., Trivedi, M., Mardas, N. and Sosis, K. (2009), *The Little REDD+ Book*, Global Canopy Programme, Oxford.
- Persha, L., Agrawal, A. and Chhatree, A. (2011), "Social and ecological synergy: local rulemaking, forest livelihoods, and biodiversity conservation", *Science*, Vol. 331 No. 6024, pp. 1606-1608.
- Phelps, J., Fries, D.A. and Webb, E.L. (2012), "Win-win REDD+ approaches belie carbon-biodiversity trade-offs", *Biological Conservation*, Vol. 154, pp. 53-60.
- Phels, J., Guerrero, M.C., Dalabajan, D.A., Young, B. and Webb, E.L. (2010), "What makes a REDD country", *Global Environmental Change*, Vol. 20 No. 2, pp. 322-332.
- Putz, F. (2009), "Dangers of carbon-based conservation", *Global Environmental Change*, Vol. 19, p. 111.
- REDD+ Technical Secretariat (2019), "Self-assessment of the REDD+ readiness phase by stakeholders", available at: https://www.forestcarbonpartnership.org/system/files/documents/Cameroon%20R-Package%20%20%20review_25-2-19.pdf.
- Ribot, J.C. (2006), "Décentralisation démocratique des ressources naturelles: Choix institutionnels et transfert de pouvoirs discrétionnaires en Afrique sub-saharienne", in *L'Etat et la gestion locale durable des forêts en Afrique francophone et à Madagascar*, L'Harmattan, Paris, pp. 174-194.
- Rights and Resources Initiative (2015), *Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights*, Who Owns the World's Land? A global baseline of formally recognized indigenous and community land rights, Washington, DC, p. 56.
- Robiglio, V., Ngendakumana, S., Yemefack, M., Tchienkoua, M., Gockowski, J., Tchawa, P. and Tchoundjeu, Z. (2010), *Options for Reducing Emissions from all Land Uses in Cameroon*, World Agroforestry Centre, Yaounde, Final Report, p. 111, available at: https://www.asb.cgiar.org/PDFwebdocs/CAMEROON_REALU.pdf.
- RoC (Republic of Cameroon) (1994), *Law No 94/01 of 20 January 1994 Establishing Forestry, Wildlife and Fisheries Regulations*, Presidency of the Republic, Yaoundé, Cameroon.
- RoC (Republic of Cameroon) (1995), *Decree No. 95/531/PM of 23 August 1995 Establishing the Modalities for the Implementation of Forestry Regulations*, Prime Ministry, Yaoundé, Cameroon.

- Rodgers, M. (2012), "REDD+, Community Forestry & Gender: Lessons Learned and Paths Forward", Major Research Paper. Graduate School of Public & International Affairs University of Ottawa, p. 64.
- Roe, D., Nelson, F. and Sandbrook, C. (2009), "Gestion communautaire des ressources naturelles en Afrique, Impacts, expériences et orientations futures", *Ressources Naturelles, Londres, IIED* No. 18, p. 222.
- Sandbrook, C., Nelson, F., Adams, W. and Agrawal, A. (2010), "Carbon, forests and the REDD paradox", *Oryx*, Vol. 44 No. 3, pp. 330-334, doi: [10.1017/S0030605310000475](https://doi.org/10.1017/S0030605310000475).
- Shepherd, G. (1992), *Managing Africa's Dryland Forests*, Overseas Development Institute, London.
- Skutsch, M. and McCall, M.K. (2012), "The role of community forest management in REDD+", *Unasylva*, Vol. 63 No. 239, pp. 51-56.
- Sonwa, D.J., Nkem, J.N., Idinoba, M.E., Bele, M.Y. and Cyprain, J. (2012a), "Building regional priorities in forests for development and adaptation to climate change in the Congo Basin", *Mitigation and Adaptation Strategies for Global Change*, Vol. 17 No. 4, pp. 441-450, doi: [10.1007/s11027-011-9335-5](https://doi.org/10.1007/s11027-011-9335-5).
- Sonwa, D.J., Somorin, O.A., Jum, C., Bele, M.Y. and Nkem, J.N. (2012b), "Vulnerability, forest-related sectors and climate change adaptation: the case of Cameroon", *Forest Policy and Economics*, Vol. 23, pp. 1-9.
- Stern Review (2006), *McKinsey & Company Report – 'Reducing US Greenhouse Gas Emissions: How Much at what Cost?'*.
- Ticha, E. and Tchakouté, S. (1996), *Situation des Groupes d'Initiative Commune(GIC) et possibilités d'Intervention des Institutions Financières*, Rapport d'Etude, CETAI, Montréal.
- Transparency International (2012), *Keeping REDD+ Clean. A Step-by-step Guide to Preventing Corruption*, Transparency International, Berlin, Germany.
- UN-REDD (2011), "Principes sociaux et environnementaux et critères associés du programme ONU-REDD; Version 1", (UN-REDD/ PB6/ 2011/1001).
- UNFCCC (United Nations Framework Convention on Climate Change) (2011), "Report of the conference of the parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010", available at: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>.
- Vabi, M., Njankoua, D.D.W. and Muluh, G.A. (2003), *The Costs and Benefits of Community Forests in Selected Agro-Ecological Regions of Cameroon*, Consultancy report, DFID/CFDP, Yaoundé.
- Viana, V.M., Aquino, A.R., Pinto, T.M., Lima, L.M.T., Martinet, A., Busson, F. and Samyn, J.M. (2012), *REDD+ and Community Forestry: Lessons Learned from an Exchange Between Brazil and Africa*, The World Bank/Amazonas Sustainable Foundation, Manaus, p. 72.
- Wellstead, A.M., Steadman, R.C. and Parkins, J.R. (2003), "Understanding the concept of representation within the context of local forest management decision making", *Forest Policy and Economics*, Vol. 5 No. 1, pp. 1-11.
- West, S. (2012), *REDD+ and Adaptation in Nepal, REDD-Net*, Overseas Development Institute, London, p. 13.

Corresponding author

Mekou Youssoufa Bele can be contacted at: yube_bele@yahoo.com

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com