

Review Article

Community forestry in Cameroon: Insights on state institutional deficits



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A B S T R A C T

Community forestry (CF) was set-up in Cameroon about 20 years ago to enable better environmental, economic, and social benefits for communities. Since then, 430 community forests have been attributed, covering an area of almost 1.7M ha. However, less than a quarter (10%) are in active management or enterprise. Weak institutions have been widely cited as a leading cause of poor performance in the community forestry process. This paper examines the current state of institutional deficits in Cameroon and identifies pathways for overcoming the deficits. Our analysis is based on a rigorous review of documented experiences so far. Results obtained revealed that emerging deficits revolve around form and functions. Legal; power, authority and rights; and size and biophysical potential deficits were grouped under the realm of form while resources; capacity; and governance deficits were grouped under the realm of functions. Proposed solutions to these deficits point to the need to recognize and manage inter-dependencies between challenges and corresponding potential solutions. Hence a system or integrated approach is needed to tackle the problems identified.

Introduction

Community forestry can be defined as efforts geared at devolving greater control to forest-dependent communities over forests in their locality so that they can procure benefits from resources (like high value timber, non-timber forest products, and wildlife species) contained in these forests (Lynch and Talbot, 1999; Poffenberger, 1999; Doornbos et al., 2000; Gibson et al., 2000; McCarthy, 2006; Alemagi, 2010). A major commonality to all the definitions of community forestry is the recognition and respect of forest-dependent communities and the explicit provision of social, economic, environmental, and cultural benefits to these communities by integrating them in the management of forest ecosystems. Many scholars have posited that community forestry has the potential of meeting the triple goal of ecological conservation, improving the living standard of local forest-dependent communities, and carbon sequestration (Klooster and Masera, 2000; Smith and Scherr, 2003; Minang, 2007). Community forestry has received considerable attention as many countries over the world have implemented this form of forest tenure. It has been reported that more than sixty countries have implemented reforms to enable communities gain control over forest management (White and Martin, 2002).

Reforms regarding the creation of community forests have occurred in developed countries like Canada, Italy, Japan, and the United States. However, most reforms that have been made to devolve forest management to local forest-dependent communities have occurred in the tropics (see, for example, Michon et al., 2007; Macura et al., 2011; Porter-Bolland, 2012; Rives et al., 2013; Mulyoutami, 2009; Wibowo et al., 2013; Cronkleton, 2013; Lescuyer, 2013). The goal of these reforms has been to increase the participation of local forest-dependent communities in forest management in order to contribute in improving their livelihoods as well as encouraging them to better protect and conserve the ecological integrity of the forest that has been ascribed to them as per the prevailing legal disposition.

In Cameroon, efforts have been made by the government and Non-governmental organizations (NGOs) to promote community forestry since its enactment into law in 1994 (see, for example, Vabi et al., 2000). As a result, by 2013, there were 375 forest-dependent communities with community forest licenses in Cameroon. Notwithstanding the aforementioned development, however, many forest-dependent communities still encounter a lot of difficulties in procuring a license to operate a community forest. Additionally, less than fifty community forests representing less than 10% of forest-dependent communities with

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community forest licenses are operational in the country. Weak institutions (especially inadequate implementation of laws and policies governing community forestry) have been widely cited as a leading cause of poor performance in the community forestry sector (see, for example, Ekoko, 2000; Oyono, 2005; Foundjem-Tita et al., 2014). The efforts put in place have done little to advance community forestry, as they have failed to address the state institutional deficits impeding the smooth functioning and operation of community forests in the country. State institutional deficit here is defined as weak state organizations that are responsible for managing community forests, as well as deficits in the rule of law formulated to advance community forestry. State institutional deficits that were identified came in two groups which revolve around form and functions. Form emanates from the legal and regulatory frame, while function comes from operational practices. In this paper, we therefore examine the state institutional framework or setup governing community forestry process in Cameroon and identify pathways for overcoming deficits that are associated with this setup. The following fundamental questions are addressed in this paper: (i) what are the prevailing state institutional deficits associated with the community forest process in Cameroon? (ii) to what extent have these deficits affected the community forest process in Cameroon? (iii) how can these deficits be overcome?

Theoretical rationale for the study

Several studies have been conducted on governance and institutions vis-à-vis community forestry in Cameroon. In a synthetic review of forest governance in Cameroon, Piabuo et al. (2018) evaluated the prevailing state of community forest governance in Cameroon by using a series of good governance criteria to 36 case studies in the country. They found that the state of community forest governance was comparatively poor, with 78% of case studies not meeting all the principles or criteria. Bernard and Minang (2019) provided a detailed analysis of how community forests can help accomplish the fundamental objectives of REDD+ (an institutional mechanism for reducing emission from deforestation and forest degradation) implementation in Cameroon. This study establishes among others that the community forest architecture features potentially inhibiting factors such as poor forest governance and financing issues or challenges. Essougong et al. (2019) employed literature review and content analysis to assess equity in community forestry in Cameroon. One of the key conclusions was that there is a need to promote good governance in the management of community forests in Cameroon.

Alemagi (2010) compared and contrasted the community forest model in Cameroon and the one in the province of British Columbia in Canada. Key findings revolved around the fact that the legislative provision regarding tenure duration is not permanent in both jurisdiction as there is a maximum statutory duration for the community forest license in both jurisdiction. Minang et al. (2019) investigated, evaluated, and reflected on how community forestry in Cameroon has advanced from an innovation ecosystem perspective, with the fundamental objective of enhancing innovations and performance especially in the governance structure that governs community forestry in Cameroon. Key innovations identified in the study included the introduction of pre-emption rights and fundamental options toward sustainable forest management (prohibition of industrial logging, formulation of certification standards, and the introduction of the environmental notice in place of a full environmental impact assessment for community forest activities). Minimal or no innovation was obtained in areas pertaining to forest enterprise and in terms of advancing sustainable forest management at the institutional level. Others like Oyono (2005) have provided governance challenges inherent in the management of community forests in Cameroon while Assembe (2006) cited mismanagement of proceeds at the institutional level originating from the exploitation of community forestry in the Kongo community of East Cameroon.

While, the aforementioned studies are instructive, this study is

innovative in that it undertakes a comprehensive analysis of the state institutional setup governing community forestry in Cameroon. This is key for Cameroon as the country has already given out about 1.7 Mha of forest land to communities but the outcomes are not as anticipated from the beginning. Indeed, we posit that an empirical study of this nature would be helpful in identifying the prominent state institutional deficits that are currently impeding the smooth functioning of community forestry in Cameroon and proffering the necessary recommendations that should be employed in making the community forestry scheme succeed in the country especially from a state institutional perspective.

Methods

The study is purely qualitative and draws upon secondary data obtained from relevant peer reviewed literature, agency reports, and 'grey' literature in the form of working papers and reports from relevant governmental/non-governmental organizations (NGOs). The data search was conducted between January 2017 and July 2021 via google and the Library of the World Agroforestry center in Yaoundé, Cameroon. Papers that were searched included papers from the year 1999 to 2021 and the search term was "community forestry in Cameroon". We elected to limit our search between 1999 and 2019 because an initial cursory search in Library of the World Agroforestry center showed that most of the papers on community forestry in Cameroon were published between 1999 and 2019. To minimize bias and errors in the study selection process, we identified the inclusion criteria (papers from 1999 – 2019 and outlined the search term – "community forestry in Cameroon) and avoided ambiguity as much as possible in the entire process. The initial search provided us with a total of eighty-six articles. This literature was then screened to identify a total of fifty-five publications (reports, working papers, legislation, book chapters, and peer-reviewed literature) from the year 1999 to 2019 corresponding to community forestry in Cameroon. Initially, a comprehensive review and analysis of ten reports, two working papers, and two forest legislation pertaining to community forestry in Cameroon were conducted. Six technical reports and two book chapters with vital information on community forestry was also reviewed. This was followed by a review and detailed assessment of twenty peer reviewed literature containing vital information on community forestry in Cameroon. While a breadth of topics were explored in greater detail, institutional deficits afflicting the community forest model in Cameroon emerge under seven major themes that were grouped under the realm of form and function.

Legal deficits, power and rights deficits, allowable community forest size deficit, and biophysical potential deficits was grouped under the realm of form while financial resources deficit, capacity deficit, and governance deficits was grouped under the realm of functions. Next, using the analytic framework (see Fig. 2), we then analyzed datasets under each theme to extract authors' findings of institutional deficits, which if improved would also improve the chances of success – see Fig. 1 and Tables 1, 2 for details.

Results and discussion

Form

Legal deficit

The revised Manual of Procedures for the Attribution and Norms for the Management of Community Forests in Cameroon stipulates that the acceptable legal entities that communities must have as a fundamental prerequisite for obtaining a community forest license include four options: an Association, a Co-operative, a Common Initiative Group (CIG), or an Economic Interest Group (EIG). These legal entities are responsible for correspondence with the government regarding the establishment and management of the community forest.

As of 2013, 63.47% of the CFs in the country were registered under CIGs, 36% under Associations and the rest under Cooperatives and EIGs.

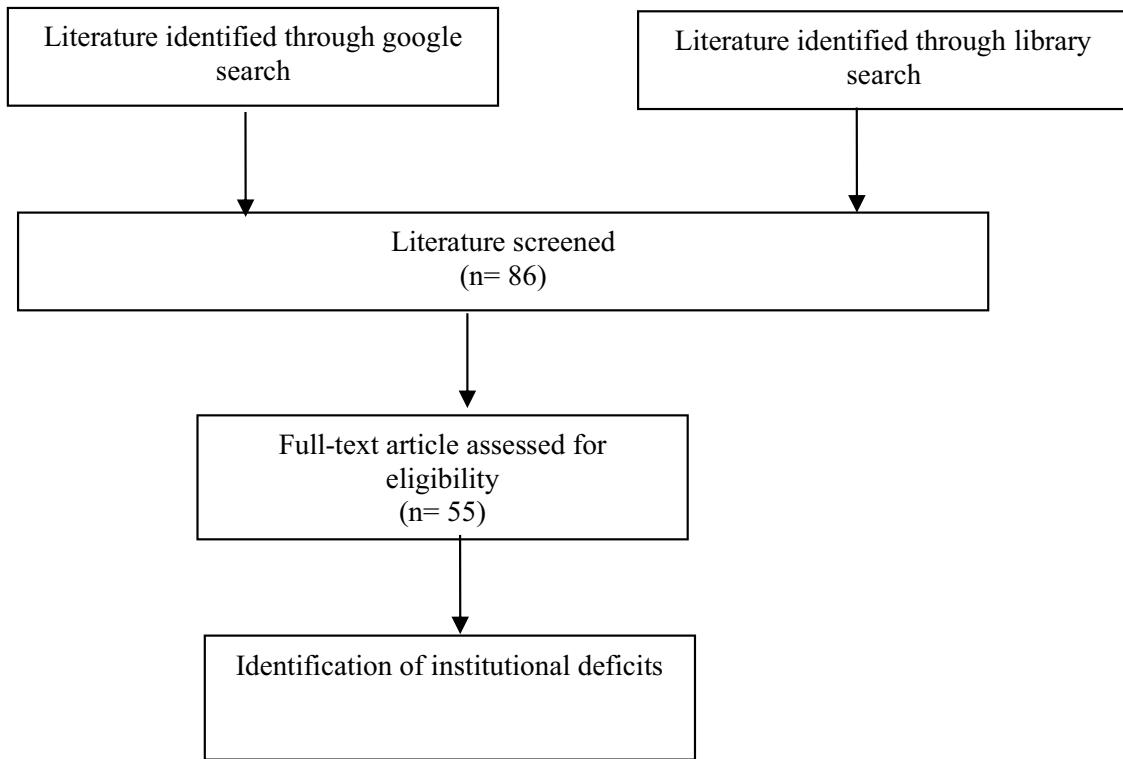


Fig. 1. Flow diagram of the methodological approach for data collection.

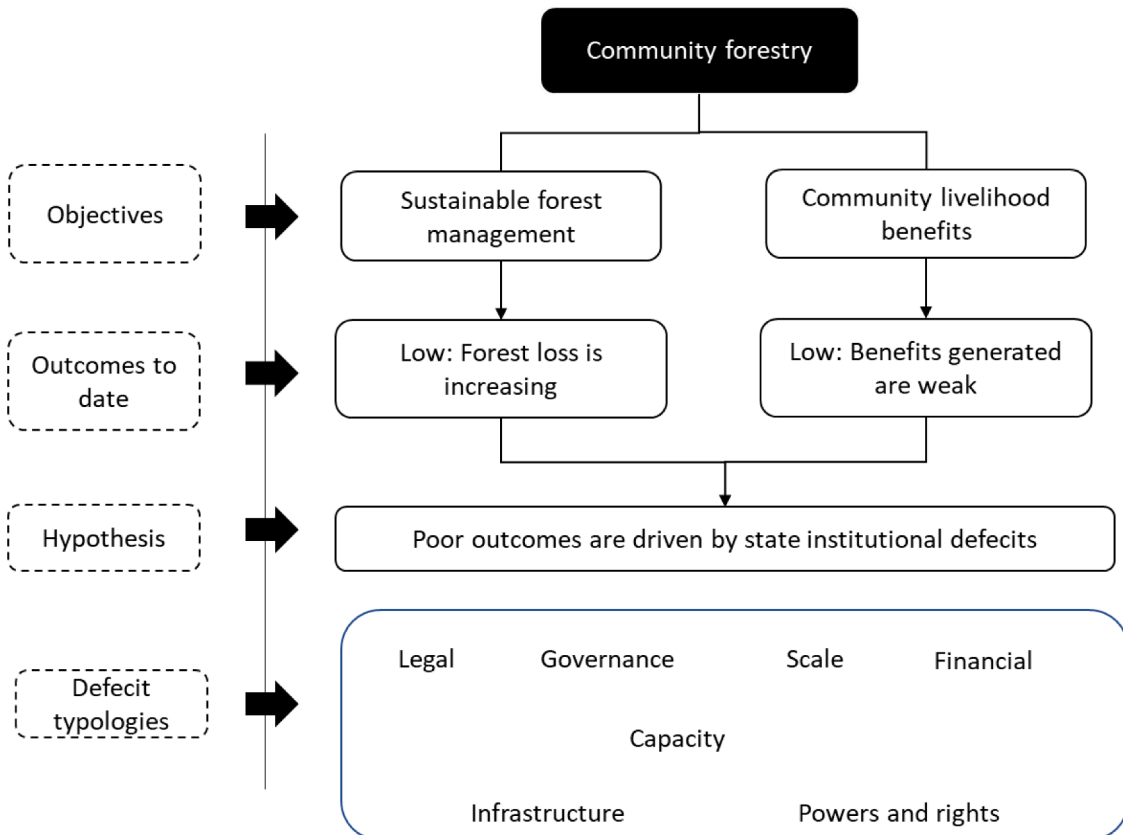


Fig. 2. Conceptual framework for analysing state institutional setup for community forestry in Cameroon.

Table 1
Key literature cited, their scale and context, and the category (ies) of institutional deficits being covered.

Key literature cited	Scale and context	Category(ies) of institutional deficits
Alemagi (2010)	Multiple case studies	Power and rights deficits
Alemagi and Kozak (2010)	National level	Power and rights deficits
Beauchamp and Ingram (2011)	Sub-national level	Biophysical potential deficit, financial resource deficit, capacity deficit
Belibi et al. (2015)	Sub-national level	Capacity deficit
Brown et al. (2010)	National level	Governance deficit
Djeumo (2001)	National level	Legal deficit
Mbolo and Movuh (2013)	National level	Power and rights deficits
Minang et al. (2007b)	Sub-national level	Capacity deficit
Oyono (2005)	National level	Governance deficit
Rainforest Alliance, (2016)	National level	Capacity deficit
Tobith and Cuny (2006)	National level	Capacity deficit
Mandondo (2003)	National level	Power and rights deficit
Foundjem-Tita et al., 2014	National level	Power and rights deficit
Mbile et al. (2008)	National level	Power and rights deficit
Karpe et al. 2013	Sub-national level	Capacity deficit
Etoungou (2003)	Sub-national level	Governance deficit

The reason for forest-dependent communities electing to register under CIG and Association is due to the merits associated with these organizations. According to Djeumo (2001), Associations are easy to form and manage, exempted from taxes, and receive subsidies, donations and bequests if it is recognized as a public utility by the President of the Republic. He further notes that CIGs are also easy to manage, may easily be transformed into a cooperative, can distribute benefits amongst its members, and can also receive subsidies, donations and bequests. That said, Associations and CIGs are not without setbacks or deficiencies. As Djeumo (2001) further opine, Associations cannot receive subsidies, donations and bequests as an ordinary association and cannot distribute benefits to its members while CIGs do not have any legal provisions with regards to its management structure.

Quite recently, since CIGs are created exclusively for the benefit of its members and do not pay taxes, the Ministry of Forests and Fauna (MINFOF) has formulated a policy that has been used to stop the approval of CIG for communities who very much desire this legal entity as a requirement for submitting an application for the creation of a community forest. However, after this decision by the MINFOF, there has been no official text formally disapproving CIG as a requisite legal entity for creating a community forest. Indeed, this is a typical style of the development of Policy and regulatory instruments in French-speaking African Countries - Postponement - step-wise approach to policy and regulatory development. This constitutes a legal vacuum or deficit that should be addressed for effective and efficient management of community forests in Cameroon.

Table 2
Some advantages and disadvantages of different types of legal entity.

Legal entity	Advantages	Disadvantages
Association	- Easy to form and manage - Exempt from taxes - Receives subsidies, donations and bequests if it is recognized as a public utility by the President of the Republic	- Cannot receive subsidies, donations and bequests as an ordinary association - Cannot distribute benefits to its members
Co-operative	- The benefits are shared according to individual transactions - Receive subsidies, donations and bequests	- Weighty and complex management structure
Common initiative group	- Easy to form and manage - May be transformed into a co-operative - Can distribute benefit among its members - Receive subsidies, donations and bequests	- No legal provisions regarding management structure
Economic interest group	- Easy to form and manage - Can distribute benefit among its members	- The main aim is the improved economic activity of its members - No tax exempt

Source: Djeumo (2001).

Power, authority, and rights deficits

In Cameroon, any forest-dependent community must first secure a license to operate a community forest. MINFOF (MINFOF, 2009) provides a detailed overview of this licensing procedure, which begins with the submission (by the community) of an application file (in two copies) to the Divisional Delegate in Charge of Forestry of the area concerned. After receiving the file, the Delegate in Charge of Forestry forwards the file with a reasoned recommendation to the Regional Delegate of Forestry not later than ten days after reception. The Regional Delegate then forwards the file with a reasoned recommendation to the Minister in Charge of Forestry not later than ten (10) days after reception. After cross checking if the forest is not covered by a logging title and/or does not encroach on the permanent forest estate, the Sub-Directorate for Community Forestry forwards the file to the Minister in Charge of Forestry for signing the provisional (conditional) management agreement (valid for 2 years). If it is approved and signed, the community may start carrying out the planned forest operations but if rejected, a letter stating clearly the reasons for rejection signed by the Minister in Charge of Forestry is sent back to the community through the delegates.

To harvest and sell timber as well as NTFPs in Cameroon, an exploiter must procure from the Department of Forests at MINFOF an Annual Exploitation License or Permit, an approval (agrément), and a Way Bill (“Lettre de Voiture”). Specifically, the Department of Forests in Yaoundé, the national capital is responsible for issuing an Annual Exploitation License after final approval by an inter-ministerial committee. Additionally, it can only issue approvals when final authorization is made by the Prime Minister’s Office.

One main deficit or shortfall is that separate applications are made by a legal entity seeking to exploit a community forest and also exploit its NTFP resources. Thus, separate delegates are in-charge of this review exercise which implicitly increases the bureaucratic huddles of successfully establishing a community forest. Additionally, apart from the

Way Bill that can be obtained at any decentralized office of MINFOF, decentralized MINFOF officials do not have the power to issue Annual Exploitation Licenses and approvals. To this end, all traders contemplating to engage in the harvesting and trade of timber and NTFPs must travel to Yaoundé to procure these licenses and approvals. Indeed, many scholars have argued that the design of procedurally complex licensing scheme and permit has been a major deficit plaguing community forestry process in Cameroon. More specifically, as [Mandongo \(2003\)](#) explains, in Cameroon, “the process of establishing community forests is long and costly, riddled with contradictions between the supportive law and its decree, and vests too much discretionary power in state-level actors at the expense of the communities”. [Mbolo and Movuh \(2013\)](#) also maintain that the state has too much powers in the process of granting a community forest license and other permits thus making the process slow, complex, and costly for forest-dependent communities. Since the state has too much powers in the issuing of a community forest license, in the words of [Alemagi & Kozak \(2010\)](#), “it takes about 18 months (on average) to obtain a community forest license in Cameroon and the procedure for getting this license is very time consuming”. More precisely, there is also a consensus especially among stakeholders that the procedure is riddled with bureaucratic complexities and that the labor, time, and costs relating to the procurement of a license and permit may be dissuading many communities from submitting an application to operate a community forest.

The tenure duration of a probationary community forest license is two years and when all conditions in this license are fulfilled it is converted to a permanent license which is valid for 25 years ([MINFOF, 2009](#)). One key deficit to the sustainability of forest resources within the community forest is the tenure duration. This is because while forest-dependent communities with community forest licenses have the right to manage and use the community forests, they do not have the right to own all the resources contained in the community forest. Therefore, as [Beauchamp and Ingram \(2011\)](#) suggest, the likelihood that communities might focus on profit maximization at the expense of maintaining the ecological integrity of the forest in the first cycle (25 years) could be very high irrespective of the conditions that might be set in the annual exploitation permits and Simple Management Plans. This is because they are not sure if they could actually continue managing and using the forest after the management agreement expires.

Another major deficit is that the rights of forest-dependent communities to most NTFPs within community forests is limited to usufruct rights (exploitation for personal use only) since commercial exploitation is subjected to permits ([Betti 2007](#); [FAO, EU, COMIFAC, SNV, ICRAF, CIFOR, 2010](#), [Laird et al., 2010](#), [Ngwasiri et al., 2002](#), [Foundjem-Tita et al., 2014](#)). Moreover, while the law lists in Section 9 (2) a series of products which are considered “special forest products” it does not define “special forest products” per se ([Foundjem-Tita et al., 2014](#)).

Finally, communities with community forest licenses do not have permanent ownership of the land in which the community forest is situated as well as carbon rights (carbon sequestered within the community forestry surface area) within the community forest. Additionally, if communities very much desire to manage a community forest for other values like water or recreation, they must procure proper tenures or license from the relevant government agency. Other scholars further maintain that the regulations surrounding traditional user rights within the framework of community forests management in Cameroon is oftentimes biased, unjust, and poorly implemented ([Mbile et al., 2008](#)).

Size and biophysical potential deficit

The size of a community forest is fundamental in ensuring that sustainable forest management is achieved because it provides a basis for determining resources contained within any given community forest. In Cameroon, the maximum allowable limit of a community forest is 5000 hectares. The major deficit here is that this size is very small especially if it is compared to the 200,000 hectares that is allocated to forest exploitation companies.

Table 3

Summary of forest classification in Cameroon as per Law No. 94–1 of 20th January 1994.

Forest type or unit	
A	<i>Permanent or classified forests</i> Forest set aside for long-term use and should constitute at least 30% of the total forest area in the country
1	State forest Made up of protected areas including national parks, forest reserves, and sanctuaries with conservation as the main objective. They require management plans for exploitation
1a	Production forest reserves (UFA) This is forest set aside for sustainable lumber production. Forest concessions can be granted for an area of up to 200,000 hectares to licensed timber exploiters in these areas. Management plans are also a fundamental requirement.
1b	Council forests These are planted or natural forests managed by municipalities in their area
B	<i>Non-permanent forests</i> This include all unclassified forests that could be converted temporarily or permanently to other purposes other than forestry
1	Private forests This is planted forest which belong to individuals wherein logging, tree planting, and management activities are allowed following an approved management plan
2	Communal forests (<i>forêt du domaine nationale</i>) This include a residual class of forests including all forests not included in the permanent or private forest estate
2a	Community forests This is forest area within the communal forest estate which is exploited following an agreement between the community and the state. Its maximum statutory limit is 5000 ha per forests and management contract for their exploitation can run for 25 years renewable. Communities can open up their community forests to a sale of standing volume and other activities provided they are agreed upon well stipulated in their management plan
2b	Sale of standing volume (<i>ventes de couple</i>) An area whose maximum statutory limit is 2500 ha for which logging rights have been ascribed to a Licensed Timber Operator. No management plan is required for their exploitation

Source: [Brown, 1999](#), [Djeumo, 2001](#), and [Minang et al., 2007a](#).

Furthermore, the allocation of 5000 hectares over 25 years means communities can only harvest timber and non-timber forest products from 200 hectares per year. This means the cost per unit of production is potentially very high. Additionally, productivity in 200 hectares many of which are secondary forest is also low. Finally, Way Bill limits of 30M³ of timber per month is also a limiting factor.

In 1994, a new forestry law (Law No. 94–1 of 20th January 1994) was enacted and promulgated and in the subsequent year, a decree (Decree N0. 95–531-PM of 23rd August 1995) was introduced to facilitate its implementation. As [Minang et al. \(2007a\)](#) explain, the 1994 forestry law and its implementation decree provided a new classification of forests, logging rights, as well as conditions for forest management in the national territory (see [Table 3](#)). As shown in [Table 3](#), community forests were classified as non-permanent forests.

The main deficit here is that by being part of the non-permanent forest estate, most community forests are by default poor forests in terms of timber. As [Beauchamp and Ingram \(2011\)](#) further explain, most community forests are basically on secondary forests which were logged before. In this vein, they do not provide significant timber volume that might boost the livelihood of the communities especially where the community forest is associated with large number of households.

Function

Financial resource deficit

Indeed, community forestry is well supported when governments take strong ownership and provide the necessary funding to support community forestry. However, one main shortcoming or deficit is that in Cameroon, community forestry projects are supported mostly by local,

national and international NGOs. Just one program on community forestry (RIGG – strengthening of initiatives of community management of forest and wildlife resources) has been funded with government resources. Like RIGG, there is also the Community Forestry Development Project (CFDP) through whose implementation brought together MINFOF and four international community forestry experts. A key role of CFDP was to develop/enhance skills at both the national and regional levels for the implementation of community forestry as a concept and tool practice for community participation in forest management and livelihoods improvement. However, the program and project faced many financial and governance challenges as will be discussed later. In fact, there are financial shortfalls at both the national level (to implement government policies) and at community levels (for communities to operationalize their simple management plans).

Specifically, at the national level, the 1994 law created a Special Forestry Development Fund, which is a national instrument for the promotion and development of forest resources management (Minang et al., 2007a). This implies that the legal framework exist for statutory funding of community forestry initiatives in Cameroon. The major issue is that there is however not much clarity regarding the amount of monies accrued to this Fund and how the monies have been applied. Several reports assert the insufficiency of funding and resource allocation for community forestry in Cameroon (Beauchamp and Ingram, 2011) and suggest that funding has been piecemeal (African Development Bank Group, 2008). Additionally, funding or capacity building is inadequate and funds to embark on field visits to forest sites or lands designated or to be designated as community forests is equally insufficient.

Still at the national level, the introduction of community forestry in Cameroon in 1994 led to the establishment of a special community forestry unit called the Sub-Directorate for Community Forestry within MINFOF. As Minang et al. (2007a) explain, this unit is responsible for handling the community forest attribution process in the country as prescribed in the Manual of the Procedures for the Attribution, and Norms for the Management of Community Forests. However, the main challenge here is that this unit is not equipped with adequate financial resources.

At the local level, communities with community forest licenses do not have the adequate financial resources. As Minang et al. (2007b) reports, in 2005, the total income of the Bimbia Bonadikombo community forest in the South West Region of Cameroon stood at US\$ 30,200 (see Table 4). They note that by the end of 2005, this community

Table 4
Estimated income and expenditure (in US \$) of the Bimbia Bonadikombo community forest and the Tinto community forest for the period January – December 2005.

Description	Income for Bimbia Bonadikombo community forest	In come for Tinto community forest
Total income	30,200	10,150
Income from forest operations – wood (%)	28.5	100
Income from grants and donations (%)	10.4	0
Income from service delivery (ecotourism and tree care service to urban council (%))	23	0
Income from fine and auction sale (%)	19.1	0
Income from loans (%)	18.8	0
Expenditure		
Total	32,300	1900
Operational costs – office (%)	11	100
Operational costs – field (%)	23.4	0
Salaries (%)	62.8	0
Investment (%)	0	0

Minang et al. (2007b).

forest was running a deficit of US\$ 3000. In the same year, total income for the Tinto community forest (still in the South West Region of Cameroon) stood at US\$ 10,150 and 100% of this total amount was an advance payment for timber exploitation (Minang et al., 2007b). Similar issues persist in other community forests in country. For example, it has been reported that in community forests in the Littoral and South region of Cameroon, revenues per person from each sale of timber were estimated to be between US\$ 5.6 to US\$ 6 corresponding to an internal rate of return of less than 35% (Foundjem-Tita et al., 2018).

Capacity deficit

Competence tended not to be a key requirement in recruiting management staff for the rural sector and this pose a challenge to capacity for community forestry in Cameroon (African Development Bank Group, 2008). At the national level, well trained technical and management staff tend to be inadequate. For instance, the Sub-Directorate for Community Forestry in MINFOF is not equipped with adequate technical and human personnel that are specialized in community forestry. Thus, while capacity building of community institutions is essential in community forestry in Cameroon, this has often been neglected at the national level.

At the local level, local forest managers need skills and knowledge required for the proper implementation of community forestry. Success is generally noted when the capacities of local community forest managers and foresters are built to support community forestry especially in terms of providing the necessary skills, legitimacy, and social capital. Beauchamp and Ingram (2011) noted that the key factors influencing success of community forestry is technical and managerial capacity. The main deficit is that at the local level capacity building especially of rural communities with community forest operations is inadequate in Cameroon. Although the community forestry model has been in use for more than 20 years in Cameroon, its adoption has been slowed by the limited capacity of local communities to operate competitive enterprises and access markets for sustainable forest products (Rainforest Alliance, 2016). Another issue is the absence of a structure like the Community Forest Unit (CFU) at the level of Regional Delegations of MINFOF. Though their role was incorporated into the Regional Forest Officer, the incumbent themselves do not fully understand the concept and practice of community forestry.

Minang et al. (2007b) further revealed that forest-dependent communities with community forests do not have the necessary knowledge and skills to accommodate Clean Development Projects. They note that community capacity is generally found to be inadequate for the uptake and implementation of Clean Development Projects. As a result, these communities cannot perform fundamental task relating to the management of a community forest like baseline estimation, financial analysis, leakage analysis, and environmental and social impact assessment. Since most forest-dependent communities lack the capacity to exploit resources like timber within the community, many have contracted their forest to large-scale logging companies. As a consequence, Oyono (2004a) asserts many of these large-scale logging companies are among the giants of commercial timber exploitation in Cameroon. He notes that they are engaged in both intensive and extensive logging practices which can devastate a community forest within less than two months.

A report by the African Women's Network for the Management of Community Forest (REFACOF) reveals that at the local level, there is serious discrimination against women and some indigenous communities in rural areas of Cameroon with regards to access and the management forest and the resources therein (Karpe et al., 2013). As Belibi et al. (2015) further explain, the main capacity deficit is the gross underrepresentation of women and the Baka communities on community forest management in Cameroon. Furthermore, Tobith & Cuny (2006) maintain that while local women participate in meetings relating to the establishment of community forests in Cameroon, their number is always inferior as compared to men. They point out that women's influence in the community forest management decision-making process

remains weak, especially in relation to the election of the executive members responsible for the management of the community forest. It could also be argued that this gender gap in the management of community forest could be attributed to the civil society actors that were accompanying local communities in this process. This limited presence of women and the Baka communities in community forest management implies that their needs, interests, and aspiration are less likely to be taken into consideration during the establishment and implementation of forest management plans (Belibi et al., 2015). Furthermore, gender and environment studies shows an inter-connectedness of women and nature thus they are great environmental conservators and forest managers resulting from years of experience gathering and collecting basic foodstuff and medicinal plants from the forests since forest resources have been their sole livelihood base for ages and they are therefore an asset in sustainable CF management.

Governance deficit

Governance is a broad range of political, social and economic structures and processes put in place to shape and constrain actors behavior towards a desired outcome (Levy and Newell, 2005). Indeed, there are governance deficits within the current institutional arrangement governing community forestry in Cameroon. The existing framework does not promote greater devolution of control to local forest dependent communities making the desired outcome replete with governance issues. For instance, forest-dependent communities with community forest licenses are recommended by law to set up community forest management committees (CFMC) for the management of community forests and forestry fees (Oyono, 2005; MINFOF, 2009). However, there are elites who are not part of forest-dependent communities but are usually members of the CFMC and have the financial resources to influence how community forests are managed (Etoungou, 2003). As Brown et al. (2010) explain, a fundamental shortfall or deficiency to the success of community forestry in Cameroon is the composition of the CFMC. They note that these committees do not have any internally recognized legitimate authority and are dominated by elites who are corrupt and have replaced the roles which were once played by traditional authorities.

Many elites also provided cash for the community forest process in several locations in the Big South of Cameroon. They also used their powers, authority and connections with MINFOF to get both the files and management plans of community forests signed. Also, any process that prescribed the involvement of local administrative officers (DOs and SDO) are riddled with corrupt practices. Indeed, the Cameroon community forestry process was also seriously affected by local political activities. Therefore, it was not a surprise that these elite became member of the community forests management committees and again used their authorities/power to get back money advanced for the

process. It must also be noted that some exploitation companies also paid for the inventories and negotiated contracts to exploit approved community forests.

Furthermore, it is reported that revenues generated from the sale of timber from community forests are not used entirely for the provision of social amenities to the communities by members of CFMC. It has been asserted that this revenue is stolen by members of the CFMC (Oyono, 2005). Oyono (2005) further provides classical examples to justify his assertion of corruption and misappropriation of funds from the exploitation of community forest by members of the CFME including: "In the Kongo village located in the East Region of Cameroon, of the U.S. \$29, 730 that was generated by the community forest from December 2001 to December 2003, only U.S. \$9580 was spent for economic or social purposes". The rest was embezzled by members of the CFMC. In the village of Mboké (located in the South Region of Cameroon), only 12% of the U.S. \$7920 generated by the community forest was used for economic or social purposes (construction of a classroom). The rest of the money was illegally directed to some supporters of the chairman of the CFMC (Oyono, 2005).

Some possible ways forward

To summarize, legal deficit, power and rights deficits, size deficit, biophysical potential deficit, financial resource deficit, capacity deficit, and governance deficit were identified as major deficits (Table 5) associated with community forestry in Cameroon. In light of these deficits, this section of the paper makes some recommendations (Table 5) for overcoming these deficits.

The need for the adoption of a simple cooperative format (which is what is currently practiced in Cameroon) as a legal entity required for the establishment of a community forest cannot be overemphasized. The reason is deeply rooted in the fact that when organizations adopt recognizable simple cooperative formats commercial banks and other relevant financial institutions are more inclined to provide assistance like in the British Columbia province of Canada. Additionally, simple cooperative format are exonerated from taxes. Here the voting systems is one person one vote, and membership is open subject to the articles governing the organization.

One of the major institutional deficit impeding the smooth functioning and operation of community forests in the country is the complexity especially in terms of the exorbitant costs and excessive timelines for formalisation of community forest operations. Therefore, the enactment and promulgation of a less cumbersome and cost effective procedures or laws that enable communities to easily procure community forests would contribute enormously in addressing this issue. Additionally, to address this issue, it will be in the best interest of both parties (the communities and the government) to work towards the

Table 5
Deficits being addressed and proposed solutions.

Deficits	Proposed solutions
Legal deficit	Adoption of a simple cooperative format as a legal entity required for the establishment of a community forest
Power and rights deficit	The enactment of a less cumbersome and cost effective procedures that enable communities to easily procure community forests and the devolution of part of the decision-making authority for the approval of community forests licensing to the local level. The need for the government to reformulate its forest policy to grant communities ownership of the land as well as other resources like water and carbon contained in the community forest.
Size deficit	The policy reform should also increase the maximum statutory limit for community forest
Biophysical potential deficit	Promotion of reforestation practices within community forest
Resource deficit	Increasing direct national budget allocation for community forest development. Relevant authorities should also provide incentives for the aggregation of community forest initiatives that should bring about economies of scale and overcome resource deficit
Capacity deficit	The need for proper capacity building. For example university system (for example CRESA and the University of Dschang) should adopt relevant short and long term courses on community forestry
Governance deficit	Community management institutions should be linked with formal authorities while ensuring that accountability, transparency, rigor, and local democracy is promoted in the management of resources emanating from community forest

devolution of part of the decision-making authority for the approval of community forests licensing to the local level. This is envisaged to speed up the registration process and save communities that contemplate procuring a community forest license much financial resources. It will also spare community forest applicants the burden of commuting numerous times to the national capital to follow up on their community forest applications. Finally, given that it takes an average of about 18 months to obtain a community forest license, the amended legislation should stipulate a maximum period of 6 months within which licenses are processed and issued. This way, the discretionary powers of state authorities will be further curtailed.

In the current forestry law reform, it is vital that the government reformulates its forest policy (the entry point is the reformation of forest policy even the 1994 forestry and wildlife law which already encourages community participation in forest management) with a specific emphasis on the clarification of exactly what "special forest products" are per se. The reform should also grant communities ownership of the land as well as other resources like water contained in the community forest. Minang et al. (2008) further recommend that such reforms should address carbon right within a community forest in a more explicit manner. On another note, the reform should also increase the maximum statutory limit of community forest in the country (this has worked in the British Columbia province of Canada) and promote reforestation practices within community forest. This will go further to align the new institutional framework with international standards, provide a space for promoting development, and mitigate the inevitable conflict that could emanate from overlapping claims to community forest in the country and the resources therein.

Given the likelihood that communities might focus on profit maximization at the expense of maintaining the ecological integrity of the forest in the first cycle (25 years) over exploitation as well as illegal exploitation could be very high since the law does not allow ownership of all resources within the community forest. There is the need to vest ownership rights in communities to prevent tragedy of the commons - situation in which property rights are ill defined leading to unsustainable exploitation of forest resources. In addition, there is the need to allow communities automatic renewal if it is determined that exploitation has been sustainable after the first 25 years cycle.

Capacity building especially of rural communities with community forest operations is insufficient in Cameroon. Thus, there is a need for proper capacity building of national and local community-level forest managers like in Nepal. This capacity building could be provided by the university system (for example CRESA and the University of Dschang) who should provide relevant short and long-term courses on community forestry and forest governance in general. Some other key capacity needs are the following (Hagen, 2014):

- Training to manage and collaborate on technical aspects of sustainable forest management;

- Development of governance capacities for community level internal enforcement mechanisms to ensure compliance with forest access and use rules for enhanced carbon sequestration;

- Development of low- cost tools and expertise for community-based managers to monitor forest conditions; and

- Training and support to effectively analyze and address gender and other social diversity issues;

This paper also presses the need for the government to provide incentives for aggregation of community forest initiatives that should bring about economies of scale and overcome the size and resource deficits. Additionally, the government should also increase direct national budget allocation for community forest development which is currently about 34 Million FCFA. For instance, these funds could come from the Special Funds for Forestry Development (*Fonds Spécial de Développement Forestier*).

Achieving sustainability in the community forest sector will involve structural changes in the governance framework. Indeed, governance deficits was characterized by corruption and mismanagement of funds

emanating from the exploitation of resources from a community forest. Community management institutions should be linked with formal authorities while ensuring that accountability, transparency, rigor, and local democracy is promoted. For example, owing to protests by communities in Ebolowa and Mbang of the South and East Regions of Cameroon, corrupt members of committees responsible for managing forest royalties and proceeds from community forests were sacked (Oyono, 2004b). Additionally, elite capture should be avoided and jail terms for defaulters should be more aggressively promoted and applied around managing forest resources from community forests and ensuring that the proceeds derived from these economic activities are used to enhance the overall objectives of both the community forests and surrounding communities.

Finally, many scholars have sought to use path dependency concept as a means of explaining institutional stickiness (Crouch and Farrel, 2004); in other words why institutions tend to stick to established ways of doing things even when such ways may be inefficient thereby leading to institutional deficits. One possible reason for path dependency is "threats to established power bases" (Sexton et al., 1999). Institutions may already have an entrenched way of doing things and may not be comfortable with new methods of doing things that could lead to better outcome for community forestry and will therefore resist change. Further, the idea of ceding control to local forest dependent communities may not be popular among many central institutions/authorities in higher positions since decentralizing control might erode their power base. Thus, threats from established power bases tend to perpetuate existence of weak/dysfunctional laws and institutions. In this respect, in order to break this path dependency, we recommend that environmental foundations and community NGOs should shape the nature of dialogues by their actions and focus and bring pressure to bear on government to institute appropriate changes in the institutional framework governing community forestry in Cameroon.

Conclusion

By combining findings from relevant peer review literature, agency reports, and 'grey' literature in the form of working papers and reports from relevant governmental/non-governmental organizations (NGOs), this paper has sought to examine the various state institutional deficit associated with community forestry in Cameroon. Despite having formulated and implemented a lot of initiatives to promote community forestry in Cameroon by the government, institutional deficit like legal; power, authority and rights; size and biophysical; resources; capacity; and governance deficits still persist. To effectively address these deficits, the relevant government authorities and policy makers in the MINFOF should begin by simplifying the procedure for procuring community forest licenses, and revising the legislative framework governing community forestry. At the same time, they must ensure that there is an amendment in the forest allocation policy. Specifically, these policy makers also need to ensure that there is proper capacity building and increase in the direct national budget allocation for community forest development. These relevant government authorities from MINFOF should also provide incentives for the aggregation of community forest initiatives and ensure that accountability, transparency, rigor, and local democracy is promoted in as much as the management of proceeds from community forest is concerned. Over the long run, such initiatives would serve to benefit both the government and the needy forest-dependent communities with community forest licenses.

Finally, this paper focuses solely on state institutions and does not examine the role non-state or customary institutions play in forest governance and the management of community in Cameroon. Therefore, one possible area for future research is a critical analysis of non-state or customary institutional setup for community forestry in Cameroon.

CRedit authorship contribution statement

Dieudonne Alemagi designed, collected and analyzed data, wrote and revised the manuscript with Lalisa Duguma. Peter Minang, Daniel Nukpezah, and Divine Foundjem-Tita contributed in data collection, the design, writing and revision of the manuscript.

Declaration of Competing Interest

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

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