Governing wildlife resource in DRC: Challenges of local actors in Rubi-Tele hunting domain

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Abstract

Forestry ecosystem of Democratic Republic of the Congo is the base of rural people economy. But, these people do not have sustainable practices on natural resources. Therefore, the objective Pursued in achieving the present study is to determine the impact of the peasant practices on the local natural resources and to analyze the role of traditional power in Ngbete and Mabanga's villages. To achieve this, we submitted 63 persons to a mixed questionnaire. We completed the methodology in using the unstructured individual interviews. The average age of those surveyed varies between 30 and 50 years. The main findings show that the traditional authority doesn't influence positively the sustainable use of wildlife. Though, the Congolese Institute for Nature Conservation (CINC or ICCN in French) which is in charge of Rubi-Tele hunting domain hasn't the appropriate means for taking care of this protected area. In this case, the traditional authority who could ensure the sustainable management of natural resources, especially the wildlife, is in the lack of legitimacy whose the roof taken in the history of creation of these villages, namely Mabanga and Ngbete. This situation leads to the scarcity of wildlife which is the main source of peasant's income.

Keywords: traditional authority, governance, wildlife resources, Rubi-Tele hunting domain, Democratic Republic of the Congo

1. Introduction

The forest of the Democratic Republic of the Congo (DRC) accounts for sixty percent (60%) of Congo Basin forests; and forty-seven percent (47%) of Africa's forests. It is therefore a real global lung, after the Amazon (Oyono *et al.* 2006, Eba'a Atyi and Bayol 2009). Indeed, considered as an important reservoir of biodiversity, the DRC forest is a vital resource for human beings (Counsell 2006). Since more than 70% of the population depends directly on it (World Bank 2003). Behind the forest-wood, also hides the real forest which is travelled, worked, modified and rebuilt by the farmers. It is this forest that is the base of village's economy and therefore their heritage. This latter is managed according to so-called 'customary' norms, rules and practices defined, effective and respected at the local level (Michon and Moizo 2011).

It Cline-Cole is clear that the elements of biodiversity that we have reached nowadays are because they were used sustainably. Formally, the exploitation of the resources, in particular, the fauna was made in harmony with spirits of the ancestors and under the guidance of the traditional institutions (Chambers and Conway 1991, Bonye 2007).

Today, the sustainable use of forest resources by local communities cannot be proven since all the world's societies experience socio-culture mutation (Kyale and Maindo 2017) due to the globalization. Yantibossi (2011) goes further; the mentality of local populations has evolved in using the gift of nature. Despite this reality, customary power remains the true manager of grassroots communities in the rural areas (Bonye 2007) and therefore best placed to help the government in achieving its goals for the Sustainable Development (SDG). Considering the above, we propose, as part of this study to analyze the perceptions of users of the wildlife that the power of village leaders Ngbete and Mabanga, finding in Rubi-Tele hunting domain.

Thus, we believe that the population of Mabanga and Ngbete villages perceives the wildlife resources found in Rubi-Tele hunting domain as their ownership. This perception is reinforced by the lack of leadership on the part of traditional authorities on the one hand, and negligence if not oblivion plaguing the DCRT from the State Congo foreshore and conservation NGOs on the other hand.

The structure of this article is organized in four parts. In the remainder of this brief introduction, we detail in the second part of the text the conceptual approach and methodology. This part includes a presentation and justification of the case study, the mode of collection of our quantitative and qualitative data, and the analytical approach used to treat such data. The third part of the article presents the findings and discusses the validity compared to similar studies conducted in relatively comparable political social contexts in Africa and throughout the tropics. The latter part of the article proposes a succinct conclusion of the study.

2. Conceptual approach and methodological framework

2.1. Presentation and justification of the case study

The Mabanga and Ngbete villages (Figure 1) are part of the Bobate group, which is one of eight groups present in Rubi-Tele hunting domain. Created by the law N° 51/Agri of 12th November 1930 and supplemented by the law N° 61 / Agri of 26th November 1932 amending the boundaries of this hunting domain; the latter covers 5 administrative territories which three of them (Aketi, Buta, Bambesa) belong to the Bas-Uele province others territories namely (Banalia and Basoko) are in Tshopo province. When it was created, this protected area extended over an area of 11,302,72 km², but nowadays, it occupies only 6227.74 km².

The interest that led us to carry our attention on Mabanga and Ngbete villages is justified by the fact that this protected area has remained nearly 80 years after its creation, neglected without benefiting necessary means to allow the Congolese Institute of Nature Conservation (CINC) to assume its role. Faced this reality, wildlife resources are used unsustainably. In addition to this, the choice of Mabanga and Ngbete villages is due to their accessibility because they are located along the national road (Kisangani-Buta).

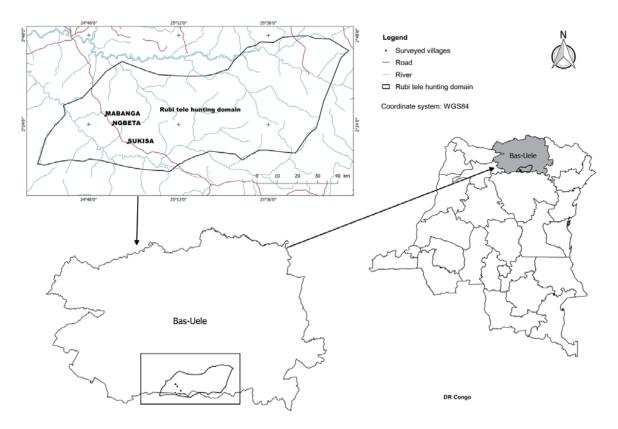


Figure 1. Location of surveyed villages in Rubi-Tele hunting domain

2.2. Collection of data

This study is based on a mixed methodological approach of qualitative and quantitative analysis (Creswell 2009). Qualitatively, the first part of this research was structured around the household survey, because they constitute the basic unit of resource exploitation in a village, then two focus groups and numerous individual interviews were conducted in villages Mabanga and Ngbete. The aim of this approach was to collect the opinions and testimonies of peasants and managers of the hunting domain based at the checkpoint notably their experiences on the change observed over the years in the production of the game, on the availability of wildlife resource, the involvement of traditional authorities in the regulation of access to wildlife resource, the contribution of the checkpoint Sukisa in the management of that area. To achieve our purpose, the survey was close to 63 households among them 32 to Mabanga and 31 Ngbete were involved in the investigation by questionnaire. The questions were about the observed change in access to wildlife resources, the frequency of hunting, the number of games taken by hunters, the most captured species, the level of production, the legitimacy of the authority of village leaders in the regulation of hunting and the capacity of CINC to assume its role. These informations were intersected and crossed with those from individual interviews (18) and focus groups made during our field study.

2.3. An analytical approach guided by the logic of induction

To better capture the logic of the actors studied as part of this study, qualitative data collected were analysed using an approach comprehensive type 'systemic' (Morin 1977). Their interpretation has been systematically checked and strengthened by the above-mentioned quantitative analysis. In line the interdisciplinary approach was privileged in this study, we mobilized the sociological studies of organizations (Crozier and Friedberg 1977). In an inductive logic, the aim of this initiative was to better define the role of actors who rely on the wildlife (villages) at the one hand and those whose have the conservation of wildlife resources as their role (Congolese institute of nature conservation). This approach allows us to observe strictly the relations of different forces in the local governance of wildlife in Rubi-Tele hunting domain landscape in focusing on Mabanga and Ngbete villages. At the sociology approach of the organization, we have associated critically observation of governance process of commons (Ostrom 1990, Locher 2013). This combination was made for understanding how the role and formal and informal interest of the local actors in the wildlife governance resources impact negatively on the state of resources. Besides interpretations qualitative analysis of our date, a statistical analysis (R software) was also made.

3. Findings and discussion

3.1. Unsustainable governance of wildlife resources in Rubi-Tele hunting domain

Empirically, our work shows that several factors hind the sustainable governance of wildlife in Rubi-Tele hunting domain in general and in Mabanga and Ngbete villages in particular. The most raised during our data field collection are:

3.2. The omission of Rubi-Tele hunting domain as much as by the government than the NGOs of conservation

With an area of 6,227.74 km², the hunting domain of Rubi-Tele has only 42 agents assigned by the Congolese Institute of Nature Conservation to secure this protected area. Consequently, each guard has to watch on an area of 148.27 km². Curiously, only 6 of the 42 agents are paid by the Congolese government, the others are not. The sole argument from government is the fact that the concerned are new recruits though some of these 'new officers' have more than 15 years of service. This situation reveals how the management of this hunting domain is not a priority as well as for government as the NGOs. Concerning the latter, the conservator in chief of this hunting domain, testifies in saying that: 'we didn't receive financial support from partners till in 2012. We received the foundation of Therese art. When they came, we hoped that at the end of their remote sensing and the wildlife inventory, this hunting domain would be known and through their scientific report, the partners would be attracted. Unfortunately, their work was stopped and from that time they haven't been back'. Though, this hunting domain is the living place of some species strictly protected as Okapi Johnstoni.

3.3. Governance characterized by mistrust of actors

The continued misuse of wildlife resources leads to the imposition of ineffective punitive measure which tends to further erode the influence of traditional rulers (Majambu *et al.* 2019; Lewis *et al.* n.d.). The absence of boundaries between hunting grounds and villages is one of the causes of this mistrust. This observation is strengthened by the fact that almost ¾ of those investigations (this proportion is higher in Ngbete than in Mabanga) they assert to master upstream and downstream of Rubi-Tele hunting domain. The lack of clear boundaries of this hunting domain on the one hand and the one of financing and to take in charge the Congolese institute of nature conservation's agents; leads the wildlife users to misuse resources. The wildlife resources' users accuse the Congolese institute of nature conservation's agents to mismanage this hunting domain. For them, this hunting domain was well managed when chieftaincy was in charge of management of the hunting domain land. Thus, the participants at the focus group organized with villages' actors at Bokapo argue that: 'may the management of this hunting domain be returned at our chieftaincy. When it was the case before the coming of colonizer this area was well managed. Since the Congolese institute of nature conservation is in charge of management, the depletion of wildlife resources goes worse and worse'. For the CINC it is the population who abides in

villages located in this hunting domain who is responsible of the degradation of natural resources in general and wildlife resources in particular. Those words show clearly the opposition which characterize the key actors in governance wildlife resources in this hunting domain. It does prove that where resources are linked with survival people with very low incomes survive as best they can. The temptation to break preservation laws is great, since wild animals can provide food and cash. Furthermore, the people who should enforce the law (agents of Congolese institute of nature conservation for instance) often receive inadequate salaries and therefore they may be tempted to turn a blind eye to or even to aid exploiters (Lewis et al. n.d.). For Mampeta (2017), the matter of wildlife conservation comes from the fact that the policy of protected areas in Africa is built on the dichotomy of land tenure legacy of colonialism and nationalism. In this case, we support with Lewis et al. (n.d.) that the urgent requirement today is for a significant and sustained effort to include the evaluation, development, management and utilization of wild animals in national plans for socio-economic development. The involvement of national planning and financial institutions at all levels is essential and assistance may also be required from competent international agencies to ensure success. At the same time long term sustained utilization of wildlife resources cannot succeed without local people participating in management and receiving a fair share of the benefits that accrue.

3.4. Traditional power crisis as a cause of natural resource degradation

Chiefs and /or headmen are the cornerstones of African rural societies and the traditional customs that bind and regulate village communities (Lewis *et al.* n.d.) because of their authority. For, the authority is the ability of an actor to act on others, is the recognition of formal actor A to govern other (Crozier and Friedberg 1977, Weber 1978). The abolition of these powers during and after colonial administration has led to situation where central governments are unable to sustain the needs of adequate law enforcement to protect wildlife resources. Land tenure and access to natural resources were formerly determined by these chiefs in the common interests. The case of Mabanga and Ngbete villages reveals the inescapable role of traditional authority. The population are consciousness that when disorder became rule of life in any society, traditional authority may play great role. But concerning the depletion of their wildlife resources, they are disappointed in the fact that traditional authority, especially the chiefs of their villages are unable to stop the degradation of resources. No surprising for them to argue I the following words when we ask them if their chiefs cannot stop the depletion of wildlife resources. They react in saying that: 'what kinds of chief have we? They are powerless and lack initiative. They are unable to regulate access to our forestland'.

Free access to resources natural wildlife including in the villages' surveyed notes the lack of organization at the local level and the weakness of traditional power. It should be noted that this weakness is rooted in the context that characterise the creation of the surveyed villages. Created by Ngelema tribe from Basoko territory and around (Province Tshopo), none of them had legitimacy to

lead others. Those who have become leaders subsequently became by the head of group host's will, and therefore, not enjoying any legitimacy within their entity. This situation leads to the uncontrolled exploitation of resources. However, when a resource is subjected to a common exploitation, it is doomed to disappear. Thus, when resources are degraded or depleted, it is local communities that will suffer most; because of they are relying on those resources for their basic needs (Ostrom 1990). Considering that the common utilization of resources leads to depletion, Bigombe (2004) recommends initiating the villagers or local users to decentralized management. For him, this taste must be made with social institutions such as the lineages. Then it is possible to strengthen these local institutions, including increasing their abilities so that they can finally commit and respect of contracts relating to the use of natural resources.

In comparing our results to theirs, we realize that ours differ from those found by Fairhead and Leach (1994), Andriamalala and Gardner (2010), and Tohinlo *et al.* (2001). The first found in the Mende region (Eastern Africa) that the laws established by the local community was respected and it was regulating access to the natural resources. The second found at Velondriake (southwestern Madagascar) a local tool of governance of natural resources called 'Dina'. The third authors found that in Benin, particularly in the complex of Agonvè, the rules of access and use of natural resources were adopted by local institutions (customary power) and respected by all.

3.5. Scarceness of game: Cause of traditional authority inaction

Although the chiefs of the villages of Mabanga and Ngbete do not have the absolute legitimacy, their populations recognize in them the possibility of denouncing unsustainable hunting practices close to the state administration which has invested them. However, the fact that they have no salary from administration, they prefer to hold one's tongue. This is revealed in the statements required by the chief of Mabanga village. He declared: 'How can we prohibit unsustainable hunting practices? We have no salary from government. The latter pays only the leaders of chieftaincies and sectors. We are not paid. Therefore, hunting allows us to live. This is why we practice hunting as we cannot wait only the products of fields. Sometimes others members of the village come to offer us some game after a successful hunt'. The chief village's argument needs to be qualified because unstainable hunting practices are not the sole cause of scarcity of game. In the context of poverty as is the case of villages which are located in this hunting domain, populations rely not only on hunting activities. Beyond hunting, they practice also agriculture and charcoal production which are the cornerstone activities of deforestation. Though, the deforestation is the base of the rarefaction of game. However, there is clear evidence that attempts to protect or re-stablish wildlife resources that into consideration the socio-economic needs of local people are doomed (Lewis et al. n.d.).

3.6. Impact of users' practices

The hunting impact on wildlife resource as revealed by the decrease (84%) in the production game. This situation is justified by the fact that 68% of respondents have decided to practice hunting more than 3 times between two weeks. During this hunting period, most hunters capture on average, fewer than 5 games whose species are indicated by the graph Below (Figure 2).

The figure above indicates that two species are the most captured. It concerns *Cephalophus dorsalis* and *Cephalophus monticola* each representing 25% of the catches made. On the other hand, the least species caught remains *Manis sp* which represent 1%. These results do not differ from those found by Ndambo (2014). The latter noted that the hunting pressure is mainly on large rodents and which represent 80% of captured animals on Matadi-Boma road.

Indeed, Madzou and Ebanega (2006) found in Southeast of Cameroon at the north periphery of the Boumba-Bek reserve that about 450 animals captured by villagers hunters, the majority consisted of ungulates and primates which represent more than 88% of the total and antelopes (*Cephalophes* sp.) and monkeys (*Cercopithecus* sp.) were the proportion of game.

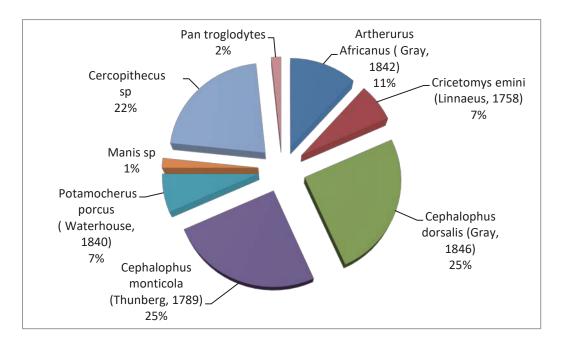


Figure 2. Game currently captured in Rubi-Tele hunting domain

Focusing on the above reality, some scholars consider that Wildlife management typically considers 2 kinds of capacity. The one which interests us is the first which is described as wildlife acceptance capacity (Decker and Purdy 1988), cultural carrying capacity (Minnis and Peyton 1995), and wildlife stakeholder acceptance capacity (Carpenter *et al.* 2000). Each stakeholder has a capacity relative to positive or negative impacts. Or acceptance capacity varies with stakeholder knowledge, beliefs, and attitudes, and with their economic, social, and environmental conditions (Riley and Decker 2000). If

these conditions are not considered by stakeholders, the consequence will be the loss of these species as it was the case in the Amazon and Congo basins (Nasi *et al.* 2011).

4. Conclusion

The sustainable management of wildlife resources in Rubi-Tele hunting domain requires consideration of different perceptions and practices of wildlife resources' users. However, users developed since years, strategies that allow them easy access to those natural resources despite the presence of Congolese institute of nature conservation agents who are in charge of controlling this area. In the context of weakness and incapacity of government to manage sustainably this protected area, it was important to focus on the ability of traditional authority that are representing administration among natural resources' users in Mabanga and Ngbete villages in order to analyse their ability of ensuring the sustainable management of wildlife resources. The findings show that the management of the wildlife resources by the villages concerned by our survey is not possible for the following reasons: (1) the omission of Rubi-Tele hunting domain as much as by the government than the NGOs of conservation. This hunting domain does not benefit neither of the regular functioning fees from the government nor the support from nature protection international NGOs. This situation leads to the Governance characterized by mistrust of actors (2) because of absence of boundaries between hunting grounds and villages. Beyond the above reasons, let's confirm together with the findings that (3) traditional power crisis is one of the causes of natural resource degradation. This reality comes from the context of creation of those villages that leads nowadays to the Scarceness of game which has negative impact (4) on the wildlife resources. To change this situation requires considering the life mode of population who lives in this hunting domain; to involve him in the management. It is to say that they have to participate in all decisions which concern this hunting domain. These populations are ready to use wildlife resources sustainably, but on one condition: they want to see the positive impact of conservation on their livelihoods. Therefore, it appears urgent for Congolese national institute of conservation which is in charge of the management of this hunting domain to work in synergy with local population and traditional authority.

Acknowledgements

The authors gratefully acknowledge the organizers of the first Rwanda workshop. The authors would also like to thank the anonymous reviewers of this paper for their comments and suggestions.

Funding

This research was mainly funded by the research-development project 'Forest/EU' implanted in the Centre for International forest Research (CIFOR).

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