

Community livelihoods versus biodiversity conservation. Constraints to sustainability of the Santchou forest reserve in the Western highland region of Cameroon.

Protected areas' landscapes as resources for human health and wellbeing

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Abstract

Not only has the overall demand of land for agricultural production, urban expansion and other activities increased but also has the community need or demand for land for conservation as revealed by government policies. Certain predictions (MCDONALD & BOUCHER, 2011) foresee that global protected land might increase more in the next 20 years than they have in the last. These needs have as objective the conservation of biodiversity but to the local population, these areas have been their home for many generations on which they have based their livelihoods, culture and identity. It is thus not very surprising to note that biodiversity continues to decline (AILI et al, 2016) and reduces in the long run the capacity of these protected areas to maintain their roles and human wellbeing.

The intimate relationships that exist between the local population and protected areas have been explored as farmers and forest dwellers are the users of protected areas as well as lands connecting them. What has not been extensively addressed are other options to equitable reconcile sustainable livelihoods within and around protected areas. In protected area categories where agricultural activities are undertaken whether allowed by the law or not, there is need to consider productive activities which provide livelihoods in an equitable and environmentally friendly way. This is because the local population always tend to encroach on the resources of these areas taking into consideration the fact that resources around are scarce and the population tend to view protection areas as a way of depriving them of their land especially if participatory methods are not effective or were not put in place during the creation of these areas.

The objectives of our study are to analyze the forms of indigenous exploitations, the current mode of community management and its effects on biodiversity conservation. In addition to this, the contributions of exploitation of this protected area to community livelihoods will be discussed coupled with propositions on a sustainable model for its management.

Our research questions focused on the effects of an agro-industrial exploitation of protected areas by the local communities on biodiversity conservation on one hand and on the other, its influence on community livelihoods with the Santchou reserve as case study. Has this protected area achieved its conservation objectives and how has community participation or its absence contributed to the attainment of the objectives? Are the current conservation models sustainable or what are the flaws to sustainable conservation? We are thus advocating the proposal that though much effort has been invested in terms of conservation, there is little tangible evidence to support achievement of these projects.

Qualitative variables are mostly used for the research, obtained from simple observations through field exploration, photographs, an extensive literature review and finally through semi-structured interviews with the divisional officer, the park manager and guards and with some farmers. The interviews were transcribed verbatim and recurrent themes were identified. Our principal results are obtained from these themes using the thematic analysis approach.

Principal findings include widespread conflicts between the administration in general and the indigenous population or local communities. These tensions further undermine a sustainable exploitation leading to a rapid loss of biodiversity as poaching persist as a means of survival, reduce income sources for the community and insufficient respect of human rights in the protected area. Customary land rights are not overly respected and the bulk of the negative consequences are endured by the indigenous population.

Keywords

Livelihoods, Biodiversity conservation, Protected areas, Constraints, Community exploitation, Santchou, Cameroon.

Introduction

While awareness on the importance of biodiversity conservation and protection coupled with the negative effects of its destruction increases, socio-economic constraints are causing non-sustainable exploitation of such resources by indigenous communities. Reserves are vital tools for biodiversity conservation and management especially in areas threatened with extinction of species though their creation has done little to reduce the ever-increasing tide of degradation, which constitutes an eminent threat in the maintenance of global climatic equilibrium. Without an appropriate implication of these communities through participative management approaches, these protected areas are fast losing their ecological and cultural value with important externalities on livelihoods. Geographically, the Santchou Reserve is situated between latitude 5°10' and 5°15' North, longitude 9° 5' and 10° East and locally within 03 administrative regions of Cameroon i.e. the Western region with a very high population density, the Southwest and Littoral regions with low densities and made up of 09 indigenous villages. At the same time, a tropical montane savanna occupies the northern part of the reserve while the dense tropical rainforest occupies the southern part thus the reserve occupies 02 ecological zones. Geographically, this area is found in the Western highland region but owes its ethnic and cultural identity to the Mbo of the Sawa tribes. This reserve has successively been administered by the Ministry of agriculture, the General Delegation of tourism and today by the Ministry of environment, forest and wildlife protection. A diagnosis of the reserve presents symptoms of an acute advanced and multiform degradation where vast areas have been replaced with human settlements and an industrial type of agriculture and the once rich animal species inexistent or facing extinction. It becomes an imperative to preserve this unique forest through sustainable management approaches that integrates the needs of the indigenous population with the current conservation methods.

Brief history and delimitation of the Santchou reserve

It is by decree No 262 of 29 July 1947 during the French colonial rule that the Santchou reserve is created to favor natural reforestation, execute reforestation and protection works. It was originally a forest reserve and the decree of 29 September 1986 transformed it to an animal reserve due to the important variety and density of animal species especially the dwarf elephant. It covers an administrative surface area of 7000ha according to the Ministry of Forestry and Wildlife though about half is under human occupation. The main purpose of creating this reserve in 1947 was to protect/conservate the dwarf elephant and dwarf buffalo species which are now almost extinct because of human pressure and interferences, a variety of over 161 endemic bird species which are currently present in the Reserve and have suffered less threats from human presence. The Reserve is also home to a variety of monkeys and fauna amongst which are Gabon viper, python, wild boar, porcupines, and monitor lizards all currently under threat. The Santchou Reserve is said to be one amongst the two important bird and biodiversity reserves in Cameroon where the Guinea-Congo forests biome species *Phyllanthus Attripennis* prevails.

Results and discussion

The Santchou reserve today borders on abandonment and on the verge of a complete extinction of its prime biodiversity. Unless concerted conservation actions are undertaken to reduce this trend, future generations will only live a history of its former biodiversity glory due to infringement and exploitation by the population. The Reserve's manager and Divisional officer confirms an intimate relation between the population and the reserve as the formers essential livelihood is based on the exploitation of resources from the latter. While the fight for its conservation or sustainable exploitation is just and will be advantageous to the population in the short, and long-term, it will be a difficult task to accomplish because the idea of a Reserve is lost to the population. An interaction and a few interviews with the indigenous population clearly brings to light the fact the basic notions of the understanding of what the Reserve should be is lost to the people.

Degradation of the Santchou reserve: a diversified milieu with diversified causes and activities

Ignorance, insufficient knowledge and misinformation champion the cause for the rapid degradation of this natural reserve. The population mistook the creation of the Santchou Reserve and the conservation efforts of public authorities as a means to estrange them from their land, principal anchor of their livelihoods and cultural identity. In the local context, they imagined largescale evacuations or living in a fenced-in and enclosed space with wild animals thus exploitation of the reserve became a defensive action against such prospects. From the experience of the current Divisional officer who has tried to enforce conservation efforts, the hostility of the population could only be compared to the intense love they have for their ancestral land. The people's reaction could only be interpreted that neither did they have enough information on the importance and necessity nor had they been sensitized on the significance of the disappearance of the Reserve on the local and international scale. It is regrettable today that the vast variety and exquisite fauna especially the dwarf elephant that made up the pride of the population can no more be seen during important traditional feasts and might never be sighted again simply because they have migrated out of the area.

Large food and cash crop plantations now occupy vast portions of the Reserve and according to the population, their existence have accelerated this last decade due to the sedentarisation of strangers from the Western, North and South West Regions. These lands were sold by the indigenous population to these strangers according to certain sources. With the aid of bush fires especially in the montane savanna area, large areas have also been cleared for the establishment of plantations.

During the creation of this Reserve, several villages were already inside the delimited zone but they have increased in size due to demographic explosion and installation of migrants from neighboring zones especially the Western region where there is high pressure on land. Demand for firewood and other wood products from local craftsmen/artisans and for construction have accelerated destruction of the forest cover. In the words of certain individuals, chainsaws can be heard sawing away almost daily for timber exploitation and expansion of existing plantations.

Exploitation of medicinal plants and poaching has equally contributed to degradation of the reserve from increased demand from neighboring villages and towns. Increasing demand is also attributed to the galloping demography, accused on the introduction of polygamy by foreigners. Many wives equals many children and as a direct consequence many mouths to feed and the main community granary being the forest, there is bound to be an accelerated exploitation. The disappearance of elephants in the Reserve is also attributed to the embrace of the Western culture by the youths, they have refused to be initiated into the tradition of their ancestors i.e. the keeping of 'totems'. Wild animals regularly invade and lay waste to large plantations thus their extermination to preserve farmers crops. Since most plantations are owned by foreigners, they are accused of killing these animals to preserve their farms while the allogenes accuse the natives of using their totems to destroy their crops.

Generalized poverty and the presence of many jobless youths could explain the reasons for the activities responsible for the rapid degradation of the Reserve. While agriculture is gradually intensifying especially for the production of cocoa, coffee and oil palms, market outlets are still insufficient to assure sustainable livelihoods. The absence of agricultural processing industries also limit potential sources of income thus the economy is based on primary activities and the Reserve constitute the major resource base. It is thus evident that the population has to be sensitized on the importance of conservation or an eventual sustainable exploitation strategy. The development of other profitable activities might curb the high degradation rates of the park while the technical capacity of current management institutions have be reinforced to be able to efficiently manage the Santchou Reserve.

Conclusively, fight against the current degradation and an eventual restauration of the reserve will principally include the following actions: promote a sensitization of the local population on the value and potential of the reserve. Reduce poverty and the precarious livelihoods of the people in the area, promote participative management and forest regeneration. The development of alternative activities i.e. non-agricultural, promote sustainable agricultural practices and reinforce the capacity of institutions managing the reserve.

Concessions and willingness of the population towards a positive change

The negative effects of the degradation of the Santchou animal reserve are evident and immediate action required an effective mitigation to be achieved. From the administrative agents, it is understood that the population live in abject poverty with insufficient access to health services, malnutrition, limited cultivable space and low incomes. While they are willing to change because they are becoming aware of the inconveniences of degradation, other profitable activities have to be developed for the population to exploit. Many elites have mobilized and have sensitized the population against the sale of land to foreigners especially the indigenes of Balé. This group of settlers are accused of the rapid degradation especially the killing of animals to safeguard their plantations, they are also accused to be responsible for the high demographic growth rates which have further increased demand and consequently degradation of Reserve land. Limiting the settlement of foreigners might also reduce the popularization of the Western culture which has reduced the population of youths to be introduced to the tradition of totems. The practice of sustainable agricultural practices would be welcome as it requires less space and profitable but producers have to be taught on the practice of these production techniques. The youths are also eager to participate in the traditional activities of their ancestors and be able to see the famous animals they have heard so many stories about but their economic situation obliges them to exploit the vast resources of the forest for their survival. Most importantly, the population is willing to participate with the current administrative agents managing the forest for an effective conservation. Their proposed actions include the reforestation of certain portions of the forest and the liberation of certain migratory corridors of settlements to permit animal species to return to their natural habitat. While certain areas have been colonized without hopes of recovery, certain traditional rulers and the youths have proposed a redefinition of the Reserves' cartography.

Before these concessions, any action to reconcile the present gaps should integrate certain principal objectives by identifying signs and manifestations of biodiversity degradation with its corresponding causes. It should also determine the immediate, mid and long-term consequences of the reduction in fauna and floristic species on the communities while identifying insufficiencies in the current conservation system and management of the reserve. Identify the opinion, preoccupation and complaints of the population as regards the reserve and identify the natural and cultural potentials of the reserve with a view to a sustainable and profitable exploitation. Sensitize public authorities, national and international stakeholders about the advanced state of affairs. Lastly, propose best adaptation strategies to better the conservation conditions while considering the needs of the indigenes and their living conditions.

Conclusion

Protected Areas in Cameroon are suffering from a continuous invasion by the local population. While the conservation of biodiversity becomes a preoccupying issue as demands increase, a consideration still needs to be done at the level of integrating the indigenes. The delimitation of protected areas in Cameroon as a whole and Santchou in particular has deprived the local population of their resources and if the indigenous people are denied their basic livelihoods through administrative creations that hinder them from depending on their natural resources, there is an unsolved problem which only gets bigger as the years go by". Solving such a problem is making sustainable exploitation and development the lamp light of protected areas. While future prospects visualize the removal of the population that has settled along certain migratory corridors of the reserve, it will be difficult to displace indigenes because they occupied the area even before the creation of the Reserve. This study therefore recommends a proper Wildlife and Protected area law enforcement and monitoring, concerted actions in protection and conservation (integrating the local population) to avert forest cover loss and also the reintroduction of the extinct pioneer wildlife species such as the dwarf elephants and dwarf buffaloes to their natural habitat for future generations.

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