

Community Participation in Wildlife Conservation and Protection in Oban Hills Area of Cross River State, Nigeria

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ABSTRACT This paper examines the nature and extent of Community-based Wildlife Management in Oban Hills sector, home to the Cross Rivers National Park, Nigeria. Community-based Wildlife Management (CWM) approach has been identified as an effective ethical way of integrating the goals of wildlife conservation with the needs of the rural poor in the tropics. CWM is premised on the notions that the stewardship over wildlife resides at the local rather than the state level, and that it is possible to improve rural livelihood, conserve the environment and promote economic growth at the same time. The Cross Rivers National Park (CRNP) located at Oban Hills, Nigeria, was created by the Federal Government in 1991. In-depth Interviews, Key Informant Interviews and the survey method were used to collect data. Five villages/ communities were selected purposively based on their proximity to the park and simple random sampling applied to select research participants. Findings from this research indicate that; community leaders and the youth play key roles of educating their members on the importance of wildlife conservation and guarding their forests from poachers respectively; they do not derive significant benefits from wildlife conservation efforts by the Federal Government; the implementation of laws prohibiting hunting in the protected area and harvesting of conserved animal species in forests in the buffer zone has negatively affected the livelihood of heads of households and male youth who were great hunters. This has inflamed feelings of neglect, deprivation and alienation which has generated different forms of conflicts between members of the communities and rangers of the Cross River National Park. The authors are of the opinion that Community institutions enforcing taboos and totem related to killing and eating of wildlife and non-governmental organizations or conservation societies, community leaders and youth should be strengthened and officially recognized as partners who derive significant benefits from wildlife management in Oban Hills, Nigeria.

INTRODUCTION

West and Central African Countries are experiencing a decline of wildlife populations due to the increasing trade in bushmeat, as well as problems of forest encroachment due to farming and large-scale plantation development. This decrease in wildlife populations has been acknowledged as a major concern not only by conservationists but also by local inhabitants (Akumsi 2003). Bush meat consumption is an integral part of livelihood both as protein requirement and important source of supplementary income but it is also of major socio-cultural importance (De Merode et al. 2003). Over harvesting has been found to be the key reason for forest wildlife declines in Africa (Bennett et al. 2007). Exploitation is increasing as a result of growing human populations, improved access to undisturbed forests, changes in hunting technology, and scarcity of alternative protein sources (Robinson and Bodmer 1999; Bennett and Robinson 2000; Fa et al. 2002). Bushmeat depletion in the Congo Basin supply may drop by 81

percent in less than 50 years if current rates of harvest continue, resulting in a dramatic increase in protein malnutrition (Fa et al. 2003). Over-exploitation of wildlife for bushmeat in West and Central Africa is a serious issue which can lead to local, national or worldwide extinction of targeted species, with tragic ecological and economic repercussions. Sustaining various species of wildlife both for future economic and social reasons becomes an important point of direction if the balance in the ecosystem must be sustained invariably.

Thus, effective wildlife management models need to be developed to secure bushmeat as a vital resource for both rural and urban populations and make it available for future generations. In many African countries, wildlife is still state property and hunting often illegal, leading to a situation of low ownership, non-recognition of user rights and even criminalisation of use. In order to change this situation, many countries are seeking ways to devolve user rights to communities as an incentive to invest in the long-term sustainable use of resources (Pailler 2005).

There is an increasing realization that, the management of wildlife resource needs to be inclusive and involve the local communities. Conservation authorities are increasingly becoming aware of the need to involve local communities in managing natural resources to safeguard and secure more space for wildlife conservation (Republic of Kenya 2008). One of the main drivers of community participation in conservation is the evidence and feasibility of benefit sharing from the project among various stakeholders. Kenyan experience suggests that the local communities are now seeking ways of getting benefits from the wildlife resources on their lands particularly through wildlife-based eco-tourism ventures that have the potentials for direct benefits (Kipkeu et al. 2014: 69). Community Wildlife Management (CWM) models may be one of the key mechanisms to engender support for attempts to make the bushmeat harvesting more sustainable. The focus of CWM is on enhancing the livelihoods of the people living in and from the forest zones that are often the poorest and most marginalised in their countries (Ashley et al. 2002). The CWM is based on the assumption that it is possible to improve rural livelihoods, conserve the environment, and promote economic growth (Roe 2001). However, detailed analyses combining socio-economic and ecological data on forest wildlife hunting are few and it is debatable if such systems can serve both economic and ecological purposes under current conditions (Songorwa et al. 2000). Some scholars are of the inclination that within human inhabited protected areas such as National Parks, it is seen that on the one hand, bordering communities multiple-value attachment for resource development and on the other hand, policies, strategies and programmes formulated in line with conservation principle have frequently been at points of conflicts. The attempt to protect the natural environment and the resources therein while on the other the need to have unrestricted access to natural resources have attracted attention (Brockington and Schmidt-Soltau 2006; Andrew – Essien and Bisong 2009; Andrew-Essien 2014: 55). Previously, Daniels (2002) also identified the fragility in resource development and conservation complexity in most conservation projects. In this regard, the cultural ties to the natural environment by many communities as a medium for extraction based on its recognition as a “giver of life” have triggered repeated and wanton resources decline. From the environment, the rich diversity of fauna and flora have

provided the much needed support for meeting the human needs for food, fuel and fodder. According to him, the concerted efforts at conservation are owed to the declining resource availability trends that are promoted by incessant encroachments through deforestation practices such as farming. In Nigeria, conflicts that pertain to resources use and conservation are as a result of the overriding influence of poverty.

The Korup-Oban Hills region of Cameroon and Nigeria, particularly the Oban Hills forest area of Cross-River in Nigeria is a very important conservation region with unique biodiversity, and many endangered species in this region. People in this forest zone have depended solely on these forest resources for centuries. The region was also the first trans-boundary conservation initiative in the Guinea-Congolian forest zone, containing a network of protected areas of various status and a huge amount of scientific reports have been prepared by consultants. Although bushmeat trade and marketing has been a subject of research, the extent of community involvement in conservation efforts in the area is relatively scarce or unknown. A study from Kenya (Kipkeu et al. 2014: 70) indicates that community participation in wildlife conservation in the Amboseli ecosystem is to a low extent. This stems from the point that the community members seem not to have connected with the programme as most community needs and aspirations might have been ignored on developing conservation programmes. This could lead to difficulties in enforcing conservation policies in the area as the policies may not be respected by local community where illegal activities may become common and/or locals may be dissatisfied with management of the ecosystem. It has been revealed that initiated projects by the government and other conservation NGO's are implemented without knowledge of the entire community and thus proceeds from land leases benefits a few (Kipkeu 2014b: 79).

Research on community involvement will make it possible to assess the extent to which indigenous beliefs and practices are embedded in the principle of wildlife conservation. In this regard, a critical explication of the functions and limits of taboos and customary practices attached to wildlife harvesting in Oban Hills communities of Nigeria will illuminate sufficiently on what the society stands to gain from various taboos and how these taboos can be constructively repositioned to achieve ultimate conservation of natural resources, for example wildlife

species. Presently, there is an imminent challenge posed by the search on realistic conservation approach where all stakeholders will be involved and happy. Currently, many countries have been challenged in the provision of sound and realistic approaches for the effective conservation of their natural resources, particularly where the sources of livelihood of rural communities have been affected (Andrew-Essien 2014: 58). As Andrew-Essien further pointed out, the apparent relegation of support communities to the background in conservation is reflective of the conflicts that the conservation programmes showcase in a bid to emphasize long term benefit of conservation to mankind. According to her, the establishment of National Parks in any ecologically rich environment should be primarily for the benefit of the support communities and its people and subsequently, the world at large. The violation of this maxim may result to chronic and acute conflict situation between various stakeholders, where one stakeholder is the ultimate source of ideas, policies and implementations without keeping other stakeholders into consultation.

Specifically, this study examined cultural institutions/ groups that are involved in wildlife conservation and the significance of wildlife to the people of the area (income, health and nutrition among others); documented the role of beliefs and taboos in wildlife conservation and investigated local community members' attitudes towards wildlife hunting and conservation. The study also investigated the effectiveness of community wildlife education strategies and enforcement mechanism in Oban Hill. In addition, the study also examined the CWM models that will ensure community investment in wildlife resources and engender sustainable wildlife exploitation by local communities and how social beliefs and taboos have a long-term influence on wildlife management systems.

MATERIAL AND METHODS

Study Area

Location, Vegetation and Topography

The Cross River National Park located in Cross River State, Nigeria was created by Acts Nos. 36 and 46 of 1991 and 46 of 1999 respectively. Precisely, it is under the control of the

Federal Government of Nigeria with a legal instrument promulgated through decree No. 46 of 1991. The park is made up of two sectors namely Oban and Okangwo. The Oban Hills Sector of the Cross River National Park was carved out of Oban group of Forest Reserves in 1991. With a total area of 2500 square km of high tropical humid forest, it shares boarder with Korup National Park, Cameroon in the east. The Oban Hills sector of CRNP is in turn divided into two corridors: the Obong/Nsan corridor and Oban corridor.

The Oban Protective Area is located in Akamkpa and Etung Local Government Areas of Cross River State, with its headquarters at Akamkpa, about 42 km from Calabar, the capital of Cross River State, Nigeria. The Park is headed by a General Manager who reports to the Conservator General of the National Parks Service. The General Administration of the Park is controlled from the Head office located at Akamkpa with two divisional offices at Bubatona in Okwangwo and Aking in Oban Division. The Oban Hills sector has a relatively large amount of tropical high forest remaining in their forest; the place also consists primarily of hills and swamps. The area has rainy season of at least nine months (March- November) with an annual rainfall of 3500mm or more. The terrain is rugged with hills ranging from 100 to more than 1,000 meters above sea level. The Protected area has a generally high temperature with an average of about 27^oc. The mean relative humidity varies between 78 percent and 91 percent, with an average of 85 percent.

The park, which is predominantly primary rain forest, is an area of high biological diversity and has been included in the data sheet Treatment in a recent WWF/IUCN publication on Centers of Plant Diversity and Endemism (CRNP OHP 1995-2000). The flora and fauna composition of Oban Hills sector has been described by Schmitt (1996). He identified 1,303 species of plants, 141 lichens, and 56 mosses. Seventy-seven of these are endemic to Nigeria. Fauna biodiversity included 134 mammals, 318 birds and 42 snake species, and over 1,266 butterflies. The vegetation of the Oban sector is currently dominated by tropical rainforest at various stages of degradation and recovery. There are patches of closed canopy, open canopy, secondary vegetation, farm fallows and oil palm plantations. The buffer zone is dotted with oil palm, cassava, banana, plantain, maize and cocoyam farms. There

are also numerous stone quarries around the buffer zone of the park.

Land Tenure and Administration

The Oban Hills protected area was formerly a forest reserve under the control of the Cross River State Government. However, the Federal Government took over the ownership of the protected areas as part of Cross River National Park in 1990. By legal instrument, the protected area was officially promulgated in 1991 through Decree No. 46. This is in line with the provisions of Land Use Act 1978 of Nigeria. The Land Use decree No. 6, was promulgated on 27 March 1978 (now Land Use Act) by the federal military government of the country. The main rationale and philosophy of the Land Use Act as advanced by the government was to remove the serious obstacles on the path of fast economic and social development in Nigeria. Hitherto, it was not easy to acquire land for development purposes, such as the National Park and Protected Areas.

The administrative responsibility lies on the General Manager who reports to the Conservator General of the National Park Services. The National Parks' service is domiciled in the Federal Ministry of Environment. Among other things, the Oban Hills protected area was established to meet the following principal objectives:

- i) Protection of the remaining tropical rainforest ecosystem together with its endemic species of flora and fauna, including its watershed;
- ii) Development of the ecotourism potentials of the region;
- iii) Ensuring sustainable development of communities surrounding the protected area and the support zones.

Sampling Technique, Sample Size and Data Analysis

The research adopted a multistage sampling technique in selecting respondents who participated in the study. Oban hills sector was purposively chosen for this study due to its vast wildlife forest resource base and prevalence of hunting in the area vis-a vis conservation efforts of the CRNP. Five villages (Aking, Efameyen, Ekang, Obung and Osomba) were chosen randomly, four from Oban east and one from Oban west. Within the selected villages, systematic random sampling was used to select every third

house alternatively from both sides of the road and two respondents were selected for the study.

A total of 45 oral interviews (Key Informant Interviews and In-depth Interviews) were conducted among the various sampling units within the communities in the study area. 288 people took part in the survey. Data collection instruments such as interview guides and questionnaires were pretested and modification made on the final copy. A comprehensive mapping and classification of various animals was carried out to generate a list of animals that are totem related vis-à-vis those that are not totem related. Primary data was collected through the use of participatory rural appraisal tools such as semi-structural interviews, seasonal calendar, activity profile and profitability margins, participant observations, focus group discussions, village meetings and in-depth interviews. Stakeholders who were considered to have direct influence on the management of the park were identified and various levels of interaction were carried out with them. They include: households, hunters, CRNP staff, Non Governmental Organizations; staff of Cross River Forestry Commission and Community leaders. Personal interviews were held with community leaders, key members of staff of the National Park, State Forestry Commission and Non Governmental Organizations. Secondary data was collected from literature such as annual reports, government gazettes, policy documents and commissioned project reports.

RESULTS

Socio-demographic Characteristics of the Study Population

Oban Hills Protected Area and Support Zones, comprise of about fifty (50) villages with a total of about 40,000 inhabitants. The area is inhabited predominantly by Ejagham ethnic group (47.9 %). Other ethnic nationalities found in the area include; Efiks (29.9 %), Ibibio (11.0 %) migrants from Akwa Ibom state, Yakur (2.8 %), Igbo (6.9 %) and Cameroonians (2.1 %). The major languages spoken include: Ejagham (80 %); Efik (12 %) and, Igbo (8 %). Forty percent of the respondents were within the age range of 41-60 years, while 36 percent were between 61-80 years. Data on marital status indicated that the marital status analysis showed that 56.9 per-

cent had only one wife, 15.3 percent had more than one wife, while only four percent were single. Number of children per household ranged from 1 and 10. Those with between 7-10 children were the highest, followed by families with 4-6 children. Thirty-eight percent (88%) had between one and three other relatives staying with them, while thirty percent had four to six relatives.

Generally, farming is the main occupation which is practiced by 59.7 percent of the respondents, followed by trading (12.5 %), while others are engaged in activities such as hunting (7.6 %) public service (6.9 %), Menial jobs (4.9 %) and craft (2.8 %). Among other things; participation in the social and economic production of bushmeat has supplemented other occupations of people of Oban area, as (8.33 %) of the households participate in the trade on bush meat. Slightly more than half 51.4 percent and 33.3 percent of the respondents have completed secondary and primary school respectively. The people of Oban Hills are mainly Christians. This may be as a result of early influence of missionaries in the area. Traditional worship of ancestor and of other gods is largely unpopular in the area. The presence of shrines and places of worship and sacrifices for the local communities have drastically reduced over the years.

Community Wildlife Exploitation and Conservation Rules and Strategies

This study revealed that beliefs and taboos form part of the guidelines for both extraction and consumption of bushmeat in the various communities of Oban Hills. Taboos and beliefs come in form of totems for different villages, families, households and even individuals. They underline the 'ought not' with regard to animal killing and consumption. More importantly, reasons especially traditional oriented ones are attached to these totems, which make these animals forbidden creatures. In most communities, for those who have taboos, it is believed that anybody that breaks such a law may be infected by disease inflicted by their ancestors, which requires some particular sacrifices to appease the gods of the land.

Most communities' members of the Oban Hill understand both in principle and practice with regards to totems and taboos about various animals. Speaking from a relatively modern and alien conception a school teacher at Oban maintained

that there is no animal that is meant not to be killed or eaten. Though he knew that the decision by some people not to kill or eat a particular meat may be for spiritual reasons, which implies that taboos are sometimes religious observances and preferences. In his words

'There is no general rule or laws that prohibit the killing and consumption of a particular animal. Though individually, many people may not want to kill or eat certain animals based on their individual life experience or through spiritual instruction.....there is no animal that I cannot eat except python because it looks so dreadful and more also when it is not properly cooked it can cause body rashes and itching.'

The above position differs across villages, according to one of the Park Rangers interviewed, 'in some communities among the Ishobo, they have some animals that should not be killed based on culture and tradition of the people, but in this part of the Oban sector of the Park, most communities do not have such taboos any longer.' Observation from the study indicates that cooked bushmeat buyers usually ask for the identity of the meat before they purchase. One of the bushmeat sellers interviewed at Oban village did not know why people usually ask for the identity of meat before they can purchase or eat them. However, she noted that some ethnic groups do not usually ask for or eat particular types of meat. According to her

'Anybody who wants to buy cooked bush meat from me usually asks for the type of animal before buying. For instance the Igbo (Ibo) people do not like monkey meat, while the Akwa Ibom people of mainly Ibibio and Anang also do not like monkey. It is forbidden in their areas.'

The notions about taboos by most communities in the Oban Hills sector are not really emphasised. Taboos as observed from the field would have been very strong in the past, with little or no recognition of such in the recent time. However, the survey revealed that all the households responded to the fact that there are animal species that are forbidden to be eaten by different people due to one reason or the other. Table 1 indicates species of wild animals that are forbidden among communities around the Oban Hills sector.

Efforts by the community members to protect these wildlife species shows more vividly in

Table 1: Some forbidden wild animals species among communities around the park

Species	Aking	Eking	Mfam-eyin	Oban	Osomba
Alligator	F	F	F	F	F
Bush pig	NF	F	F	F	F
Boar	F	NF	F	F	F
Elephant	F	F	F	F	F
Monkey	F	NF	F	F	F
Snail	F	F	F	F	F
Snakes	F	F	F	F	F
Tortoise	F	F	F	F	F

Source: Field Data

NB: F = Forbidden NF = Not Forbidden

their formation of functional cultural associations which are involved in the wildlife conservation in the communities where they exist. Among these groups, *Mgbe* has the widest recognition among villages followed by *Angbu*. Other cultural associations include *Adenwa*, *Momikin*, *Obon*, *Egbe*, *Nabor* and the Women Association. Obioha et al. (2012) recorded these ten cultural associations, while seven laws and taboos are in practice, which are relevant to sustainable use of natural resources in the area (Table 2). For instance, *Ofu Anaka* is a traditional law which forbids women from hunting on certain days, The offender of *Ofu anaka* may be asked to go to the 'evil forest', she will also present 4 bottles of native gin and one jar of palm wine to the community. Similarly, *Ofu Dibu* is a traditional law which forbids men from hunting on some days. There are penalties to the offenders of these laws or taboos. For *ofu dibu*, anyone who contravenes the rule must pay a fine consisting of a goat, some tubers of yams, bunches of plantains and two cartons of beer.

The community members believed that at least some of their cultural associations should be involved in wildlife conservation so as to reduce the feeling of marginalization. These include the youths who can assist in protecting the park against external encroachment based on the fact that they are believed to be strong, fast and active. It is a strong opinion from the community members that the community leaders and the *Mgbe* deity should be involved due to some attributes. The reasons given for the involvement of community leaders is that they possess the wisdom to guide the youths and other members, while the deity possesses some

spiritual characteristics that are capable of eliciting social control on the majority of the people.

Table 2: Indigenous cultural institutions, traditional laws and taboos in the communities

S. No.	Cultural institutions	Traditional laws/taboo
1	Mgbe	Ofu Anaka
2	Angbu	Ofu Dibu
3	Ademwa	Law against use of chemical for fishing
4	Momikin	Law for bidding women from touching Civet cat
5	Obon	Law or taboos that forbid hunter from killing pythons
6	Egbe	Law for bidding pregnant women from eating elephant
7	Nabor	Law or taboos that forbid hunter from killing leopard

Source: Field Data

Local Community Members' Awareness of and Attitudes towards Wildlife Hunting and Conservation of Wildlife

There is an understanding that locals are aware of conservation of wildlife in the area. The respondents of the study identified the federal government (97.9 %) as the most important institution involved in conservation of wildlife. Among the identified agencies of government, the Cross Rivers National Park (76.4 %) ranks first in the implementation of conservation policy in the Oban Hills sector. The CRNP enforces the policy through public enlightenment (22.9 %), arrest of violators (17.4 %) and liaison with other government agencies (39.6 %) and the enforcement of local taboo (13.2 %) within the communities.

However, it is not clear whether they actually understand the policy document. Knowing quite well that the policy is made in order to avoid total elimination of the endangered species as it is known that some animal species in various parts of the world had since gone into extinction; even the educated members of the community find it difficult to believe the main thrust of this policy. This can be attributed to the common belief in this area by some people that animal species cannot be totally eliminated, that they are there in the bush but it will only take a hunter along time to find such animal. Their belief is that the animals that are no longer

seen are not in extinction, rather the hunting activities and the Quarry industry make them to run far away from the Parks. In spite of the above opinion, some community members really believe that some animals have disappeared and have probably gone into extinction. The Pangolins, bush cow etc are believed to have been eliminated in this area, according to a Chief in one of the villages around the Park. The major concern among the people is that most of their children do not know such animals that have disappeared. According to one of the respondents, a school teacher at Etim:

‘Most of our children, do not know some of these animals. If they were better preserved, they would have been able to identify them. Continuity makes our children to see these Animals. It will also contribute to education and preservation of our natural environment. It also gives animal nutrition for body development.’

It is important to have an understanding of wildlife species that are currently found in the area of study. Table 3 shows the varieties of species that are found in the five villages of Aking, Eking, Mfameyin, Oban and Osomba in the Oban Hills Sector. From the table it is apparent that some animals are no longer in existence in some locations.

Table 3: Wildlife species present or absent in the communities

Animal species	Aking	Eking	Mfam-eyin	Oban	Osomba
Antelopes	P	P	P	P	P
Boar	P	P	A	P	P
Bush pig	P	P	P	P	P
Chimpanzee	P	P	P	P	P
Crocodile	P	P	P	P	P
Duikers	P	P	P	P	P
Elephants	A	A	P	P	P
Grass cutter	P	P	P	P	P
Gorilla	P	P	A	P	P
Monkey	P	P	P	P	P
Pangolin	P	P	P	P	P
Porcupine	P	P	P	P	P
Python	P	P	P	P	P
Tiger	P	P	P	P	P
Tortoise	P	P	P	P	P
Snakes	P	P	P	P	P

Source: Field Data
 NB: P = Present A = Absent

Participants also believed that, as endangered animals are getting reduced it means the human protein required by the body for growth

and development will also reduce, which may lead to diseases and sickness. From a political point of view, it can be gleaned that most of the Chiefs and their community members are not happy about the fact that the government has instituted this conservation policy, by using their forests for that purpose. In the words of one of the village heads :

‘We are seriously annoyed with the decision to have our bush as National Park. That is what we depend on as means of livelihood, where we can get our small money. We are not happy with them.’

It is a common opinion among the Chiefs and village heads that, when the forest was taken away from their control, government promised to support the local people and provide an alternative means of livelihoods for them, as they are not allowed to hunt in their forests any longer. The government promised to establish fishponds, snowing, open farm lands, and build roads and to give loan to members of the community to engage in the above mentioned ventures and piggery farm. Since that time nothing has been done to assist members of the communities who at the same time were restricted from entering the forest to hunt for their livelihood. Basically, their main complain was lack of land to farm, to train their children in school.

The community members complained of non employment of their children in relation to the National Park and as such they believed that it is of no benefit to them. They are not in tune with the policy as they think that they would have been better if the forest was given to private companies to manage as most compounds are poor because of failed promises by the government. It is evident that the community members are not happy about conversion of their farmland and hunting forest to National Park. Their inclination is that the establishment of the National Park through the enabling laws has impoverished their people and that they would have been better in a ‘without situation.’ Members of the conservation authorities like the NGOs, and some officials are not particularly optimistic that the policy which established the National Park will end hunting in the area. For instance a conservationist with one of the NGOs reiterated the following:

‘If anybody tells you that hunting activities would stop such a person a not being realistic. I have been an educator for over 12 years; it

is not realistic that hunting of wildlife will stop.'

However, it is a common believe among the conservationists that when the hunters and community members understand some of the concepts, the conservation idea will then be internalized. General information on households' perception of the Park revealed that the CRNP establishment is known to many members of the communities. From the survey conducted in various communities, 85.8 percent of the respondents were aware of CRNP around them. A hunter in Osomba made the following observation about the role of CRNP:

CRNP are security for the animals in the forest, they do not want anyone to tamper with animals in the conserved area. I think what they are doing is very good. This is because without the CRNP some of the animals we have today would have reduced. This has limited the rate of hunting in this place. For instance, there are some animals I know and my son or daughter may not know were it not for the activities of the CRNP.

The majority of community members have desired to be part and parcel of the Park Management. In this regard, 96 percent of the respondents welcome the idea of communities' involvement in park management. According to them, the aspects which the communities could be involved include, park protection (35.3 %), decision making (32.4 %), advisory services (20.6 %), and park maintenance operations (8.82%).

The study revealed that community leaders (9.7 %) and youths (6.3 %) also play important roles in ensuring that policies governing conservation of wildlife is enforced in their communities as part of their usual community practice. The community leaders hold regular meetings with the youths where important policies and rules governing different activities in the community are made. The youth have been mobilized into vigilante groups to patrol their forests in order to ensure that hunters do not encroach into the conserved area. The youth also patrol the forests to ensure that foreigners adhere to the cultural and legal laws governing wildlife exploitation. Community members accused Ibibio hunters of violating existing taboos regarding wildlife harvesting in the area. Specifically, Ibibio hunters are believed to use charms to lure wildlife from their hiding for them to be harvested. At *Ekang* axis of the study area, there exist

Mfameyin Conservation Society which assists in enforcing wildlife conservation policy through public awareness and provision of alternative livelihood strategies such as prvision of plants seedlings, animal husbandry and fish farming. The project which commenced only recently is donor supported and just at its infancy. It is yet to be seen whether community members especially hunters would find this option viable. This will depend on the profits derived from these alternative income generating activities vis a vis profits derived from hunting of wildlife.

Wildlife Related Conflicts in the Protected Areas

Most community leaders and their members surrounding the protected area are unhappy about the establishment of the CRNP. They argue that the CRNP has negatively affected their livelihood capacity by reducing the proportion of land available for farming, placed restrictions on wildlife hunting within the conserved area and harvesting of protected wildlife species in the buffer zone. The result is the emergence of various forms and dimension of conflicts and contestations over resource use and control leading to the destruction of property and bodily harm. Previous study on level of awareness of existing conflict between the Park Management and the surrounding communities in the study area revealed a substantial knowledge of presence of conflict in the Cross River National Park. Andrew-Essien (2014: 56) established that seventy-eight percent (78%) of National Park respondents affirmed the existence of conflicts, while twenty-two percent (22%) of respondents indicated not being aware of the existence of any disagreement between the Park and its host communities.

Various reasons have been found to be the root cause of conflict between the park authorities and surrounding communities in some cases. From her study in Cross River National Park in Nigeria, Andrew-Essien (2014: 57) found a discrepancy between what the National Park management on one hand and the community members on the other hand allude to be major reasons for conflict in the zone. While the management perceived restrictions of livelihood sources of the communities as the major turning point, most community members attribute the conflict situation and disagreement to lack of education

of the people by the park management. Similarly, Jacob et al. (2013: 17) found that majority of the reasons for the conflict was due to the negative impacts the park establishment had on the socio-economic status of the respondents and the difference in values of the natural resources between the conflicting parties. Conflict between the park and the support zone communities is largely connected to contests over resources and access to them. For this present study, conflict situation arises when rangers of CRNP arrest hunters for either hunting within the core area or harvesting protected wildlife species. Usually when arrests are made, the culprits are taken to holding cells at the sub-division of CRNP at Aking, and information is passed to the head quarters at Akampka for transportation of offenders and prosecution. This process takes some time since the sub-divisions lack basic equipments for communication and transportation, thus giving the community members sufficient time to mobilize themselves with the aim of releasing their arrested kin using any means possible, including violence. In determining the conflict types, non-cooperation with the park management appeared to be the dominant form of conflict, while the more expressive types such as open hostilities and resentment were found to be negligible from the work of Andrew Essien (2014: 56). These dimensions have been previously expounded in the work of Bassey (2003), which details a general survey of conflict in South-east Nigeria.

This study observed that most of the households in the study area are poor according to the United Nations Development Programme international standard and measurement of poverty. There are apparent inadequacies of infrastructural facilities which reduce quality of life of the people in the area. Besides, there are limited sources of income, which forces local community members to either engage in full time hunting and trading in bushmeat or in a part time occupation in conjunction with farming, which is the main source of subsistence in the area. Apart from the direct economic gains derived from marketing and trading in bushmeat, the by-products are useful sources of protein, traditional medicine, arts and craft.

DISCUSSION

This study examined the extent of community involvement in wildlife conservation in Oban

Hills, Cross River State, Nigeria. A Community-based Wildlife Management (CWM) approach has been identified as an effective and ethical way of integrating the goals of wildlife conservation with the needs of the rural poor in the tropics. The CWM is premised on the notions that the stewardship over wildlife resides at the local rather than the state level, and that it is possible to improve rural livelihood, conserve the environment and promote economic growth at the same time (Roe 2001). In Oban Hills sector, about fifty communities in the buffer/ support zone do not participate in the management of Cross Rivers National Park. As identified by Daniels (2002), the management of the protected area is strictly controlled by the park authorities. Although community leaders and the youth play important roles of education/awareness and patrol of the forests, the proceeds from ecotourism goes to the national parks service. The communities are neither involved in the planning and monitoring nor do they derive any benefit from conservation efforts. This is contrary to the policy orientation of the recent wildlife legislation in Nigeria. The policy planned to adopt innovative approaches to promote community participation in forest management on both forest reserves and forest areas outside forest reserves. The aim of this policy is to address the disincentives associated with a protectionist approach to forest management whereby government is regarded as the major stakeholder on forests management. It also addresses the destructive practices associated with open access to forest resources. The development of collaborative forest management will define rights, roles, and responsibilities of partners and the basis for sharing benefits from improved forest management. There will be a specific focus on wide stakeholder participation, collective responsibility and equity, and on improving the livelihoods of forest-dependent communities. The policy also plans to encourage collaborative partnership with rural communities for the sustainable management of forest resources to ensure the supply of goods and services from the forest for the present and future generations.

As revealed in the study, various taboos and totems regarding wildlife harvesting and killing still exist in the area, although with minimal impact in wildlife conservation. These cultural practices and institutions can play a very important role in ensuring sustainable exploitation of wild-

life resources if properly incorporated into conservation policy. This is based on the notion that wildlife for most forest dwelling people is communally owned and cultural beliefs systems enhances social control, as previously alluded by Ngoufo et al. (2014) on the social norms and cultural practices that relate to wildlife utilization in Cameroon. As revealed by this study, community members perceive sustainable exploitation of the wildlife resources in terms of adhering to the conservation policy as advantageous for the future of their communities. For instance, they understand through their indigenous knowledge system that adhering to the rules of wildlife conservation will enhance having enough wildlife to eat in the near future as the conservation practice allows the animals to reproduce. Besides, sustainable exploitation will ensure non total elimination of the species, especially those that have been labelled endangered species, which as most of the community members reiterated may achieve the purpose of continuity of the animals from the present generation to the future.

Furthermore, community leaders and members believe that a policy such as Wild Life Conservation Policy should be made in consultation with the people in order to make it look home grown. This has been previously elucidated by Andrew-Essien who believes that the administrative procedures employed in many parks can be considered as catalysts to conflict inducement (Andrew-Essien 2014: 55). Conflict of objectives and administrative procedures in most conservation areas have been implicated as a fundamental source of conflict between various stakeholders, especially the communities around the protected areas and the managing authorities. It is clear that there is a clash between the objectives of biodiversity conservation and the development needs of the people inhabiting these areas. The administrative procedures employed in many parks can be considered as catalysts to conflict inducement. Three administrative options are generally recognized which include the top-down, mixed management and bottom-up management approaches (Daniels 2002) These approaches to administration have diverse resulting consequences and impacts such as displacements, disagreements, opposition and non-compliance (Arambiza 1998; Leitao and Nascimento 1994).

The above revelations corroborate the notion of institutional challenges of community

wildlife management (Hurst in Davies et al. 2007). These challenges as have been observed by numerous scholars are pitched on the nuance that wildlife management models in forests have often favoured the exclusion of potential users and local communities (as it is the case in Oban hills), from the resource, which leads to cultivating an opportunistic and “grab-it-first” mentality among stakeholders and leaving no incentive for long-term oriented management. Previous studies and more importantly the works of Arambiza (1998) and Leitao and Nascimento (1994) have shown the importance, tradeoffs and gains from collaboration between the scientific conservationists and the indigenous people in protected areas. Their studies affirmed the need for inclusive and bottom up approach in conservation matters in order to make the system work.

The way forward is to recognize that local wildlife consumption and trade is something to be managed, not devalued and criminalized (Brown 1999). Local people are more likely to support full protection of some areas if they perceive direct benefits from them (Milner-Gulland et al. 2003), as some recent studies (Obioha et al 2012; Ngoufo et al. 2014) have indicated the invaluable importance and contribution of wildlife products and bye-products to various livelihood benefits of Oban communities. The value of setting aside no-take areas as source for wildlife populations needs to be recognized by local communities (Sutherland 2000; Novaro 2000). A realistic and community oriented land policy often leads to a positive attitude of community members towards conservation, as correlation has been found to exist between level of community participation, land tenure and land use systems (Kipkeu et al. 2014). Participation of local people in conservation and management of wildlife resource is also a function of perceived benefit sharing. The drive for the local people to control and benefit from wildlife resource within their areas of jurisdiction is now widely accepted concept for managing protected areas in many parts of the world. “It is therefore imperative that the management of the wildlife resource in the ecosystem has to be inclusive and involve the local communities. Decentralized wildlife resource management is necessary to sustainable development and equitable benefit sharing arrangement. In order to meet the conservation goals and local community’s livelihood needs, the increase of public education and awareness

on conservation and wildlife management is critical” (Kipkeu et al. 2014: 70).

In addressing the issue of wildlife sustainability under prevailing socio-cultural, economic, policy and environmental conditions in the Oban Hills sector, an array of responses abound. This question has a very broad implication for addressing the sustainability of any forest resources management approach, such that collection of good baseline social and natural science data is required during the planning process of any initiative (Olsen et al. 2001; Ngoufo and Temgoua 1997). An evaluation of the Oban Hill region, incorporating the above conditions suggests some expert interventions to achieve sustainability. With the present economic, social and cultural situation in the area, where there is poverty, unemployment and absence of basic infrastructural facilities, coupled with unforeseen substitute or alternative to wildlife harvesting, sustainability can be achieved given the fact that there are alternative sources of livelihood available to the people to choose from. It is popularly believed among scholars that community participation in conservation will increase if they foresee any equitable benefit sharing amongst all stakeholders from the project, unlike the model that exists in the study area at the moment. In exploring equitable benefit sharing modalities as a driver for community participation, Kipkeu et al. (2014b) sought to establish measures that can bring an equitable sharing of benefits from wildlife conservation to the rural community in Kenya. Their study found the need for local park management to disseminate information on revenues generated from Amboseli and the expenditures in running the park, for appreciation of the benefits and costs of conservation in the ecosystem is very important to the community members. With proper communication, all community members will believe in the conservation crusade as they will collectively share the accruing benefits /costs of wildlife conservation in the ecosystem.

However, the policy environment and implementation condition at its present shape may not be able to lead to sustainability of wildlife harvesting, given the fact that the community vanguards and the government agencies are working differently in “silos” instead of working together. In the main, the government agencies and policies have not yet recognised the efforts and contributions of the community con-

servation initiatives which are practical and complementary to the formal policies. Until when such time where community efforts are recognised, the government unilateral conservation efforts will continue to be hectic with little expected outcome.

From a more realistic point of view, there are some critical issues and conditions to be monitored very closely, as exploitation is increasing due to growing human populations, improved access to undisturbed forests, changes in hunting technology, and scarcity of alternative protein sources in the communities abound (Robinson and Bodmer 1999; Bennett and Robinson 2000; Fa et al. 2002). Bushmeat depletion in the Congo Basin is real and supply may drop by 81 percent in less than 50 years if current rates of harvest continue, resulting in a dramatic increase in protein malnutrition (Fa et al. 2003). In spite of the present challenges, sustainable wildlife conservation is realisable in the region, given the present practices and recommendations from other regions in Africa. For instance, recommendation for sustainable wildlife conservation from Kenyan experience include adopting land use practices compatible with wildlife conservation, enumerating benefits/liabilities of wildlife, enabling institutional arrangements that enhance wildlife conservation, enhanced benefit sharing and community rights and adoption of land use plan which guide land use types within certain areas (Kipkeu et al. 2014b: 80)

CONCLUSION

Evidence generated from this study clearly indicate that communities in the core and support zones of the Cross River National Park are not meaningfully involved in the management of wildlife and conservation effort in the area. Community leaders play an important role of educating their members on the laws concerning wildlife harvesting in the area since failure to do so often generates unpleasant situations for them and their members. A community leader at Ekwang narrated the ordeal they went through eventually paying a total sum of N170,000 in order to facilitate the release of their kin. The study also found out that community members are disappointed with government for not keeping their own part of the agreement of providing alternative livelihood strategies for them. Evidence also show that the entire Oban Hills

sector has been ignored by government as the area lacks basic infrastructural facilities such as schools, hospital, electricity and safe drinking water required to live a fulfilled life. Majority of the inhabitants of the area are poor according to United Nations Development Programme international standard and measurement of poverty. Thus, the establishment of the Cross River National Park negatively affected the livelihood capacity of the people by reducing the proportion of land available for farming, placed restrictions on wildlife hunting within the conserved area and harvesting of protected wildlife species in the buffer zone. The result is the emergence of various forms and dimension of conflicts and contestations over resource use and control leading to losses to the communities and Cross River National Park.

Community wildlife management implies that the community or village is an important stakeholder in the management of wildlife conservation. They should share in the benefits of ecotourism and other revenues derived from their forests which should serve as incentive for them to report illegal hunting activities and alternative livelihood options should be provided.

RECOMMENDATIONS

In line with the conclusions reached by this study, the following recommendations are suggested to engender community involvement in wildlife conservation efforts and ensure sustainable wildlife exploitation in Oban Hills. The park management and Nigeria Conservation Foundation should carry out participatory rural appraisal in all the communities in the core and buffer zones of CRNP. Secondly, incorporation of existing community institutions in the planning, decision making and monitoring of conservation policy. Similarly, the already alternative sources of livelihood engaged by the people need to be supported by the government by abiding by their promises of establishing small scale ventures for the people. Besides, conflicting laws with regard to enforcement and monitoring should be harmonized including laws that can control international poaching. Finally, public enlightenment and education with regard to promotion of cultural taboos and totems should be encouraged wherever they are identified.

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