

Assessment of bush meat exploitation by hunters in Ifon Area of Ondo state, Nigeria

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ABSTRACT

This study assessed the bush meat exploitation by hunters in Ifon Area of Ondo State. Questionnaire was administered as interview guide to all 30 members of hunters association in the area as well as personal visits and observations were made, while discussions and interviews were made use of to obtain information on the study area. Data collected was analysed using descriptive statistics (Frequency count and Percentage, Measure of Central Tendency and Measure of Dispersion). Results reveal that the bush meat species commonly found and consumed, reasons for bush meat hunting, the effect of bush meat exploitation on the area and the level of awareness with regard to the negative impact of bush meat exploitation on Wildlife Conservation. Based on these findings, it is essential that, logging companies are encouraged or urged not to facilitate bush meat hunting and transportation in their concessions. Likewise, social marketing activities should be put in place to attempt to direct consumer preferences for animal protein away from bush meat species that are particularly susceptible to over-exploitation.

Keywords: Bush meat exploitation, Wildlife conservation, Social marketing

INTRODUCTION

In Africa, uninhabited forest is often referred to as 'the bush', thus wildlife and the meat derived from it is referred to as 'bush meat' (in Yoruba- *Eran-Ìgbé*). This term applies to all wildlife species, a number of which are threatened or endangered species, used for meat including: elephant (*Loxodonta africana*); gorilla (*Gorilla gorilla*); chimpanzee (*Pan troglodytes*) and other primates; forest antelope (duiker: *Cephalophus monticola*); porcupine (*Hystix cristata*), bush pigs; cane rat (*Thryonomys swinderianus*); pangolins; monitor lizard (*Varanus niloticus*); and guinea fowl (*Numida meleagris*). Bush-meat generally refers to meat from wildlife sources or undomesticated animals which are normally consumed in place of meat from domestic origin or livestock. Bush meat, the meat of wild animals is one of the most valuable tropical forest products after timber. It is an important source of protein, widely consumed in both rural and urban areas (Wilkie and Carpenter, 1999). The magnitude of its exploitation and consumption however varies from one place to the other and is determined principally by its availability, but this is also influenced by government control on hunting, socio economic status and cultural prohibitions (Asibey and Child, 1999). Bush meat has been part of the local diet for centuries (Grubb *et al.*, 1998 cited by Bifarin *et al.*, 2008). National estimates of the value of the domestic trade in bush meat range from US\$42 to US\$205 million across countries in West and Central Africa (Davies, 2002). Ayodele, *et al.*, (1999) postulated that the supply of Bush meat

from wild sources no doubt serves as the only possible measure to bridge the gap between livestock production and human population growth.

Though habitat loss is often cited as the primary cause of wildlife extinction, unbridled hunting for the meat of wild animals has become an immediate threat to the future of wildlife in Ifon Area of Ondo State and around the world. However, in recent years, there has been an important transition from subsistence to commercial hunting and trading of wildlife because of accelerating population growth, modernisation of hunting techniques, and greater accessibility to remote forest areas (Ape Alliance, 1998; Wilkie and Carpenter, 1999). Bush meat and pet trade are often by-products of hunting. Commercial exploitation of Bush meat has reached a crisis situation in Africa leading to the formation of the Bush meat Crisis Task Force (BCTF) with the vision of eliminating the unsustainable, illegal, commercial bush meat trade (BCTF, 2004). Sustainable exploitation of natural resources requires that levels of off-take be lower than the rate of production. This is rarely the situation with Bush meat enterprise in any part of West Africa. Over exploitation of wildlife resources leads to impoverishment of local people through the destruction of wildlife habitats, wildlife based economy, environmental degradation and loss of biodiversity (Ayeni and Mdaihli, 2003; Madzou and Ebanega, 2006).

In tropical areas, the meat of wild animals has long been part of the staple diet of forest-dwelling peoples. In Africa, bush meat is sold for public

consumption either fresh or smoked. Bush meat remains the primary source of animal protein for the majority of forest families, and can also constitute a significant source of revenue (Juste *et al.*, 1995). The high demand for bush meat and the lucrative trade associated with it is the main reason for the high extraction rates estimated for many West and Central African countries (Fa and Peres, 2001). Although changes from subsistence to commercial hunting has been occurring for some time (Hart, 2000), many more hunters are now supplementing their incomes with the sale of bush meat. Such commerce increases the amount of hunting and reduces the sustainability of populations of numerous wildlife species largely because it enlarges the effective human population density of consumers eating meat from an area of forest (Bennett and Robinson, 2000). Commercial hunters and traders supply urban markets for profit to meet the increasing demand for animal protein in urban centres. Markets in towns and cities are the main sales-point for species extracted from natural areas (Fa *et al.*, 2000; Fa *et al.*, 1995). The specific objectives of the research work were to obtain information on: animal species commonly found and consumed as bushmeat, reasons for bush meat hunting, the effect of bush meat exploitation on the area and the level of awareness with regard to the negative impacts of bush meat exploitation on Wildlife Conservation.

METHODOLOGY

The study was carried out in Ifon; the headquarters and seat of government of Ose Local Government Area of Ondo State of Nigeria. Ifon is a junction town with two axes to Edo State and one to the rest of Ondo State. It lies at about the mid-point on the Federal Highway that connects Akure and Benin City. Located on an elevated terrain, a view from the centre of the town confirms the beauty of the surrounding vegetation and the richness of the Ifon land. Ifon is blessed with many mineral resources e.g. Kaolin and granite. There are also abundant forest resources like timber and games reserve. Ifon games reserve is one of the well-known reserves in Nigeria. Questionnaire was administered as interview guide to all 30 members of hunters association in the area as well as personal visits and

observations were made, while discussions and interviews were made use of to obtain information from respondents in the study area. Data collected was analysed using descriptive statistics (Frequency count and Percentage, Measure of Central Tendency (Mean, Median and Mode) and Measure of Dispersion (Standard deviation, Variance and Sum).

RESULTS AND DISCUSSION

There was only one hunters association in the area having thirty (30) members. All the respondents in Ifon area of Ondo State were male (table 1) reflecting the fact that hunting of wildlife was a male-dominated occupation. The Age group/stratification of the respondents as it appear in table 1 shows that, no respondent was less than 20 years of age. The other age brackets and the percentages were 20-30years (13.3%), 31-40years (20%), 41-50years (33.3%), and >50 years (33.3%). The highest number of respondents were within the age bracket 41-50years and >50years.

Of the respondents 3.3% were single while 96.7% were married. No respondent was a divorcee or widower. The level of education attained by the respondents and their percentage respectively were: primary (33.3%), secondary (40.0%), OND/HND/NCE/BSc/MSc/PhD (16.7%) and respondents represented by 'Others' (10.0%).

The mean and Median of respondents sex was 1.00, with the Mode 1. Whereas, the Standard deviation and variance of respondents' sex was 0.000, the sum total was 30. The mean and median of respondents' age were 3.87 and 4.00, respectively, with the Mode of 4^a (here, multiple modes exist, and 4 happen to be the smallest). The Age standard deviation and variance were 1.042 and 1.085, respectively, with the total sum of 116. The marital status mean, median and mode were 1.97, 2.00 and 2, respectively, whereas the standard deviation, variance and sum of the marital status were 0.183, 0.033 and 59, respectively. The Level of education attained by the hunters had the mean, median and mode as; 2.03, 2.00 and 2, respectively, whereas, the standard deviation, variance and sum were 0.964, 0.930 and 61.

Table 1: Distribution of respondents by demographic characteristics

Demographic characteristics	Frequency	Percent
Sex		
Male	30	100.0
Female	0	0
Age		
< 20	0	0
20-30	4	13.3
31-40	6	20.0
41-50	10	33.3

Demographic characteristics	Frequency	Percent
>50	10	33.3
Marital Status		
Single	1	3.3
Married	29	96.7
Divorcee	0	0
Widow	0	0
Level of education		
Primary	10	33.3
Secondary	12	40.0
OND/HND/NCE/BSc/MSc/PhD	5	16.7
Others	3	10.0

Source: Field Survey, 2012

Out of the respondents, 93.3% were of the opinion that the populations of wild animals are inexhaustible, while 6.7% thought the effect of exploitation of Bush meat on wildlife will be negative in the area. The majority of the hunter's believe that exploitation of bush meat does not have any effect on wild animals in the area, confirming the common position that, the rate of production is higher than the rate of exploitation. By this, it is believed that the rate at which the animals reproduce in the wild at Ifon area of Ondo State was higher compared to the rate at which they were exploiting them, and as such, their hunting activities had no effect on the wildlife in the area. These clearly show the extent of their level of awareness, because no matter how numerous the wildlife are in the bush, if they are exploited without check, the number will be depleting at a gradual or steady rate, which will result in extirpation of population of wildlife at the end. Some were aware of the laws relating to bush meat but believe that bush meat is part of God's gift to man that should be killed and eaten at anytime one wishes or even depend on for sustenance.

All the respondents agreed that, bush meat exploitation in Ifon Community is contributing to the economy and development of the area, though

some said they had not really felt the effect personally in their own family, but were hopeful that it will impact positively soon. The impact on the household was positive as the hunters made references to their achievement as a result of the hunting of wildlife and they also attributed the economic development of the community to bush meat exploitation because they transported some of the bush meat to urban areas at times where they are sold at high prices.

Most of the respondents attributed their hunting reason to poverty in that they needed to support their families. As shown in Table 2, 22 respondents (73.3%) hunt to support their families, while 3 respondents (10.0%) hunt due to hardship and 5 respondents (16.7%) hunt for leisure. When the animals are killed, they are often sold to people fresh or smoked. But in most cases the bush meat is smoked as a means of preservation to increase shelf-life of the products. Some hunters claimed that they hunt animals for leisure, while the greater number of them hunts due to hardship and to support their families. Some even said that if any member of his family was not in-support, such individual run the risk of not having any share in the bush meat or in anything derived from the sale of bushmeat.

Table 2: Distribution of respondents by effect of bush meat exploitation on Wildlife, its contributions to the community and hunters reasons for hunting

Effect of Bush meat on wildlife	Frequency	Percent
Positive	28	93.3
Negative	2	6.7
Economic benefit to the development of Ifon community		
Yes	30	100.0
No	0	0
Reasons for Hunting		
Leisure	5	16.7
Due to Hardship	3	10.0
Support Family	22	73.3

Source: Field Survey, 2012

Shown in Table 3 below are the lists of animal species that are commonly found and consumed in the study area. For so many (fifty!) decades according to personal interview all these species were found in abundance but as at the time of this research work, some were rarely found due to exploitation; this was an indication of the negative impact of hunting on the populations of animals in the area.

The most common bush meat available in the region were Grasscutter (*Thryonomys swinderianus*), Antelopes, Bush ‘Rabbit’ (*Lepus*

crawshayi) and Bush Pigs. The people prefer the first two believing that they have high protein content. According to Barrie and Aalangdong (2005), overhunting has further reduced wild populations of many forest-dependent animals. Likewise in Ifon area, most wildlife species have been extirpated as the hunters themselves said that some species (like Buffalo, *Syncerus caffer*; Leopard, *Panthera pardus*; Elephant, *Loxodonta africana*; and Lion, *Panthera leo*) that they had seen before and often killed were no longer available.

Table 3: Distribution by availability of meat of species of animals in Ifon area of Ondo state

Species of Animal	Rare	Abundant
1 Grasscutter: <i>Thryonomys swinderianus</i>		—
2 Antelope (Duikers).		—
3 Monkey: <i>Mandrillus leucophaeus</i>		—
4 Bushbuck: <i>Tragelaphus scriptus</i>	—	
5 Scrub Hare: <i>Lepus capensis</i>	—	
6 Bush dog: <i>Lycaon pictus</i>		—
7 Porcupine: <i>Hystrix cristata</i>	—	
8 Bush ‘Rabbit’: <i>Lepus crawshayi</i>		—
9 Squirrels: <i>Funisciurus anerythrus</i>		—
10 Bush Pigs: <i>Potamochoerus porcus</i>		—
11 Crocodile: <i>Crocodilus niloticus</i>	—	
12 Pangolin: <i>Manis tetradactyla</i>	—	
13 African Buffalo: <i>Syncerus caffer</i>	—	
14 Leopard: <i>Panthera pardus</i>	—	
15 Elephant: <i>Loxodonta Africana</i>	—	
16 African Grey Parrot: <i>Psittacus erithacus</i>	—	
17 African gaint rat: <i>Cricetomys gambianus</i>		—
18 Monitor Lizard: <i>Varanus niloticus</i>		—
19 Tortoise: <i>Kinixus belliana</i>		—
20 Giant snail: <i>Archachatina marginata</i>		—

Source: Field Survey, 2012

CONCLUSION

Studies have shown the impact of bush meat hunting on forest wildlife populations. The present level of hunting in Ifon area of Ondo state is affecting the distribution and density of bush meat species as those animal species abundantly found in the past were becoming so rare or even unavailable. This is likely to be unsustainable for most large-bodied animals, and may only be sustainable, in the short-term, for rodents. Though, as at now, the total number of hunters in the area is less than hundred, there is high possibility of increase in the number due to poverty and unemployment.

The impact of bush meat hunting is likely to get worse in the future as road construction by logging companies provides ever more access to the forest and to expanding urban markets.

Therefore, it is essential that, logging companies must be encouraged or made not to facilitate bush meat hunting and transportation in their concessions. Likewise, social marketing activities should be put in place to attempt to direct consumer preferences for animal protein away from bush meat species that are particularly susceptible to over-exploitation. Since these hunters are the major drivers of Bush meat Exploitation in the area, there is need to set up (Hunters-to-Protectors) projects to recruit, train and re-employ wild animal hunters as guards/teachers to enlighten the people on need to conserve the wildlife. It is also necessary to establish Task Forces to check bush meat hunting, monitor faunal populations and guard against the influx of commercial hunters. Poverty too is part of the problem faced by the community and there is high possibility that most graduate will later turn to hunting of bush meat for sustenance. Thus, provision of employment for the people will also discourage them from hunting,

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