ATTITUDES TO BUSHMEAT TRADE AND WILDLIFE CONSERVATION AT 
A MARKET TOWN IN LOWLAND RAINFOREST, RIVERS STATE, 
NIGERIA

ABSTRACT

Aims: The study was undertaken to investigate the attitudes of residents (involved and not involved) to the bushmeat trade and conservation at a market town in rural lowland forest, Rivers State, Nigeria.

Methodology: Against the background of meteoric rise and alarming increase in the number of endangered and threatened mammalian species in Nigeria, studies were initiated at the main bushmeat market town, Omagwa, in Rivers State, Nigeria. Questionnaires were administered to a number of respondents: 103 (not involved in the trade), 42 (Vendors), 37 (Hunters), 08 (Middle men).

Results: Although some of the hunters had been in the trade for many years, more than 50% entered the occupation within the last 10 years. Nearly 70% of them were involved in other occupations before they became hunters; only 30% were unemployed before they ventured into hunting. More than 35% of vendors were civil servants. The attitudes of those not involved in the trade to it, were diverse, but nearly 50% thought it was a threat to wildlife. On conservation, nearly 50% offered very positive suggestions on wildlife management. Among hunters, about 60% suggested ways of conserving wildlife, although they were of the view that to enhance the trade, hunting was to be intensified. Vendors were totally in support of conservation by different means.

Conclusion: All 190 respondents with the exception of an individual not involved in the trade were keen to ensure that future generations would have too many opportunities to behold the diversity of wildlife at Omagwa. It was therefore clear that they were interested in one of the main goals of conservation, despite some contradictory statements. Suggestions on wildlife management policies are presented, beginning with enlightenment on the concepts of conservation, sustainability, wellbeing, etc, and other inter relationships.

Keywords: Attitudes, Occupation, Bushmeat Trade, Wildlife Conservation, Nigeria
INTRODUCTION

The IUCN published its World Conservation Strategy (WCS) in 1980. It was prepared with financial backing from UNEP and the WWF and the benefit of comments from FAO and UNESCO. The WCS had a clear practical objective: “to stimulate a more focused approach to the management of living resources and to provide policy guidance on how this can be carried out”[1]. Conservation has three main objectives: to maintain essential ecological processes and life-support systems, to preserve genetic diversity and to ensure the sustainable utilization of species and ecosystems. The sustainability concept has been extensively discussed[1-5]. The number of species of animals listed as threatened or endangered has increased from 1700 in 1988 to 3800 in 1996, to 5400 in 2000[4]. A recent IUCN Red Book of threatened Animals reported that about 25% of all known species of animals are at risk of extinction[6]. The term “endangered” means any species which is in danger of extinction throughout all or a significant portion of its range, while “threatened” refers to any species which is likely to became an endangered species within the foreseeable future throughout all or a significant portion of its range. There are several reasons for the conservation of endangered or threatened species: utilitarian (Importance in Medicine, Agriculture, Industry, etc); maintaining the functions of ecosystem and the biosphere, aesthetic justification (biological diversity adds to the quality of life, providing some of the most beautiful and appealing aspects of our existence); moral justification (based on the belief that species have a moral right to exist, independent of our need for them) and cultural justification (specific species are of great importance in many ways to indigenous people[4]. Humans have become an important cause of the alarming increase in endangered and threatened species. This occurs in several ways: through intentional hunting of harvesting (for food, commercial purposes,
sport or to control a species that is considered a pest), through disruption or elimination of habitats, through pollution of the environment and through introduction of exotic species, including new parasites, predators or competitors of native species.

The IUCN Red List of Threatened Species incorporates data from two countries in Africa: South Africa and Tanzania, where these were available. Threatened mammalian species were 41 and 43 respectively, while threatened birds were 20 and 33 respectively in these countries. It is probable that trends were similar in other African countries. In Nigeria, there has been no update of the 1993 Endangered Species Decree. The non-enforcement of Conservation laws and the unrestricted entry into the commercial bushmeat trade are threatening wildlife in Nigeria. More than 1.2 metric tonnes of bushmeat, excluding elephants are harvested in a month in Nigeria. Of the eleven primate species listed that occur in Nigeria, 81.82% were threatened by hunting and 18.18% were affected strictly by habitat destruction. It was against this background that studies were initiated at the main bushmeat market town, Omagwa, in Rivers State; results on species composition, abundance, cost and the resilience of the Greater Cane Rat, *Thyronomysswinderianus* are documented. The present study focusses on attitudes of residents (involved and not involved in the trade) to the trade and wildlife conservation.

MATERIALS AND METHODS

Stromayer and Ekobo placed the active hunting communities into three categories: villages on the highway, people living along logging roads leading to the main highway, people living in defunct logging towns. The bushmeat market town, Omagwa, 4°98'N, 6°91'E, is in the first category of the Stromayer and Ekobo grouping. It is situated on the busy interstate highway that connects two
State capitals, Port Harcourt (Rivers State) and Owerri (Imo State). It is located in rural, lowland rainforest with no industries, major businesses, etc. The Port Harcourt International Airport is at the periphery of the town.

Questionnaires were administered across all villages at Omagwa; 390 were administered but only 190 responded. Those not involved in the trade were 103, while those involved were as follows: Hunters (42), Vendors (37), Middlemen (8). Responses were sought on educational qualifications, occupation, previous employment, ways of improving the trade, attitude to conservation, the need for future generations to see the diversity of wildlife at Omagwa, etc.

RESULTS

The past employment profile of those (Hunters, Vendors, Middlemen) involved in the bushmeat trade at Omagwawas very diverse. Among the eight middlemen, their previous employment chart was: unemployed, 1 (12.5%); Civil servants, 2 (25%); students, 2 (25%); Taxi driver, 1(12.5%); restaurant supervisor, 1(12.5%); bus conductor, 1 (12.5%). Among the vendors, the previous employment profile was: Engineers, 4(10.81%); Civil servants, 13 (35.14%); Trader, 1 (18.92%); Bankers, 2 (5.41%); Clergy, 3 (8.11%); Welder, 1 (2.7%); Drivers, 2 (5.41%); Health professional, 1 (2.7%); Caterer, 1 (2.7%); Farmer, 1 (2.7%); Auto Mechanic, 1 (2.7%); Bicycle mechanic, 1 (2.7%). The hunters stated that they had been in the business for several years: 20 years and above 2 (4.76%), 10-19yrs 16(38.1%), 2-9yrs 22(52.38%), <2yrs 2(4.76%). Fourteen (33.3%) of the hunters were unemployed before entry into hunting while 28 (66.67%) were in diverse occupations prior to their entry into commercial hunting. Among the 103 residents of Omagwa not directly involved in the bushmeat trade, all but one were interested in their children’s children being in a position to enjoy nature’s gift of diverse wildlife at Omagwa. In respect of attitude to the bushmeat trade, views were
diverse: Gift of nature 20(19.42%), Tradition of community 02(1.94%), Alleviating Poverty 26(25.24%), Good but threatens wildlife 34(33.01%), Threatens wildlife 17(16.51%), Abhor the trade 04(3.88%) (Table 1).

Table 1 Attitudes of residents not involved in the bushmeat trade

<table>
<thead>
<tr>
<th>Responses</th>
<th>Numbers in the categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Gift of nature</td>
<td>20</td>
</tr>
<tr>
<td>2.Tradition of community</td>
<td>02</td>
</tr>
<tr>
<td>3.Resulting from unemployment (Alleviating poverty)</td>
<td>26</td>
</tr>
<tr>
<td>4.Good but threatens wildlife</td>
<td>34</td>
</tr>
<tr>
<td>5.Threatens wildlife</td>
<td>17</td>
</tr>
<tr>
<td>6.Abhor the trade</td>
<td>04</td>
</tr>
</tbody>
</table>

In response to suggestions on how to restore dwindling wildlife populations, those not involved in the bushmeat trade were virtually split: approximately 50% had no suggestions but to ascribe the trade to the non-availability of job opportunities and the other group had very useful suggestions on the conservation of wildlife (Table 2).

Table 2 Attitudes of residents not involved in the bushmeat trade to wildlife conservation

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bushmeat trade is a job opportunity and thus the Government should not interfere</td>
<td>49</td>
</tr>
<tr>
<td>Conserve wildlife populations, selective hunting, reduce deforestation and bush burning, Government should establish reserves, enforce existing environmental laws, prosecute those involved in the trade, enlightenment, Government should establish</td>
<td>51</td>
</tr>
</tbody>
</table>
In response to the need for conservation, to forestall extinction of wildlife populations, the hunters proffered a variety of views. The majority view was positive (Table 3).

Table 3. Responses of hunters to the need for conservation to forestall wildlife extinctions

<table>
<thead>
<tr>
<th>Responses</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunt only mature wildlife, enforce laws, enlightenment, stop bush burning, stop deforestation, governments should protect forests</td>
<td>27</td>
</tr>
<tr>
<td>Need for loans to change occupations to save wildlife</td>
<td>08</td>
</tr>
<tr>
<td>Hunting is an occupation</td>
<td>07</td>
</tr>
</tbody>
</table>

In the community, the vendors were the most conservation-conscious group, as reflected in their responses (Table 4). They were resolute in their beliefs that future generations should see the wildlife diversity at Omagwa.

Table 4. Responses of vendors to the need for conservation to prevent wildlife extinction

<table>
<thead>
<tr>
<th>Responses</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforce existing conservation laws</td>
<td>20</td>
</tr>
<tr>
<td>Afforestation/reduction in bush burning</td>
<td>08</td>
</tr>
<tr>
<td>Selective hunting</td>
<td>07</td>
</tr>
</tbody>
</table>

The 8 middlepersons were unanimous in the view that future generations should have the opportunity to view the diverse wildlife in the forests at Omagwa. Their views on avenues to improve the trade were concentrated on increased sales.
DISCUSSION

Although some of the hunters were in the network for nearly two decades, more than 50.0% ventured into the occupation within the last decade, probably because of the certainty of steady, modest earnings. Only 33% of the hunters were unemployed, before their entry into hunting, indicating that hunting had always been an integral aspect of life at Omagwa and environs. This was in contrast to the Mount Cameroon area, Cameroon, where most people considered hunting as a degrading way to make a living\[12\]. Many hunters, vendors and middlemen were of the view that they would love to see future generations, their children’s children behold the amazing diversity of wildlife at Omagwa and environs. Sustainability is a major goal of conservation\[4\]. This view was championed by the vendors, with the highest proportion of graduates.

Surprisingly, nearly 50% of residents not involved in the trade were of the view that the trade was a genuine way to make a living and therefore Government should not intervene, a view held by most of the hunters who advocated intensified hunted to enhance the trade. Studies have shown that wild meat supply is usually greater in secondary forests and forest-farm-fallow mosaics\[13\], typified by Omagwa and environs. However, as Lang\[14\] et al. stressed, open access harvesting has never been sustainable. Since virtually all residents were of the view that they wanted their children’s children to behold nature’s gift to Omagwa in Wildlife diversity, they were apparently on the same trajectory as Brundtland’s sustainability, which states “meets the needs of the present without compromising the ability of future generations to meet their own needs”\[1\]. Based on these findings, a vigorous enlightenment campaign that explains in simple terms the concepts of conservation, sustainability, abundance of bushmeat and their interrelationships should be inaugurated. The guidelines for bushmeat management
policies advocated by Cowhishaw et al.\textsuperscript{[15]} for Ghana are applicable in Nigeria. These are:

- Initiatives that permit the sustainable hunting of robust species, but also protect vulnerable species, will allow communities to continue benefiting from the bushmeat trade whilst protecting biodiversity and its associated ecosystem services.

- Agricultural “farmbush” landscapes have the potential to provide a significant and sustainable supply of bushmeat. These areas may be important components of bushmeat management policies.

- Management attention should focus primarily on those markets where vulnerable species (slow reproducers) are still being traded, since these species are likely to face rapid local extinction in the absence of effective regulation.

- Management interventions in the bushmeat commodity chain will be most effective when all interest groups are involved. This approach is most important when no single group controls the market, but it will be beneficial in all market conditions.

- All regulatory frameworks developed for the sustainable management of the bushmeat trade must be supported by effective law enforcement.

REFERENCES

11. Stromayer KAK&Ekobo A. Biological surveys of southeastern Cameroon. 1991.EU, ECS. New York, USA.