



Evaluation of Wild Animal Species Hunted In Selected Communities around Old Oyo National Park, Nigeria

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ABSTRACT: There is need to have an up to date information on the wild animal species hunted in Old Oyo National Park and other Parks in Nigeria. Such record will form the basis for the development of appropriate intervention programmes and subsequent policy guidelines. Therefore, this research work evaluates wild animal species hunted in selected communities around Old Oyo National Park, Nigeria using standard method. The finding revealed fifteen (15) wild animals belonging to different species of wild animals that are hunted as bush meat. The reasons and season of hunting revealed that income generation is the major purpose of hunting with 72.6%. Dry season recorded the highest period of hunting with 61.3%, followed by both season with 26.4% and wet season recorded the least with 12.3%. The rate of poaching activities of wild fauna indicated that medium recorded the highest with 55.7%, followed by high with 31.1% while low recorded the least with 13.2%. The suggested possible solutions to reduce hunting wildlife species showed that provision of alternate source of livelihood recorded the highest (24.5%), followed by increased anti-poaching with 22.6% while translocation are the least with 1.9%. The study concludes that that fifteen (15) wild animal species are hunted in the study area for income and consumption purpose.

DOI: <https://dx.doi.org/10.4314/jasem.v27i12.28>

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Cite this paper as: MOHAMMED, H. L; OLAGUNJU, I. O; AYENI, S. M; AKANDE, O. A. (2023). Evaluation of Wild Animal Species Hunted In Selected Communities around Old Oyo National Park, Nigeria. *J. Appl. Sci. Environ. Manage.* 27 (12) 2875-2879

Dates: Received: 12 November 2023; Revised: 10 December 2023; Accepted: 21 December 2023 Published: 30 December 2023

Keywords: Evaluation, Hunted, Species, Wild Animal

Wild animals have constituted a very significant element in human evolutionary history and culture around the world. Wildlife is a constantly subject of human use and management practices because of its multiple values, which in turn depend on each social group and specific historical and geographical context (Pérez-Gil, Oliver and Ho, 2015). In rural tropical areas, a large proportion of human residents continue using a variety of wildlife species as sources of protein, fat, medicinal substances, clothes, tools, adornments, ritual objects, and income, among other purposes (Milner-Gulland and Bennett, 2003). Hunting of wildlife for food is today considered a significant threat to conservation of wildlife diversity

in tropical forest (Milner-Gulland *et al.*, 2003). Most wildlife resources are obtained through hunting, considered a subsistence activity when its primary purpose is to satisfy the hunter's and his family's basic needs (Ojasti, 2000), and occasionally the whole community basic needs as well (Montiel and Arias, 1999).

Impacts of hunting on wildlife populations include declines in vertebrate biomass and shifts in the relative abundance of size classes (Peres, 2000). With improved hunting technologies and penetration into remote forest areas, there is greater wild meat consumption (Wilkie and Carpenter, 1999). Studies on

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sustainability of hunting show that species are being extracted much above sustainable limits (Hart, 2002; Hill *et al.*, 1997). Market demands for wild meat have also contributed in pushing the harvest levels of wildlife to unsustainable limits (Fa *et al.*, 1995; Apaza *et al.*, 2002). The effect of hunting by rural people has leads to quantified changes in structure of mammal assemblages (Jerzolimski and Peres, 2003). Wildlife plays an important role in the lives of local people and is used for food, rituals and medicines. The sale of wild meat and wildlife products provides cash income and hunting of wildlife is also for recreation (Datta, 2002). The main motivation for commercial hunters is to exchange their prey for money. In contrast, subsistence hunters usually go hunting for food, although the sale of surplus meat within their communities may occur (Ojasti, 2000). Subsistence hunting frequently implies lower risks for wildlife populations than commercial hunting (Fa and Peres, 2001). However, studies had suggested that subsistence practices increase pressure on hunted species, generally large and medium-sized vertebrates (Peres, 2000; Wright, 2003). Among the wild terrestrial vertebrates providing food and other products to rural hunters in the rural communities are dozens of mammals (ungulates, primates and large rodents), birds and some reptiles (tortoise, turtles, snakes, iguanas and crocodiles) (Ojasti, 2000). Overhunting on these species may induce severe

decreases in their population sizes potentially leading to their local extinction, especially if they face habitat loss, degradation and fragmentation (Lande, 1998). Most Supporting Zone Communities of National Park solely depend on wildlife species for food and sources of income (Xien *et al.*, 2015). Literature abound on abundance, population structure and distribution of wildlife species in Old Oyo National Park. Therefore the objectives of this study is to evaluate wild animal species hunted in Old Oyo National Park.

MATERIAL AND METHODS

Study Location: Old Oyo National Park lies between latitude 8°15' and 9°00'N and longitude 3° 35' and 4° 42' E. Old Oyo National Park is one of the Oldest conservation area in Nigeria and indeed the West African sub region having been designated upper Ogun Forest Reserve in 1936, converted to Oyo-Ile Forest Reserve in 1941 and designated Game Reserve in 1952. The sources potentials and the rich cultural and biological diversities informed the Federal Government, decision to elevate the reserve to the status of a National Park by decree No 36 of 1991 It has a total land area of about 2,512km² and average rainfall of 1,100mm/year. The vast guinea savannah ecotype with luxuriant grass, browse plants species and water supports grazing of ungulates.

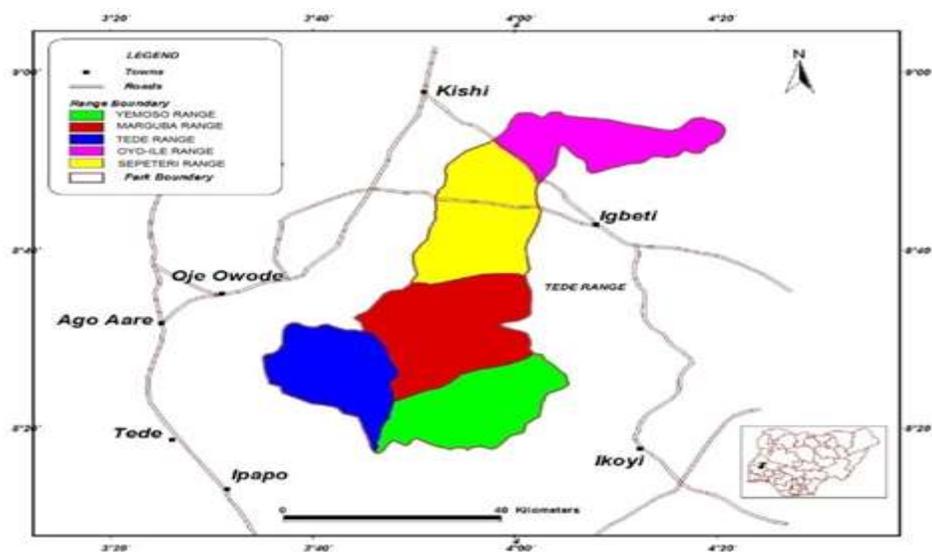


Fig 1: Map showing Old Oyo National Park Source: Ogunjimi *et al.*, (2016)

Study Population: For the purpose of this research study, the target populations are the hunters and wildlife traders in six (6) selected communities. The communities includes; Ogundiran, Bodo Mongo, Gboguro, Igbo-Ologun, Ajebamidele and Alakuko.

Sampling Techniques and Sample Size: Purposive sampling technique was used to select three (3) ranges from five (5) ranges available in Old Oyo National Park, Two communities each from the selected ranges were purposively selected base on their proximity to the Park boundary. Due to the unavailability of the

total population of each of the communities sampled, convenience sampling method was adopted. Thus, 40 copies of questionnaires were randomly administered to the respondents in each of the selected range. The sample size was put at 120 respondents but one hundred and six (106) questionnaires were retrieved.

Data Collection: This involves the use of primary data; the primary data involve questionnaire administration only.

Data Analysis: Data obtained was analyzed using descriptive statistics i.e frequency tables.

RESULTS AND DISCUSSION

*Results:*The demographic characteristics of the respondents were revealed in table1, in which male recorded the highest (76.44%) and female records 23.6%. Age group 31-40 years recorded the highest (41.5%), followed by 41-50 with 33.0% and the least was 51 years and above with 10.4%. The table further revealed the marital status of the respondents in which

majority (65.1%) is married and the least are divorce with 8.5%. Also majority (61.3%) of the respondents practice Islam. The level of education of the respondents showed that secondary education are the highest with 39.6%. Species of wild animals hunted are revealed in table 2, in which 15 wild animals are recorded belonging to different species of wild animals. The reasons and season of hunting were showed in table 3, it was revealed that income generation is the major purpose of hunting with 72.6%. Dry season recorded the highest period of hunting with 61.3%, followed by both season with 26.4% and wet season recorded the least with 12.3%. Table 4 revealed the rate of poaching activities of wild fauna in the study area, in which medium recorded the highest with 55.7%, followed by high with 31.1% while low recorded the least with 13.2%. The suggested possible solutions to reduce hunting wildlife species are indicated in table5, in which provision of alternate source of livelihood recorded the highest (24.5%), followed by increased anti-poaching with 22.6% while translocation are the least with 1.9%.

Table 1: Demographic Characteristic of the Respondents

Demographic	Variables	Frequency	Percentage (%)
Gender	Male	81	76.4
	Female	25	23.6
Age Group	21-30	16	15.1
	31-40	44	41.5
	41-50	35	33.0
	51 and Above	11	10.4
Marital status	Married	69	65.1
	Single	28	26.4
	Divorce	9	8.5
Religion	Christianity	30	28.3
	Islam	65	61.3
	Traditional	11	10.4
Level of Education	No Formal Education	22	20.8
	Primary Education	31	29.2
	Secondary Education	42	39.6
	Post-Secondary Education	11	10.4
	Total	106	100.0

Source: Field Survey, 2023

Table 2: Species of Wild Animals Hunted in the Study Area

S/N	Common Name	Scientific Name
1	Giant rat	<i>Critecosmysgambianus</i>
2	Grass Cutter	<i>Thryonomyswinderianus</i>
3	Roan antelope	<i>Hippotragusequinus</i>
4	Stripped ground squirrel	<i>Epixarusepii</i>
5	Kobs	<i>Kobus kobs</i>
6	Python	<i>Python sebae</i>
7	Guinea fowl	<i>Numidamelliagres</i>
8	Cobra	<i>Najanigricolis</i>
9	Rabbit	<i>Oryctolagusuniculus</i>
10	Francolin	<i>Francolinusbicalcaratus</i>
11	Warthog	<i>Phacochoerusaeiopicus</i>
12	Red Flanked Duiker	<i>Cephalophusrufilatus</i>
13	Grimm Duiker	<i>Sylvicapragrimmia</i>
14	Bushbuck	<i>Tragelaphusscriptus</i>
15	Patas Monkey	<i>Erythrocebuspatas</i>

Source: Field Survey, 2023

Table 3: Reason and Season of Hunting

	Variables	Frequency	Percentage (%)
Reasons for Hunting	Consumption purposes	29	27.4
	Income Generation	77	72.6
Seasons	Dry season	65	61.3
	Wet season	13	12.3
	Both season	28	26.4
	Total	106	100.0

Source: Field survey, 2023.

Table 4: Rate of Poaching Activities of Wild Fauna in the Study Area

Rate	Frequency	Percentage (%)
High	33	31.1
Medium	59	55.7
Low	14	13.2
Total	50	100.0

Source: Field survey, 2023.

Table 5: Suggested Possible Solutions to Reduce Hunting Wildlife Species

Measures	Frequency	Percentage (%)
Increased Anti-poaching	24	22.6
Employment opportunity	15	14.2
Provision of alternate source of livelihood	26	24.5
Translocation	2	1.9
Involvement of community in decision making	18	17.0
Infrastructural Development	21	19.8
Total	107	100.0

Source: Field Survey, 2023.

The finding indicates that wild animal are hunted in communities around Old Oyo National Park. The study revealed that gender variable showed that males were dominant in the bushmeat trading than females. This is in contrast with the report by Alconer (1992) that women dominated bushmeat trade in Atwenmonom market, Ghana. Most of the hunters/marketers are within the age range of 31–40 years. This is similar to the report by Infield (2008) that men from an early age were involved in hunting and selling of bushmeat. The result shows that most of the respondents were married people only few of them are single and divorced or separated. The major reason for hunting wild animals is for income generation. This is in line with report by Wilkie *et al* (2000) that bushmeat sale contributes 6-40% of all household daily income.

Bushmeat trade in the study area is lucrative and it is a significant source of income. This is in line with the report by Gally and Jeanmart (1996) that hunters made 19% profit from the sale of monkeys and traders made 20% profit. Bushmeat is available in the study area throughout the seasons but are more abundant during the dry season. Winter was the preferred hunting season for most hunters (93%). According to hunters, wildlife descends from the higher elevations during dry season and hunting is easier then. Hunters also prefer hunting during this season because it is less tiring and they can carry out long treks into the forests. During this season, they are also free from agricultural work as the harvest season is over by October–

November. There are some specific times during dry season when hunting expeditions are undertaken. Hunters report that hunting success is greater when a rainy night is followed by a bright morning. Fifteen (15) wild animals are hunted in the study area. This is in agreement with the report by Asibey (1987) that in Ibadan, Nigeria in 1975 when price for mutton and beef were US \$2.80 and \$4.20 per kg respectively, grasscutter (cane rat) meat cost \$7.20 per kg. However, the respondents’ benefits from bushmeat trade include payment of children’s school fees and catering for their families. Also the socio-economic contributions of wild animals as bushmeat to the people in the study area include serving as a source of animal protein for consumption, being used in traditional medicine for treating various ailments such as hypertension, protection against enemies and witches. They are important source of income to both the hunters and marketers.

Conclusion: The study concluded that Fifteen (15) wild animal species were hunted in the study area for income and consumption purpose. The season of hunting showed that dry season recorded the highest period and the rates of poaching activities are medium. The suggested possible solutions to reduce hunting wildlife species includes; provision of alternate source of livelihood, increased in anti-poaching patrol and employment of some of the community people etc. The study therefore recommends that poverty alleviation program should be initiated.

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