

## KNOWLEDGE AND PERCEPTION OF THE NIGERIA WILDLIFE CONSERVATION LAWS AMONG HUNTERS IN LAGELU AND EGBEDA LOCAL GOVERNMENT AREAS, OYO STATE, NIGERIA

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## ABSTRACT

This study assessed the knowledge and perception of wildlife conservation laws among hunters in Egbeda and Lagelu Local Government Areas of Ibadan, Oyo state, Nigeria. The result shows that all the hunters (100%) were male, with a mean age of  $50.1\pm13.8$  years. The art of hunting was learnt by majority (84.5%) of the hunters as a form of apprenticeship from an experienced hunter or from the hunter's father. Hunting was done on a daily basis primarily for household consumption of bushmeat, and secondarily for income generating purpose. While, majority (58.5%) claimed to have heard of wildlife conservation laws, they do not understand the meaning and significance of the laws. None of the hunters could state the number of wildlife laws that exist in Nigeria but noted that the laws hold in protected areas. On the other hand, most of the respondents (66.3%) noted that there are traditional laws (taboos) that enable wildlife conservation, especially as regards pregnant, nursing and young animals. Conclusively, hunters in the study area, despite having heard of wildlife conservation laws had a low understanding of the significance and scope of the laws. There is, therefore, a need for vigorous awareness campaign among the hunters for effective wildlife conservation.

Keywords: Conservation law, Hunter, Wildlife

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#### **INTRODUCTION**

Wildlife is a component of the environment which forms a great proportion of the animal protein being consumed in Nigeria (Ann and Medugu, 2016) just like in several other West African countries. Wild animal meat provides a flexible source of income, a direct source of affordable protein with good storage qualities and safety net in times of particular hardships for many rural populations. Cowlishaw *et al.* (2004) particularly noted that wild animals are captured by indigenous people as a source of income, employment, food, medicine, recreation and vital raw materials for many purposes including construction. However, many factors are threatening the sustainability of these resources (Ezenwaka, 2008). Exploitation of animal populations has been highlighted as one of the central reasons why species are threatened (Mace and Reynolds, 2001). It has been suggested that hunting for food poses the most potent threat to the persistence of many species in tropical forests (Redford, 1992). Sustainability of this major component of the environment (wildlife) is key in maintaining a healthy and balanced environment. Scientific approaches of conservation and or preservation has been proposed (e.g. government setting aside reservation areas through laws) but these are not yielding the anticipated results (of conserving the bio-diversity) as illegal and unsustainable hunting and harvesting of the forest resources are still observed (LENF, 1998).

The survival of the present and future generations is somewhat linked to the abundance of biodiversity resources because of the benefits derived from it in terms of food provisions, housing materials, income generation, job opportunities, fuel etc. Conversely, despite the efforts targeted at reducing its loss, biodiversity is still facing numerous irreversible threats thereby reducing the level of reliance placed on it by man. There is uncommon destruction of the terrestrial ecosystems which covered the majority of the plant and animal species. This is also true for inland water ecosystems as well as wetlands, and highly valuable marine and coastal ecosystems which have long been diminishing. Indeed, this biological wealth is today extremely impacted by emerging human activities actuated by increased human population. Biodiversity loss is now one of the major concerns of our time. Nigeria's rich and varied biological diversity is fast disappearing and exposed to a variety of threats worsen by human growing population (Sobere and Ihua-Madunenyi, 2019).

Conservation is an effort to maintain and use natural resources wisely in an attempt to ensure that those resources will be available for succeeding generations (Yarrow, 2009). Hence, wildlife conservation is an endeavour to exploit wild populations reasonably so that they will be available for future use (Idowu and Morenikeji, 2015). Rapid loss of biodiversity in recent times indicates that a sixth mass extinction event is currently in progress on the Earth, whereby the average rate of vertebrate species loss is now up to 1000 times higher than downplayed rate. A key role in reducing excessive harvests of wildlife in many contexts is imposing existing legal wildlife protection or improvement of legal tools. Such solutions need to involve clearer laws governing the conditions under which harvest of wildlife for meat is permissible, strong penalties for violations, education of judiciaries and law enforcement (Ripple *et al.*, 2016). More conservation practices need to be done in the areas of updating the laws governing the protected areas in Nigeria so as to reflect the current realities especially in the area of sanctions being imposed on the defaulters in protected areas (Ann and Medugu, 2016). Unlawful hunting and fishing activities are serious problems in today's world (Hummel, 1983). Gibbons (1972) noted that these activities represent a significant type of lawbreaking, especially in rural areas.

Studies have shown that hunters focus initially on large animals and continue to hunt them even when their numbers become low. Such species comprise the majority of the mammalian biomass in undisturbed forests and play keystone ecological roles. Reduction or loss of species will have impacts on the forest community and the environment, leading to loss of pollinators, loss of seed predators (e.g., pigs, peccaries, agoutis, large squirrels), loss of seed dispersers (e.g., primates, frugivorous bats, birds etc.), loss of predators (e.g., large cats, raptors). Ripple et al. (2016) stated that a serious problem for a range of mammal species which has been recognized a long time ago is hunting and the trade of wild meat and body parts. This compelling pressure on ecosystems can have wide-ranging effects that cascade beyond the loss of the hunted species, altering the structure and function of the environments in which they occur and the services they provide. Even traditional forms of subsistence hunting can result in overexploitation of particular species when human population density increases.

Essentially, indiscriminate hunting of wildlife for food to compliment subsistence farming and bush burning leads to loss of biodiversity and also depletes the ecosystem by causing death of wildlife; destruction of eggs and plant species (FME, 2010). Isiugo and Obioha (2015) also noted that overexploitation 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. Gamalo *et al.* (2018) asserted that one of the threats causing the demise of biological treasures in Philippine which is considered as biodiversity hotspot could be the lack of awareness and the negative perception of the people towards wildlife and conservation.

The lack of awareness and wrong perceptions of the people towards wildlife could result in the lack of concern for their conservation (Coker et al., 2020; Oliver and Heaney, 1996). Assessing awareness and perception of wildlife and wildlife concepts is thus important in management. In Nigeria, there is a dearth of empirical evidence on the awareness, knowledge and perception of wildlife conservation laws. This study is therefore aimed at assessing the knowledge and perception of wildlife conservation laws among hunters in two local government areas in Oyo State, Nigeria, where hunting of wild animals is prevalent. The study also goes further to document the taboos regarding the hunting of animals, as well as the frequency of encounter of certain animals in the past years. It is believed that the results of this study will be able to pinpoint strengths and weakness of current information and education programs regarding wildlife and which aspects of these programs to improve upon and which concepts to emphasize in information dissemination.

### MATERIALS AND METHODS Study Area

The study area lies within Latitude 7°20"N and 7°35"N and longitude 3°55"E and 4°10"E (Figure 1). Egbeda is the headquarters of the Local Government Area (LGA) which was created out from Lagelu Local Government in 1989. The LGA is bordered by Osun State to the East, Lagelu LGA to the North, Ibadan North to the West and Ona Ara Local Government to the South. Lagelu was created in 1976 as one of the functioning Local Government Areas of Oyo

state, Nigeria. It has its headquarters located in Iyana Offa. The council areas consist of towns and villages of lalupon, Lagun, Monatan, Ofa, Ejioku, Oyedeji, Kelebe, Sagbe, Elegbaada, Olowode, Wofun, Ogburo, Kutayi, Apatere, and Olorunda among others.

### **Data Source and Collection**

The study was carried out in Egbeda and Lagelu local government areas of Ibadan, Oyo State, Nigeria between September and December 2019. Both qualitative and quantitative research methods were adopted. The two local governments have a united hunters' association called Ajumose Hunters Association. The association has about 300 members. Using Krejcie and Morrgan Table, the sample size obtained was 169. Data were collected using primary data collection tool (semi-structured questionnaire). The questionnaire (initially developed in English Language) was transcribed into the local language (Yoruba) for the hunters to be able to read because most of them were not educated and was not able to read and write in English. One hundred and forty questionnaires were retrieved while only 110 copies of questionnaires were valid for analysis. A focus group discussion (FGD) approach, consisting of 15 discussants, was also used to get more information from these hunters during an arranged meeting by the 'Olu Ode', the Head of the Association.

## RESULTS

## **Demographic information of Hunters**

The demographic results were based on the respondent's age, gender, marital status, religion local government as displayed in table 1. The mean age was  $50.04\pm18.86$  years. All the respondents were male. Majority (94.5%) of them were married while only 2.7% of them were single. Over half of the respondents (51.8%) were Muslims, 21.8% of them were Christians while 20.9% of them were traditionalists (Table 1).

Socio-den	nographic Characteristics	Frequency	Percentage (%)	
Sex	Male	110	100	
	Female	0	0	
Marital	Married	104	94.5	
status	Single	3	2.7	
Religion	Christian	24	21.8	
	Muslim	57	51.8	
	Traditional	23	20.9	
Age	21-30	8	7.2	
(years)	31-40	23	20.9	
	41-50	42	38.1	
	51-60	16	14.5	
	61-70	11	9.9	
	71-80	8	7.7	
	81-90	2	1.8	
	Mean	50.0445		
	Standard deviation	18.8606		
	Minimum	20		
	Maximum	85		

#### **Hunting Experience of The Hunters**

As shown on Table 2, majority of the respondents (87.7%) claimed to have known about hunting as an occupation through apprenticeship with another knowledgeable and experienced hunter while 11.8% of them inherited it. Majority of the respondents (58.3%) hunt daily, 30.6% hunt weekly, 10.2% only hunt once in a while 0.9% hunt monthly as displayed in Table 2. Majority (81%) of respondents confirmed that there are certain animals that shouldn't be killed and 19% claimed that there are no animals that couldn't be killed as displayed in table 2. Majority (41.1%) of

respondents stated that a hunter with pregnant wife should not kill animals anyhow especially pregnant animals. In addition, 17.3% of the respondents were of the opinion that pregnant animals should not be killed irrespective of whether the hunter has a pregnant wife or not. Also, 15.5% stated that animals that are in the process of giving birth to their young should not be killed. Moreover 9.1% in their responses wrote that twin hunter (s) cannot hunt carelessly. Furthermore, 2.7% stated that lactating animals should not be killed. Finally, only a very few respondents (0.9%) stated that animals moving with their young should be preserved.

Variable	Frequency	Percentage (%)	
Hunting knowledge	- · ·		
Apprenticeship	93	87.7	
Hereditary	13	12.3	
Hunting frequencies			
Daily	63	58.3	
Weekly	33	30.6	
Monthly	1	0.9	
Once in a while	11	10.2	
Are there animals that should not be killed			
Yes	85	81	
No	20	19	
Taboos guiding special cases (multiple response)			
Hunter with pregnant wife	46	41.8	
Animals giving birth	17	15.5	
Twin hunters	10	9.1	
Lactating animals	3	2.7	
Pregnant animals	19	17.3	
Animals with their young	1	0.9	

#### **Animals Frequently Seen by Hunters**

As shown in Table 3, the animal most frequently sighted by majority (70.5%) of the respondents during hunting exercise was Grasscutter (*Thryonomys swinderianus*). This was followed by Maxwell's duiker (*Philantomba maxwelli*) and Bushbuck (*Tragelaphus sylvaticus*) as reported by 63.6% and 44.5% of the respondents

respectively. Only 4.5% of the respondents encountered Giant rat (*Cricetomys gambianus*) while 2.7% came in contact with Guinea fowl (*Numida meleagris*). The least sighted species were African Buffalo (*Syncerus caffer*), Leopard (*Panthera pardus*), and Common Warthog (*Phacochoerus africanus*) as reported by only 1.8% of the respondents.

Common nam	e Scientific name	Frequency	Percentage (%)
Grasscutter	(Thryonomys swinderianus)	78	70.5
Maxwell's duik	er (Philantomba maxwelli)	70	63.6
Guinea fowl		3	2.7
African Buffalo	o (Syncerus caffer)	2	1.8
Bushbuck	(Tragelaphus sylvaticus)	49	44.5
Common Warth	nog (Phacochoerus africanus)	2	1.8
Giant rat	(Cricetomys gambianus)	5	4.5
Leopard	(Panthera pardus)	2	1.8

## **Reasons for Hunting**

As shown in table 4 below, most of the respondents (41.3%) engaged in hunting for consumption. This was followed by 32.7% of the respondents who hunt for income generation. The result also revealed that 26% hunt for both income and consumption reasons. Hunting was

an additional source of income for the family as indicated by majority of the respondents (77.9%) while 22.1% stated that hunting was their family's main source of income.

#### **Table 4: Reasons for hunting**

Reasons	F	%
Income	34	32.7
Consumption	43	41.3
Both income and		
consumption	27	26
For income		
Family's main source	21	22.1
Additional source of income	74	77.9

# Availability of Animals in the Past 10 Years and Earlier

In the last ten years, majority of the respondents have not seen *Panthera leo, Loxodonta africana, Psittaciforms walger* and *Pan troglodytes* as indicated by 90%, 89.9%, 74% and 72.3% respectively (Table 5). Animals that were frequently seen include *Thryonomys swinderianus, Cephalophus philantomba, Vulpes vulpes* and *Pholidota manis* as reported by 80.8%, 77.7%, 52% and 40% of the respondents respectively. *Crocodylus niloticus* and *Panthera pardus* were seldom seen as reported by 51.5% and 45% of the respondents respectively.

Table 5: Availability of animals in the past 10 years and earlier

Animal	Frequently		Moderately		Seldom		Never	
Ammai	F	<b>P(%)</b>	F	P(%)	F	P(%)	F	P(%)
Cane rat	84	80.8	6	5.8	14	13.5	-	-
Pangolin	44	40	26	23.6	28	25.7	3	2.7
Duicker	80	77.7	7	6.8	16	15.5	-	-
Fox	52	52	20	18.8	24	21.8	4	3.6
Chimpanzee	8	7.9	10	9.1	10	9.1	72	72.3
Crocodile	2	1.8	16	16.2	51	51.5	30	30.3
Parrot	-	-	7	7	19	19	74	74
Leopard	-	-	9	9.2	45	45	44	44.9
Lion	-	-	4	4	6	6	90	90
Elephant	-	-	3	3	7	7.1	89	89.9

F- Frequency; P- Percentage

# Presence of taboos guiding special categories of animals

The result is presented in Table 6. Majority of the respondents indicated that there were taboos guiding the hunting of young females, lactating females, pregnant animals and young males as indicated by 81.9%, 64.5%, 66.3% and 57% respectively. On the other hand, the greatest representation of the respondents indicated that there were no taboos guiding the hunting of old females and old males.

Animal		Yes	No		
Ammai	Frequency	Percentage (%)	Frequency	Percentage (%)	
Pregnant animals	61	66.3	31	33.7	
Young males	53	57	40	43	
Young females	77	81.9	17	19.1	
Lactating females	60	64.5	33	35.5	
Old females	8	8.6	85	91.4	
Old males	7	7.7	84	92.3	

# Knowledge and perception of Nigerian conservation wildlife laws

Most (58.9%) of the respondents stated that they have heard about wildlife laws while 41.1%

indicated otherwise (Table 7). They were however not informed on training about the laws as indicated by three quarter of the respondents (75.5%). Similarly, the laws were not explained to them as claimed by 76% of the respondents. In hunter's meetings however, majority (72.7%) indicated that the laws are discussed. The table also shows that most respondents (68.9%) believe that wildlife laws are necessary. On the other hand, over half (53.3%) of the respondents indicated that government does not have enough resources to enforce the laws while 44.7% believed otherwise. The laws do not stop hunting as indicated by the bulk of the respondents (82.5%), and majority (72.8%) of the respondents has never heard of someone punished due to violation of laws. Also, most (71.6%) of the respondents stated that taboos do not reduce the rate by which animals are being killed. Furthermore, majority (71.1%) of the respondents agreed that consistent hunting reduces the number of animals in the wild. Also, most (72.4%) of the respondents indicated their interest in leaving behind some resources. They were also mostly (76%) interested in judicious use of the resources .

Variable	Yes		No	
	F	%	F	%
Have you ever heard about wildlife laws?	56	58.9	39	41.1
On training, were you informed about wildlife laws?	24	24.5	74	75.5
Were those laws explained to you?	24	24	76	76
Do you understand those laws?	22	21.8	79	78.2
Do you discuss those laws in your meetings?	32	27.3	78	72.7
Do you believe those laws are necessary?	71	68.9	32	31.1
Does the government have enough resources to enforce these laws?	46	44.7	57	55.3
Do these laws stop hunting activities?	18	17.5	85	82.5
Have you ever heard of anyone punished due to violating these laws?	28	27.2	75	72.8
Do taboos reduce the rate of killing of animals?	29	26.4	73	71.6
Do consistent hunting reduce the number of animals in the wild?	54	71.1	22	28.9
Are you interested in leaving behind some resources for posterity?	55	72.4	21	27.6
Are you interested in judicious use of these natural resources?	57	76	18	24

#### Table 7: Knowledge and perception of wildlife laws

#### Table 8: Knowledge and perception of wildlife conservation laws among hunters based on FGD

S/N	Statement	Response
1	Are there areas restricted from	Government policies do not allow hunting of natural resources in protected
	being hunted?	areas, but they are not limited to areas outside protected areas.
2	Does any taboo bind the hunting of specific animals?	There are taboos for special categories that varies with hunters but there are no Governmental laws guiding the animals they cannot kill. For example, any hunter with a pregnant wife must offer sacrifice to avoid calamity when the wife wants to deliver.
		The discussants particularly stated that 'all animals can be killed, there is no animal that we can't kill'
3	Do you know of any animal that has undergone local extinction?	In their local hunting areas, Pythons and Bushbuck no longer exist because water bodies are no longer available and the area is now residential.
4	Are their restrictions on animals you hunt?	They do not hunt female and pregnant animals in order to ensure reproduction of young ones.
5	Are there efforts to ensure that the animals do not go into extinction?	They engage in a particular kind of sacrifice that enables the animals to return back to the forest after a successful hunting to ensure another successful hunting next time.
6	Have any of the members being punished for contravening wildlife laws?	There is no punishment for killing animals. Even for protected areas, once they get a pass, no one can hold them for killing any animal they wish to.

#### DISCUSSION

Hunters in the study areas are characterized by certain socio-demographic attributes. First, the result showed that the mean age of the hunters was 50.04 years, depicting an older and experienced population. This contradicts the findings of Adefalu *et al* (2013) which recorded a youthful population of hunters in Kwara State,

with a mean age of 27.8 years but affirms the report of Layade et al. (2021) with majority falling between 31 and 50 years. Further, all the respondents were male. The study of wildlife hunting activities in Ido LGA of the state by Layade et al. (2021) similarly revealed that 96% of their respondents were male while only 4% were female. It was observed during the FGD that very few women were part of the hunter's association. The results while validating that hunting is a male dominated profession, also project though minimal the presence of women who plays less physically challenging roles like marketing and collection of less aggressive animals like snails. Majority (94.5%) of them were married. This was also documented by Layade et al. (2021). They are by implication matured individuals with defined responsibilities of providing for their families.

Hunting was acknowledged by most respondents (87.7%) as an occupation learned through apprenticeship with another knowledgeable and experienced hunter while 11.8% of them inherited it. A finding also reported by Layade et al. (2021) where most hunters in their study had received training mostly from other hunters in the community and followed by those who were trained by their fathers. The foregoing thus corroborates Akinyemi (2018) who noted that hunting is amongst the oldest profession passed down from one generation to the next. Friant et al. (2015) in their study of hunters and nonhunters in communities around Cross River National Park concludes that the decision to become a hunter stems from family tradition and modified by economic necessity. Also, the study showed that most of the respondents (41.3%) engaged in hunting for consumption. This was followed by 32.7% of the respondents who hunt for income generation. The result also revealed that 26% hunt for both income and consumption reasons. Hunting was an additional source of income for the family as indicated by majority of the respondents (77.9%) while 22.1% stated that hunting was their family's main source of income. This corroborates Layade et al. (2021) which documented that most hunters in their study engaged in hunting for financial gains and engage in it while they have other sources of livelihood. Thus, while hunting provides income and also an alternative source of livelihood (Babalola & Oladipupo, 2018), it also provides a source of animal protein for household consumption.

The FGD discussants stated that 'all animals can be killed, there is no animal that we can't kill'. However, there are taboos for special categories of animals that vary with hunter but no governmental laws guiding the animals that cannot be hunted. Majority of the respondents indicated that there were taboos guiding the hunting of young females, lactating females, pregnant animals and young males. This establishes that majority of the hunters believe in taboos, and employs this in their hunting activities. For example, a large proportion indicated that a hunter with pregnant wife should not kill animals' carelessly especially pregnant animals. In addition, more hunters were also of the opinion that pregnant animals should not be killed irrespective of whether the hunter has a pregnant wife or not. Similarly, some obliged that animals that are in the process of giving birth to their young as well as lactating mothers should not be killed. These practices can aid the propagation of wildlife animals, where the pregnant ones are preserved for the sustainability of the animal population. This not only aids conservation, it also helps in the preservation of the livelihood of the hunters, as their operations will only continue, if there are animals in the wild to hunt. On the other hand, the greatest representation of the respondents indicated that there were no taboos guiding the hunting of old females and old males. As such, this can aid selective cropping of animals, where the older individuals are hunted, and giving better opportunities for the younger ones to grow to maturity.

The hunters largely engaged in hunting activities in areas outside protected areas, as they acknowledged that protected areas (the closest to them being Omo Forest Reserve in Ogun State) are off limits for the hunters, except for those who obtain licenses and are not sanctioned for any species of animals killed. The animal most frequently encountered by most hunters during hunting exercise was Grasscutter (*Thryonomys swinderianus*). This was followed by Maxwell's duiker (Philantomba maxwelli) and Bushbuck (Tragelaphus sylvaticus). These three species were among the 10 species documented by Layade et al. (2021), as wild animals killed by hunters in the study area. Of particular note is the fact that Thryonomys swinderianus is a predominant species found in most forests in south western Nigeria. They are found displayed either fresh or roasted in most bushmeat markets, and along roadsides. The results were further substantiated with respect to respondents rating of the availability of animals in the past 10 and 2 years, where animals like Panthera leo, Loxodonta africana, Psittaciforms walger and Pan troglodytes have not been encountered. while Thryonomys swinderianus, Cephalophus philantomba, Vulpes vulpes and Pholidota manis were the frequently seen. Worthy of note however is the fact that the frequency of encountering animals when compared with past times was low. They also acknowledged in the FGD that some animals are no longer existent in their immediate environment, that is, they are locally extinct.

A key role in reducing excessive harvests of wildlife in many contexts is imposing existing legal wildlife protection or improvement of legal tools. As such, the knowledge and perception of wildlife laws by hunters in the study area was assessed. The result showed that most hunters even though has heard about wildlife conservation laws, were oblivious of the meanings and significance. Only few of the respondents claimed to be informed about conservation laws. This few could neither state nor give the contents of the law. It was further revealed that these laws were not explained to the hunters while on training as apprentice. Similarly, these laws were not discussed in hunters' association meetings neither does the association have any material that relates to the law. Vividly, the results thus points to the fact that the hunters are not aware of the Nigerian wildlife conservation laws, and their significance This trend was also observed by Adefalu et al (2013) who noted that hunters in Kwara State were not aware of the endangered species act. The implication is that the hunters could encroach into protected animals for their hunting expeditions, which could compromise wildlife conservation.

People rationally calculate the costs and benefits of breaking the law. People are predicted to abide by the law if sanctions are sufficiently severe, whereas they tend to break the law if sanctions for doing so are too mild (Becker 1968; Polinsky and Shavell, 2000). A higher percentage (82.5%) indicated that the laws do not stop hunting activities of any species of animal whether endangered or not. This shows that the hunters do not really feel the impact of the written laws as there were little occurrences of people being punished due to violation of the laws. Also, a high proportion (78.2%) of the respondents stated that they've never heard of anyone that was sanctioned because they violated wildlife laws. It could be said that since sanctions do not exist or are too mild to be noticed, these hunters do not operate within the confines of any wildlife conservation law. According to Morgera (2009), rules aiming at the conservation of wildlife are usually in the form of general statements requiring sustainability, general prohibitions, classification of species to be granted varying degrees of protection, creation of protected areas and the protection of wildlife from negative effects of other land uses. Among the weaknesses which may be noted is the lack of clear legal frameworks for management planning, which makes it difficult to achieve sustainability.

## CONCLUSION

Hunters in Egbeda and Lagelu Local Government Areas of Ibadan, Oyo State, Nigeria were oblivious of Nigeria wildlife conservation laws and carry out their hunting expeditions with no respite to the laws. However, a crucial factor guiding the sustainability of wildlife is the local laws and taboos inferred on hunters. These taboos were targeted at protecting pregnant, nursing and young wild animals, while older females and males are the target in hunting expeditions. Taboos like 'a hunter with a pregnant wife must not kill a pregnant animal' and laws like 'voung and female animals should not be killed' help to retain some of these animals for continuity. Although the hunters were confident that the animals can never to go into extinction, there are evidences that the frequency of sighting certain animals in the present compared to about 10 years ago and earlier, was low and some of the animals

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were gradually becoming locally extinct. It is recommended that Nigerian wildlife laws should be reviewed for effective management of wildlife. The laws should be introduced to the hunters through their associations in the right manner and appropriate language; as well as publicised on all media forms especially in radio

## REFERENCES

- Abhary K., Adriansen,H. K., Begovac, F., Djukic, D., Qin, B., Spuzic, S., Wood, D., Xing, K., (2009). Some basic aspects of knowledge. *Procedia Social and Behavioral Sciences* 1: 1753–1758.
- Adefalu, L. L., Aderinoye-Abdulwahab S., Akangbe J.A., Ogunlade I. and Matanmi, B. M. (2013). Local hunting strategies in Kwara State, Nigeria: Challenge for wildlife conservation policy enforcement. *Albanian Journal of Agricultural Science*, 12 (4): 627-632
- Akinyemi, I.G. (2018). Assessment of wildlife hunting methods in two ecological zones in Nigeria. Sch. *Journal of Agriculture and Veterinary Science*, 5(12):664-668
- Ann, O.O, and Medugu, I. M (2016) Assessing the impact of Wildlife hunting in Otukpo, Benue state, Nigeria. *International Journal of Scientific Engineering and Applied Science*. 2(5): 217-233.
- Babalola, F.D. & Oladipupo, A. D. (2018). Evaluation of factors associated with bushmeat marketing in Igbomina District of Kwara State, Nigeria. *Journal of Forest Resources Management*; 15(1):3-50
- Becker, G.S. (1968): Crime and Punishment: An Economic Approach. *Journal of Political Economy* 76: 169-217.
- Coker, O. M., Ajayi, O. O. and Dada, O. M. (2020). Knowledge of Nigeria wildlife conservation laws among officials of Okomu and Old Oyo National Parks, Nigeria. *Nigerian Journal of Wildlife Management*, 4(1): 37 - 43
- Cowlishaw, G., Mendelson S. and Rowcliffe J. M. (2004). Evidence for post depletion sustainability in a mature

and television such that the information would circulate in such a way that everyone, both hunters and non-hunters would have an idea about the law. Also, government should ensure that adequate penalties should be given to defaulters of the law.

bushmeat market. *Journal of Applied Ecology*, 42: 460-468.

- Ezenwaka, J. (2008): Communal Participation and Ownership in Sustainable Development; being a paper presented at the Rivers State Stakeholders Conference for Sustainable Development held at the Alfred Diete Spiff Sports Complex, 13 – 17 October 2008; pp 193 – 196.
- Ezenwaka, J. and Abere, S. A. (2009): Role of Social Capital in Sustainable Livelihoods and Community Development in the Niger Delta; *International Journal of Geography and Regional Planning*, 1(1): 44 – 53.
- Federal Ministry of Environment. (2010). Nigeria Fourth National Biodiversity Report (NFNBR) (2010). Retrieved August 27, 2018 from <u>http://www.cbd.int/doc/world/ng/ngnr-04-en.pdf</u>
- Friant S, Paige S. B, Goldberg T. L. (2015) Drivers of Bushmeat Hunting and Perceptions of Zoonoses in Nigerian Hunting Communities. *PLOS Neglected Tropical Diseases*, 9(5): 48-55
- Gamalo, L. E, Cabañas, A., Suetos, K. J., Tauli,
  J. I., Vegafria, N. J., Tenorio, F. M.,
  Galapon, M., Balatibat, J. (2018).
  Awareness and perception on wildlife
  and conservation of teachers and
  college students in Los Banos, Laguna
  Philippines. Journal of Biodiversity
  and Environmental sciences. 12(2):
  160-167.
- Gibbons, D. C. (1972). Crime in the hinterland. Criminology, 10: 177-191
- Hummel, R. L. (1983). Hunting and fishing—but not in sociology. *The Rural Sociologist*, 3: 255-258.
- Idowu, I. J. and Morenikeji A.O. (2015). Wild Fauna Conservation in Nigeria.

*Environment and Natural Resources Research.* 5(3): 98-108

- Isiugo,N.P., and Obioha, E.E. (2015). Community Participation in Wildlife Conservation and Protection in Oban Hills Area of Cross River State, Nigeria. Journal of Sociology and Social Anthropology, 6(2): 279-291.
- Kiss A., 1990. *Living with wildlife*. Wildlife Resource Management with local participation in Africa. World Bank technical paper 130. (African Technical Department Series). Pp 236
- Layade, K. T., Layade, A. A., Khinde, J., Alaye, S. A. and Jayeoba, W. A. (2021).
  Assessment of wildlife hunting activities in Ido Local Government Area, Oyo State. *Journal of Applied Science and Environmental Management*, 25(3), 415 418
- LENF (1998): Living Earth Environment Action Programme; Participatory Learning and Action report (Unpublished report, Living Earth Nigeria Foundation)
- Mace, G.M. and Reynolds, J.D. (2001) Exploitation as a conservation issue. *Conservation of Exploited Species* (eds J.D. Reynolds, G.M. Mace, K.H. Redford & J. G. Redford), pp. 3–15. Cambridge University Press, Cambridge, UK.
- Mutanga, C. N., Vengesayi, S., Gandiwa, E., Muboko, N, (2015). Community perceptions of wildlife conservation and tourism: A case study of communities adjacent to four protected areas in Zimbabwe. *Tropical Conservation Science* 8 (2): 564-582.
- Nasi, R., Brown, D., Wilkie, D., Bennett, E., Tutin, C., van Tol, G., and Christophersen, T. (2003). Conservation and use of wildlifebased resources: the bushmeat crisis. Secretariat of the Convention on Biological Diversity, Montreal, and Center for International Forestry Research (CIFOR), Bogor. Technical Series no.33, 50 pages.

- Oliver, W. L. R and Heaney, L. R (1996). Biodiversity and conservation in the Philippines. *International zoo news* 43: 329-336
- Polinsky, M. A. and Shavell, S. (2000): The Economic Theory of Public Enforcement of Law. *Journal of Economic Literature* 38(1): 45-76.
- Redford, K. H. (1992). The empty forest. *Bioscience*. 42(6): 412-422.
- Ripple, W. J., Abernethy, K., Betts, M. G., Chapron, G., Dirzo, R., Galetti, M., Levi, T., Lindsey, P. A., Macdonald, D. W., Machovina, B., Newsome, T. M., Peres, C. A., Wallach, A. D., Wolf, C., Young, H. (2016). Bushmeat hunting and extinction risk to the world's mammals. *Royal Society Open Science*, 3:160498
- Sobere, N. U and Ihua-Madunenyi, A. B. (2019). The Impact of Human Population on Biodiversity Conservation in Nigeria: The Need for Legal Intervention. Journal of Law, Policy and Globalization,92, 2-11.
- Western, D. and Wright, R. M. (1994). *The* background to community-based Conservation. Natural connections: Perspectives in community-based conservation. Washington, DC: Island Press.
- Yarrow, G. (2009). Wildlife and Wildlife management. Fact sheet 36; Clemson Extension. Retrieved March 17 from <u>https://www/clemson.edu/../wildlife/.</u> ./fs36\_wildlife\_and \_wildlife\_mana.