ISSN:
Print - 2277 - 0755
Online - 2315 - 7453

Journal of Agricultural Science and Environment

IMPACT OF HUMAN-WILDLIFE CONFLICT IN THE SURROUNDING VILLAGES OF OLD OYO NATIONAL PARK

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ABSTRACT

The study assesses the impacts of Human-Wildlife conflicts in the surrounding villages in Old Oyo National Park (OONP), Nigeria. Two ranges out of the five ranges were used. Four villages were selected based on the distribution of primates and wildlife populations with each range producing two villages around Old Oyo National Park, were randomly selected for wildlife assessment. A total of 80 well-structured questionnaires were administered to the villagers with each getting 20 questionnaires respectively. Data collected were subjected to inferential and descriptive statistics. Result shows that among other socio demographic characteristics tested against the impact of Human –wildlife conflict in the park, educational level and religion show significant difference ($p<0.05$). the buffer zone around the park has been extensively encroached; this made most of the surrounding villages to the park fall within the average distance of 2.6km. about 79% of the villages make use of fire wood for their household cooking. Major animals that intrude farmlands in the study areas include monkey (24%), Grass-cutter (11%), Cattle (19%), Gorilla (12%), Antelope (6%), Cane rat (5%) and Rabbit (3%). Some of the crops attacked by the wildlife animals include; tubers (24%), tubers and vegetable (7%), tubers and fruits (36%), tubers, vegetable and fruits (3%), vegetable (7%), fruits (3%). All the respondents (100%) rated the level of attack and damages to their crops as high.

INTRODUCTION

National Parks are refuges of tranquillity and peace, yet they are also places where conflict occurs. In a world in which the bio-physical environment and socio-cultural system are changing rapidly, conflicts involving protected areas are unavoidable. However, conflicts that are properly addressed can be opportunity for problem to be identified and solved. In the Nineteenth and early part of twentieth century, most African countries were colonized by Europeans, who set apart large areas of land containing wildlife and other natural resources for conservation under state ownership. Thus, colonial government owned relatively high-density of wildlife areas in many parts of Africa. Rural communities with traditional custodians of wildlife resources were forcibly moved out of their ancestral areas of land and consequently alienated from the wildlife that they once owned.

Human-wildlife conflict is defined as "any interaction between humans and wildlife that results in negative impacts on human social, economic or cultural life, on the conservation of wildlife populations, or on the envi-

ronment" (WWF 2005). Conflicts between humans and wildlife are the product of socio-economic and political landscapes and are controversial because the resources concerned have economic value and the species involved are often high profile and legally protected (Treves and Karanth 2003; McGregor 2005). While humans and wildlife have co-existed for millennia, the frequency of conflicts involving problem animals as grown in recent decades, mainly because of the exponential increase in human populations and consequential expansion of human activities (Woodroffe 2000; Woodroffe et al. 2005), expansion of wildlife distributions, as well as a frequent inability of institutions that are meant to mediate such conflicts to respond effectively.

Conflicts between wildlife and human are a major conservation problem which conservation organizations all over the world are dealing with (WCS, 2010). Human wildlife conflict is one of the major threats to conservation in Africa. They occur in different settings such as increasing land scarcity, hunting prohibition and wildlife induced damage to property and these constitute factors that may create local hostility towards wildlife and protected areas. Access to land is a central issue in rural Africa for both farmers and pastoralists. Consequently, rural Africans generally do not want to give up land to wildlife or have wildlife nearby (Newmark *et al.*, 1994). One major source of conflict between wildlife and farmers in Nigeria and the world at large is crop raiding (Rowe, 1996; Hill *et al.,* 2004; Warren, 2003 and Distefano, 2010).

This study will therefore assess the effects and impacts of wildlife's activities on two villages sharing border with the Old Oyo National Park which has resulted to Human-Wildlife conflict over the years. This study is therefore carried out to specifically:

- Determine the effect of Primate and other wildlife on the livelihood of residence in the two villages under study that share boundary with the park.
- Determine percentage damage done to farms produce by primates and any other related species.
- Determine perception on the conservation of wild animals.
- Determine the causes of human wildlife conflict
- Determine the challenges of the respondents in the study area.
- Determine and make recommendation on how to combat conflict in the study area.

METHODOLOGY

Study Area

The study was carried out in villages bordering Old Oyo National park, Nigeria. Old Oyo National Park (OONP) is one of the National parks of Nigeria. The Park stretched through Guinea and derived savannah. The park lies between latitude 8°15' and 9° north; and longitude 3°35' and 4°42' east and covers a total area of 2,512km^2 mostly of lowland plains at a height of 330 m and 508 m above sea level. The Climate is equatorial, notably with dry and wet seasons with relatively high humidity. The dry season lasts from November to March while the wet season starts from April and ends in October. Average daily temperature ranges between 25 °C (77.0 °F) and 35 °C (95.0 °F), almost throughout the year.

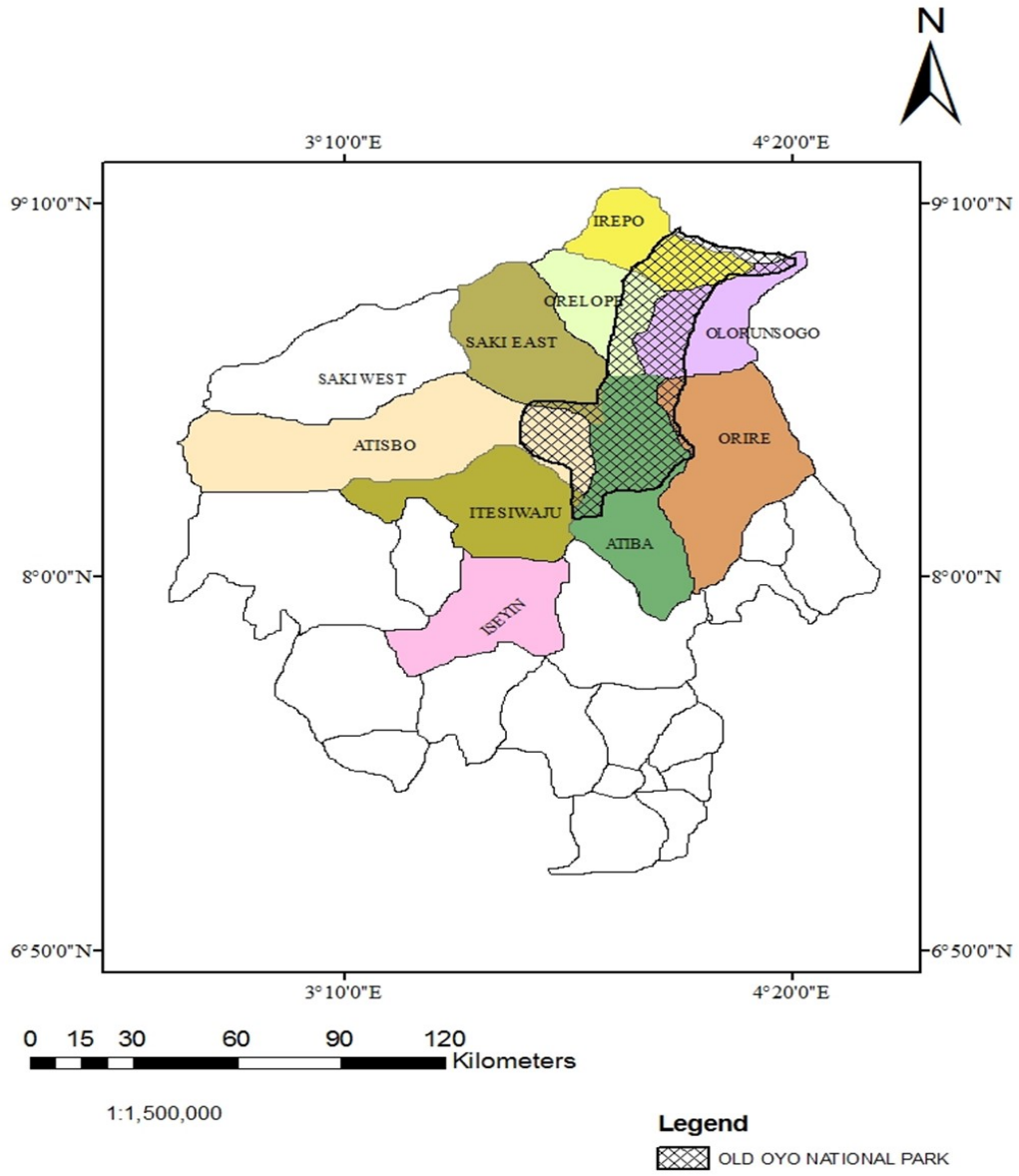

Fig 1. A map showing the Old Oyo National Park, Oyo and its surrounding town

Old Oyo National Park comprises of a whole lot of communities bordering the 5 ranges (which are: Oyo Ile, Sepeteri, Tede, Yemoso and Marguba Ranges) of the park. However, only two ranges was used for this study based on the impact of Human – wild-life conflict in the surrounding villages in Old Oyo National park. They are: Marguba Range (comprising of Abanla and Imodi vil-lages) and Sepeteri Range (comprising of

Budo Alhaji and Fomu villages). Thus the four villages mentioned were used for the study.

Sampling Procedure and Sample Size

The study was carried out using a well structure questionnaire to villagers around the four communities sharing boundary with the range selected. A total of eighty (80) copies of the questionnaire were administered to the respondents in the four selected four selected village, with twenty (20) questionnaire randomly administered to household representatives in each respectively.

Method of Data Collection

The required primary data and information were collected through the use of copies of a well structured questionnaire designed to suit the objective of the study especially the specific objective of the study.

Analytical tools

Computer analysis with Statistical Package for the Social Sciences (SPSS) software was used. Descriptive statistics of the data collected were also represented in tables and charts.

RESULTS AND DISCUSSION

Socio Economic Characteristics of Respondent

The age distribution of the respondents shows that 23.8% are within the ages of 20-30 years, 28.7% are within 31-40 years, 40.0% are within 41-50 years, while 7.5% are above 50 years (Table 1). This indicates that majority of the farmers are within the agricultural productive age of between 20 and 40 years. This also conforms with the findings of Oduntan *et al.,* (2008), that people between 20 and 40 years of age are engaged in agriculture. The gender distribution shows that 45.0% of the respondents are male, while 55.0% are female. This is in line with the earlier findings of Oduntan *et al* (2008). The marital distribution shows that 28.7% of the respondents are single, 70.0% are married, while 1.3% of the respondent is divorced. The religion distribution of the respondents, shows that 56.3% are Christian, 42.5% Islam, 1.3% traditional. This can be attributed to the large number of churches in the study area. The educational distribution of the respondents, the table shows that 68.8% of the respondents had no formal education, 23.8% of the respondents had primary education, 2.5% had secondary education, while 5.0% had tertiary education. This result agrees with the earlier findings of Oduntan *et al.,* (2008) who noted that majority of the respondents in the study area were without formal education. Past researchers have found that farmers with formal or higher education level are more likely to recognize and be cautious of harmful environmental practices or pest control methods (Jacobson *et al*., 2006). The household size distribution of the respondents, the table shows that 71.3% of the respondents had a household size of between 2-5, while 28.7% of the respondents had a household size between 6-10. Previous studies (Akinyemi and Oduntan, 2004; Oduntan *et al*., 2012) revealed that families with many members will likely have more economic pressure and struggling to uplift their living standard.

The occupation distribution of the respondents, the table shows that majority 77.5% of the respondents are farmers, 8.8% of the respondent are artesian, 6.3% are hunters, while 7.5% of the respondents are civil servants. farming is said to be the predominant occupation in the rural communities which accounted for the large number of respon-

dents who are into agriculture due to adverse land area and vegetation. The income distribution of the respondents, the table below shows that 25.0% of the respondents earns an income level between N5000 and N10000, 10.0% earns an income level between N10000 and N20000, 35.0% earns an income level between N20000 and N30000, while 30.0% of the respondents earns an income level above 30000. This is due to the predominant occupation of the respondents in the study area who are farmers and practice subsistence farming, providing for their family first before selling.

Table 1: Distribution of Respondents Socio-economic Characteristics

Variable	Classes	F	%
Age	20-30years	19	23.8
	31-40years	23	28.7
	41-50years	32	40.0
	Above 50years	6	7.5
	Total	80	100.0
Gender	Male	36	45.0
	Female	44	55.0
	Total	80	100.0
Marital Status	Single	23	28.7
	Married	56	70.0
	Divorced	1	1.3
	Total	80	100.0
Religion	Christianity	45	56.3
	Islam	34	42.5
	Traditional	1	1.3
	Total	80	100.0
Educational Level	No Formal Education	55	68.8
	Primary	19	23.8
	Secondary	2	2.5
	Tertiary Education	4	5.0
	Total	80	100.0
Household Size	2-5	57	71.3
	6-10	23	28.7
	Total	80	100.0
Occupation	Farming	62	77.5
	Artesian	7	8.8
	Hunting	5	6.3
	Civil Servant	6	7.5
	Total	80	100.0

Distribution of the type of Crop Grown and Crops Attacked by Wild Animals

According to the type of crops grown. 12.5% of the respondents grow tubers, 18.8% of the respondents grow tubers and vegetables, 38.8% of the respondents indicated they grow tubers and fruits (Table 2). About 23.8% of the respondents indicated they grow tubers, fruits and vegetables, 5.0% indicated that they grow vegetables, while 1.3% of the respondents indicated they grow fruits only. The respondents in the study area are predominantly farmers that grows mainly tubers and fruit such as cassava, maize which is a priority crop cultivated by all the farmers in the study area. The distribution of respondents according to the crops attacked by wild animals, 30.0% of the respondents indicated that tubers were usually attack by wild animals, 8.8% indicated that tubers and vegetables were usually attacked, 45.0% indicated that tubers and fruits were attacked, 3.8% indicated that tubers, fruits and vegetables were usually attacked, 8.8% indicated that only vegetables were attacked, while 3.8% of the respondents indicated that only fruits were attacked. These findings agree with the observations of some previous studies (Else, 1991; Naughton-Treves, 1998 and Naughton -Treves *et al*., 1998; Shemweta and kidegesho, 2000; Waladji and Tchamba, 2003) that raiding which affects Maize occurred when ripe Maize is available. The impact of Maize destruction is most felt by households. Tantalus monkeys were implicated for most destruction done to Maize in Filinga range. Similarly, Shemwata and Kidegesho (2000) listed Warthog, Tantalus monkey and porcupine among the major cause of crop damages to the local communities around the Seakale Swayne hartebeest sanctuary in Ethiopia. Maize is a priority crop cultivated by all the farmers in the study area. Destruction of a priority crop in a community where about 80% of the people are engaged in agriculture (Kirk - Green, 1958) is a very serious case that requires an urgent attention to safe the entire populace from hardship as respondents' economies are negatively affected.

Table 2: Distribution of Respondents according to the Type of Crop Grown and Crops Attacked by Wild Animals in all the selected villages

QUESTION		F	%
Type of crops grown by households in study area	Tubers (cassava, yam, potatoes)	10	12.5
	Tubers and vegetables	15	18.8
	Tubers and fruits	31	38.8
	Tubers, fruits and vegetables	19	23.8
	Vegetables (tomatoes, pepper, okro, mellon)	4	5.0
	Fruits (mango, cashew, maize, cheery, groundnut)	1	1.3
	Total	80	100.0
What are the crops usually attacked by wild animals	Tubers (cassava, yam, potatoes)	24	30.0
	Tubers and vegetables	7	8.8
	Tubers and fruits	36	45.0
	Tubers, fruits and vegetables	3	3.8
	Vegetables (tomatoes, pepper, rodo, okro, mellion)	7	8.8
	Fruits (mango, cashew, maize, cheery, groundnut)	3	3.8
	Total	80	100.0

Distribution of respondents according to the Species of Wildlife Animals visiting their Farm and the Rate of Destruction caused by Wildlife Animals

About 26.3 % of the respondents indicated that monkeys do visit their farm, 13.6% of the respondents indicated that grasscutter visits their farm, 23.8% of the respondents indicated that their farms are visited by cattle, 15.0% indicated that Gorilla visits their farm, 6.3% indicated that giant rat are visitors to their farm, 3.8% indicated that rabbit visits their farm, 7.5% indicated that their farm are visited by antelope, 3.8% of the respondents indicated that rabbits do visit their farm (Table 3). This is partly in line with the findings of Warren (2003) that primates reduce 42.1 % of expected crop yield in the study area. It also corroborates other studies (Naughton-Treves, 1998; Porter and Sheppard, 1998 and Yudelman *et al*., 1991) that estimated losses caused by primates to be between 10-50% of total crop production.

Majority of the respondents indicated that the cause of destruction by wild animals is high. This corroborates with Oduntan *et al* (2009) who concluded that destruction of crop by wild animal species hardened farmers' attitude against wildlife conservation. Loss of thousands and millions of Naira of food crops in villages of a nation where 70.80% of the population are living on less than one dollar a day and 92.40% on less than two dollars a day (UNICEF, 2006) can further impoverished people living in such areas.

Table 3: Distribution of respondents according to the Species of Wildlife Animals visiting their Farm and the Rate of Destruction caused by Wildlife Animals in the selected villages

QUESTION		F	%
What species of wildlife animal visit your farm	Monkey	24	40.1
	Grass cutter	11	13.9
	Cattle	19	23.8
	Gorilla	12	15.0
	Giant rat	5	6.3
	Rabbit	3	3.8
	Antelope	6	7.5
	Total	80	100.0
How you rate the level of destruction caused by wildlife animals	High	80	100.0
	Medium	0	0.0
	Low	0	0.0
	Total	80	100.0

Perception of Respondents on the Conservation of Wildlife animals

About 5% of the respondents strongly agree that they are not permitted to kill the wild animals, majority containing about 62.5% of the respondents agrees that they are not permitted to kill wild animals, 32.5% disagrees that they are not permitted to kill the wild animal (Table 4). This conforms to the findings from Pers. Com. (2010), which noted that discussants emphasized that "Wild animals especially Kirka (Tantalus Monkeys) has disturbed their village for a long time as they are not permitted to kill the animals. About 63 %of the respondents strongly agree that the animals are not useful to them because they don't eat their meat, 61.3% strongly disagree, while 32.5% disagree with the opinion.

About 51.2% of the respondents strongly agree that animals are usually active around farm settlement, 32.5% agree, 11.3% strongly disagree, while 5.0% disagree. This is due to the fact that they are attracted to the farm settlement due to the presence of crops which serves as food to them. Also 51.2% of the respondents strongly agree that beneficiaries of these wild animals are tourists and park management, 36.3% agree, 6.3% strongly disagree, while 6.3% disagree. Also, 56.3% of the respondents strongly agree that they learn to tolerate wildlife animals around them, 36.3% agree, 3.8% strongly disagree, 3.8% disagree. About 55% of the respondents strongly agree that the wild animals pose as treat to their farm produce, 37.5% agree, 3.8% strongly disagree, 3.8% disagree. This result supports the findings of Msiska (2002); Nxumayo *et al.* (2008) that noted that historical background of these communities is characterised by a general dissatisfaction with reserve authorities in part due to village evictions and damage to crops and property caused by wildlife.

About 56.3% of the respondents strongly agree that the animals (wild) cause economic loss to them as their livelihood is destroyed, 36.3% agree, 3.8% strongly disagree to the opinion, while 3.8% disagree. This supports the findings of (UNICEF, 2006) that there is loss of thousands and millions of Naira of food crops in villages of nations that are within wildlife parks and reserve, where 70.80% of the population are living on less than one dollar a day and 92.40% on less than two dollars a day.

Table 4: Distribution of Respondents according to Crops not usually attack by Wildlife Animals, and Their Sources of Domestic Energy

QUESTION		F	%
What are the crops not usually attacked by wildlife animals	No crop	68	85.0
	Tomatoes	4	5.0
	Potatoes	5	6.3
	Pepper	3	3.8
	Total	80	100.0
What are the sources of domestic energy to villagers	Firewood	79	98.8
	Charcoal	1	1.3
	Kerosene	0	0.0
	Total	80	100.0

Table 5: Distribution of respondents according to their perception on the conservation of wildlife animals

RESEARCH QUESTION	SA F(%)	A F(%)	SD F(%)	D F(%)	TOTAL F(%)
We are not permitted to kill the wild animals	4(5.0)	50(62.5)	-	26(32.5)	80(100.0)
The animals are not useful to us because we don't eat their meat	5(6.3)	-	49(61.3)	26(32.5)	80(100.0)
Animals are usually active around farm settlement	41(51.2)	26(32.5)	9(11.3)	4(5.0)	80(100.0)
Beneficiaries of these wild animals are tourists and park management	41(51.2)	29(36.3)	5(6.3)	5(6.3)	80(100.0)
We learn to tolerate wildlife animals around us	45(56.3)	29(36.3)	3(3.8)	3(3.8)	80(100.0)
They pose as treat to our farm produce	44(55.0)	30(37.5)	3(3.8)	3(3.8)	80(100.0)
They cause economic loss to use as our livelihood is destroyed	45(56.3)	29(36.3)	3(3.8)	3(3.8)	80(100.0)

Perception of respondents on the causes of human wildlife conflicts

About 47.5% of the respondents strongly agree that there is illegal hunting of wildlife, 28.7% agree, 16.3% strongly disagree, while 7.5% disagree to illegal hunting of wildlife (Table 6). This conforms to the findings of Kepe, *et al* (2000) that noted that illegal hunting is high because communities living around the protected area poach to supplement their starch based diet with protein as reported about in Mkambati Nature Reserve in South Africa. About 47.5% of the respondents strongly agree to illegal grazing of Park Range by cattle, 27.5% agree, 18.8% strongly disagree, while 6.3% disagree to illegal grazing of Park Range by cattle. Also, 46.3% of the respondents strongly agree to farmland encroachment by wildlife animal, 28.7% agree, 16.3% strongly disagree, 8.8% disagree to farmland encroachment by wildlife animal. This corroborates the findings of other studies (Naughton-Treves, 1998; Porter and Sheppard, 1998 and Yudelman *et al*., 1991) that estimated losses caused by primates to be between 10-50% of total crop production. Also 46.3% of the respondents strongly agree logging activities in park vegetation, 28.7% agree, 15.0% strongly disagree, while 10.0% disagree. About 51.2% of the respondents strongly agree that there is unemployment of villagers, 30.0% agree, 10.0% strongly disagree, while 8.8% disagree. The damage of crops which serves as livelihood could eventually lead to unemployment of productive youths. About 50% of the respondents strongly agree that destruction of farm crops were made by wildlife animals, 30.0% agree, 10.0% strongly disagree, 10.0% disagree. This is in line with studies of (Happold 1995; Emerton 1999; Choudhury 2004; Dublin and Hoare 2004; Hill *et al* 2004; Graham *et al.* 2005) who observed that wildlife damage represents a very real and tangible threat to livelihoods in terms of personal injury, crop and livestock losses, and property damage.

About 31.3% of the respondents strongly agree that there is poor communication and understanding between the park management and surrounding communities, 25.0% agree, 31.3% strongly disagree, 12.5% disagree. This was attributed to lack of compensation given to farmers and rural dwellers for the damages caused by wildlife animals to farmland by park management. About 48.8% of the respondents strongly agree that park range boundaries are too close to surrounding communities, 22.5% agree, 18.8% strongly disagree, while 10.0% disagree. Findings indicate that majority of the communities in the study area share boundaries with the park.

Table 6: Distribution of respondents according to their perception on the causes of human wildlife conflicts

RESEARCH QUESTION	SA F(%)	A F(%)	SD F(%)	D F(%)	TOTAL F(%)
Illegal hunting of wildlife	38(47.5)	23(28.7)	13(16.3)	6(7.5)	80(100.0)
Illegal grazing of park range by cattle	38(47.5)	22(27.5)	15(18.8)	5(6.3)	80(100.0)
Farmland encroachment by wildlife animal	37(46.3)	23(28.7)	13(16.3)	7(8.8)	80(100.0)
Logging activities in park vegetation	37(46.3)	23(28.7)	12(15.0)	8(10.0)	80(100.0)
Unemployment of villagers	41(51.2)	24(30.0)	8(10.0)	7(8.8)	80(100.0)
Destruction of farm crops by wildlife animals	40(50.0)	24(30.0)	8(10.0)	8(10.0)	80(100.0)
Poor communication and understanding between the park management and surrounding communities	25(31.3)	20(25.0)	25(31.3)	10 (12.5)	80(100.0)
Park range boundary too close to surrounding communities	39(48.8)	18(22.5)	15(18.8)	8(10.0)	80(100.0)

Assessment of Impacts of Human Wildlife Conflicts on Respondents

About 48.8% of the respondents strongly agree that there is decrease in revenue from crop damaged, 16.3% agreed, 11.3% strongly disagree, while 11.3% disagree, (table 7). This can be attributed to the damage of crops and farmland by wild animals which have lead to reduction in revenue for dwellers around the park. This finding corroborates with the report of (UNICEF, 2006) that noted that loss of thousands and millions of Naira of food crops in villages of a nation where 70.80% of the population are living on less than one dollar a day and 92.40% on less than two dollars a day due to wildlife attacks on farmland. Also 46.3% of the respondents strongly agree that there is an increase risk of starvation as there is no food due to loss of farm produce, 17.5% agree, 27.5% strongly disagree, 8.8% disagree. This finding indicates that due to massive damages encountered by farmers' food shortage is imminent as majority of their crops are destroyed. This is partly in line with the findings of Warren (2003) that primates reduce 42.1 % of expected crop yield in the study area. It also corroborates other studies (Naughton-Treves, 1998; Porter and Sheppard, 1998 and Yudelman *et al*., 1991) that estimated losses caused by primates to be between 10-50% of total crop production.

About 50% of the respondents strongly agree that raising orphans is difficult due to conflict incidents, 15.0% agree, 28.7% strongly disagree, 6.3% disagree. This result indicates that damages to farmland implies damage to livelihood , thereby making it difficult for people who are raising orphans in their household due to the cost of living which is not commiserate with the income generated. Moreover 50.0% of the respondents strongly agree that residue from crops is not returned to soil as fertilizer when they are eaten, 15.0% agree, 30.0% strongly disagree, 5.0% disagree. These findings indicate majority of the crops attacked are taken away by the wildlife into the park and even their faeces which should have served as fertilizer is deposited in the park not the farmland.

About 53.8% of the respondents strongly agree that means of livelihood of villagers is destroyed, 17.5% agree, 22.5% strongly disagree, 6.3% disagree. This is in line with studies of (Happold 1995; Emerton 2001; Choudhury 2004; Dublin & Hoare 2004; Hill 2004; Graham *et al*. 2005) who observed that wildlife damage represents a very real and tangible threat to livelihoods in terms of personal injury, crop and livestock losses, and property damage.

About 53.8% of the respondents strongly agree that there is extinction of wildlife animals due to hunting and indiscriminate killing, 18.8% agree, 17.5% strongly disagree, 10.0% disagree. Also 55.0% of the respondents strongly agree it creates unemployment, 21.3% agree, 13.8% strongly disagree, 10.0% disagree. This can be attributed to the loss of livelihood due to attacks and damages caused by wildlife animals.

Table 7: Distribution of Respondents according to assessment of impacts of Human Wildlife Conflicts

RESEARCH QUESTION	SA F(%)	A F(%)	SD F(%)	D F(%)	TOTAL F(%)
Decrease revenue from crop damaged	39(48.8)	13(16.3)	19(23.8)	9(11.3)	80(100)
Increase risk of starvation as there is no food due to loss of farm produce	37(46.3)	14(17.5)	22(27.5)	7(8.8)	80(100)
Raising orphans is difficult due to conflict incidents	40(50.0)	12(15.0)	23(28.7)	5(6.3)	80(100)
Residue from crops is not returned to soil as fertilizer when they are eaten	40(50.0)	12(15.0)	24(30.0)	4(5.0)	80(100)
Means of livelihood of villagers is destroyed	43(53.8)	14(17.5)	18(22.5)	5(6.3)	80(100)
Extinction of wildlife animals due to hunting and indiscriminate killing	43(53.8)	15(18.8)	14(17.5)	8(10.0)	80(100)
Creates unemployment	44(55.0)	17(21.3)	11(13.8)	8(10.0)	80(100)

Perception of Respondents on the Control of Human Wildlife conflicts in Surrounding Villages

About 32.5% of the respondents strongly agree that if monkey or Baboons, they will deal with them, 17.5% agrees, 29 (36.3%) strongly disagree and 13.8% disagrees (Table 8). This can be connected to the fact that most of the rural dwellers are not permitted to kill the monkeys and baboons. This conforms to the findings from Pers.Com. (2010), which noted that discussants emphasized that "Wild animals especially Kirka (Tantalus Monkeys) has disturbed their village for a long time as they are not permitted to kill the animals. About 47.5% of the respondents strongly agree that beating drums chases them (wild animals) away, 33.8% agree, while 8.8% strongly disagree and 10.0% disagree. This finding is in line with the study of Byamukama and Asuma (2006), who noted that the beating of drums and shouting causes Gorillas in Bwindi impenetrable National Park to retreat from cultivated and residential areas. Also 48.8% of the respondents strongly agree that setting fire on the park range borders chases wildlife away from villages, 31.3% agree, 7.5% strongly disagree, 12.5% disagree. This result of majority setting fire on the park border area conforms with the findings of Campbell, (2007) who noted that effectiveness of the use of fire as not be evaluated and that fires are problematic as uncontrolled bushfires endanger people and wildlife animals. About 53.8% of the respondents strongly agree that they contact extension agents or range management in the case of wildlife attack incident, 30.0% agree, 5.0% strongly disagree, 11.3% disagree. This indicates that on the occasions of attack by wild animals, park rangers and extension agents are called to control such incidence. Also 57.5% of the respondents strongly agree the use of scare crows on farmland, 26.3% agree, 6.3% strongly disagree, 10.0%

disagree. About 48.8% of the respondents strongly agree that while waiting for park rangers, we make noise to scare animal away, 31.3% agree, 7.5% strongly disagree, 12.5% disagree. This finding is in line with the study of Byamukama and Asuma (2006), who noted that the shouting causes Gorillas in Bwindi impenetrable National Park to retreat from cultivated and residential areas. Also 46.3% of the respondents strongly agree that fixing or maintaining fence helps control human wildlife conflicts, 23.8% agree, 18.8% strongly disagree, 11.3% disagree. Majority agrees they fix fences to control attack of wildlife attack. But findings by Ohashi, (2005) reveal that in Bossou Guinea, Chimpanzees have learned to dismantle wire snares by triggering the release mechanism without contacting the snare. Forty-five percent of the respondents strongly agree that there is no barrier between people and the park, 25.0% agree, 22.5% strongly disagree, 7.5% disagree. This can be attributed to the lack of fences constructed by the park management, thereby facilitating the free flow of wildlife animals into surrounding communities. Also 46.3% of the respondents strongly agree that giving consideration to the surrounding villages interest (dialogue) helps control human wildlife conflicts, 31.3% agree, 13.8% strongly disagree, 8.8% disagree. This indicates that if the respondents are given due consideration, human wildlife conflicts can be controlled and reduced as conflict between rural dwellers and the community can be resolved. Also 46.3% of the respondents strongly agree that use of repellents helps control human wildlife conflicts, 30.0% agree, 15.0% strongly disagree, 8.8% disagree. This is in line with the findings of Strum, (1994) and Chalise, (2001) who noted that crop palatability by applying capsicum solution has help to chase wildlife animals for eating crops.

About 48.8% of the respondents strongly agree the use of bee hives, 28.7% agree, 11.3% strongly disagree, 11.3% disagree. Majority of the respondents believes that the bee's hives will pose as a threat to the wildlife animals attack their crops in the process chasing them away. In addition 37.5% of the respondents strongly agrees that the cultivation of non palatable crops and use of baboon urine as control, 27.5% agree, 20.0% strongly disagree, 15.0% disagree. The result shows that planting of such crops will drive wildlife animals away from the rural dwellers farmland as they will visit other area for food. Also 30.0% of the respondents strongly agree that translocation (trapping and moving of problems animals, also people) helps control human wildlife conflicts, 28.7% agree, 23.8% strongly disagree, 17.5% disagree. The result shows that translocation of problem animals will help in reducing the damages and loss of revenue due to attacks of such animals. In addition 11.3% of the respondents strongly agree that guarding of farmland helps control human wildlife conflicts, 20.0% agree, 47.5% strongly disagree, 21.3% disagree. This shows that majority of the respondents strongly disagrees as they believe they cannot watch over the farm all day as they have other household activities. Also 30.0% of the respondents strongly agree that use of lethal weapons (killing of problem animals) helps control human wildlife conflicts, 25.0% agree, 32.5% strongly disagree, 12.5% disagree. This shows that if lethal weapons are used wildlife animals encroaching farm land will be chased away from damaging crops.

Table 9: Test for significant relationship between the socioeconomic activities of the respondents and the impact of human wildlife conflict on the people in the surrounding communities and wildlife

Variable	Value	DF	Asymp Sig.	Decision
Age	41.134	4	0.636	NS
Sex	13.513	4	0.563	NS
Marital Status	14.306	4	0.993	NS
Religion	94.849	4	0.000	S
Educational Level	77.192	4	0.002	S
House Size	17.405	4	0.295	NS
Occupation	57.597	4	0.099	NS
Income	46.587	4	0.407	NS

Test for significant relationship between the socioeconomic activities of the respondents and the impact of human wildlife conflict on the people in the surrounding communities and wildlife's

There was a significant relationship between the Religion, Educational level of the respondents and the impact of human wildlife conflict on the people in the surrounding communities and wildlife's as the significant level is less than 0.05 (Table 9). The result shows the religious belief of the respondents has effect on the impact of human wildlife conflicts as some of the respondents believes that some parts of the wildlife animals can be used for fetish worship and in the case of attack on their farmland they kill them and used or sell them out to traditionalist.

Also a relationship exists between the educational qualification of the respondents and the impact of human wildlife conflict on the people in the surrounding communities and wildlife's. This can be attributed to the fact that the educational level determines the level of management of conflicts between human and wildlife. This result is in line with the earlier findings of Oduntan *et al* (2008) who noted that majority of the respondents in his study area were without formal education. Past researchers have found that farmers with formal or higher education level are more likely to recognize and be cautious of harmful environmental practices or pest control methods and management of human wildlife conflicts. (Jacobson *et al*, 2006).

CONCLUSION

The study revealed that majority of respondents; in the neighbouring villages of Old Oyo National Park are farmers and married. It also revealed that due to the loss of several amount of money amounting to thousands of naira due to damages caused by wildlife animals such as primates, warthogs and others on their farmlands, the farmers however

resulted into use of fire arms and traps to mitigate and control these damages on their own farmlands. This shows that the villagers don't believe in conservation of the wildlife as they have tolerated the activities and destructions caused by the species over the years without any form of compensation.

It could also be concluded that due to the abundance of food in the area the destructions by Tantalus monkey would not seize, as most of the crops produced are consumed by the wildlife. And food would always be abundant because of the high fertility of the soil along the river basins coupled with the fact that the agrarian households are continuously cropping at least 3 times in a year. It could however be concluded that the non - payment of compensation and the poor fencing of the park in restricting the movement of the wildlife is sole responsible for Human wildlife conflict. Due to the lack of commensurate means of compensating the people is not put in place as the pressure is continuously building up the resultant conflict will become frequent and complex to manage.

The study also revealed that the presence of Fulani cattle rearers attracted by the luxuriant vegetation in the park whose cattle have been vandalizing crops of farming households and grazing on vegetation meant for wild games, which exposes the wildlife's to their farms. This has resulted in loss of farm and poor capital returns.

It could also be concluded that due to the Human wildlife conflict, this which has generated a negative fillings about Tantalus monkey and the villagers has resulted in killing the species secretly using poisons, traps and gun.

RECOMMENDATION

In mitigating the occurrence of human-wildlife conflict, there is need to take into consideration some of the findings of this study, the following recommendations are made

Conservation education for local population at different levels to disseminate innovative techniques, building local capacity in conflict resolution and more understanding of Human -Wildlife Conflict (HWC). This will promote commitment towards conservation.

Promotion of dialogue and cooperation among different stakeholders. The commitment and coordination of local governments, National Park Service, Non-Governmental Organization (NGOs), conservation organization, scientific community, tourism and rural people will enhance participation, support and more contribution towards conservation activities.

Integration of the village council in management process to create better understanding between the Park and the local communities.

Construction and maintenance of bridges, culverts, roads and tracks to ease movement of people and farm produce.

Employment of more youths of the area to increase local involvement.

Construction of permanent ranger's post in Mayo Yum guard against illegal grazing in the Park.

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(Manuscript received: 6th June, 2017; accepted: 11th March, 2021).