



Public Attitude Towards Wildlife Conservation In Delta State, Nigeria.

EMELUE G.U. and EMUEZE M.N.

Department of Forestry and Wildlife, Faculty of Agriculture, University of Benin,
P.M.B 1154, Benin City, Nigeria .E-mail:gideonemelue@yahoo.com

Abstract

The study examined the attitude of the public and factors influencing it towards conservation of wildlife in Delta State. The respondents were residents of eight communities from three Local Government Areas in the State. Structured questionnaire were administered to 100 respondents from the communities and 20 from the staff of the Department of Forestry and Conservation in the state. Data obtained were analyzed using descriptive statistics, ANOVA and Chi-Square analysis. Results showed that only 45% of the respondents had knowledge about wildlife conservation. The respondents had a negative attitude towards wildlife conservation as only 7% of the respondents would think of rearing wild animals, 71% would kill and 22% would allow to go. The study also showed that occupation, settlement, sex, educational level, knowledge about wildlife conservation and efforts made by the government are significant factors that influence the attitude of the public towards wildlife conservation at $p < 0.05$. The study furthermore showed that there is no conscious effort on ground now being made by Delta State Government to boost conservation of wildlife in the State. It is recommended that the people should be enlightened on how important it is to conserve wildlife, awareness programmes should be organized in all the Local Government Areas, conservation areas such as zoos, parks and game reserves should be established and money should be provided to those who can go into wild animal conservation.

Introduction

Wildlife conservation is the regulation of the use of wild animals and plants in such a way as to provide for their continuous existence. It is a state of harmony between man and the environment. The conservation of wildlife is a social process involving the care and concern of man for the different animal species so as to maintain harmonious existence between himself and the environment (Oseni, 2006). The excessive manipulation of the environment by man for his needs is the most prevalent factor affecting habitats and consequently wildlife population, hence the efforts of wildlife conservation are aimed at preventing the depletion of present population and ensuring the continued existence of the habitats targeted species needed to survive.

The need for conservation of wildlife was embraced in Nigeria over 30 years ago

when the demand for wildlife resource increased due to increase in human population and also due to loss of wildlife habitat through logging, exploitation for fuel wood, industrialization, agriculture and highway development (Anadu, 1987) with the objective to preserve representative samples of the ecosystem, protect unique and endangered species, promote tourism and boost the supply of game meat (bush meat) on which the rural population depends for about 13 percent of their animal protein supply (Charter, 1973; Ajayi 1979).

Habitat destruction/loss of wildlife habitat which is the major challenge facing wildlife conservation effort has gone to the extent that wild plants are being impoverished and some wild animals population densities are closer to extinction and some already extinct. This has resulted due to increasing rate of population growth and various developmental

programmes aimed at meeting the needs of the increasing population. Other causes of habitat degradation are overgrazing, land clearing for agriculture, uncontrolled logging and gathering of firewood (Anadu, 1987 and Asibey and Child, 1990), increasing economic development, desertification, drought and other man-made disaster. Added to habitat destruction is the pressure put on wildlife by man's pollution of the environment, for instance in Delta state, gas flaring and oil spillage which is the major environmental pollution results in migration of some wild animals from the state to other neighbouring states. Haruna and Okeyoyin (1995) identified illegal hunting, illegal grazing and indiscriminate setting of vegetations on fire as some of the factors affecting wildlife conservation in developing countries. Furthermore, man's unguided and brutal killing of wild animals not only for his own consumption, but also for economic needs has resulted in massive depletion of wildlife resources. (Oseni, 2006). Gubbi, (2003) reported that Local traditional hunting has led to the extinction of some species of wildlife and pushing several others to critical levels.

In other for wildlife conservation to succeed there is need for the support of local communities living in close proximity to a reserve and also for community wildlife conservation to succeed, an understanding of the attitude and perception of local communities is paramount (Mohamed, 2010). The understanding of attitude towards wildlife, reserve and factors that affect these attitudes and perception is important to improve tolerance for wildlife. Infield (1988) recommended that attitudes of rural communities must be studied, their needs and aspirations considered in order to minimize conflicts between conservationists and people living around protected areas. Previous studies on attitude of people towards wildlife conservation have showed that knowledge about conservation and socio-demographic factors such as sex, age, level of education, proximity to a reserve and occupation (Mohamed, 2010; Christoph, 2010; Bogner & Wiseman, 2004; Alexander, 2000; Moridi, 1987 quoted by Parry & Campbell, 1992) were factors that influence the attitude of people towards wildlife conservation. Studies by Newmark et al., (1993),

Fiallo and Jacobson (1995) found that conservation knowledge and awareness significantly affects attitudes and perceptions towards protected area.

This study was carried out to determine the level of awareness of the public about wildlife conservation, their attitude towards it, identify factors influencing the attitude of the public to wildlife conservation and determine the efforts being put in place by the government to encourage wildlife conservation in Delta State.

Method

Study area:

The study was carried out in Delta state, Nigeria. The area lies between longitude 5°00' and 6°45' East and latitude 5°00' and 6°30' North and covering a total area of 17,440sq.km, about one-third of this is swampy and water-logged. The area comprises mainly of Ibo (Anioma people), Urhobo, Isoko, Ijaw and Itsekiri. The ethnic groups that make up the state are administratively grouped into three (3) senatorial districts namely; Delta North, Delta South and Delta Central for easy administrative purposes. Delta State made up of twenty-five (25) Local Government Areas, has total population of 4,098,291 which is made up of 2,673,306 males and 2,024,085 females (Federal Republic of Nigeria Official gazette, No. 24, Vol. 94, 2007).

Data Collection

Using multi-stage and simple random sampling technique, eight communities were selected from three Local Government Areas (LGA) which were Aniocha South, Warri North and Okpe with each Local government area representing a senatorial district in the study area. The following communities were selected: Koko and Ogbinbiri (Warri North LGA), Adagbrase, Okuloho, and Oha (Okpe LGA), Ubulu-Uku, Ogwuashi-Uku and Umute (Aniocha South LGA). Structured questionnaire were administered in the selected communities. The questionnaire was of two types: one for the individuals in the communities and the second for Department of Forestry and Wildlife/Conservation staff in the State headquarter (Asaba). A total of hundred pieces of questionnaire were administered to individuals within the age bracket of 18years

and above in the selected communities while twenty were administered to the Department of Forestry and Wildlife staff.

Data Analysis:

Descriptive Statistics, one way analysis of variance ANOVA and Chi Square were used to analyse the data.

Results and Discussion

The socio-demographic characteristics of the respondents are presented in Table 1. The respondents are in different age groups as follows: 18 – 22 (9%), 23 – 27 (25%), 28 – 32 (30%), and above 32 (38%). The study included male (67%) and female (33%). However, this is for a reason: the men were more agreeable when approached. The educational attainment of the respondents vary widely with only 3% having no formal education, 38% having primary, 33% having secondary while 28% having tertiary education attainment. The study also revealed that majority of the respondents were farmers (38%) followed by hunters (21%), fishermen (14%), civil servants (13%) while 7% were traders and students were 7%.

Table 1: Demographic characteristics of the respondents

Variable	Frequency	Percentage (%)
AGE		
18 – 22	9	9
23 – 27	23	23
28 – 32	30	30
Above 32	38	38
SEX		
Male	67	67
Female	33	33
EDUCATIONAL LEVEL		
Non-formal	3	3
Primary	38	38
Secondary	33	33
Tertiary	28	28
OCCUPATION		
Hunting	21	21
Fishing	14	14

Farming	38	38
Civil servant	13	13
Trader	7	7
Student	7	7

Source: Field survey, 2010.

The study investigated the people’s knowledge about wildlife conservation. The results showed (Table 2) that 45 of the respondents had knowledge about wildlife conservation while 55 of them had no prior knowledge about it. The result with regards to the respondents’ knowledge about excessive killing of wild animals leading to extinction of the wild animals revealed that majority of the respondents (68%) believed that excessive killing of wild animals would result in their extinction while 32% of the respondents did not believe that excessive killing would lead to extinction.

Table 2: Respondents’ knowledge about Wildlife Conservation

Senatorial Districts	Communities	Yes	No	Total
Delta North	Ogwuashi-Uku	3	9	12
	Ubulu-Uku	6	6	12
	Umute	5	7	12
Delta South	Koko	12	2	14
	Ogbinbiri	6	8	14
Delta Central	Okuloho	4	8	12
	Adagbrase	3	9	12
	Oha	6	6	12
Total		45	55	100
Percentage (%)		45	55	100

Source: Field survey, 2010.

Chi-square analysis in Table 3 revealed that there is significant difference in the knowledge about wildlife conservation in the senatorial districts. Hence respondents in Delta South tend to be more knowledgeable about wildlife conservation than those in Delta North and Delta Central.

Table 3: Chi-Square Analysis on Wildlife Conservation Knowledge

Variable	Df	X ² cal	X ² tab	Decision
Knowlegde about wildlife conservation	5	8.120	2.015	Significant

Source: Field survey,2010.

The result in Table 4 shows that 71% of the respondents will kill wild animals when they see them while 22% of them will allow the animal to go and only 7% of the respondents will rear the animals. With this we can infer that the respondents had a negative attitude towards wildlife conservation. Chi-square analysis in Table 5 revealed that there is significant difference in the attitude of the respondent's towards wildlife conservation in the senatorial district. Hence those in Delta North and Delta Central tend to have more negative attitude than those in Delta South. Table 6 shows believe of the respondents on the need to conserve wild animals. The result reveals that 78% of them think there is need to conserve wild animals while 22% of them do not think there is need to conserve wild animals. Reasons given by them were that conservation of wild animals will preserve the wild animals for future generation and also will serve as source of income. Thus we can infer that despite the fact that the respondents have negative attitude towards wildlife conservation, they still think there is need to conserve wild animals.

Table 4: What comes to respondents' mind at the sight of a wild animal

Senatorial Districts	Communities	Kill	Rear	Allow To Go	Total
Delta North	Ogwuashi-Uku	10	0	2	12
	Ubulu-Uku	9	0	3	12
	Umute	10	0	2	12
Delta South	Koko	7	4	3	14
	Ogbinbiri	8	2	4	14
Delta Central	Okuloho	10	1	1	12
	Adagbrase	10	0	2	12
	Oha	7	0	5	12
Total		71	7	22	100
Percentage (%)		71	7	22	100

Source: Field survey, 2010.

Table 5: Chi-Square Analysis on Attitude towards Wildlife Conservation

Variable	Df	X ² cal	X ² tab	Decision
Attitude towards wildlife conservation	7	60.800	1.943	significant

Source: Field survey, 2010.

Table 6: Response to Need for Wild Animals Conservation

Senatorial Districts	Communities	Yes	No	Total
Delta North	Ogwuashi-Uku	9	3	12
	Ubulu-Uku	10	2	12
	Umute	9	3	12
Delta South	Koko	13	1	14
	Ogbinbiri	10	4	14
Delta Central	Okuloho	9	3	12
	Adagbrase	10	2	12
	Oha	8	4	12
Total		78	22	100
Percentage (%)		78	22	100

Source: Field survey, 2010.

The result of the analysis of the staff in the Department of Forestry and Wildlife/Conservation in the study area reveals that 15 (75%) of them did not think the people in the state were aware of the need for wildlife conservation while 5 (25%) thought the people were aware. The result also shows that of the 5 staff that thought the people were aware, 60% of them believe the people were not too aware while 40% believed that the people were much aware. The result further reveals that 95% of the staff attested that there was no programme organized by the government to encourage wildlife conservation but there were proposed programmes to be executed in near future. From the interview carried out, it was revealed that the proposed programmes were the establishment of a primate sanctuary in Umute (in Aniocha-south LGA) and the re-establishment of the Kwale Game Reserve which was only a grass land at the time of interview. From this we can conclude that there was no conscious effort being made by Delta State government to boost conservation of

wildlife, although there were plans to do that in near future (Table 7).

Table 7: Response by the Department of Forestry and Wildlife Staff

Variable	Frequency	Percentage (%)
Awareness of the need for Wildlife Conservation by the public		
Yes	5	25
No	15	75
How much aware		
Very much aware	0	0
Much aware	2	40
Not too aware	3	60
Government organized programme to encourage wildlife conservation		
Yes	1	5
No	19	95

Source: Field survey, 2010.

The analysis of variance (ANOVA) reveals that the knowledge about wildlife conservation is dependent on some socio-demographic factors at $p < 0.05$ level of significance. The result reveals that there is a significant difference in the relationship between Education level, and conservation knowledge ($p = 0.000$). The respondents that had attained higher level of education were more knowledgeable than those with lower level or no formal education. The result also reveals that occupation significantly affect the conservation knowledge ($p = 0.000$). Settlement also is a significant factor that affects conservation knowledge. Conservation knowledge is independent of sex, age and religion (Table 8).

Table 8: Factors influencing the conservation knowledge of the Respondents

Do you have prior knowledge about wildlife conservation?		Settlement	Sex	Age	Educational Level	Occupation	Religion
F		3.919	3.185	2.438	52.734	29.729	0.811
P		0.051*	0.077	0.122	0.000*	0.000*	0.370

Note: * Significant at $p < 0.05$.

Source: Field survey, 2010.

The findings on the factors that affect/influence the respondents' attitude towards wildlife conservation reveal that sex (p=0.009) is a significant factor that affects the attitude of the respondents towards conservation. Educational level (p=0.000) also is a significant factor that affect the people's attitude towards wildlife conservation. There is also a significant difference in the relationship between occupation (p=0.000) of the respondents and the attitude of what comes to their mind at the sight of a wild animal. In addition also, the prior knowledge about wildlife conservation significantly affects the attitude of the respondents towards wildlife conservation. The

finding also shows that the contribution of government towards wildlife conservation influences the attitude of the people towards wildlife conservation. There was no significant relationship between age and the attitude of the people towards wildlife conservation (p=0.154), wildlife damage of crop (p=0.157) did not have influence the attitude of the people towards wildlife conservation. Those whose crops were damaged by wild animals do not show much negative attitude towards wildlife conservation as this will be accounted that because their crops were damaged that was the reason for the attitude (Table 9).

Table 9: Factors that Influence the Attitude of the People towards Wildlife Conservation

What comes to mind at the sight of wild animals?	SET	SEX	AGE	EDU	REL	OCCUP	KWC	DC	GE	WAF	PNO
	F	3.801	4.934	1.908	9.581	1.508	10.343	9.016	1.906	8.918	0.881
P	0.026*	0.009*	0.154	0.000*	0.227	0.000*	0.000*	0.157	0.000*	0.418	0.828

Note: *Significant at p<0.05.

Source: Field survey, 2010.

- SET – Settlement
- EDU – Educational Level
- REL – Religion
- OCCUP – Occupation
- KWC – Knowledge of Wildlife Conservation
- DC – Damage of Crops by Wild Animals
- GE – Government effort to encourage Wildlife Conservation
- WAF – Wild Animals forbidden
- PNO – Programmes not organized by the Government

Discussion

The result of the study shows that the people's knowledge about wildlife conservation is poor as only 45% of the respondents had prior knowledge about wildlife conservation. This agrees with the finding that was observed at International Technical Consultation Meeting organized by FAO/UNEP (1979) that public awareness on wildlife conservation was at low

level and was very limited especially in West Africa. However in contrast to the findings of Abimbola (2008) where the people's knowledge about wildlife conservation was relatively high as many people were able to say certain things about wildlife conservation. The low knowledge of the respondents about wildlife was significantly influenced by occupation, settlement and educational level. The

respondents with higher level of education tend to be more knowledgeable about wildlife conservation than those with lower level of education or no formal education. This finding concurs with that of Randler and Bogner (2006) and Prokop et al., (2007). They reported that educational level significantly influence the people's knowledge about wildlife conservation.

Those in non-agricultural activities (civil servant, students) also tend to be more knowledgeable than those in agricultural activities (occupation as farmers, hunters and fishermen).

The result of the study also shows that a larger number of the respondents hold negative attitude towards wildlife conservation. This finding was attributed to factors such as sex, educational level, occupation, settlement, knowledge about wildlife conservation and efforts put by government to encourage wildlife conservation as factors that influenced the attitude of the people toward wildlife conservation. This finding shows that age has no effect on the attitude of the respondents. This is in disagreement with the findings of Kimeli (1996) and Mohammed (2010). They reported that age significantly influence the attitude of the local communities towards wildlife conservation.

Educational level significantly influenced the attitude of the respondents towards wildlife conservation. Those respondents that had attained higher level of education were more knowledgeable about wildlife conservation and thereby had a more positive attitude towards wildlife conservation. This finding is not in consistence with previous findings (Chandra, 2007; Abdullahi et al., 2007). They did not support that educated respondents have more positive attitude towards conservation. However, it agrees with the findings of Infield (1988) and Akama et al., (1995). They reported that as the level of education increases, the level of negativity towards the reserve and conservation decreases. It can be inferred that a society with high percentage of educated people will have high level of awareness about wildlife conservation than those with low level of education to

influence attitude positively. Also conservation knowledge and awareness level are factors that affect the attitude of the people towards wildlife conservation. This finding differs from that of Mohamed (2010) but in consistence with the findings of Newmark et al., (1993), Fiallo and Jacobson (1995). They found that conservation knowledge significantly affects attitude and perceptions of people toward conservation.

Their findings also revealed that government not putting enough effort to encourage wildlife conservation is also a factor that affects the people's attitude towards wildlife conservation in the studied area.

Furthermore, the finding reveals that occupation (economic activity) of the people affects their attitude towards wildlife conservation. With majority of the respondents engaged in agricultural activities hence poses negative attitude than those respondents engaged in other occupations. This finding concurs with the result of Infield (1988), Newmark et al., (1993) and Mohamed (2010).

Conclusion

In this study it was discovered that the level of awareness or knowledge about wildlife conservation is low as only 45% had knowledge about wildlife conservation. It was also discovered that the people have a negative attitude towards wildlife conservation and it was identified that the attitudes of the people were shaped by a combination of different factors. These factors are sex, educational level, occupation, level of awareness/knowledge about wildlife conservation and government effort to encourage wildlife conservation in the state. Those who engaged in non-agricultural activities, attained higher level of education and have knowledge about wildlife conservation tend to have a more positive attitude towards wildlife conservation. It was also discovered that the people can go into conservation of wildlife (wild animals) if given financial assistance by the government. The findings also revealed that there is no conscious effort on ground been made on the part of the government towards conservation of wildlife now, although there are

programmes they are planning to execute in near future.

Recommendations

The following recommendations are made in order to improve the attitude of the people towards wildlife conservation in Delta State as well as other States faced with similar scenario:

- Awareness campaign programmes should be organized enlightening the people on how important it is to conserve wildlife in the Local Government Areas involving the communal heads.
- Government should organize programmes to encourage wildlife conservation.
- Conservation areas such as Zoos, Game Reserves and Parks should be established.
- Government should provide money for the promotion of wildlife conservation to those who can go into it if given the financial assistance. They should also try to monitor these people to see that the money given is used effectively.

References

- Abdullahi, M.B, Sanusi, S.S, Abdul, S.D and Sawa F.B (2007) "Perception of Support Zone Communities towards the Conservation of Yankari Game Reserve, Bauchi State, Nigeria". *Int.Jor.P.App.Sc.*, 1(2): 49-57,2007.
- Abimbola,O.A (2008) Peoples perceptions of the old Oyo National park, Nigeria: Germane Issues in park management. *Environmental Research Journal* 2(4): 182-186.
- Ajayi S.S (1979) Utilization of Forest wildlife in West Africa. F.A.O publication, FO/miscl.79/26 dec. 1979. Rome.
- Akama J, Lant C, Burnet D. (1995) Conflicting Attitudes towards State Wildlife Conservation programmes in Kenya. *Society and National Resources*, 8:133-144.
- Alexander, S.E. (2000). Resident Attitudes towards Conservation and Black Howler Monkey in Belize: the Community

- Baboon Sanctuary, *Environmental Conservation* 27(4): 341-350.
- Anadu, P.A(1987). Wildlife Conservation in Nigeria: Problems and strategies. *The Environmentalist*, 7(3): 211-220.
- Asibey, E.A.O and Child, G (1990). Wildlife Management for Rural Development in Sub-Sahara Africa. Unasyuva.
- Bogner, F.X and Wiseman, M. (2004). Outdoor ecology education and pupils environmental perception in preservation and utilization. *Science Educational International*, 15,1-20.
- Chandra, S.C. (2007). The relationship between political awareness and conservation attitudes and behaviors. Available: www.loyola.com
- Charter, J.R (1973). The Economic Value of wildlife in Nigeria. Research paper No.19, Federal Department of Forest Research, Ibadan, Nigeria.
- Christoph, R. (2010). Animal Related Activities as Determinants of Species Knowledge. *Eurasia J. Math. Sci. & Tech. Ed.*, 6(4):237-243.
- FAO/UNEP,(1999). International Technical Consultation. Regional Review for Africa protected area management in Africa: Strategies for the millennium. Position paper for the FAO/UNEP International Consultation at Harare, Zimbabwe, pp: 26-29.
- Fiallo E, and Jacobson S (1995). Local Communities and protected areas: attitude of rural residents towards conservation and Machalilla National Park, Ecuador. *Environmental Conservation*. 22(3):241-9.
- Gubbi, S. (2003): Wildlife on the run. www.wildlifefirst.info/images/wordfiles/onthetherun.doc.
- Haruna, S.Z and Okeyoyin O.A (1995). The threats of human activities and Livestock grazing on the conservation of Gashaka Gumti National Park, Nigeria. In proceedings of the Regional Training Workshop held at the Federal University of Technology, Akure, Nigeria. Pp 24-26s
- Infield M. (1988). Attitudes of rural community towards conservation and a local conservation area in Natal South Africa. *Biological Conservation*, 45:21-46.

- Kimeli, W. (1996). Non-use values as a key factor in the conservation of Biodiversity. Unpublished Project Report. Eldoret Moi University.
- Mohamed, G.S (2010). 'Determinants of Attitudes and perception on Resource Use and Management of Marsabit National Reserve Kenya' .J. Hum Ecol, 30(1): 55-62.
- Newmark W.D, Leopard N.L, Gamassa D.G.M, and Seriko H.I. (1993). Conservation attitudes of Local conservation living adjacent to five protected areas in Tanzania . Biology of Conservation, 63:177-183.
- Oseni,J.O., (2006). Ensuring peaceful coexistence between man and animals in protected areas in Nigeria. Department of Agricultural Economics and Extension, Federal University of Technology, Akure, Ondo State.
- Parr, D. and Campbell, B. (1992). 'Attitudes of rural communities to animals wildlife and its utilization in Chobe Enclave and Mababe Depression, Botswana', Environmental Conservation 19(3): 245-252.
- Prokop, P., Kubiato, M. and Fancovicova, J.(2007). Slovakian Pupils Knowledge of and Attitude Towards Birds. *Anthrozoos*, 21, 221-235.
- Randler, C. and Bogner, F.X. (2006) : Cognitive Achievements in Identification Skills. Journal of Biological Education, 40:161-165.
- Wikipedia (2010). Delta State Wikipedia - The free encyclopedia. http://www.en.wikipedia.org/wiki/Delta_State.htm