
Evaluation of the effect of legislation on wildlife conservation: A case study of Kainji lake National park, Kainji, Niger State, Nigeria

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ABSTRACT

This study is conducted on the evaluation of the effect of conservation on wildlife offences in Kainji Lake National Park, Niger State was carried out in a period of four years since 2005-2009. Both primary and secondary collected data were analyzed and the results revealed that illegal grazing was the highest offence, recording 56.8%. Also, 15.5% were acquitted and 84.9% convicted and 16.1% went to jail and as high as 68.8% were able to pay fine during the period. Majority of the nights guards claimed that allowances were not paid and that staff were not accommodated properly and this has reduced the level of performance to their duties.

Keywords: Conservation, Wildlife, Legislation, Offence.

1 Introduction

Wildlife conservation is the science of analysis and protecting the Earth's biological diversity, which is the variation of life form within a given ecosystem, or for entire Earth (Soule, 1986). Wildlife conservation is also defined as the process by which individuals and organizations protect and preserve the species through conservation policy, which entails preservation of habitat and management of wildlife species (Douglas, 1978).

In Nigeria, game and wildlife conservation commenced in the early years of this century, by the department of game and wildlife formed in 1965. Wildlife reserves and conservation policies were found in 1974 (Bowen, 1999), rooted in the general culture and traditions of the country. This policy recognized the livelihood of people, the role of protected areas in meeting the demand for bush meat and the importance of engaging local communities in protected area development (Myers *et. al.*, 2000). However, certain short comings have become evident particularly, in the need to obtain the acceptance of local communities directly affected by conservation measures and to modify the emphasis placed on preservation of useful animals. This is to protect valuable resources against further depletion and environmental degradation (Edward, 1987)

In recent years, the public has become increasingly aware of the importance of preventing further loss of wildlife and preserving our remaining biodiversity (CTA, 2011). Habitat destruction, illegal trade and conservation offences are the most significant threats faced by endangered species. During the past three decades, Nigeria has shown increased concern for the preservation of her indigenous wildlife heritage. The number of game reserves has grown steadily and international cooperation agreements for the protection of wildlife have been signed. A decree to regulate trafficking in endangered species was promulgated in 1985 to amend the 1916 Wild Animal Preservation Ordinance (Anadu, 1992) in each of the nineteen states in the federation.

The formation of the Nigeria Conservation Foundation in 1982 marked the beginning of organized private involvement in the promotion ethics in the country. Nevertheless the nations goal of managing wildlife for tourism, sustained cropping of game meat (bush meat) and preservation of a national heritage remains hard pressed in the face of mounting economic problems, an expanding population, and the continuing destruction of wildlife habitat (Anadu, 1992). This study is designed to evaluate the impact of the legislative measures on wildlife conservation in Kainji Lake National Park since the policy was promulgated.

2. Materials and Method

2.1 Study area

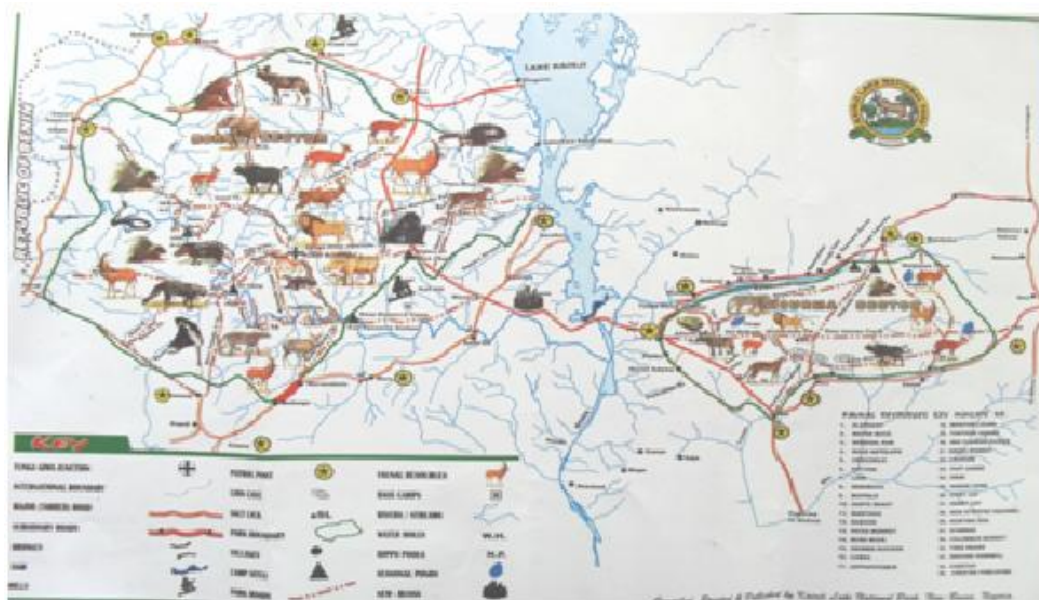


Figure 1: Map of study area

Kainji Lake National Park is situated in the North West part of central Nigeria between Niger and Kwara states, close to the border with the Republic of Benin (Ezealor, 2002). The park consist of two sectors which lie approximately between latitude $9^{\circ} 40' N$ and $10^{\circ} 30' N$ and between longitude $3^{\circ} 30' E$ and $5^{\circ} 5' E$ respectively (Aremu *et al*, 2002). The sectors (Zugurma and Borgu) altogether cover a total area of 534.082 ha and are separated by the Kainji Lake, a lake impounded on the river Niger for hydroelectric power generation (Ezealor, 2002).

The rainfall pattern for the park is a single rainfall peak. Highest rainfall data is recorded between August and September. The annual rainfall ranges from 975mm – 1220mm around Kainji Dam and Wawa respectively. The highest temperature is recorded in March about $28.6^{\circ}C$. Temperature starts rising from January during which time, the cool harmattan winds are receding to a March / April peak and then decline with onset of the rains to an August minimum, it then goes up again after the rains (Meduna *et. al.*, 2009).

Generally the vegetation is described as northern guinea savanna types which is a formation of mosaic of plant communities constricting in structure and physiognomy (Meduna *et. al.*, 2009). The *Daniela Oliveri* complex, *Acacia spp*, *Anogeissus leocarpus* /*Deterium*

microcarpom woodland etc. (Ezealor, 2002). The dominant tree species around the park include *Burkea africana*, *Detreium microcarpum*, *Afzelia africana*, *Isoberlina tementosa*, *Acacia spp* etc (Ezealor, 2002).

The animal species in the park are Buffalo (*Syncerus cafer*), Roan antelope (*Hippotragus equineus*), Senegal kob (*Kobus kobus*), Western hartebeest (*Alcelaphus buselaphus*), Hippopotamus (*Hippopotamus amphibus*), Olive baboon (*Papio anubis*), Bush buck (*Tragelaphus scriptus*), Oribi (*Ourebia ourebi*) and Lion (*Panthera leo*). (Meduna *et. al.*, 2009).

2.2 Method

Both primary and secondary data collection were collected. Rapid assessment questionnaire, personal interview and on site assessment were used to collect data. A total number of 150 questionnaires were administered and the respondents were the park workers and people who lived in communities around the park.

Obtained data were analyzed by using the descriptive statistics method such as by frequency table and percentages.

The analysis of the results covers the issues like reasons for the arrest and types of penalty resulting from a breaking of wildlife conservation law. This is to determine whether there are changes in the trends of wildlife offences in the park as a result of wildlife law of 1963 where wildlife offences attract heavier penalty in Northern Nigeria.

3. Result and Discussion

Table 1: Number of people arrested for wildlife offences in the study area (2005 – 2009)

Year	Illegal hunting	Illegal grazing	Illegal fishing	Wood loggers	Illegal entry	Illegal farming	Total
2005	40	35	11	--	---	--	86
2006	43	63	7	4	--	8	125
2007	64	91	6	14	--	6	181
2008	22	70	11	5	1	11	120
2009	29	136	10	5	3	1	184
Total	198	395	45	28	4	26	696
%Total	28.5	56.8	6.5	4.0	0.6	3.7	--

Source: Kainji Lake National Park

There were six reasons why people were arrested in the park shown in table 1, illegal grazing recorded the highest number of offence that is 395, representing 56.8%, and illegal hunting was the minimum that is with 198 (28.5%). The reason for maximum offence could be associated with the fact that the nomadic herds do not have enough to eat despite all effort put into meeting their feeding requirement by moving from one geographical location to the other. This is in line with the findings of Williams *et al.* (1999) which stated that inadequate grazing area for increasing animal population as well as lack of dependable sources of food was the concern to the nomadic pastoralists.

During the period, 16.1% went to jail and as high as 68.8% paid fines as indicated in Table 4. It could therefore be concluded that more people were able to pay fines rather than go to jail

on conviction because they have no other source of meeting their daily demand and so the only option is to contravene the law since they could get the fines paid easily.

Table 2: Types of penalty meted out to offenders on yearly basis

YEAR	Total number of arrest	Number acquitted	Number convicted
2005	86	15	71
2006	125	22	103
2007	181	20	161
2008	120	18	102
2009	184	30	154
Total	696	108	591
% total	--	15.5	84.9

Source: Kainji Lake National Park

Table 2, shows that the number of people convicted has the highest number of offenders of 591(84.9%), since 2005 up to 2009.

Table 3: Wildlife offenders in the study site (2005 – 2009)

OFFENCES	PUNISHMENT	
	FINES (N)	IMPRISONMENT
Poaching	10,000 – 50,000	Three month – five year
Illegal grazing	10,000 – 50,000	Five year
Wood logging	5,000 – 25,000	Six month – five year
Illegal fishing	5,000 – 25,000	Six month – five year
Fire (bush burning)	10,000 – 50,000	Five year
Trespassing and erecting tent	20,000	One – two year
Attacking game guard	Not stated	Not stated
Harboring poachers	Not stated	Not stated

Source: Kainji Lake National Park

Table 4: Number of people arrested (2005 – 2009), distributed according to term of penalty served and amount of fines paid

Year	Number of arrest	Number acquitted	Number jailed	Number paid fine	Amount paid (N)
2005	86	15	18	53	211,000
2006	125	22	8	95	183,000
2007	181	20	28	133	660,00
2008	120	18	31	71	225,000
2009	184	30	27	127	865,000
Total	696	105	112	479	2144,000
%total	---	15.1	16.1	68.8	---

Source: Kainji Lake National Park

Table 4, shows that the number of offenders that paid fines has the highest number of 479 with 68.8%, while the number of acquitted is minimal with 105 of 15.1% and jailed 112 of 16.1 %.

From Table 4, Decree No. 46 of 1991 which gives information on the intervention of government on wildlife conservation showed that it has not been able to discourage people from illegal activities in the park since (%) people arrested have the ability to pay on conviction. Table 2 shows that the number of arrests between the five years covered for this study is 696. A breakdown of this figure reveals that the number of arrest between 2005 (86) to 2009 (184) was at an increasing rate. Also, 15.5% were acquitted and 84.9% convicted.

The staff of the park who are to enforce the decree are not well remunerated 82% claimed, 78.8% of the staff claimed that no adequate accommodation and no compensation for game guards attacked by poachers and 66.0% attacked by wild animals, while 64.4% claimed that there is inadequate patrol vans. Therefore, there is need for the park rangers to be properly equipped and increased in number for effective anti-poaching patrols.

Table 6: Wildlife patrol problems in the study site

Problems	Response	Ibbi	Kulho	Kali	Doro	Olli	Kubile	Kemenji	Woru-makoto	Total	%
Are you armed for defense	Yes	17	19	16	14	15	17	18	16	132	100
	No	--	--	--	--	--	--	--	--	--	--
Any functional patrol van	Yes	8	12	12	9	8	13	15	8	85	64.4
	No	9	7	4	6	7	4	3	9	59	37.1
Staff accommodated properly	Yes	4	2	3	1	5	7	4	2	28	21.2
	No	13	17	13	13	10	10	14	14	104	78.8
Paid night/bush allowance regularly	Yes	17	19	16	14	15	17	18	16	132	100
	No	--	--	--	--	--	--	--	--	--	--
Is your uniform replaced regularly	Yes	12	13	11	12	13	13	16	12	102	77.3
	No	5	6	5	2	2	4	2	4	30	22.7
Ever been attacked by poachers	Yes	10	17	15	14	11	13	11	15	106	80.3
	No	7	2	1	--	4	4	7	1	26	19.7
If yes, any compensation given you	Yes	6	8	12	9	6	9	9	11	70	66.0
	No	4	9	3	5	5	4	2	4	39	34.0

The frequency of wildlife patrol in the study site (Table 7) shows that out of all the respondents, an average of 4 claimed to embark on wildlife patrol when the need arises. However, the patrol is every fourth night in Olli because of its strategic location, with the highest number of natural resources of the Park. The staff of the park that are to enforce the decree are not properly accommodated (Table 6). It therefore becomes imperative to provide necessary accommodation for convenience of the staff when running shifts.

Table 7: Frequency of wildlife patrol in the study site

Frequency	Ibbi	Kulho	Olli	Doro	Kali	Kubile	Kemenji	Worukoto
Every fourth night	3	2	8	3	1	2	1	2
Once a month	5	8	5	2	3	1	2	3
When the need arise only	9	5	2	1	2	4	6	5
Total	17	15	15	6	6	7	9	10

Source: Author

4. Conclusion / Suggestions/ Findings

With a growing human population as well as a changing lifestyle, the conflict between wildlife and humans is intensifying. The desire to commit wildlife offences is quite difficult to curb because it is not an activity in which people derive pleasure rather it is for the purpose of uplifting the living standard of people within the society. It has therefore become imperative to reason that the solution to wildlife offences in the park does not solely lie on any litigation policy or severity, since people can easily payoff fine and by pass punishment attached to such offences. This is because the fines attached to each offence are quite affordable by the offenders. It is also necessity to look more inward into the planning of the park from all aspect of management and participation of the people within the neighboring communities. To accomplish an effective wildlife conservation policy operating in the park, effort should be directed towards the adoption of the following measures;

1. Involvement of the rural communities around the park which will serve as watch dogs to deter intruders in the park.
2. Organizing awareness programmes on the socio-economic benefits of the park to the communities. This will encourage them to involve in other trades which will in no means harm the park:
3. Increased remuneration of the game guards as well as the management of the park. It will reduce the act of corruption: receiving bribes from nomads and other intruders.

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