

## **ECOTOURISM POTENTIALS OF KAMUKU NATIONAL PARK, BIRNIN GWARI, KADUNA STATE**

**\*I.O.O.OSUNSINA; \*\*A.A. OGUNJINMI; \*\*\*A.J. MEDUNA AND  
\*\*\*O.O. OYELEKE**

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\*Department of Forestry and Wildlife Management, University of Agriculture,  
P.M.B. 2240, Abeokuta, Ogun State. Nigeria.

\*\*Department of Forestry and Wildlife Management, University of Port Harcourt,  
P.M.B. 5323, Port Harcourt, rivers state. Nigeria.

\*\*\*Federal College of Wildlife Management, p. M. B. 268, New Bussa,  
Niger State. Nigeria.

Corresponding Author's E-mail: osunsinaisrael@yahoo.com

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### **ABSTRACT**

Nigeria has a very rich and immense natural resources and cultural heritage which are potentials for a buoyant tourism industry. However lack of inventory and socio-economic problems have hampered ecotourism development in the country. The ecotourism potentials of Kamuku National Park was therefore investigated to assess, locate and determine potential ecotourism features, through field survey and oral interview of park staff and visitors to the park. The study shows that the park is rich in fauna, flora natural resources and cultural features. The study also reveals that the major problems affecting ecotourism development in the Park include improper funding, inadequate staff, social disturbance and inadequate infrastructural facilities. Poaching, illegal grazing and conflict between park protection staff and cattle herdsman were also among the principal factors hindering ecotourism development in the park. It is therefore important that the potentials of the park as tourist destination be explored and widely publicized so as to attract tourists, while drastic steps should be taken to curtail the obstacles that may limit its development.

**Key words:** Ecotourism, National Park, Potential, Economy.

### **INTRODUCTION**

Ecotourism or nature tourism is a relatively recent development that has become very popular all over the world. It has grown in influence and importance with man's understanding of his environment and more importantly the role he plays in its improvement or demise (Marguba, 2001). Ecotourism is a concept that de-

scribes a form of development that respects tradition and culture; protects and preserves the environment; educates and welcomes visitors (Bushnell, 1994). For any particular site or location to qualify for ecotourism the natural landscape must be relatively undisturbed for people to study, enjoy and admire the scenery and its wild animals and plants in their natural state.

Wildlife based tourism has continued to sustain the economy of East African countries. Also, the National Park of East and South African countries are well developed and earn millions in vital foreign exchange (Ajayi, 1986; Ayodele, 2001). Kenya is cited as the most successful African country in terms of tourism development and is the second highest foreign exchange earner providing about US\$600 million annually (Eltringham, 1994). In Zimbabwe, tourism and wildlife based industries earned between Z\$300 million to Z\$ 1 billion in recent years and contributed 2-5% of GDP (Muir, 1989). Also in South Africa, nature based tourism is the fifth highest foreign exchange earner yielding approximately SAR 2.5 billion equivalent to some \$800 million in 1992 and provided jobs for 300,000 people (Koch, 1994). Using a computer model based on projected numbers of visitors to the Amboseli National Park in Kenya over a 15 year period, Thresher (1981) argues convincingly that it is more profitable to both the nation and individual households to protect game animals for tourism than for consumptive purposes. Thresher's model estimates that a single maned lion in the Amboseli Park was worth US \$ 515,000 as a tourist resource for game viewing as compared with \$8,500 if it was used as a resource for hunting or sport and only \$960 to \$1,325 if used as a commercial resource (i.e. the market value of a well – cured lion skin). For individual land owners participating in a group ranch scheme and who received benefits from the state after cost deductions, income derived from the maintenance of a lion on their ranch as tourist resource was \$91,000 as compared with \$600 paid out as hunting fees if the lion was sold out for sport

hunting and \$250 if hunted for the skin (Ntiamoa-Baidu, 1997).

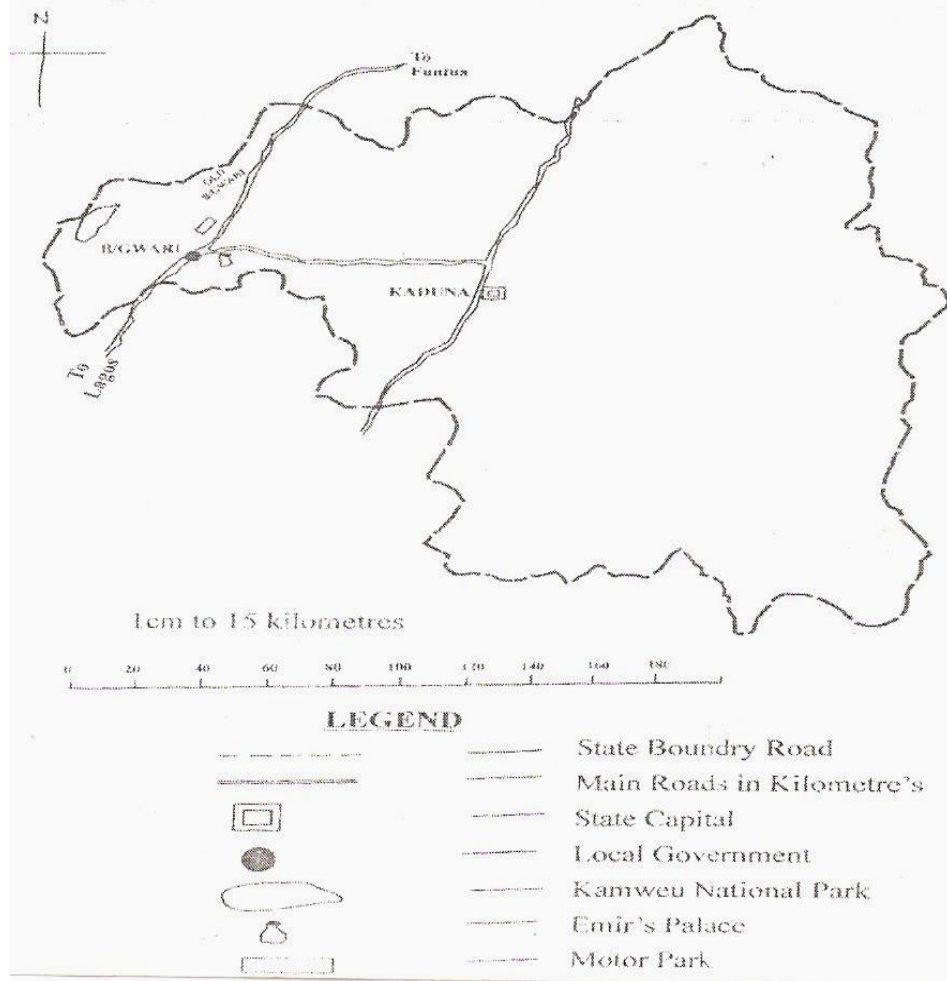
With Nigeria's reported shift in emphasis to tourism as a means of augmenting revenue from crude oil, Nigeria's National Parks alongside her major mandates to conserve flora and fauna biodiversity in various Nigeria's ecological zones, are also scheduled to promote ecotourism and generate income for the nation. For this to materialize, there is need for proper assessment of eco-tourism potentials of Nigeria National Parks so as to improve the resources available for tourism use. This study is therefore undertaken to provide data on the ecotourism potential of Kamuku National Park; make available possible solution to the problems militating against ecotourism development in the site and also recommend strategies for developing and maximizing the vast resources of the Park for ecotourism purposes.

## METHODOLOGY

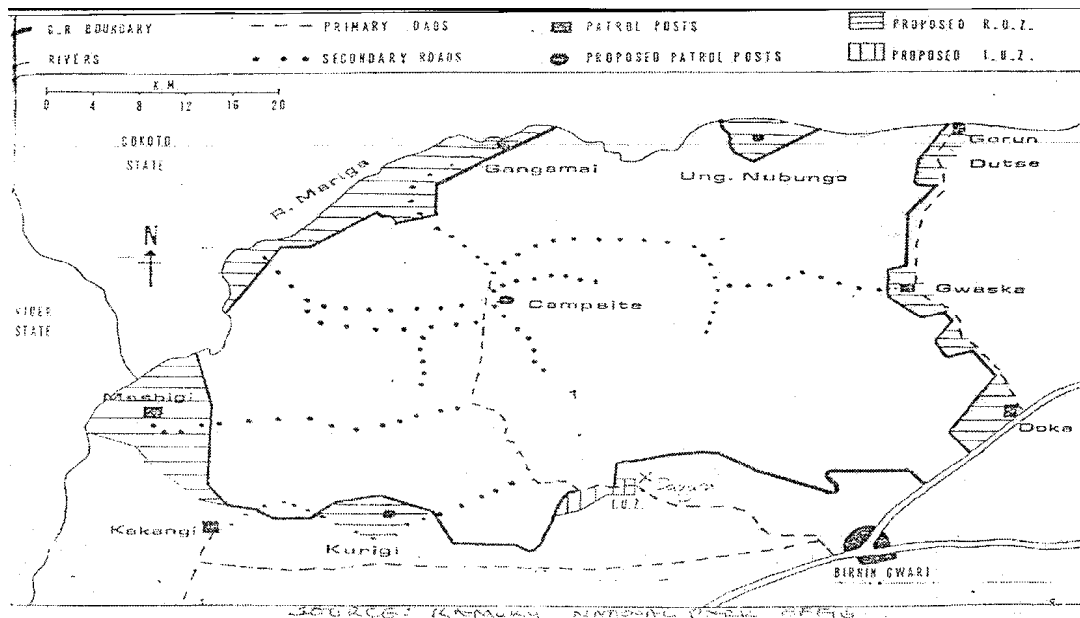
The study area is Kamuku National Park, Birnin Gwari, Kaduna State. It has a total land area of 1121 square kilometres and located between latitudes 10<sup>0</sup>05`N and longitude 6<sup>0</sup>11`E and 6<sup>0</sup>36`E. The vegetation is typical savanna woodland with dominant tree species such as *Isoberlinia doka*, *Afzelia spp.*, *Daniella spp.*, *Pilliosigma reticulata*, *Tamarindus indica*, *Entada africana*, *Terminalia spp*, *Acacia spp*, *Combretum molle*, etc. Shrubs consist of lilly plants; grasses such as *Andropogon spp.*, the grasses are quite tall within the marshy areas. The area has an average annual rainfall of 1,250mm with average temperature of 30<sup>0</sup>C. It has two seasons, the dry season which starts from November to April and

raining season from May to November. The hottest months are March and April, while the coldest month is December and January during the harmattan period when temperature drops to the freezing point in the evening and morning. Reconnaissance survey was carried out in the park to assess, locate and determine the potential

tourism features. Oral interviews were carried out with the staff of Kamuku National Park. 100 visitors were interviewed during the period of the study. Extensive literature review were conducted and other relevant documents were consulted to validate information on the potential tourism features of Kainji Lake National Park.



**Figure 1: Map of Kaduna State showing Birnin Gwari**



**Figure 2 : Map of Kamuku National Park**

## RESULTS AND DISCUSSION

The park is endowed with traditional, cultural, man – made and natural features that bring tourists close to nature (Table 1). One of the major natural features is the Dogon Ruwa water fall which is located at the Northern part of the park, along Birnin Gwari Funtua Road. The fall takes its source from two water bodies - one from Birnin Gwari and the other from old Gugama stream. The two sources joined at Kurazo village and flow directly to the park. The fall is scenic and usually very attractive during dry season. It is normally used by tourist for camping, campfire, educational purpose and sport fishing during the raining season. Another natural feature of note is the Mai'lawa Dam which is located at the core of the park. It flows from Kufaki streams found within the park. It was a natural dam but later rebuilt and constructed as artificial or man

- made dam. It is the main water body that holds water for the animal all year round, and also serves as a centre of attraction because of the high concentration of animals at all times, most especially during the dry season. There are lots of reptiles found in the dam including crocodiles which are easily sighted. The luxuriant vegetation surrounding the dam also provides cover for the animal and a good site for game viewing. The dam could also be used for boat cruising if it is upgraded and better developed.

The park has a museum where objects of artistic, cultural, historical and scientific interests are kept for public viewing. Asobang (1990) stated that a museum has ceased to be regarded as the convenient repository of antiquated items. It once was thought to be, but it is increasingly being

seen as a powerful cultural centre for the community, a powerful institution which has a lot to add to the development of any nation. It is a tourist centre and should be so developed to promote tourism. The park also has a modest wildlife trophies museum, which is collection of animal specimen, some of which include the skin, legs and head of roan antelope, bush buck, duiker, ostrich and elephant. The natural history of the animals is also on display which made it educational and very informative.

Kamuku National Park also has guest house and own the Kada motel which are meant for tourist accommodation and relaxation. Kada motel also provides standard catering services for visitors and the residents of Birnin Gwari at large. But the accommodations are grossly inadequate, not only in quantity but in standard, when compared with exotically furnished suites of international standard with restaurants in Yankari National Park, Bauchi State which is one of the foremost and well developed park. Ayodele (2001) stated that to boost ecotourism in Nigeria National Parks, there should be provision of adequate facilities to take care of the issue of overnight accommodation either in lodges or camps. Availability of standard facilities will ensure comparability with local patterns further solving some problems of tourism development. For instance, such a move will prevent tourist from going to look for accommodation outside the vicinity of the tourist sites or rushing home the same day because of shortage of accommodation. The money which could have been spent by tourist in that locality would be spent elsewhere (Ayodele, 2001). This constitutes a sort of leakage to the local

economy and defeat the purpose of tourism which is revenue generation. It is therefore expedient that standard and adequate accommodation, with conveniences should be provided. Banquet halls, conference centre, indoor and outdoor games facilities should also be made available.

The Gwari and Kamuku people who are the indigenes of Birnin Gwari and its suburbs are known to be very good in hand-crafts and artifacts. They are expert craftsmen, weavers, blacksmiths and pottery makers. They are known to produce decorated calabash “Kwariya”, Arewa handmat “Tabarma” and ceramic pots. These crafts are deeply entrenched in the culture of the people and serve as attraction and souvenirs for the tourists. Tourism has been known to generate revenue and create opportunities for employment and small scale business establishment (Falade, 2001), most especially at the grassroots or community level. Tourists are known to buy local craft as souvenir which generates income for the local community. These apart from generating income for the local craftsmen also promote the culture of the people. The diverse local cuisine of the area also could be explored, most especially the “Damentuwo” which is used as a traditional welcome menu for guests and visitors. This is one of the park’s neighbouring community cultures which could be very fanciful and interesting especially to foreign tourists, since an average tourist is an adventurer seeking to explore new things which they perceive as cultural integration and identification with the local people. Another cultural attraction of the area is the Birnin Gwari Emir Palace. The palace reflects the deep cultural heritage of the people. The Durbar, the local horse

racing sport occasionally done during the festive period could also attract more tourists if given better and wider publicity.

One of the primary objectives of wildlife conservation in National Parks and Game Reserves is game viewing of varieties of animals in their natural habitat (Ayodele, 2001). Kamuku National park is blessed with fauna and flora resources, which serves as a major source of attraction for tourist. The presence of elephant in the Park serves as a major attraction for the tourists, although the elephant population often migrates to the neighbouring Kuyanbana Game Reserve in Zamfara State. There is also a large population of Grimm's Duiker, which are commonly sighted in the Park with 177 documented species of birds (both residents and inter African migrants and several species of reptiles). Agbelusi *et al.* (2000) recorded 27 species of large mammals among which were buffalo, bubal hartebeest, anubis baboon, tantalus monkey, elephant, lion, leopard, hippopotamus, roan antelope, kob and warthog, etc (Table 2). The park is also associated with some rich cultural features, some of which are sacred like the old Parnomo shrine, scenic hills, rock outcrops, perennial streams etc.

Since the conversion of Kamuku Game Reserve to a National Park in 1999, there has been increase in the flow of tourist to the park. Table 3 shows the tourist flow for five years (2001 – 2005). In 2001, the park management began its operation on ecotourism, the result shows an increase in the number of visitors from 2001 – 2003 (90 to 127), but decreased in 2004 (117). The decrease was as a result of the religious and political crises that resulted in

loss of life and properties which occurred in Kaduna, Jos and Kano. In year 2005, there was a rapid influx of tourists to the park (325). It can therefore be said that security and a peaceful environment is a catalyst for tourism to thrive, since an average visitor would not want to visit a turbulent or war torn area because of the security of their lives and property.

One of the major problems facing Kamuku National Park Rangers beside Poor remuneration (30.20%) is the conflict between the Park officers and cattle grazers from neighbouring states of Katsina, Kaduna, Niger, Kano and Zamfara (25.80%) (Table 4). The Kuyambana and Kogo Game Reserves in Zamfara and Katsina States respectively shares common boundary with Kamuku National Park and have been seriously overgrazed, hence the Park virtually came under the siege of the illegal grazers due to the availability of good grazing materials and water. Abifarin (2001) reported that this has led to violent confrontation between the Park rangers who insisted on protecting and preserving the park resources and the grazers. This resulted in loss of property and sometimes human lives. From 1979 – 2001, over 20 National Park staff had either been shot dead or maimed by trespassers or illegal grazers and during this study two rangers were reportedly killed by cattle herdsman. The park management has come to contend with certain acts of vandalism such as setting patrol posts on fire, vandalisation of vehicles, machinery and sign posts (Abifarin, 2001). Closely related to the problem of illegal grazing is poaching activities, which is also very pronounced in the area. Poaching activities has been known to reduce the population of animals.

The enormous loss of animals in the park is directly attributable to illegal hunting or poaching which goes on in the Park (Dasmann, 1981; Osunsina, 2004). This will adversely affect tourism as the animal populations which serve as a major attraction to tourists are being depleted. The level of funding of the park is also very low, this financial constraint has led to inadequate infrastructural facilities such as water shortage, fluctuation of electricity supply and inadequate game viewing vehicles and bad roads (Table 5).

The Government should therefore properly fund the park and also recruit more staff for its better management and protection. The park management should likewise institute a sustained and effective publicity of the park resources and also a public enlightenment campaign of their importance. A well developed National Park backed with adequate publicity

would no doubt encourage the influx of tourists from both home and abroad to such areas (Ayodele, 2001). A buffer zone should also be created, which could be used as grazing land by the cattle herds-men; as this would reduce the incessant conflict between the park and the herdsmen and also provide forage for their herds. There should also be strict enforcement and punishment to all trespassers, poachers and herdsmen violating the park laws most especially those who kill or maim park staff.

**CONCLUSION**

Kamuku National Park is blessed with ecotourism potentials which consist of cultural, natural and man-made attractions, which could make it one of the leading tourists’ destinations not only in Nigeria, but also in Africa. However there is need to explore and develop these potential and likewise deal with the obstacles that may limit its development.

**Table 1: Ecotourism Features of Kamuku National Park**

S/no	Description	Nature	Location
1.	Dogon Ruwa water fall	Natural	North – East of Park
2.	Mai’Iwa Dam	Man made	Centre of the park
3.	Museum	Natural / man made	Head office (KNP)
4.	Guest House / Kada motel	Man made	Birnin Gwari Township
5.	Hand craft (Kwariya)	Natural / man made	Birnin Gwari and Environs
6.	Arewa Hand craft (Tabanna)	Man made	Birnin Gwari and Environs
7.	Birnin – Gwari Emir Palace	Man made /Traditional	Birnin Gwari and Environs
8.	Game viewing	Natural	Park
9.	Organized cultural events	Cultural	Birnin Gwari
10.	Sport fishing	Man made	Birnin Gwari
11.	Bird Watching	Natural	Birnin Gwari
12.	Hiking along the trail	Man made	Birnin Gwari

**Table 2: Species Composition of large mammals observed at Kamuku National Park from transect survey and questionnaires**

Animal Species	Scientific Name	Transect	Survey Questionnaire
Bubal hartebeest	<i>Alcelaphus buselaphus</i>	+	+
West African savanna Buffalo	<i>Syncerus caffer brochyceros</i>	-	+
Side-striped jackal	<i>Canis adjustus</i>	+	+
Anus baboon	<i>Papio anubis</i>	+	+
Patas monkey	<i>Cercopithecus patas</i>	+	+
Tantalus monkey	<i>Cercopithecus tantalus</i>	+	+
Red-flanked duiker	<i>Cephalophus rufilatus</i>	-	+
Grim's duiker	<i>Sylvicapra grimmia</i>	-	+
African elephant	<i>Loxodonta africana</i>	+	+
Caracal	<i>Felis caracal</i>	-	+
Lion	<i>Panthera leo</i>	-	+
Leopard	<i>Panthera pardus</i>	-	+
Lesser galago	<i>Galago senegalensis</i>	-	+
Hippopotamus	<i>Hippopotamus amphibious</i>	-	+
Roan antelope	<i>Hippotragus equines</i>	-	+
Brush-tailed porcupine	<i>Artherurus africanus</i>	+	+
Crested porcupine	<i>Hystrix cristata</i>	-	+
Cape clawless other	<i>Aonyx capensis</i>	-	+
Oribi	<i>Ourebia ourebi</i>	-	+
Klipsringer	<i>Oreutragus oreutragus</i>	-	+
Aardvark	<i>Orycteropus afer</i>	+	+
Defassa waterbuck	<i>Kobus ellipsiprymnus</i>	-	+
Kob	<i>Kobus kob</i>	-	+
Warthog	<i>Phacochoerus aethiopicus</i>	+	+
Bushbuck	<i>Tragelaphus scriptus</i>	+	+
Civet cat	<i>Viverra civetta</i>	+	+
Mongoose	<i>Herpestes sp.</i>	+	+

Source: Agbelusi *et al.* (2000)



**Table 3: Tourist flow Of Kamuku National Park from 2001 – 2005**

S/N	Year	Number of Tourist	Percentage
1.	2001	90	11.64
2.	2002	114	14.75
3.	2003	127	16.43
4.	2004	117	15.14
5.	2005	325	42.04
Total	5 years	773	100

**Table 4: Problems faced by Park Rangers in Kamuku National Park**

Problems	% respondents
Poor remuneration	30.20
Killing and maiming of Park officers	25.80
Poaching (illegal hunting)	21.40
Inadequate equipment/patrol vehicle	12.35
Vandalism	10.25

**Table 5: Major problems encountered by visitors to Kamuku National Park**

Problems	% respondents
Poor accommodation	33.62
Poor water quality	22.45
Irregular supply of electricity	20.55
Inadequate game viewing vehicles	13.15
Bad roads	10.23

## REFERENCES

- Abifarin, R.A.** 2001. *The hazards of park protection: Kamuku National Park. National Park Service goes paramilitary.* Nigeria Parks Magazine, Volume 1, Number 1, Pp 14.
- Agbelusi, E.A., Owolabi O.O., Haruna, Z. S.** 2000. Large Mammals of Kamuku National Park Birnin Gwari, Kauna State. *The Bioprospector* Vol. 2 Sept,2000. [www.bioprospector.org](http://www.bioprospector.org) Pp. 27 - 35
- Ajayi, S.S.** 1986. *Wildlife in crisis-conservation An Antidote.* University of Ibadan Inaugural Lecture: Thursday, February 27, 1986, University of Ibadan, Nigeria. Pp. 67
- Asobang, R.N.** 1990: Museums and African Identify: the museum in Cameroun: *A Critique cultural resources management: An African dimension* WAJA, Volume 20
- Ayodele, A.I.** 2001. Wildlife Based Tourism in Nigeria. *In cultural and Ecotourism Development in Nigeria*, David Aremu (Ed), Hope Publications, Pp. 118 – 127.
- Ayodele, A.I.** 2001. Management of Tourism potentials in Nigerian National Parks. *In cultural and Eco-tourism Development in Nigeria*, David A. Aremu (Ed.), Hope Publications, Pp. 136 – 143.
- Bushnell, S.M.** 1994. The Ecotourism Planning Kit. A business Planning Guide for Ecotourism Operators in the Pacific Islands. The Pacific Business Center Program, University of Hawaii, Pp. 209.
- Dasmann, R. F.** 1981. *Wildlife Biology* 2<sup>nd</sup> Edition. John Wiley and Sons Inc. New York Pp. 75 – 100,166 – 179.
- Eltringham, S.K.** 1994. Can wildlife pay its way? *Oryx*, 28: 163 – 168.
- Falade, O.** 2001. The Economic implication of Developing Tourism in the three – tier Government of Nigeria. *In cultural and Ecotourism Development in Nigeria*, David .A. Aremu (Ed.), Hope Publications, Pp. 62.
- Koch E.** 1994. Reality or Rhetoric? Ecotourism and rural reconstruction in South Africa.UNRISD, Discussion Paper. No. 54, Pp. 58.
- Marguba, B.L.** 2001. The relevance of tourism (Cultural and Ecotourism) in Nigeria towards our 21<sup>st</sup> century National Economic Development. *In Cultural and Ecotourism Development in Nigeria*, David .A. Aremu (Ed.), Hope Publications, Pp. 13 – 19.
- Muir, K.** 1989. The potential role of indigenous resources in the Economic Development of Arid Environment in sub-Saharan Africa: The case of Wildlife utilization in Zimbabwe Society and National Resources, 2: 307 – 318.
- Ntiamoa – Baidu, Y.** 1997. Wildlife and food security in Africa. *Food and Agriculture Organization, Conservation Guide.* The FAO Forest Resources Division, Rome. Italy.

- Thresher, P.** 1981. The Present Value of life Species in Agriculture, Forest and Nature Trail Ibadan, Nigeria. M.Sc. Dissertation, University of Agriculture, Abeokuta. Unpublished. Pp 159.
- Osunsina, O.O.** 2004. Ecological Distribution, Abundance and Diversity of Wild-