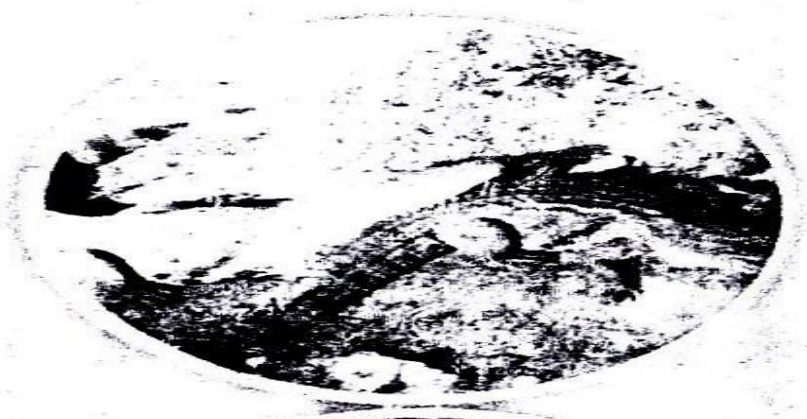
# BOOK OF READING IN FORESTRY, WILDLIFE MANAGEMENT AND FISHERIES

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# PRACTICAL ISSUES IN PROTECTED AREA MANAGEMENT IN NIGERIA: CASE STUDY OF NIGERIA NATIONAL PARKS

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## INTRODUCTION

The trend in the conservation of biodiversity has evolved globally in the area of protected area management. More than 100,000 protected areas have been listed in the World Database on Protected Areas. These cover over 11.4% of the earth's land surface including Marine Protected Areas. Over the past decades several notable innovations have been made in the concept and practices of protected area management. Five main changes in the approach towards protected area management globally are:

(i) Protected areas are no more islands but networks.

(ii) They are guided by not just conservation goals but social and economic objectives.

(iii) Management is now with and for the people instead of against the people.

(iv) Emphasis is now on quality against quantity.



(v) Management of these protected areas is not just of national but international concern.

These innovations and strategies reflect the changing context in protected area management while addressing emerging challenges. The new trends are meant to guide management needs and provide for effective management of protected areas across the continent. Protected areas are now the most important and effective tools in safeguarding biodiversity and other natural assets all over the world. Nigeria is not left out in this development being a signatory to fourteen major biodiversity related treaties. A decree to regulate traffic in endangered species was promulgated in 1985 and each of the 36 states of the federation has either amended or repealed the 1916 and 1963 wild animal preservation ordinances. The creation of forest and game reserves as well as National Parks has been one of the strategies to conserve the Nations biodiversity by successive governments. The establishment of the first game reserve in Nigeria-Yankari Game Reserve by the defunct Northern regional government set the pace for the establishment of several other protected areas across the country (Ajayi and Milligan, 1975; Afolayan, 1980).

Some of the challenges in protected area management in Nigeria include habitat degradation, over hunting and poaching. Biodiversity is being lost by logging, farming, exploitation for fuel wood and illegal grazing inside protected areas. Above all, government machineries to control hunting and habitat loss are grossly inadequate. Nevertheless in the face of these challenges government is still determined to ensure the success of biodiversity conservation in Nigeria.

## PROTECTED AREA

A protected area is "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources which is managed through legal or other effective means" (IUCN, 1994).

Protected areas are established and managed to meet a range of multiple objectives. Each protected area would have a priority objective for which it is being managed. It can also have a range of secondary objectives. IUCN has developed a classification system for placing protected areas into one of six categories. This classification was created to provide a globally applicable framework to allow comparisons to be made and lessons to be learned across the continents. Under this system protected areas are divided into six broad categories which differ primarily in the access available to the general public (including the extent and type of resource extraction permitted) and in the amount of active manipulation of the biological systems by management. The categories are as follows:

**Category I: Strict Nature Reserve/ Wilderness Areas**

Protected areas managed mainly for science or wilderness protection. These protected areas are divided into two sub-categories.

**Category II: National Parks**

Protected areas managed mainly for ecosystem protection and recreation.

**Category III: Natural Monuments**

Protected areas managed mainly for conservation of specific natural features.



**Category IV: Habitat/ Species Management Areas**

These are areas of land and/ or sea where active management interventions are undertaken so as to ensure the maintenance of habitats and/ or to meet the requirements of specific species.

**Category V: Protected Landscapes/ Seascapes:**

Protected areas managed mainly for landscape/ seascape conservation and recreation.

**Category VI: Managed Resource Protected Areas**

Protected areas managed mainly for the sustainable use of natural ecosystems.

## STATUS OF PROTECTED AREA MANAGEMENT IN NIGERIA

The British colonial administration took the initial step to create game reserves to conserve wildlife for recreation as well as posterity. After a survey of the wildlife resources of West Africa in 1932, Col. A. H. Haywood recommended the establishment of game reserves in the savannah region of Nigeria, particularly in Borgu/Oyo; Wase/Muri and the Chafe/Kwiambana areas. Consequently in 1956, the Yankari Forest Reserve, with an area of 1, 280km$^2$, was demarcated and constituted a game reserve in Bauchi Province. The reserve was opened to the public in September 1962. The Borgu Forest Reserve with an area of 245km$^2$ was also demarcated and constituted as a game reserve in 1963 by the Northern Nigeria government. This was followed by the creation of the first national park in the countryKainji Lake National Park on 23rd September 1975 by merging Borgu Game Reserve together with the

adjacent Zugumma Game Reserve. The creation of Kainji Lake National Park through the promulgation of Decree 46 of 1979 was a turning point in the evolution of wildlife conservation for tourism and recreational purposes in Nigeria.

Twelve years later, Act 46 of 1979 was replaced with decree 36 of 1991 establishing five National Parks from existing reserves in the country. These were Chad Basin National Park (CBNP), Gashaka Gumti National Park (GGNP), Cross River National Park (CRNP), Kainji Lake National Park (KLN) and Old Oyo National Park (OONP) (Table 1). Consequently in 1991, Nigeria had 5 National Parks, 31 Game Reserves, one biosphere reserve and one nature reserve (Table 1). Yankari Game Reserve was later upgraded to a National Park, in 1991 by order of 1993 on the request of Bauchi State Government bringing the number of parks to six. In 1991, the Decree 36 of 1991 was completely repealed and replaced with the Decree 46 due to fundamental operational problems and perceived inadequacies. Two forest reserves were also upgraded by the new law increasing the number of National Parks from six to eight (Inahoro, 1991). However, in 2005, CAP N65 2004 was enacted returning the Yankari National Park to Bauchi State Government. It is worth noting that the present seven Parks were upgraded from their earlier status as game reserves which in turn were forest reserves. All the seven Parks cover about 3% of the country's land area. Furthermore, Nigeria is reported to have more than 30 game reserves. The Afi Mountain wildlife Sanctuary created in 2000 by the Cross River State Government is the most recent (Table 1). These reserves are estimated to cover a land area of 25,356.39 km$^2$ constituting about 2.7% of Nigeria's land mass (NARESCON, 1992).



**Table 1: Geographical Locations of Gazetted and Proposed Protected Areas in Nigeria**

| NO. | PROTECTED AREA | AREA (Hectare) | LOCATION | YEAR GAZETTED |
|---|---|---|---|---|
| 1. | Kainji Lake National Park | 534.082 | 9°40'- 10°10'N & 3°30'-5°51'E | 1975 |
| 2. | Gashaka-Gumti National Park | 636,300 | 6°10'- 8°20'N & 11°10'-12°10'E | 1977 |
| 3. | Chad Basin National Park | 228,000 | 13°20'N- 14°00'E | 1978 |
| 4. | Cross River National Park | | | |
| | (a) Northern Sector (Boshi/ Okwangwo) | 72,000 | 6°20'N & 9°15'E | 1991 |
| | (b) Southern Sector (Oban Hills) | 374,255 | 7°45'N & 4°07' | 1991 |
| 5. | Old Oyo National Park | 251,200 | 8°44'N & 3°44'E | 1991 |
| 6. | Okomu National Park | 11,200 | 6°21'N & 5°13'E | 1985 |
| 7. | Kamuku National Park | 120,200 | 10°48'N & 6°18'E | |
| 8. | Yankari Game Reserve | 224,000 | 9°30'N- 10°00'E & 10°00'-11°00'E | 1957 |
| 9. | Orle River Game Reserve | 110,000 | 6°50'N & 6°36'E | 1960 |
| 10. | Kwale Game Reserve | 1,340 | 5°43'N & 6°36'E | 1960 |
| 11. | Gilli Gilli Game Reserve | 36,300 | 6°05'N & 5°20'E | 1960 |
| 12. | Falgore Game Reserve | 92,000 | 11°00-11°20'N & 8°33'-8° 45'E | 1969 |
| 13. | Kambari Game Reserve | 41,400 | 8°48'N & 10°38'E | 1969 |
| 14. | Dagida Game Reserve | 29,400 | 9°42'N & 5°31'E | 1971 |
| 15. | Alawa Game Reserve | 29,600 | 10°20'N & 6°38'E | 1971 |
| 16. | Kwiambana Game Reserve | 261,400 | 10°50'-11°50'N 6°00'-7°00E | 1971 |
| 17. | Pandam Game Reserve | 224 km$^2$ | 8°31'-8°40'N 7°50'-9°00'E | 1972 |
| 18. | Pai River Game Reserve | 831 km$^2$ | 6°50'N & 6°36'E | 1960 |

| | | | | |
|---|---|---|---|---|
| 19. | Wase Game Sanctuary | 186,000 | 9°40'N & 10°00'E | 1972 |
| 20. | Ibi Game Reserve | 153,000 | 9°40'N & 10°00'E | 1972 |
| 21. | Nasarawa Game Reserve | 190,000 | 8°32'N & 7°43'E | Proposed |
| 22. | Lame-Burra Game Reserve | 205,767 | 10°27'& 9°15'E | 1972 |
| 23. | Wase Rock Bird Sanctuary | 93 | 9°04'N & 9°15'E | 1972 |
| 24. | Opara Game Reserve | 248,600 | 8°09'N & 2°50'E | 1973 |
| 25. | Kashimbila Game Reserve | 139,600 | 6°40'N -8°20'N & 11°10'-12°10'E | 1977 |
| 26. | Sambisa Game Reserve | 68,600 | 11°00'-11°30'E | 1978 |
| 27. | Hadejia Baturiya Wetlands Game Reserve | 29,700 | 12°27'& 10°17'E | 1976 |
| 28. | Anambra Game Reserve | 35,400 | 7°16'& 7°24'E | — |
| 29. | Ifon Game Reserve | 28,200 | 6°59'-7°13'N & 5°43'-5°53'E | — |
| 30. | Imeko Game Reserve | 96,610 | 7°27'N & 2°51'E | — |
| 31. | Ebba Kampe Game Reserve | 11,730 | 8°15'N & 6°00'E | — |
| 32. | Jos Wildlife Park | 8km² | 9°55'N & 8°45'E | 1972 |
| 33. | Omo Bioshphere | 460 | 6°30'N & 4°15'E | 1949 |
| 34. | Lekki Nature Reserve | 78 | 6°27'N & 3°23'E | — |
| 35. | Taylor Creek Game Reserve | - | 5°02'N & 6°25'E | — |
| 36. | Udi/Nsukka Game Reserve | - | 6°35'N & 7°15'E | — |
| 37. | Dagona Waterfowl Sanctuary | - | 12°40'N & 10°45'E | — |
| 38. | Stubbs Creek Game Reserve | - | 8°09'N & 4°29' | — |
| 39. | Afi Wildlife Sanctuary | - | | 2000 |
| 40. | Famous Elephant Sanctuary | - | | Proposed |

**Adapted from Inahoro (1991) and National Park service (2009)**
**Areas are in hectares except otherwise stated**



## THE NATIONAL PARK SERVICE

The National Park Service was established through the National Park Decree 36 of 1991 released under the official gazette of the Federal Government of Nigeria No. 44 Vol. 78 of 26th August, 1991 now National Park Service Act CAP 65 of the Laws of the Federation of Nigeria, 2004. The Act established the National Park Service of Nigeria and its Governing Board. It provides the foundation, legal basis and mandate on which operations of the National Parks are predicated. The mandate and mission of the Parks are clearly outlined in part 2 of the decree titled: Objectives, Functions and Power.

### Objectives of the National Park Service

The objectives of the service are:

a) The conservation of selected and representative examples of wildlife communities in Nigeria;

b) The establishment of an ecologically and geographically balanced network of protected areas under a jurisdiction and control of the federal government;

c) The protection of endangered species of wild plants and animals and their habitats;

### Administrative Structure

The day-to-day administration of the National Park Service is under the Conservator-General of the National Park Service. The Conservator-General executes the policy of the service and coordinates the work of the secretariat of the service and that of the

Conservator of Parks in the Seven Parks across the country. The service operates through four departments as shown below:

(i) Park Engineering and Maintenance
(ii) Finance and Administration
(iii) Park Protection and Conservation
(iv) Ecotourism

Details of the National Park Service Organogram is shown in Figure 1.

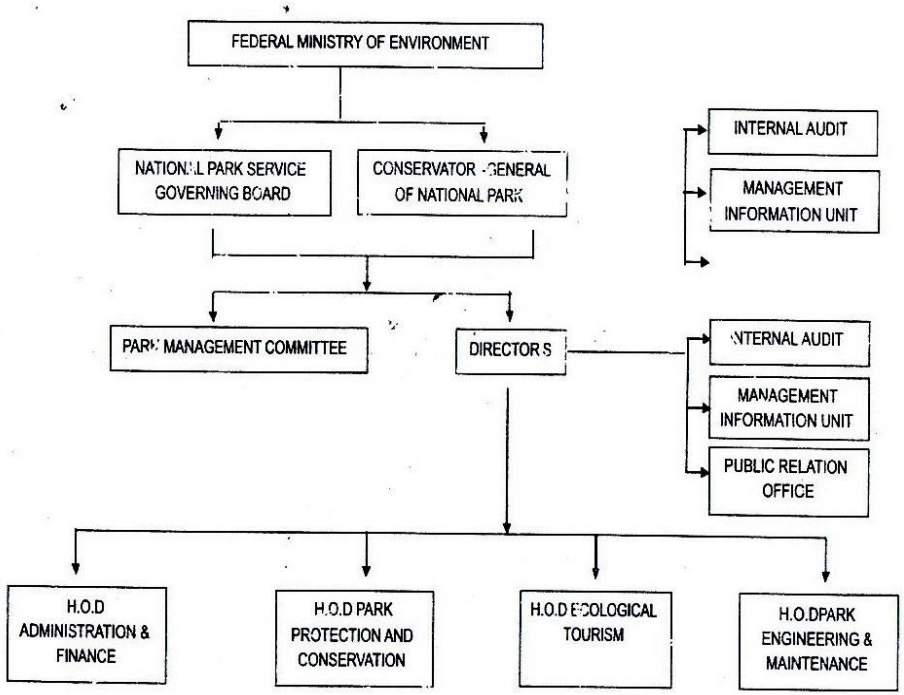


**Figure 1:Organogram for Nigeria National Parks Service**

Source: National Park Service Annual Report, (2005)



## CHALLENGES OF PROTECTED AREA MANAGEMENT IN NIGERIA NATIONAL PARKS

### SocioEconomic Problems

The greatest threats to biodiversity conservation in the NPS range from poaching, logging, water poisoning to harvest of fish, enclave settlements and farm encroachment. Others include grazing, gathering of Non-Timber Forest Products (NTFP'S) and fires as shown in Table 2.

**Table 2: Number of persons arrested in the national parks based on offences committed between 2001 and 2005**

| OKOMU NATIONAL PARK | | | | | | |
|---|---|---|---|---|---|---|
| S/N | Year | Poaching/ | Illegal Logging | Collection of NTFPs | Encroachment | Total No. of Arrests |
| 1 | 2001 | 23 | - | - | - | 23 |
| 2 | 2002 | 7 | 2 | - | 1 | 10 |
| 3 | 2003 | 14 | 6 | - | - | 20 |
| 4 | 2004 | 23 | 3 | 3 | - | 29 |
| 5 | 2005 | 5 | 5 | - | - | 10 |
| | **Total** | 72 | **16** | **3** | **1** | **92** |
| CROSS RIVER NATIONAL PARK | | | | | | |
| S/N | Year | Poaching | Illegal Logging | Collection of NTFPs | Encroachment | Total No. of Arrests |
| 1 | 2001 | - | 7 | - | - | 7 |
| 2 | 2002 | - | 22 | - | - | 22 |
| 3 | 2003 | 7 | 6 | 28 | - | 41 |
| 4 | 2004 | 17 | 8 | 7 | - | 32 |
| 5 | 2005 | 36 | 27 | - | - | 63 |
| | **Total** | 60 | **70** | **35** | | **165** |

KAMUKU NATIONAL PARK

| S/N | Year | Poaching | Illegal Logging/ Firewood Collection | Illegal Grazing | Collection of NTFPs | Illegal Fishing | Total No. of Arrests |
|---|---|---|---|---|---|---|---|
| 1 | 2001 | - | - | - | - | - | - |
| 2 | 2002 | 16 | 5 | 243 | - | 5 | 269 |
| 3 | 2003 | 18 | 1 | 303 | - | 4 | 328 |
| 4 | 2004 | 8 | - | 314 | - | - | 322 |
| 5 | 2005 | 15 | - | 219 | 10 | - | 244 |
| | Total | 57 | 6 | 1079 | 10 | 9 | 1163 |

KAINJI LAKE NATIONAL PARK

| S/N | Year | Poaching | Illegal Logging | Collection of NTFPs | Encroachment | Total No. of Arrests |
|---|---|---|---|---|---|---|
| 1 | 2001 | 57 | 7 | - | 229 | 293 |
| 2 | 2002 | 41 | 13 | - | 140 | 194 |
| 3 | 2003 | 13 | - | - | 114 | 127 |
| 4 | 2004 | 53 | - | - | 88 | 141 |
| 5 | 2005 | 40 | - | - | 87 | 127 |
| | **Total** | **204** | **20** | **-** | **658** | **882** |

CHAD BASIN NATIONAL PARK

| S/N | Year | Poaching | Illegal Logging | Illegal Grazing | Illegal Fishing | Total No. of Arrests |
|---|---|---|---|---|---|---|
| 1 | 2001 | - | - | 4 | - | 4 |
| 2 | 2002 | 21 | 19 | - | - | 40 |
| 3 | 2003 | 1 | 42 | - | - | 43 |
| 4 | 2004 | - | - | - | - | 133* |
| 5 | 2005 | - | - | - | - | 41* |
| | **Total** | | **22** | **61** | **4** | **261** |

*No details of offences committed

Source: National Park Service Annual Report (2005)



***Poaching***

Poaching has been one of the major threats to the Park's ecosystem. In similar circumstances, poaching has been considered as affecting more than 80% of 201 Parks from 16 tropical countries across three continents (Van Schack *et al.*, 1997). Collection of NTFPs occurred in 85% of Myanmar's protected areas system (Rao et al, 2002). Hunting and NTFP collection occurred in 97% and 92% respectively of 197 Russian Parks that were accessed (Tyrlyshkin et. al. 2003). A recent example of corporate poaching recorded in CBNP involved seven (7) Lebanese and five (5) Nigerians operating from Kano. The poachers were equipped with sophisticated rifles, 2 Jeeps, camping tents/gears, refrigerators, generators, and other petty items that facilitate mass exploitation of animal resources. The animal carcasses recovered include Red Fronted Gazelles, Spur-winged Goose and storks (CBNP Annual Report 2005). In Cross River National Park, hunting, trapping and fishing are one of the major sources of income and livelihood in Support Zone Communities. A good number of the hunters are from the neighbouring Republic of Cameroon. Despite active involvement of protection staff in surveillance operations, the wildlife population of Cross River National Park is still under serious threat by the activities of these poachers. A case was recorded in July 2006, when 18 suspects arrested for poaching in the Park were forcefully released by Ojor militant youths, while driving the suspect from the Park to the Head Office, Akamkpa. Their grievances were that the Management of the Park has not adequately compensated them for the resources they have been restricted from use (CRNP Annual Report, 2006).The Situation in Kainji Lake National Park has continued to have a very

serious impact on the wildlife resources of the entire Park though the gravity of the problem is greater in Zugurma sector. This is due to the closeness of villages to the Park. The communities in Borgu sector are mostly hunters and engage in this illegal act by using traditional hunting equipment including bows and arrows. Arrests of poachers inside the Park by Protection Staff sometimes lead to physical attack by community members.

***Logging***

Illegal logging is very common in Cross River National Park. Consequently the habitats of many fauna species especially primates the great apes (Gorilla and Chimpanzees) have been destroyed. Timber exploitation that was limited to community forests in the past, is now extended to the Park where most of the choice economic trees are indiscriminately exploited. Most of the loggers connived with some community leaders to exploit the Park. However, exploiters in recent times extend their operations to areas without roads, thus evacuating their logs through rivers up to the Republic of Cameroon. Although the activities of timber exploiters cannot be fully assessed for now, the impact of the noise from power chain Saws coupled with exposure of the forest undergrowth to sunlight, has been a serious threat to the Park fauna and their habitats. Widespread logging has also been reported in many protected areas globally. Logging affected nearly 70% of more than 200 Parks sampled in the tropics (Van Schack *et al.*, 1997).

***Illegal Bush Burning***

In KLNP, fire is employed by local communities surrounding



the Park to drive out animals from cover for easier capture. It was also reported that the poor drainage system particularly in Zurgurma sector most often encourages the drying up of vegetation. Thus, fires set by cattle rearers, poachers and farmers often extend beyond the areas earmarked to serve their purpose. Though the Park engages in burning annually, such management exercises are extended beyond limits by uncontroiled burning from the local communities.

In CRNP, fire is used along with slashing to clear virgin forest in the southern (Oban Division) and the northern (Okwangwo Division) portions of the Park. Fulani Cattle herdsmen set fire at the periphery of the Park in order to stimulate growth to provide fresh grass for their cattle. Uncontrolled fires extend into the Park resulting in the destruction of the Park ecosystem. Conflicts also arise where arrested Fulani herdsmen claimed that burnt areas were allocated to them by their host communities, insisting that their operational areas are outside the Park.

***Enclave communities***

This problem is very common in CRNP and GGNP. In GGNP, some villages were already in existence prior to the establishment of the Park. These enclave communities are Gumti, Chappal Talle, Chappal Hendu, Chappal, Yumu, Chappal Dallam, Fillinga and Mayo Sabere. Apart from these enclaves, some illegal settlements also exist in the Park. They include Bodel, Lagaso, Mijindadi, Mayo Fauru Mata Shirip, Mataya and Mayo Balewo. Most of these settlements have been destroyed and occupants evicted. Meanwhile, Management is seriously considering the relocation of the enclave communities. The National Parks Board recently met with Support

Zone Communities and has commenced discussions on possible resettlements of these communities.

In CRNP, six (6) communities have been officially recognized as enclaves in the Park. They are Okwangwo, Okwa I and II in Okwangwo Division, and Mkpot, Abung and Iku in the Oban Division on the Northern part of the Park. Five of these communities (Okwa I and II, Okwangwo, Mkpot and Abung) were in existence before the establishment of the Park. The enclave community of Iku is a recent development that came into being after the Park was created in 1987.

Two problems the management is having concerning these communities are:

(1) Maintaining them where they are presently operating but under a specific participatory management and development plan to be drawn jointly by the Park and the affected communities.
(2) Resettlement of the enclave villages outside the Park boundaries where basic amenities such as rural health centres, schools, bore holes and electricity can be provided for them.

The second option is most preferred by the management of the Park. The issue of the resettlement of these communities is a serious problem. The National Parks Board is however, taking steps to address the matter across all the Parks in the country.

***Illegal Grazing***

*Illegal* grazing seems to pose the greatest management problem across the Parks except in CRNP and ONP. In KNP, 1079



cattle rearerswere arrested between 2000 and 2005 which tends to confirm the magnitude of the problem. Incidentally, most of the culprits (cattle rearers) were not indigenes but came from other states that shares boundaries with the Park. In most cases, staffs of the park areattacked in the process of carrying out routine surveillance.

Two park officials were killed during an encounter with cattle rearers from Maddada village in Zamfara State. One of the officials who were brutally murdered was a very senior management staff. In another encounter, a gang of poachers/illegal grazers invaded Kuzomani base camp and vandalized the building and several properties belonging to the Park Their level of sophistication prompted management to secure the support of members of a Vigilante group to complement the efforts of the Park's patrol outfit.

In KLNP, Illegal grazing has been reported in the past as a major problem facing the Zugurma sector of the Park with the cattle rearersas the major offenders. The movement of cattle in the sector led to excessive trampling accompanied by erosion. The vegetation of the Park is also affected by fire set to improve foliage for their cattle at the expense of wildlife. Most times, wild fruits are harvested to feed the cattle including debarking of trees for their local use.

The introduction of herds of domestic animals into a conservation area in addition to resident wild animal populations result in the carrying capacity of the land being exceeded. The illegal entry of herds of cattle into Kainji lake National Park as well as other protected areas and cultivated lands has led to the creation of some grazing reserves. Unfortunately, this has not solved the problems of trespass areas (Okaeme *et al.*, 1998).

Oyadogun *et al.* (1983) identified *Afzelia africana, Daniella oliveri* and *Pterocarpus erinaceus* as the three main species mostly abused in the middle Niger Belt of Nigeria. The following are some of the ecological impact of lopping;

i. It affects the crown condition of the entire vegetation in the ecosystems thus opening up the canopy above ground.

ii. It increases the growth of light demanding herbaceous species and reduces those of shade loving species such as *Beckropsis uniseta.*

iii. In an event of continued uncontrolled lopping, it has resulted in the total death of some plant species especially as observed in some areas of the continuously lopped *Afzelia africana* in the Kainji Lake Basin.

iv. The immediate effect of tree lopping is the disturbance of the flowering/fruiting cycle thus, impairing regeneration by seed, and the rate of regeneration of lopped species.

v. Affects the condition of the herb layer vegetation in terms of flouristic composition and relative plant distribution (Okaeme *et al*, 1988)

**Infrastructural Problems**

The Headquarters of all the seven national parks are located far from the entry gates leading to the parks. Some may argue that park administration and headquarter facilities should not be constructed



right inside the park. However, this position is quite acceptable from a conservation viewpoint. However locating such facilities at the main visitor entrance to the park has several advantages. These include having more hands readily available for management as well as providing an uninterrupted visitor experience from the park entrance gate into the park. This is by far better than a visit to park headquarters located in towns far away from the park and having to drive between 30 and 45 minutes for example, to actually get to the park; a situation that interrupts the park's experience. Moreover a boundary/entrance location does not affect the resource integrity of the park itself and provides additional security for the park by its very location.

In all cases the visitor access layout across the parks are either very poor or need improvement. The Borgu sector of KLNP stands out as having the best visitor access potential with access immediately off the highway into the park. The situation in other parks varies considerably but all present problems as shown in Table 3 below. Generally, potential visitors without four-wheel drive vehicles need not visit the parks. This is an unacceptable situation in a park system that promotes tourism.

**Table 3: Visitors' access layout in the Parks**

| National Park | Functional State | Visitor Access Layout |
|---|---|---|
| Kamuku | Very poor | 24 km from highway, accessible only by four wheel drive (and not at all in rainy season) |
| Kainji | Excellent | Excellent access immediately off highway |
| Okomu | Poor | About 5 km from highway, accessible only by four wheel drive (and not at all in rainy season) |
| Cross River | Poor | About 5 km from highway for Okwangwo and 15 km for Oban, accessible only by four wheel drive (and not at all in rainy season) |
| Old Oyo | Poor | About 5 km from highway, accessible only by four wheel drive (and not at all in rainy season) |
| Chad Basin | Poor | Long distance and poor access to Park entrance |
| Gashaka Gumti | Poor | About 1 km from dilapidated highway |

Source: National Park Service Annual Report (2005)



However, the situation in CBNP and GGNP is even more challenging where visitation will probably be focused on specialty tours in the short term pending when improved access is provided for visitors. Visitor welcome centres are typically an integral part of the park experience. There are no visitor welcome centres at any of the parks. There are museums at the park's headquarters in OONP located at Oyo, KLNP in New-Bussa and CBNP in Maiduguri but they are far from the preferred visitor entrance to the Parks. Furthermore, the museums require considerable upgrading to meet today's interpretive standards.

Visitor accommodation across the parks rangedfrom poor to unacceptable standards. The only exception is the new twelve (12) room lodge at Okomu National Park constructed by the private sector. The Cross River accommodation facilities at Okwangwo division of the park can work, provided that the rooms are completely renovated to modern standards. Other accommodation facilities provided in KNP, KLNP, GGNP and CRNP are very poor. The facilities at KLNP are concrete blocks which are now outdated and need to be upgraded. More preferable for a viable lodging situation is demolition of existing facilities and replacement with a lodge more in keeping with an ecotourism/wilderness experience using local materials where possible.

Lodging design and site planning is also an important consideration for ecolodge development. Anyone locating such facilities in the parks should follow the highest possible standards for siting and construction. For example, the new private sector tourist facility in ONP has many good characteristics and should be adopted as a model by the NPS.

## Funding

It is commonly taken for granted that unsustainable exploitation of wildlife including poaching is the greatest threat to protected area management all over the world. This is principally the reason why Parks were established in the first place; that is, to confront the menace of poaching. It has become evident in recent years that the real threat to wildlife is not illegal or commercial hunting but wildlife's inability to compete economically with alternative uses of land. Unfortunately this is happening in an environment and period where the private sector has demonstrated that management of protected areas is commercially viable. This problem has been exacerbated by under-funding of National Park agencies worldwide. Underfunding of protected areas appears to be a systemic problem in other parts of the world. James *et al.*, (2001) have documented that protected areas across Africa and Latin America are managed on less than US$110 per square kilometer ($km^2$), far less than the generally accepted US$210 per $km^2$ needed to adequately manage tropical Parks. Apart from the problems of underfunding, the parks are incapable of generating substantial revenue to support park operations. For instance, the National Parks required about 444 million naira to operate in 2005. This excluded any capital costs incurred that year. A summary of the operational cost profile is shown in Table 4 below.



**Table 4: Budget and Revenue for all the National Parks in the year 2005.**

| National Park | Operating Budget (N) | % Personnel | % Overhead | Staff Level | Visitors Annual | Total Revenue (N) | % from Lodging |
|---|---|---|---|---|---|---|---|
| Kamuku | 31,500,000 | 78% | 22% | 97 | 69 | 1,540,000 | 86% |
| Kainji Lake: | 88,800,000 | 83% | 17% | 333 | 5,593 | 2,800,000 | 38% |
| Okomu | 28,100,000 | 76% | 24% | 74 | 285 | 578,000 | 17% |
| Cross River | 89,600,000 | 83% | 17% | 329 | 299 | 2,600,000 | 6% |
| Old Oyo | 69,100,000 | 77% | 23% | 184 | 545 | 860,000 | 16% |
| Chad | 46,900,000 | 81% | 19% | 160 | 33 | 160,000 | 16% |
| Gashaka | 69,100,000 | 77% | 23% | 235 | 510 | 1,230,000 | 80% |
| **Total** | **423,100,000** | | | **1,412** | **7,334** | **9,768,000** | |
| **Total Revenue as Percentage of Total Operating Budgets** | | | | | | **2.3%** | |

Source:**National Park Service Annual Report (2005)**

The financial results during the period indicate that the National Parks generated an estimated 10 million naira in revenues, or about 2.3% of total costs. Most of the costs for the parks were incurred for personnel salaries (ranging from 76% to 83%). Annual visitation amounted to about 7,500 persons. The number of visitors to the parks and the revenue generated by them indicates that there is no significant level of visitors entering the park for now.

## Staffing

The position of staff in the Parks indicates that staff number

and skills were inadequate to perform and conduct critical management activities. The background and experience of protected area staff is also a critical factor for improving and maintaining the management effectiveness of protected areas. Inadequate staffing is not limited to the Nigeria National Parks alone. Rao et al (2002), found that 1% of Myanmar's Parks had no staff at all, while 40% had some staff but not enough to adequately perform management duties. Similarly, Singh (1999) reported that 10% of India's national Parks and 13% of its wildlife sanctuaries did not have staff allocated to them. Inadequate staffing is therefore a widespread phenomenon in many protected area systems (Brandon *et al.*, 1998; Therborgh *et al.*, 2002)

Almost all the National Parks in Nigeria were created from former forestry and game reserves managed by state governments at levels that some were mere "paper reserves" made up of farms with logging and silviculture activities. In most cases workers who were later inherited by the Park service were not experienced and knowledgeable in the complex activities of protected area management. This is one of the possible reasons of discrepancies in staff capabilities within the Parks and the protected area systems worldwide. This situation is also reflected in the 294 protected areas of China where many of the protected areas were created from the former forestry bureau (Diquiing *et al*, 2003).

However, there was a general opinion from the managers of the parks that it was not the number of staffs that was frequently the issue, but where they were located, the provision of adequate equipment for their operations, the skills and responsibility level of the staff. However, it was generally recognized that the skills by staff



to conduct management activities was inadequate. Though there were clear internal organization to manage staff and management tasks, in no instance in all the Parks was staff support thought to be completely appropriate.

## FUTURE PROSPECTS OF NIGERIA NATIONAL PARKS

Inspite of the enormous challenges the National Park Service has faced right from inception, the service has also witnessed some level of achievement and there are also prospects for a better park system in the future as shown in the following areas.

### Legal Status

The primary objective of establishing the Parks was for the maintenance of biodiversity. In these areas the Federal Government has put in place some legislation through the enactment of an Act The National Park Service Act; Cap 65 of the Laws of the Federation of Nigeria, 2004. This legal instrument has a mandate to preserve, enhance and promote the protection of animals, plants, and other vegetations in the country's National Parks. Boundary demarcation has also been given adequate attention across all the Parks to ensure that communities operated within their various community lands. With respect to the issue on legal status and security, all the seven national Parks were perceived to have long term legal instrument binding protection. The establishment of the Parks have been legally gazetted or otherwise recognized by the Federal Government and are not subject to any degazetement. The rights to all protected area resources are legally protected including timber, mineral and water resources.

**Non-Governmental Organisation (NGO) Support**

Almost all the parks lack skilled staff, equipment and facilities to effectively implement habitat restoration programmes as well as monitor threats and pressures. However, when considering this issue from the reverse perspective one notices that two of the protected areas KLNP and GGNP are currently attracting foreign funding from international donor agencies. KLNP is being funded by Global Environmental Facility (GEF) while GGNP attracts funds from WWF (under its affiliate NCF), as well as Gashaka Primate Project (GPP). The GEF programme has put in place a community management and improvement programme through the GEFLEEMP ongoing initiatives designed to safeguard long term conservation goals and traditional livelihoods. Consequently, the programme has supported the KLNP through infrastructure construction, development of facilities and purchase of equipments for Park operations as well as local community support and outreach. The programme is contributing significantly in the area of staff capacity building. The GGP programme on the other hand has within the period of its commissioning provided support to the GGNP in the areas of conservation through research (generating knowledge and developing infrastructure), effective communication within the Park and local communities. Park protection, patrols and demarcation of boundaries, ecotourism and local community outreach (improving living standards through public health programmes) as well as empowerment of local economy were also given a boost by the NGO. Support from international donors is expected to spread to other parks over the years in view of the fact that this source of funding is now being accessed by many parks across the world. In China, the six



protected areas supported by GEF are rated as being managed effectively when compared with others without similar support (Diqiang Le *et al*, 2003)

**Commercialization and Concessioning**

It is commonly taken for granted that unsustainable exploitation of wildlife including poaching is the greatest threat to protected area management all over the world. This is principally the reason why Parks were established in the first place; that is, to confront the menace of poaching. It has become evident in recent years that the real threat to wildlife was not illegal or commercial hunting but wildlife's inability to compete economically with alternative uses of land. This problem has been exacerbated by under-funding of National Park agencies worldwide making this probably the single most important threat to the conservation of areas under their control. Unfortunately this is happening in an environment and period where the private sector has demonstrated that management of protected areas is commercially viable.

In Nigeria, the current programme of privatization has concluded plans to partially commercialize or concession the Federal government's interest in all the National Parks as scheduled in the Public Enterprises (privatization and commercialization) Act No. 28 of 1999. This is the first attempt to commercialize/concession the National Parks under a non-divestiture approach. The National Park are either to be partially commercialised or concessioned. The partial commercialisation objective is to apply private sector principles to Park operations, thereby making them operate more efficiently and

make them self-sustaining. Concessioning, on the other hand, results in the private sector providing certain services where, due to private sector investment, management skills and efficiency, profits can be made. Based on a review of the National Parks, those that are assessed to be more attractive to private sector management/investment are to be concessioned while the rest, not suitable for concessioning, but which could still benefit from operating using private models, principles and disciplines will be partially commercialised.

In the case of the National Park system, the "asset base" includes the designated lands for national parks, the flora and fauna resources within these designated lands and park facilities and operations equipment. Bureau for Public Enterprises (BPE) has advised that the lands and resources designated for National Parks will remain with the public sector. They further advised that the primary objective is creation of a self-financing national park system. Only the park facilities and associated operations are available for concessioning.
The successful commercialization of the parks will establish parks as economic "engines" in the regions in which they are located. This presents the park system with an excellent opportunity to provide local communities with meaningful economic participation in the parks in several possible ways, such as:

1. contracting communities to provide:
    a. resource inventory and monitoring services;
    b. resource protection services;
    c. interpretive tour services;
    d. hosting of tours of local communities for park visitors;



2. working with the park system to provide and upgrade tourism facilities in communities such as hotels, restaurants, and arts and craft outlets;
3. development of attractions in or near the communities outside the parks to provide additional activities for park visitors and increase the appeal of the park and its immediate environs.

Local community participation in resource management and visitor services is recognized globally as an important tool for local economic development combined with resource management in protected areas. However it can only work if there is an economic foundation for participation by these communities. This the National Parks can provide through the commercialization program.

**Management Plans**

Except for KLNP, none of the Parks had management plans right from their establishments almost 20 years ago, therefore there were no specific biodiversity related objectives for the Parks. This was a serious weakness across the parks because in most protected areas across the globe, effective management is predicated on current management plans. This is the case with almost all the 150 protected areas in Nepal (Scatter *et al.*, 2006). In Nepal protected areas, most of the Parks operate with up to date management plans including clearly stated biodiversity focused objectives in the buffer zones and community conservation plans (Scatter *et al.*, 2006). It is therefore a welcome development that the National Park Service has given very serious attention towards improving its management by preparing management plans for all the Parks. Arrangements are also completed to prepare a system plan for the parks.

**Eco-tourism Development**

Reports from the National Park Service indicate that for some time now, capital allocations are either not approved for the parks or grossly inadequate to operate effectively while recurrent budgets have suffered serious cuts. This is in line with the Federal Government's programme of reforms in the public service targeted towards unburdening itself by withdrawing funding to its agencies and parastatals. The loss of, or reduction in Federal Government funding is often compounded by inefficient capture of revenues by the parks. Faced with these challenges, the parks are being forced to adopt a range of measures that will increase the availability of funding to enable them operate effectively. Presently, the status of hotel accommodation and tourism quality restaurants in the national park with exception of CRNP is sub standard (Table 5).

**Table 5: Assessment of Hotel accommodation and quality of tourism facilities in Nigerian National Parks**

| National Park | Hotel Accommodation | Tourism Quality Restaurants | Availability of Other Attractions | Tourism Friendly Community (secure, clean, green) |
|---|---|---|---|---|
| Kamuku | Sub-standard | None | Limited | None |
| Kainji | Sub-standard | None | Hydro facility but otherwise limited | None |
| Okomu | Sub-standard (immediate area and Benin City) | Limited | Limited | None |
| Cross River | Better than most in Calabar but still needs upgrading | Yes | Excellent (Drill Ranch, Canopy walk, golf, etc) | Yes |



| | | | | |
|---|---|---|---|---|
| Old Oyo | Sub-Standard | None | Limited | None |
| Chad Basin | Sub-Standard | None | Limited | Not applicable |
| Gashaka Gumti | Very Poor | None | Limited | Not applicable |

National Park Service Annual Report, (2005)

Financially sustainable national parks need acceptable hotel accommodation in their regions in order to drive business. Therefore there are potentials for the parks to develop acceptable standard hotels in collaboration with the National Tourism Agency, work with local hotels to facilitate upgrading and establish "preferred hotels" lists that will provide the potential visitors with assurance that the quality is there (and consistently maintained) when they arrive. In fact, the parks could develop packages with their preferred hotels and restaurants to offer to markets in Abuja and Lagos including major cities across the country.

CRNP presents the best opportunity for kick-starting this strategy. In Cross River State, for instance, tourism has become the flagship of the state's economic development strategy. The state government has therefore invested heavily in some of its tourism centres in preparation for their privatization. Consequently, these facilities have been upgraded to meet international standards. Specifically, the Obudu Ranch Resort and its accompanying cable car project, water park, presidential lodge and conference centre are now star attractions. The runway of the Bebi Airstrip has also been expanded to accommodate larger aircrafts for tourist intending to visit the

Ranch by air. In the area of eco-tourism, the Afi Mountain Nature Reserve has been given a face lift with the construction of Africa's longest canopy walk way. The Drill rehabilitation and breeding centre is contiguous to the reserve. It was established to recover orphan drill monkeys. The centre has been acclaimed as the world's most successful programme for drills. Apart from serving as a recovery centre, it is also a centre for primate research and a rainforest tourist site. Consequently, simple but well planned chalets had been provided for tourists who are interested in enjoying the experiences of rainforest environment. This has placed CRNP in a commercially viable position for collaboration with the state government and other related agencies.

**Collaboration with local communities**

The National Parks have put in place Community Conservation Services/Education Programmes targeted towards soliciting for support and cooperation from local communities living close to the Park (Support Zone Communities). The first National Park to incorporate this programme into its management was the CRNP. This was in recognition of the fact that the economies of the villages surrounding the park depend on having access to park resources and may be seriously affected in the process of enforcing park regulations. Infact the establishment of the Park was accompanied by several complains and agitation from communities living close to Park boundaries. Their grievances were that the boundaries should be re-aligned to provide land for their farming activities. Disputes and conflicts also arise when Park laws are enforced to check illegal farming, hunting, logging and collection of NTFPs. Such



enforcement is often considered by Support Zone Communities as infringement on their hitherto rights and privileges to exploit forest resources without restrictions. Cases of molestation and threats to Park Staff by these communities are common experiences.

Several development projects were therefore proposed by WWF/EU/KFW to Support Zone Communities. However, only a few of these projects were executed partly as a result of the suspension of EU/KFW funding in 1996 following sanctions imposed by EU to Nigeria. It has been reported that these communities were fully in support of Park projects at inception. They however, lost confidence and support for Park projects when it became clear that the improved living conditions promised them by foreign NGOs such as WWF/EU could not be fulfilled.

However, the Cross River National Park has continued to provide support (Table 6) to the following communities in both sectors of the Park in the following areas:-

**Table 6: Types of support provided to local communities by Cross River National Park**

| S/N | Type of infrastructure | Year of Completion | Cost (N) |
|---|---|---|---|
| 1 | Provision of 2 boreholes at Akamkpa | 1997 | 1,917,400 |
| 2 | Construction of Health Centre at Kanyang | 1997 | 1.5m |
| 3 | Construction of Bridge at Butatong By-pass Road | 1999 | 5m |
| 4 | Completion of classrooms block at Old Netim | 1999 | 266,000.00 |
| 5 | Rehabilitation of Netim-Obung Road | 2000 | 2.5m |
| 6 | Rehabilitation of Netim-Obung Road | 2000 | 2.5m |
| 7 | Rehabilitation of Ochon-Odongeit-Etara Road | 2000 | 4.0m |

| | | | |
|---|---|---|---|
| 8 | Construction of Ojor-Ifumkpa Road | 2000 | 6.5m |
| 9 | Rehabilitation of Netim-Dinga Road | 2001 | 4.8m |
| 10 | Renovation of Aking Primary School Block | 2001 | 2.5m |
| 11 | Rehabilitation of Obung-Ekoko Road | 2001 | 5.9m |
| 12 | Rehabilitation of Ojor/Ifumkpa-Owai Road | 2001 | 5.0m |
| 13 | Water Project at Ifumkpa | 2001 | 3.0m |
| 14 | Construction of 3-classroom block with Headmaster office and store at Okoroba | 2001 | 4.5m |
| 15 | Renovation of classrooms block at Aking | 2001 | 2.5m |
| 16 | Rehabilitation of Old Ekuri Road | 2002 | 4.5m |
| 17 | Construction of 6 classrooms blocks at Butatong | 2003 | 7m |
| 18 | Development of water at Butatong (unsuccessful) | 2001-2002 | 6.5m |
| 19 | Construction of Old Ekuri Health Centre with furnishing and drugs supply | 2002 & 2005 | - |
| 20 | Rehabilitation of Akamkpa-Nsan-Nkanaya Road | - | - |
| 21 | Completion of 12m span bridge along Ifumkpa Road | - | 4.0m |

Source: Cross River National Park Annual Reports, 2008.

These development projects have been part of the annual capital budgets of the park and have significantly assuage the restiveness of these communities against the park over the years.

To ensure that these developments are extended to other parks, the National Park Service has introduced a community development initiative targeted towards ensuring that local communities that are very close to the parks (Support Zone Communities) are provided with incentives so as to illicit support from them. A few parks have committed some of their capital budgets to the provision of these basic amenities as shown below.



**Table 7: Chad Basin National Park: Local Community Projects**

| S/N | PROJECT | COST (N) | BENEFITTING COMMUNITY | YEAR | REMARK |
|---|---|---|---|---|---|
| 1. | Sinking of cement wells at wetland sector | 192,000 | Fafoyo & Sugum villages | 2006 | Completed |
| 2. | Drilling of Borehole, with accessories (over head tank and lister Generator) | 3,000,000 | Chingurmi community | 2006 | Completed |
| 3. | Rehabilitation of Dagona community compound | 171,690 | Dagona community | 2006 | Completed |
| 4. | Contribution to Wetland's Entomological society workshop | 44,000 | Dagona community | 2006 | Done accordingly |
| 5. | Assistance of Hadeja/Nguru Wetlands conservation projects workshop organized | 500,000 | Wetland | 2006 | Done accordingly |
| 6. | Clearing of Tashan Kalgo/ Dagona Compact subgrade road and Bama Gulumba feeder roads | 500,000 | Dagona, Bama and Gulumba communities | 2006 | Completed |

| | | | | | |
|---|---|---|---|---|---|
| 7. | Procurement drags for buffer Zone Communities | 1,200,000 | Wetland. Bulatura Chingurmi 7 Sambisa communities | 2006 | Distribution to according specification |
| 8. | Construction of No. 3 box (double cells) culverts at Tashan Kalgo/ Dagona road | 750,000 | Dagona community | 2006 | Completed |
| 9. | Re-activation of community borehole at Yusufari | 3000,000 | Yusufari community | 2006 | Completed |
| 10. | Provision of diesel and engine oil to power community boreholes | 520,000 | Ndabaza, Chingurmi, Amchaka 7 Yusufari communities | 2006 | Supplied according to specification |
| 11. | Drilling of borehole number1 to Gulumba community Chingurmi Duguma sector | - | Gulumba community | 2006 | Completed |
| 12. | Excavation of earth dam to Chingurmi Duguma community | 465,000 | Chingurmi Duguma 7 Dagona Communities | 2006 | Completed |
| 13. | Three numbers lister 10 KVA milling machines | 312,000 | Chingurmi Wetland and Bulatura communities | 2006 | Completed |



| | | | | | |
|---|---|---|---|---|---|
| 14. | Drilling of 5 No. cement well at wetland and Chingurmi Sectors | 0.75m | Wetland and Chingurmi communities | 1998 | Completed |
| 15. | Renovation of Primary School and provision of drugs to Surrounding Support Zone of Bulatura | 1.2 | Bulatura community | 1998 | Completed |
| 16. | Digging of 4 cement wells at Walasa, Kashkash, Mboro and Chingurmi communities | 1m | Walasa, Kashkash, Mboro and Chingurmi communities | 1998 | Completed |
| 17. | Donation of assorted drugs for Primary Health Care Support | - | Kumshe | 2006 | |

Source: **Chad Basin National Park** Annual Report, 2008

Similarly Okomu National Park is also involved in this programme as shown in Table 8 below.

Table 8: List of local community projects executed by Okomu National Park

| S/N | Nature of intervention | Benefitting community |
|---|---|---|
| 1. | Rehabilitation of a borehole | Iguowam |
| 2. | Provision of classroom furniture community | Nikorogha |
| 3. | Provision of laboratory equipment schools | Mixed secondary |

| | | |
|---|---|---|
| 4. | Donation of books Library | Udo |
| 5. | Construction of bridge community | Nikorogna |
| 6. | Provision of electricity community | Iguowan |
| 7. | Installation of garri processing machine | Iguowan |
| 8. | Donation of 100 desk/benches | Udo and Nikorogha communities |

Source: Okomu National Park Annual Report, 2008.

In the case of Kainji Lake National Park, collaboration with local communities in the management of the park is in the area of the intervention of a German NGO the Global Environment Facility (GEF). This was designed to provide support to the operations of the Park as well as develop local communities surrounding the Park.

Support Zone Communities were reported to have been provided with sustainable alternative source of income though details of these interventions were not available.

Generally, the following major activities were undertaken.

* Sensitization of stakeholders
* Capacity building workshops
* Selection of target communities
* Recruitment of NGOs

**Refuge to rare and endangered species**

**CBNP is locatedin** the southern heart of the Chad Basin, an environment with almost all its major fauna guild exterminated. With



its long history as a conservation area, Chingurmi-Duguma sector of the park has remained a formidable refuge for the Giraffe, Elephant, Topi and the Ostrich. The Giraffe is no longer seen in any of its previously known habitats in Nigeria except in Chad Basin National Park. The Ostrich and the Northern Black Crowned Crane may be seen in the Park in large numbers and nowhere else in Nigeria. Even in Kamuku National Park, the area contains significant patches of woodland savannah mosaic forest and grassland, rare habitats known to support a variety of specialized life forms, yet increasingly threatened with extinction elsewhere in Nigeria.

OONP, GGNP and KLNP are the only areas in Nigeria where some rare and threatened ungulates including Mountain reedbuck (*Redunca fulvirufula*), Western hartebeest (*Alcelahpus b. major),* Roan antelope (*Hippotragus equines*), Western kob (*Kobus kob kob*), Bush buck (*Tragelahpus scriptus*) are still found though in very insignificant numbers. In the case of CRNP, some species that are common but not found outside the park include the Cross River gorilla (*Gorillagorilladiehli*), chimpanzee (*Pantroglodytes ellioti),* drill *(Mandrillus leucophaeus)* and grey-cheeked mangabey (*Cercocebus albigena)*. It is necessary for NPS to deploy special strategies with the objective of ensuring that these native ecosystem components that have been disrupted by the past and ongoing human activities are restored not only in the parks but outside major ecological zones in the country.

## CONCLUSION

National Parks and Game reserves worldwide are created through enabling laws that emphasize conservation, preservation

and protection of wildlife and habitat as well as their utilization for research and educational purposes. The enabling laws in Nigeria are consistent with this global standard. Some levels of achievement have been recorded in Nigeria's National Parks in the areas of protection, surveillance, and community conservation, as well as environmental education. Tourism activities in Nigeria's parks, as is the case with Parks worldwide, are also recognized as important programs and pre-occupation of the National Parks in Nigeria. However, this should be given prominence in the enabling legislation of NPS.

All of the National Parks are faced with challenging relationships with communities within the parks and those at the borders. While many of the parks have actively assisted the communities with useful projects and programs targeted towards improving the livelihood of the local people, the parks need to address the heart of the issues between the parks and the communities. These issues should be relative to economic opportunities, traditional hunting practices, grazing and benefit sharing.



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