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## Causes of Change in Status of Gazetted Forests in Zamfara State, Nigeria

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## CAUSES OF CHANGE IN STATUS OF GAZETTED FORESTS IN ZAMFARA STATE, NIGERIA

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**ABSTRACT:** Protection of forests has long been the traditions and practices of various cultures in the world. The aim of this paper is to examine the causes to change in gazetted forests in Zamfara State with a view to providing information for protecting these important areas of natural habitat. Purposive sampling technique was used to select 4 directors for key informant interview. Data collection was done using content and documentary analyses, literature review and key informant interview. Findings of this study showed that a total of 18 forest reserves existed at various levels of protection in the State. These can be considered remnants of Savannah Parklands because the vegetal resources and wildlife have been severely depleted due to the various programmes and policies of the civilian administration since 1999. The changes also emanated from weak institutional capacity and forestry policy, poor funding, corruption, alienation of local communities in forest management regime as well as insecurity which restricted access to the reserves by the state forestry officials. Also, selected deforestation by local communities residing around the reserves caused a loss of several important species in the areas. Adequate Funding of the forestry sector is a requirement for protecting the forest reserves, thus Zamfara State Governments should therefore, be prepared to provide reasonable financial support to conservation and other programmes like afforestation, reforestation, erosion control and land reclamation programmes.

Key words: Protected Areas, Biodiversity Conservation, Deforestation, Ecosystem Services

### 1. BACKGROUND

Forest is an area incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of over-storey strata about equal to or greater than 20 per cent (Davidson et al., 2005). Forests covered 4 billion hectares ( $9.9 \times 10^9$  acres) (15 million square miles) or approximately 30 percent of the world's land area in 2006 ((Food and Agriculture Organisation of the United Nations, 2010; FAO, 2017). It is the most important, productive and widely distributed terrestrial biome on Earth (Farlex, 2014). Forests and associated *ecosystems*; until recent times, have been managed to enhance the production of a vast array of wild, semi-domesticated and domesticated foods, including fruits, nuts, tubers, leafy vegetables, mushrooms, honey, insects, game animals, fish and other wildlife (Berkes, 2000; Bhaskar et al., 2015).

Forest is one of the most widely protected ecosystems in the world owing to its significance. Different protection regimes were developed overtime, however, the establishment of Yellowstone National Park in the United States in 1872 marked the beginning of protected area formation and an increase in the number and expanse of protected areas around the globe (Abdulaziz et al., 2015). Database on protected areas showed that there are approximately 162000 protected areas distributed worldwide covering 28.4 million sq. km, equivalent to 5.6% of the earth surface (Watson et al., 2014; Deguignet et al., 2014).

In Nigeria, forest reservation started in early 19<sup>th</sup> century and since 1960s about 9.8 percent of her land area is under some form or degree of conservation (Adeola, 1987). By the end of the 1930s, about 30 thousand sq. km of land were made forest reserves by the colonial administration in Nigeria. That was increased to 93,420 sq. km in the 1970s (Enabor, 1981).

However, these lands, despite officially under conservation, have been extensively encroached by other land uses. Advances in satellite remote and other forest monitoring techniques suggests that some areas the lost is faster in developing parts of the world. Evidence from satellite remote sensing has shown that Nigeria has lost within the last 25 years about 43% of its forest reserves through human activities (Federal Government of Nigeria, 2012). A study on land-use change in Nigeria have shown that of the 2.9% of the undisturbed forest (including rainforests and savanna woodlands) which made up the total area of the country in 1976-78, only 1.3% remain in 1993-95 (FORMECU, 1998). Orimoogunje (2000) also reported that between 1981 and 1994, Nigeria lost 3.7 million ha of her forests. Equally, FAO reported that between 1990 and 2010, Nigeria lost an average of 409,650 ha or 2.38% per year of her forest (FAO, 2010). This showed that within the living memory, over half have of the country’s forest areas have disappeared (Usman and

Adefalu, 2010). The north is the most devastated (FGN, 2013).

The decline is more severe in the north owing to several causes including unsustainable extraction of timber, fuelwood, selective logging of plants, bushmeat, and other resources. In recent times, sadly, most forest reserves in Zamfara State have been severely encroached (Hof and Malami, 2006). Empirical evidences suggested that there are myriad drivers which advanced the unprecedented rates in the State since the past three decades. Arguably, the plethora of information still failed to address the causes of encroachment to forest reserves thereby threatening the status of these areas. The main objective of this chapter is to examine causes of changes in status of forest reserves in Zamfara State with a view to providing information for the development of sustainable polices to the myriad actions which are not compatible with cultures and values of northern Nigeria that are detrimental to protected areas.

2. STUDY AREA

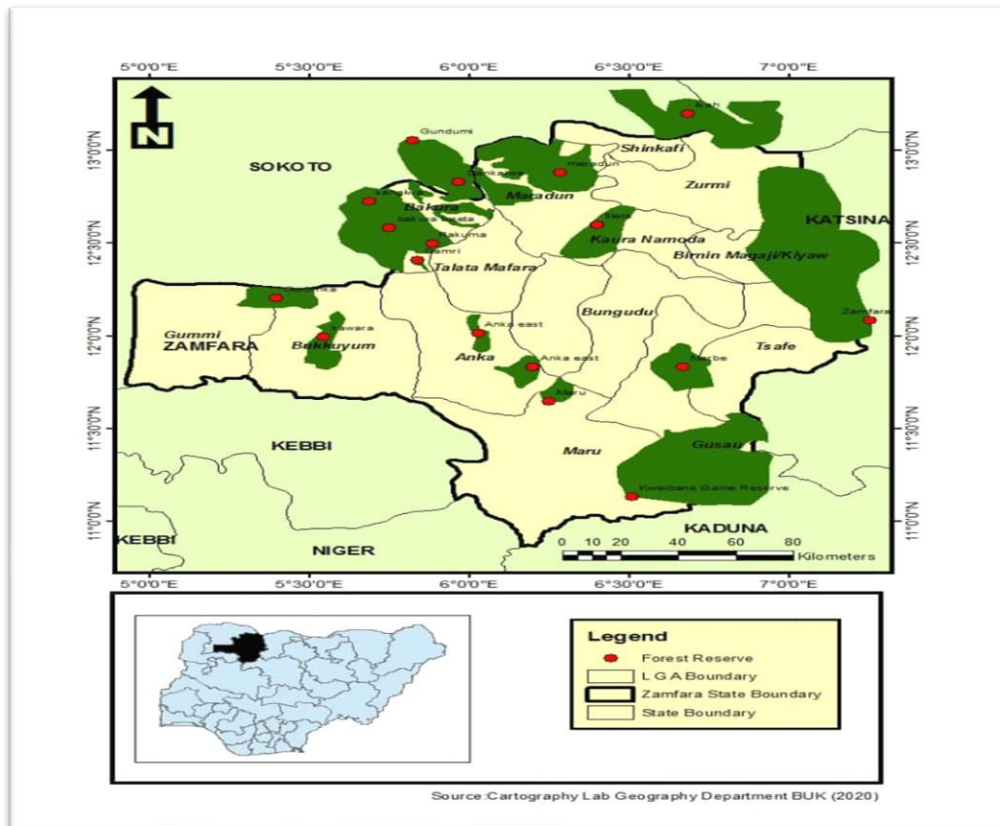


Figure 1: Protected Areas of Zamfara State, Nigeria

Zamfara State is located in Northwest Nigeria. The State lies on Latitude 11°10'0''N and 12°10'0''N as

well as Longitude 6°05'0''E and 7°15'0''E. Zamfara State is bordered to the North by Niger Republic, to the

South by Kaduna State, to the east by Katsina State, and to the west by Sokoto, Kebbi and Niger. Climate condition of the State is tropical. Rainy season lasts for 4 to 5 months starting in late May to Mid-September in most years. Average annual temperature in Zamfara State is 30.22°C which is 0.76% higher than Nigeria's average. The vegetation is the Sudan Savanna type which is dominated by grass and interspersed with thorny trees and shrubs. Most trees and shrubs are deciduous for months owing to dryness. The most dominant species include several Acacia species, *Adansonia digitata* (Kuka), *Balanite aegyptica* (Kanya), *Hyphaene thebaica* (Goriba), *Ziziphus spina christii* (Kurna), *Piliostigma thonningii* (Kalgo), *Gueira senegalensis* (Sabara), *Combretum micranthum* (Geza) and *Ziziphus mauritania* (Magarya).

Zamfara is rich in plant diversity despite heavy encroachments and climate perturbations on pristine ecosystems. Currently, a total of 18 gazetted are still under various levels of protection although many changes have occurred to both the land and species in the areas (Figure 1).

## 2.1. Research Methods

Content analysis and Key Informants Interview were employed in data collection. Purposive sampling technique was used to select 4 directors for the key informant interview (KII). Data collected was coded, sorted and thematic issues were thematically analysed and used in appropriate sections.

## 3. RESULTS AND DISCUSSIONS

### 3.1. Protected Areas in Zamfara State

There basically two types of protected areas in Zamfara State at various stages of modifications (Table 1). These include 17 Forest Reserves and 1 Game (Table 1) as follows: Zamfara, Marbe, Bakura/Tureta, Sangiwa, Maradun, Illela, Dankaiwa, Anka East (1), Anka East (2), Rakuma, Gurbinka, Kanoma/Gabiya, Damri, Maru/Bungudu, Isah/Zurmi, Kawara, Gundumi and Kwainbana Game Reserve.

Table 1: Gazetted Forest Reserves of Zamfara State, Nigeria

SN	Name of Forest Reserve	LGA	Size of Land Area (sq km)	Date Gazetted
1	Kwiambana Game Reserve (kuyanbana in Hausa).	Maru, Tsafe, Gusau	2,614	1970 by the former Sokoto State
2	Zamfara	Gusau, B/Magaji, Zurmi, Tsafe but extend to Runka Reserve of Katsina State to the east	2,355.24	1916
3	Marbe	Tsafe, Gusau	247.32	NA
4	Bakura/Tureta	Bakura	440.32	NA
5	Sangiwa	Bakura	182.50 (almost the original size)	NA
6	Maradun	Maradun	367.18	NA
7	Illela	Maradun, Kauran Zurmi	362.06	NA
8	Dankaiwa	Bakura	625.74	NA
9	Anka East (1)	Anka	466.20	NA
10	Anka East (2)	Anka	298.55	NA
11	Rakuma	Bakura	170.94	NA
12	Gurbinka	Gumi, Bukkuyum	1,6588.90	NA
13	Kanoma/Gabiya	Maru	137.28	NA
14	Damri	Bakura	204.61	NA
15	Maru/Bungudu	Maru/Bungudu	123.20	NA
16	Isah/Zurmi	Shinkafi/Zurmi	349.65	NA
17	Kawara	Bukkuyum	166.40 (almost the original size)	NA
18	Gundumi	Maru, Tsafe, Gusau	Same as Zamfara	NA

Source: Federal Environmental Protection Agency (2003); Directorate of Afforestation, Gusau, Zamfara State (2020)

NA= native authority

### 3.2. Causes of Change in Status of the Forest Reserves

Protected areas in Nigeria harbour most of the remaining interesting biodiversity, but these areas are slipping in the amount of actual protection occurring on the ground owing to several among which are active in Zamfara state. Based on available information, the following drivers are responsible for the changing status of forest reserves in Zamfara State.

### 3.3. Weak Institutional Capacity and Obsolete Forestry Policy

Weak institutions and obsolete policies have been a major cause of concern to conservation and protection of forest in Nigeria. Findings of this study revealed that Zamfara State has a number of institutions spearheading forests and policies which are lacking and needs revamping. The State has been not able to domesticate the Forestry Policy of 2006. The State also lacks effective model for the expansion of forest protection and also fails to recognize the relationship that rural communities have with forest resources and the role they play in forest management.

Forestry legislation of Zamfara as in most states is quite simple not being enforced hence a lot of human activities are going on.

The State Government once allocated some portions of Kwiambana Game Reserve to politicians in 2006 in a controversial attempt to forestall security. Other policies that were conceived in good faith but triggers destruction was the introduced agricultural revolution programme in 2001 titled Zamfara Agricultural Revolution Programme (ZACAREP) which brought serious destruction to the outskirts of Marbe Forest (Amir et al., 2016).

Indeed, the post state forestry sector suffered upheavals from some policies culmination into further depletion of flora and fauna in forest reserves. Today, most or sections of forest reserves inherited by the State are gone (Zamfara State Government, 2010). Hence the state needs a refined framework and experts that would design new forest legislation in tune with changes in global environment.

### 3.4. Poor Funding of the Forestry Sector

All institutions for forest protection and management in Zamfara State are dependent on public financing from annual budget. Since the creation of the State, budgetary allocation to forestry (compared with other key sectors) is inadequately low and dwindling despite the sector's

role in fighting climate change, land degradation, poverty and food insecurity. In 2019 for example, the State budgeted N160 million (2.16%) for forestry sector compared with that of Social Service Sector N22.96 billion. A report by an official of the state Directorate of Forestry has shown that "there has been no time when the state allocated more than 2% of its annual budget to forestry sector. In fact, the little that is appropriated may never be released. This finding is in line with FAO (2001) who reported that some states in Nigeria allocate as low as 1% of the annual state budget to forestry.

### 3.5. Corruption

Corruption in the forestry sector as well as political heads is serious driver of decayed policy and illegal activities in Zamfara state as the case in Nigeria. In 2015, a report by FAO (2015) have identified forest crime and corruption as the most fundamental drivers of forest depletion and warned that immediate attention has to be given to illegal activities and corruption in the world's forests in many countries. In most instances, funds meant for forest protection and conservation programmes are often diverted to other personal uses and other fraudulent practices. Finding of the study indicated that the State Government and forest officials grants contracts to supply equipments and seedling to forest departments to private companies that lacks the capacity and expertise to handle that, allocate protected areas to politicians freely by the government for political gains and allow exploitation of forest resources by well-connected individuals and firms who often did not have license. Corruption has been a lingering issue in forestry as suggested Corruption has been lingering limitation to forest resources management in Nigeria (Enabor, 1981). This finding supported Usman and Adefalu (2010) who reported that in some instances forest reserve officials connived with poachers to perpetuate illegal activities within reserves in most parts of Nigeria.

### 3.6. Alienation of Communities

Unlike the new forestry policy, the forestry ordinance of northern Nigeria 1960 is significant in that provisions are made for dual system of land tenure and forest reservation involving both government and local communities. Local authorities are responsible for protection, control and management of such areas and have the power to revise reservation orders and to de-reserve areas subject to ministerial approval (WCMC & IUCN, 1991). The exclusion of the stakeholders such as (local community dwellers, hunters, farmers, timber extractors and other non-timber resources users) in the administration of forests directly or indirectly has led to

poor forest governance and the consequent crises in forest reserves in Nigeria (Akinola, 2006).

### 3.7. De-reservation/trespassing of Forest Reserves

Over the years, pressures by dwindling economy and grossly under-regulation played role in de-reservation of many protected areas in the state. This has increased the rate at which forest land is trespassed by government officials for other uses. In Zamfara State, there are no records of de-reserved forest; however, a lot of pressure has been mounted on forest reserves owing to policy of the first and second civilian administrations of subdividing portions of Kwainbana reserve and allocating it to politicians for other uses.

### 3.8. Selected Deforestation by Local Communities

Finding of this study revealed that communities living around forests clear fringes of forest for farming hence there were serious destruction before bandits sacks many communities around forest reserves. This was also traced to late 1990s when forest areas continue to unjustifiably come under intense anthropogenic pressure due to decline in attention by State Government. As their only source of livelihood, they set up community enclaves e.g in Kwainbana reserve (Mafara, Danjuma and Mohammed, 2016) and Marbe reserve (Abdulaziz et al., 2016).

## 4. CONCLUSION

The following conclusions were made from this study:

1. Zamfara State has large patches of forests of different sizes and diversity. Many of which were established to preserve and protect those repositories and their associated flora and fauna. Surrounding these protected areas are villages, agricultural lands, and nuanced land uses. Coupled with many, the forest reserves in Zamfara State are facing extreme pressures as well as mounting net changes since 1970s.
2. The past 20 years has shown a significant decrease in sizes of forest reserves in Zamfara State. Forest reserves were converted to other uses – largely agriculture – or lost through poor policy each year since the advent of 4<sup>th</sup> Republic in Nigeria. If the trend should be allowed to continue at the present rate, the forest reserves would decrease drastically in the coming few years.

### 4.1. Recommendations

1. Adequate Funding of the forestry sector is a requirement for protecting the forest reserves, thus Zamfara State Governments should therefore, be prepared to provide reasonable financial support to

conservation and other programmes like afforestation, reforestation, erosion control and land reclamation programmes.

2. Participation of Communities, Private Sector and NGOs is recommended since most of the protected areas have people residing within them or dependent on them for their livelihoods. Therefore, to save the community forests, and sustain the benefits there, it is important to involve the local communities. Community involvement in the management of forest resources is a form of common property resource, which, if effective, will help in lowering transaction costs.
3. Provision of Buffer Zones between the Core Conservation Areas and Human Settlement. Buffer zones, in this case are necessary to minimize the impacts of an adjacent land use. Buffer zone has continued to evolve as an approach to protected area management. A need to re-create buffer zones around protected areas is timely even though there are agitations by some civil society groups that these areas are the biggest land grabs. All reserves in Zamfara state lacks buffer zone hence encroachment due to changing land use pattern is producing serious ecological degradation on the remaining part of the reserves.

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