

### Research & Reviews in

ISSN: 0974 - 7532

# **BioSciences**



RRBS, 5(2), 2011 [93-99]

# Forest policy review as a critical issue toward implementation of sustainable forest management: A case study of Kwara state, Nigeria

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Received: 16th June, 2011; Accepted: 16th July, 2011

### ABSTRACT

The paper focused on forest policy as a critical issue relating to implementation of sustainable forest management. The study was conducted in Kwara State which happen to be a Gateway between the Northern and Southern parts of Nigeria. Both primary and secondary data were used for the study. Primary data were collected through the administration of structured questionnaires and individual interview of the forestry administrative officers in the State Forest Department (SFD), this include the State headquarter, Zonal and Area Officers. It was discovered that the state has no forest policy of its own. All the forestry activities were carried out under the Auspices of the National Forest Policy, which was enunciated in the 60s and based on the annual allowable cut (AAC), and Sustained Yield (SY) principle. The State was faced with crippling financial resources for the forestry department to perform its functions. Incidence of encroachment, lack of support from government and inadequate inventory of the resource base are serious indicators of poor forest policy implementation in the State. Recommendation was made that the existing forest policies should be reviewed for the adequate and appropriate implementation of sustainable forest management strategy.

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### **KEYWORDS**

State forest department; Forest inventory; Revenue generation.

### INTRODUCTION

There has been global emphasis on the sustainable management of the forest resources<sup>[6,12]</sup>. Sustainable forest management (SFM) can mean different thing to different people. SFM is the process of managing forest to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and fu-

ture productivity and without undue undesirable effects on the physical and social environment<sup>[11,13]</sup>. With the current trend of forest development in Africa, emphasis on the achievement of SFM is of paramount. This is because the total amount of forests in Africa is decreasing annually at an alarming rate while the demand for the resources continues to increase<sup>[5]</sup>. Unfortunately, policies that would have increase forest productivity and ameliorate the African deteriorating environment are either not in existence or they are inappropriate<sup>[3]</sup>.

From pre-colonial times to the early sixties, Nigeria has not been short of legislation in the forestry sector. However, most of these legislations are obsolete and are not in conformity with present developmental trends. Equally, most of these laws were drafted under the regional government arrangements (Northern, Western and eastern Administrative Regions) which still subsist till today, except for some few states e.g. Kebbi and Cross River, that have enacted new legislation as state properties. A prominent feature of these legislations is that the states laws are largely modifications of the regional laws, which were in turn modifications of the 1938 Forestry Law<sup>[2]</sup>

Nigeria has developed a comprehensive conservation programme since independence<sup>[4]</sup>. These range from individual species protection through ecosystem conservation to the wider present day concept of sustainable development of the total environment<sup>[8]</sup>. There was no clearly defined conservation policy in the colonial days because it was impossible to envisage that the Nigerian environment would change so rapidly prior to the year 2002 AD. However, this period saw the establishment of forest reserves for the protection of the natural environment and development of timber resources for the lucrative timber trade<sup>[15]</sup>. The post independence period has seen a vigorous attempt by the government to promote the ideals of conservation by gazetting a number of reserves and signing a number of international treaties aimed at protecting the environment. Unfortunately, these efforts have not yielded the expected results because the authorities did not take into account and protect the interests of the local communities and their right to participate in the sustainable utilization, management and conservation of natural resources pertaining to their native lands. In addition, the institutionalized framework for the effective management of natural resources is obsolete and inappropriate to deal with the prevailing conditions[8]. The new dimension under the implementation of SFM is the recommendation of the participation of the local communities and other non-government organisation in the management of the resources and the benefits accruing from the forest should be shared with the surrounding communities[13].

Forest legislation is an indispensable tool for the implementation of forest policies because it provides the structural framework within which National Forest Policies are set and in turn reflects their objectives and

priorities<sup>[1]</sup>. In most Africa countries, forest policies and laws were enacted during colonial periods and are still in existence after many years of independence[15,16]. Most of these policies were developed without much consultation with the local communities. It is therefore imperative that the present forest policies be reviewed or better still new ones would have to be produced very urgently so as to reduce the alarming rate at which the forest are being degraded. Such policies would have to incorporate a multiple use concept of forests. It should be done with the full participation of the people and it should be fully integrated into the national policy for economic and environmental development. This study therefore focused on the implication of inadequate policy review and the effect on the implementation of sustainable forest management in Kwara state of Nigeria.

#### METHODOLOGY

### Study area

The study was conducted in Kwara State, often referred to as the Gateway between the Northern and Southern parts of Nigeria. It was created on 27th may 1967 with eleven other states. The capital of the state is Ilorin (8°28' N, 4°34' E). The state is culturally heterogeneous with a combination of ethnic groups like Filani, Yoruba, Nupe, Ebira, among others. The 2005 population estimate of the state was 4,391,555. There are thirty-two protected forest reserves, occupying a total area of 5,792 km<sup>2</sup> or 17.82% of the total land area (appendix). The high forest area within the reserves occupies 12.31 km<sup>2</sup> or 99.78%. There are only two communal forest reserves in the state, occupying a total land area of about 0.24 km<sup>2</sup>. The climate of Kwara state is tropical with distinct wet and dry seasons. Mean annual temperatures vary from 26°C in south to 28°C in north. Annual rainfall is from March to October and varies from less than 750mm in the north to nearly 1500mm in the southwest. There are twenty-two sawmills scattered all over the state, with the greatest concentration at Ilorin, the state capital. The State produces about 9,579.00 cubic meters operating system sawn wood per annum and most of the logs are processed in the state.

### Method of data collection

Primary data were collected through the administration of structured questionnaires and individual inter-

## Appendix 1: Kwara state forest reserves with their area offices and land area

Sr No	Area Forest Office	Reserves	Area (km²)
1.		Effan Forest Reserve	27.48
	Edu Local Government Area	Kuzosiko Forest Reserve	8.81
		Lafiagi Forest Reserve	0.66
		Oro Forest Reserve	155.40
		Sharagi Forest Reserve	40.02
		Pategi Escapement	0.31
		Pategi Fuel F/R	20.72
		River Kampe	652.68
			906.08
		Oloyan F/R 1	0.16
2	Oyun Local Government	Ikotun C.F.A	0/15
		Ilemona C.F.A	0.09
		Odun F/R	1.92
3	Irepodun L.G.A	Isanlu F/R	1.30
		Olomu F/R	1.17
		Esie F/R	0.67
		Ipetu F/R	0.28
		Osi F/R	41.44
4	Irepodun L.G.A		46.78
		Oro F/R II	633.72
		Share F/R II	40.02
			673.74
	Moro L.G.A	Alagbede F/R	31.34
5		Ejidongari F/R	6.99
3		Jebba F/R	29.53
		River Iwa F/R	440.30
			508.16
	Ilorin L.G.A	Oloyan II	2.28
6		Warrah F/R	11.14
		Sobi F/R	1.49
			14.91
7	W.'. I C.A	Vobera F/R	816.03
7	Kaiama L.G.A	Moshi F/R	2279.90
			3095.93
		Ilesha F/R	16.89
0	Demoter I C A	Okuta F/R	45.14
8	Baruten L.G.A	Teshi F/R	332.19
		Guwanara F/R	151.80
			546.02
	Grand total of state's rese	erves	5,792.02

Source: Kwara state forestry department

view of the forestry administrative officers in the State Forest Department (SFD), this include Headquarter, Zonal and Area Officers. The questionnaires contain a

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uniform sets of simple and easy-to-understand openended and close-ended questions of which all the respondents were subjected, therefore making there views and opinion to be analysed at the same level. Secondary data was collected through desk review of annual reports, management plans, and seminar papers that supplement the primary data.

### **RESULTS AND DISCUSSIONS**

### Forest management objectives in the state

Forest management objectives in Kwara state are to manage forest resource on a sustainable basis to ensure a continuous supply of timber and non-timber products, the provision of employment opportunities, and maintenance of a stable environment. The State Forest





Figure 1: Dilapidated offices in one of the state area office

Department (SFD) is responsible for a number of Local Government Areas (LGAs) offices, interpret and implement state policies, and monitor and coordinate field activities. Forest management activities in the state were carried out without the benefit of any predetermined Annual Allowable Cut (AAC), it was otherwise revenue driven. Permits were issued (no concessions) in free areas only. On paper, no extraction activities were allowed in forest reserves, but in reality and what was observed in the Reserve, this was far fetched. Most of the observed infrastructures at the State Area Offices were not maintained (Figure 1).

## Resources obtained from the forest in the state and group responsible

The major resources obtained from the forests are timber, poles, firewood, medicinal plants and some NTFPs (TABLE 1). As indicated in the result of the study conducted by FORMECCU<sup>[10]</sup>, the pulpwood produced in the state was in large quantity, say 400 hectares, up to 1993 for the consumption of Jebba Paper Mill but after the breakdown of the mill, the production also collapsed with the conversion of the *Gmelina* plantation meant for pulp production into timber and fuel wood production.

TABLE 1 : Forest resources and the group responsible for their production

	Responsibility for producing/ managing goods and services					
Goods/services from forest	State govt.	Community group	Private sector	NGOs	Farmers	
Wood products					•	
Timber	X	X				
Fencing posts	X	X		X		
Firewood	X	X		X		
Charcoal			X	X		
Pulpwood	X					
Non-wood products						
Medicinal plants	X	X			X	
Forest derived foods (roots, fruits, leaves)	X	X			X	
Mushrooms		X			X	
Rattan, chewing sticks, gums, and resins		X	X		X	
Bush meat	X	X			X	

### Policy formulation and implementation in the state

Kwara state has no forest policy of its own. All the

forestry activities was carried out under the Auspices of the National Forest Policy which was enacted in the 60s and based on the annual allowable cut (AAC) and Sustained Yield (SY) principle. This principle was not sufficient for adequate sustainable forest management practices. Forest policy formulation and implementation in the State has been neglected for a long period. However, series of meetings have been held with the State Governor on the state of the forestry sector. The depleting state of the Forest Reserves in the State got the attention of the state government and a committee was set up to formulate policy that will regulate the activities of the chainsaw operation at the time of data collection of this research. What also constituted to the depleted state of the forestry sector of the State in term of policy formulation was that there was no powerful structure or group of elites that influence or make forestry policy in the state neither was there community participation in the forest policy formulation. This would result in increased responsibility for community mobilisation to ensure sustainable management of resources in the State.

### Participation of private sector and NGOs

The need for government decentralise authority to institutions below federal and state levels i.e. local governments and possibly ward levels has been emphasised. It is imperative for State department of forestry to involve the stakeholders in any forestry initiative. During this study, the State did not have forestry advisory commission. In addition, there was no local community participation in the forest policy formation and management of forest reserves. Increased participation of communities in natural resource management and more active articulation and representation of their interests is deemed critical to the overall success of any policy reform process. During the data collection of this project, no known NGOs that involved in conservation efforts in the state were identified. The implication of this is that the State government do not have enough human resources to effectively manage and control what happens at the lower levels. Another important consideration is that natural resources are best controlled and managed by the people using them and living closest to them.

### Wood industry in the state

There was only one major wood processing industry in the state, the Nigerian Paper Mill (Jebba), which

has been non-functional since 1994. There are also a number of minor wood processing industrial sites in the state, their primary output being dimension lumber.

### **Trend of forest conditions**

Forestry sector of Kwara State has suffered lots of setback in the past few decades. Table in Appendix 2 indicates the Government owned Gmelina and Teak Plantation in Kwara State. Unfortunately, different forms of deforestation have occurred in free forest areas of the forest estate as timber concessions were not issued within forest reserves. However, within the past few decades, large areas of the reserves were exploited. The present forest cover has been significantly altered from the original, largely due to human activities such as agriculture development and forest harvesting. Between 1978 and 1995, the area occu-

pied by natural forest decreased from 51.0% of the State to 39.5%<sup>[9]</sup>. This amount to an alarming average annual rate of deforestation of 22,824 ha. The trend of forest conditions in the past 20 years and above in the state is presented in TABLE 2. Although permits were issued in free areas, nevertheless, illegal activities were observed in the prohibited Forest Reserves. The selective felling operations carried out in the reserves negate the objective stated in the Forest Plan of the State. This was aggravated by absence of regeneration and/or reforestation programme within the Reserves and free forest areas. In the phase of the current exploitation trend and continuous increase of the demand for industrial timber and fuelwood of the State's Forest Resource land base, appropriate measures should be put in place to check the dwindling situation of the State forest estate.

Appendix 2: Government owned Gmelina and Teak plantation in Kwara state

	Appendix 2. Government owned Ginemia and Teak plantation in Kwai a state										
No	Name of plantation	Location (LGA)	Area (HA)	Year established	Species	Objective	Status				
1	Effan plantation	Edu	3,153.0	1975-86	Gmelina	Pulpwood	Partly extracted				
2	Oro plantation	Edu	520.0	1975	Gmelina	Pulpwood					
3	Oloyan plantation	Oyun	135.44	1973	Teak / Gmelina	Timber production	Already encroached				
4	Warah plantation	Ilorin/west	165.77	1963	Gmelina	Timber production	Already encroached				
5	Sobi plantation	Ilorin east		1972	Teak / Gmelina	Timber production	Intact				
6	Isanlu plantation	Irepodun	115.8	19564	Gmelina	Timber production					
7	Odun plantation	Irepodun	203.8	1968	Teak / Gmelina	Timber production					
8	Olomu plantation	Irepodun	60.0	1954	Teak / Gmelina	Timber production					
9	Ipetu plantation	Irepodun	28.23	1959	Teak / Gmelina	Timber production					
10	Alagbede plantation	Moro	301.24	1970	Gmelina	Pulpwood					
11	Ejidongari plantation	Moro	482.64	1971	Gmelina	Pulpwood					
12	Jebba plantation	Moro	732.0	1975	Gmelina	Pulpwood					
13	Moshi plantation	Baruten	325.35	1973	Teak / Gmelina	Pulpwood					
14	Ilesha plantation	Kaiama	212.4	1974	Khaya / Teak	Timber production					

Source: Kwara state[14]

TABLE 2: Trend of forest conditions in the last few decades

Past years	Conditions of forest				
>20	Intact And Adequately Conserved				
10 - 20	Exploitation Commenced				
5 - 10	Forest Encroachment and commencement of depletion				
<5 to Date	Depletion Of Forest Resources				

### Revenue generation and sharing formula

Previous Government administration put emphasis on increased revenue generation from the forestry sector, hence over-exploitation of the available forest estate. Fecderal Department of Forestry (FDF)<sup>[7]</sup> gave the annual total revenue generated by Kwara state in

1991, 1992, 1993 as N307,878, N450,569, and N261,177.8 respectively. Funds generated in the State were not properly (if any) ploughed back into forest regeneration. The FDF was desirous of creating a situation whereby part of revenue generated from the forests is ploughed back for forestry development. The FDF, through the National Forestry Development Committee (NFDC), therefore, impressed it on the Federal Government to issue a directive to SFDs to create Forestry Trust Fund (FTF), where a percentage of royalties collected is deposited. FTF is expected to act as a vehicle that would ensure re-investment in the forest resource base, most especially in forest

regeneration. Since the directive was issued in 1993, Kwara state has not implement the directive as at the time of this study in 2004. Management was limited to the issuance of permits and the collection of stumpage price. Minimum diameter felling limits were not properly enforced. There is no adequate sharing benefit formula among the stakeholders in the state, and payment of royalty for lands that were taken from rural dwellers not observed.

### Inventory of forest reserve in Kwara state

The first and the last time that an inventory of the high forest reserves was carried out in Kwara state was between 1975-1977<sup>[10]</sup>. It was sponsored by the UNDP (United Nations Development Programme). The inventory unit of the Department of Forestry, Kwara state, constructed a yield table for Teak (*Tectona grandis*) in Olle Forest Reserve (no more part of the state) in 1978. Growth, density and site quality classifications were carried out at Olomu and Odun Forestry Reserves in 1979. Lack of fund, progressively over the years has rendered the forestry department handicapped in carrying out a detailed assessment of the actual Growing Stock (GS), in our

TABLE 3: Perceptions of the forest officers on review of forest policy and adequate implementation of sustainable forest management practices in Kwara state, Nigeria

	Change of situation as compared to nov		
	No Change	Decrease	Improvement
Area of natural forest			X
Area of forest plantation			X
Tree planting by Taungya farmers			X
Contribution of private sector			X
Development of new forest industries			X
Improvement in wood processing technology			X
Participation of local commu-nities in forest management			X
Capacity of government to implement sustainable forest management			X
Capacity of local community to manage forest sustain ably			X
Supply of non-wood forest products			X
Supply of fuel wood			X
Availability of timber			X
Level of protection of conservation areas			X
Contribution of forest based tourism to the livelihood of local communities			X
Export of forest products			X
Contribution of forest products and services to the informal economy			X
Illegal logging		X	

natural forests and plantations, including it's distribution by size or age classes, the quality and volume per acre, occupied by each class (or group).

## Perceptions of the state forest officers with improve policy and management practices

The perceptions and prospect of Forestry sector of Kwara State with the proper review of the forest policy couple with adequate implementation, and adoption of appropriate management practices are indicated in TABLE 3. Apart from illegal logging which recorded decrease from the perception of the forest officers, all other predetermined characteristics expected to change were perceived to improve in the years to come.

### CONCLUSION

The study revealed that non-review of the old forest policy in Kwara state has been contributing a serious setback to the development of the forestry sector in implementation sustainable management of the forest estate. Lack of review of the policies that aim at achieving self-sufficiency in forest products are not only defeated but also not entrenched.

The state's Forest Revenue system is not fully developed to generate the required financial resources for forest management. A better portion of the proceeds from the Forests go to the Forest exploiters who pay peanuts for the forest goods. It is apparent therefore that the current level of Inputs and Outputs can not sustain a viable Sustainable Forest Management strategy.

### RECOMMENDATION

The conclusions have captured the situation of the Forest Sector in Kwara state and aroused pertinent intervention. The following recommendations are therefore made as possible interventions towards a sustainable forestry development in the State:

- The old forest plans needed to be reviewed to reflect the multiplicity of forest benefits. Such review should pay sufficient attention to opinion of and benefits to the local communities both within and around the forests.
- For proper policy review and/or formulation, the various problems militating against the sustainable management of the forest resources should be jointly identified with the forest communities. Having iden-

tified the resources available, their potentials and contribution to local and national economics, and the factor militating against their sustainability; an all-inclusive management plan may then be developed with the people which ensures that what is removed at any point in time does not exceed what the forest is able to replace unaided within the same period. To complement these efforts, the services of the interdisciplinary group such as NGOs and forestry local councils should be employed for adequate communication and information dissemination about the new developments, environmental impacts and the interplay among various groups affected by forest activities.

- A Round Table Conference should be convened with various stakeholders in the state. This would provide the opportunity to review the State Forest Policy against the backdrop of contemporary development in the Forestry Sector.
- Appropriate machinery should be put in place for the implementation of Forest Policy, with adequate feedback and monitoring process.
- The private sector should be further encouraged in Forestry development through a package of new incentives and, if any, sustenance of the existing ones.
- The state should embark on frequent survey and inventory of the forest estate for appropriate monitoring and evaluation.

#### **ACKNOWLEDGEMENT**

We wish to express my sincere gratitude to the staff of the Kwara state Forest Department (Headquarter, Zonal, and Area officers) who assisted us during the data collection stage of this study.

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