

# Assessment of the Relationships between Government Forest Officers and Forest Fringe Communities in Ondo State, Nigeria.



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## Abstract

This study assessed the relationship between foresters and in the fringe forest communities of Ondo State, Nigeria. Two ecological zones (lowland rainforest and the derived savanna) in the study area were purposively selected and two forest reserves were selected in each ecological zone. Three communities around each of the forest reserves were randomly selected, to make a total of 12 communities. Primary data were obtained from these communities through the use of well-structured questionnaire. 20 household heads were randomly selected in each community for questionnaire administration. Four Forest Officers in-charge of each of the selected forest reserves were randomly selected and also administered with questionnaire. The results of the study showed that community members are involved in tree planting, taungya, exploitation and selling of forest products. The results also show that the socio-economic class of the respondents significantly influenced their participation in forestry activities. The foresters are enjoying the cooperation of these community dwellers in the areas of tree distribution and planting, taungya and training. However, delay in payment of labour wages, unapproved use of land and illegal procurement of forest products were discovered to be the main source of disagreement between forestry staff members and communities. The study further showed that the foresters are enjoying with the cooperation of the LCDs in the discharge of their formal duties. Foresters however not supporting the LCDs on socio-cultural activities like weddings, chieftaincy coronation and local festivals. The Chi-square test shows that education and income earnings of the respondents have significant influence on their relationship with foresters.

**Key Words:** Forest Officers, Local Community Dwellers, Forest Reserves

## Introduction

The forests and its resources are very important to the good living of man. Adedayo (2005) noted that man cannot live a convenient life without the forests and its resources. Not even the application of today's technology can provide a suitable and acceptable alternative to forest goods and services. Ehiagbanare (2007) noted that forests are known to be crucial to the welfare of man and play a very key role in climate and water cycle control. The dependence of people on forests is unlimited. Almost 1.6 billion people in the world rely on forest resources for their livelihood (World Bank, 2003) and 1.2 billion people in developing countries are using trees on farms to generate food and cash (ILO, 2002). The livelihood of the communities living in and around forest reserves depend so much on the products and services provided by the forest. They depend on the forest for food, fuel wood, shelter, medicine and construction materials. FAO/ DFID (2001) has provided the list of some of the products from the forest that are very beneficial to fringe community dwellers

However it is sad to note that the availability of many forest resources and products in Nigeria has

dwindled considerably in the past few years. This is as a result of increasing deforestation and illegal exploitation of forest resources occasioned by increasing population and increasing demand for forest products in the country. Many attempts aimed at reducing deforestation and illegal exploitation of forest resources in the country have not been successful. This is because of the increasing level of poverty among the people especially the rural dwellers who need these resources to meet their subsistence needs. Adedayo (2005) noted that the situation in most rural areas of the country is such that the trees in the forest, the land, the people as well as the entire rural environment are no longer at ease. This is because of the increasing deforestation and illegal exploitation of forest resources which has caused many problems like flooding, erosion, siltation of water bodies, low farm yield and low production of forest resources. As such availability of forest resources has dwindled considerably in many parts of the country. Attempts aimed at improving availability of forest resources in the country through the establishment of forest plantations have not been able to meet the forest product needs of the people. This is

because in Nigeria forest plantation establishment is largely dominated by government or its agencies with little participation from private organizations and individuals. In order to encourage the involvement of individuals especially the rural dwellers in tree planting, social forestry programmes was introduced. Today the emphasis is on social forestry programmes like communal wood lot and strip or roadside forestry. As noted by Forestry Research, Monitoring and Coordinating Unit (FORMECU) (1989), social forestry is a new approach to cope with the diminishing availability of forest resources and increase supplies of forest resources in the country. One of the ways to ensure the success of social forestry programmes in rural communities is to ensure good relationship between foresters and local community dwellers (LCDs). Forester Officers in the State Forestry Department are government representatives that can promote social forestry programmes among the LCDs. The local people are expected to cooperate with them in order to ensure the success of social forestry programmes. In their communities Adedayo (2002) noted that social forestry is a concept that seeks the cooperation of local people in tree planting activities as well as in the utilization of forest products so as to improve their standard of living.

The current management system, in most states of the federation, has not been able to cope with the many problems of forest management especially the problem of deforestation and illegal exploitation. This is because the local people who are living close to the forests and know about the forest are often left out in the management of the forests. Effective forest management requires both detailed knowledge of the resources and the involvement of the local users who are often the most knowledgeable about the resources (Sow and Anderson, 1996). As such, a new system known as Community Based Forest Management System (CBFMS) has been introduced in some states why the process of introducing it is on in many states in Nigeria. This new system entails the involvement of LCDs in the management of the adjoining forests. Adetula (2008) noted that CBFMS was approved by Ondo State Government to serve as panacea to the myriads of problems faced in the sustainable management of the state's forest estates. He noted that this new system entails the involvement of all stakeholders including indigenous communities in the

management of forest reserves and the free areas in conjunction with government. He went further to state that current international trend favours paradigm shift from the current system to CBFMS. However, involving LCDs in social forestry programmes or in CBFMS will require a lot of understanding and cooperation between foresters and the LCDs. Foresters who are government representatives must know how to relate with LCDs so as to have their confidence and cooperation. CDs in many parts of the country have often perceived foresters with suspicion. Many of them view foresters as government representatives with hidden 'agenda' to take over their land and resources or have come to prevent them from having full benefits of forest estates around them. This might therefore be a big challenge to the success of CBFMS and social forestry programmes in many rural communities in the country. It is in view of this that this study seek to examine the various areas where adjoining forest communities have participated in forestry activities. This is because if we are to be hopeful on reducing deforestation in the study area and in the whole country in the future and be optimistic in the future ability of the forest to meet the needs of the people on a sustainable basis, then the relationship between foresters and LCDs all over the country must be of paramount concern. Foresters as government representatives can help to mobilize the rural dwellers into planting trees and in many other social forestry activities.

## **Methodology**

### **The study area**

Ondo State lies between latitude  $5^{\circ}45'N$  and  $8^{\circ}15'N$  and longitude  $4^{\circ}25'E$  and  $6^{\circ}5'E$  (fig.1). Its land area is about 15,823 km<sup>2</sup> (Adetula, 2008). Edo and Delta states bound the State on the east, on the west by Ogun and Osun states, on the North by Ekiti and Kogi states and to the South by the Bight of Benin and the Atlantic Ocean

### **Vegetation**

Based on Keays' classification of Nigerian vegetation (Keays, 1959), three distinct vegetation belts can be identified in the state. These are Mangrove in the south, lowland rain forest in the central and derived savanna in the north.

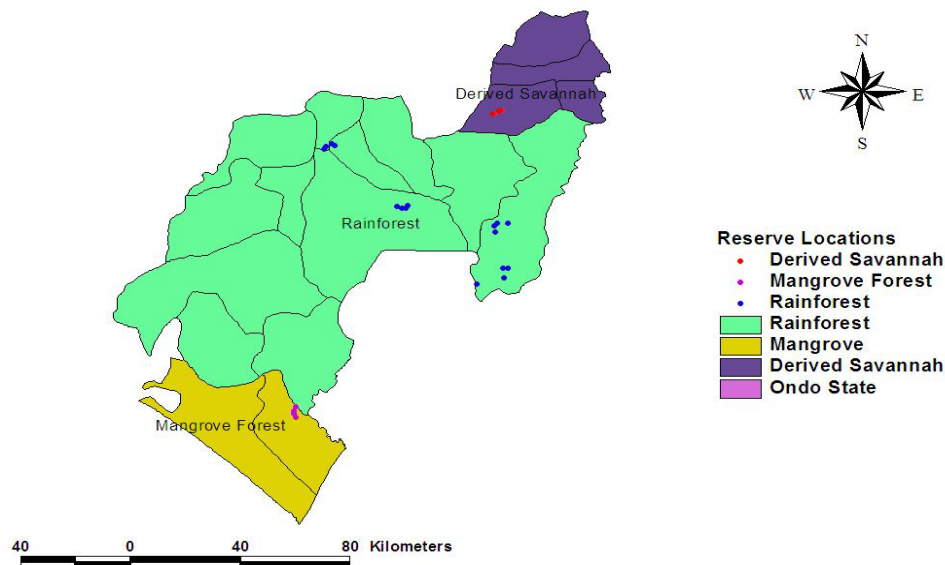


Fig. 1: Map of Ondo State showing Ecological Zones

Table 1: The selected forest reserves, the fringe communities and the number of Questionnaire administered and retrieved.

Name of Reserve	Forest	Name of Village	No of questionnaire Administered	No of questionnaire Retrieved	Percentage
1 Akure FR		Aponmu	25	20	80
		Ago Store	22	20	91
		Obada	23	20	87
2 Ala FR		Agooyinbo	22	20	91
		Agogbooro	24	20	83
		Igbodudu	22	20	91
3 Owo FR		Otaru camp	23	20	87
		Agoopanu	21	20	95
		Agooyinbo	22	20	91
4 Oyinmo FR		Waterworks	24	20	83
		Ose Oba	22	20	91
		Oba Ako	2320	20	87

Table 2: Number of questionnaire administered to Forestry Personnel in the study areas

Name of Forest reserve	No of questionnaire administered	No of questionnaire retrieved	%	No of questionnaire administered	No of questionnaire retrieved	%
1 Akure FR	4	4	100			
2 Ala FR	4	4	100			
3 Owo FR	4	4	100			
4 Oyinmo FR	4	4	100			

### **Method of Data Analysis**

The data for this study was subjected to descriptive analyses of the frequency, percentage, tables and bar charts. In addition chi-square test of association was used to test the independence of some of the variables. The hypotheses tested with the chi square are:

1. Ho- participation of LCDs in the study area in forestry activities is independent of their socio-economic class
2. Ho- there is no significant association between the educational attainment of the LCDs and their cooperation with foresters in the study area.
3. Ho- income earnings of LCDs have no significant influence on their Cooperation with Forest Officials in the study area.

### **Results and Discussion**

#### **Socio-economic Characteristics of LCDs Living around Forest reserves**

The results of the study showed that 39% and 43% of the respondents (household heads) in the forest and savanna zones of the study area respectively had no formal education. Thirty three percent and 22% had primary and secondary education respectively in the forest zone while only 3% had tertiary education in the savanna zone (figure 2). This shows that the level of illiteracy is still relatively high in the study area despite government efforts towards realizing the millennium development goal of achieving universal primary education by 2015. Table 3 shows that 43% and 45% of the respondents in the forest and savanna zones of the study area respectively earned annual income of less than ₦100, 000.00. Twenty eight percent and 18% of them in the forest and savanna zones respectively earned between ₦100, 000.00 and ₦200, 000.00 annually while only 3% in the forest zone earned an annual income of more than ₦500, 000.00. This shows that the level of income in the study area is still relatively low. This means majority of the LCDs in the study area will therefore have to rely on forest resources to meet most of their needs. Townson (1998) and Reddy and Chakravarty (1999) noted that the poorest households generally have the highest degree of reliance on forest products for income and food as they have the least access to cultivable land.

In recent years much concern has been shown by foresters and policy makers to the socio-economic characteristics of rural dwellers in Africa especially communities adjoining forest reserves. This is because socio-economic characteristics of the LCDs always have profound influence on their activities especially on the exploitation of forest resources. This therefore means that the activities of LCDs influences deforestation and anything that will help to improve their socio-economic condition might also help to bring solution to the deforestation problem. Shepherd (1992)

noted that the well-being of the forest and the people that heavily dependent on them are closely intertwined. de Ceara (1986) also reported that the only means of stabilizing the ecosystem is to stabilize the socio system. So, to solve the deforestation problem, one must solve the poverty problem.

#### **Participation of Local Community Dwellers in Forestry Activities**

Table 4 shows that 47% and 40% of the respondents in the forest and savanna zones of the study area respectively participated in tree planting. These are respondents that plant trees either around their houses, as farm boundaries or on abandoned farmlands. Many of them are encouraged to plant trees because they obtain free tree seedlings distributed by the State Forestry Department. Despite the availability of these free tree seedlings, majority of the respondent cannot still plant trees because of the tenurial problems they faced.

Fifty two percent and 48% of the respondents in the forest and savanna zones respectively are involved in the selling of forest products as a source of livelihood. They sell diverse forms of forest products including fruits, leaves, chewing sticks, snails, mushrooms and bush meat. Thies and Pfeil (2007) noted that forests have the potentials to provide opportunities for additional income for the people. In addition 71% and 43% of the respondents in the forest zone are participating in the exploitation and processing of forest products respectively. This also points to the fact that many LCDs depend so much on forest resources which is responsible for heavy exploitation of the resources. However a lower percentage of LCDs are involved in the processing of forest products. This means many of the LCDs are using unprocessed forest products. Adedayo (2002) noted that processing can help to improve the time and place utility of some forest products such that spoilage and bulkiness are reduced drastically. Taylor (1999) also noted that local processing can preserve items, reduce post-harvest losses and enable the products to reach more distant markets. This therefore means that processing can help LCDs to earn more income from forest products.

The Chi-square test results shows that the participation of LCDs in forestry activities is dependent on their socio-economic class (Table 5) This means that there is a significant association ( $p < 0.05$ ) between the socio-economic class of the LCDs and their participation in forestry activities. LCDs in the low and middle socio-economic class participated more in exploitation and selling of forest products. They exploit and sell forest products like fruits, leaves, ropes, chewing sticks, snails, and mushrooms as a source of income to meet many of their needs. However those in the high socio-economic class are participating more in

the processing of forest products especially wood processing in sawmills into planks. forest officers in the discharge of their official and social duties.

The Chi-square test ( $p < 0.05$ ) shows that there is a significant association between the educational attainment of LCDs and the forest officers (Table 5). This indicated that the educational attainment of the LCDs has significant influence on their interactions and cooperation with the foresters. Education could affect the way people think reason and communicate. Education also has great influence on the development of an individual and even the whole community (VItta, 2003). There is positive relationship between level of

education and the degree of development in an individual or society.

The Chi-square test shows that there is a significant association ( $p < 0.05$ ) between the income earnings of the LCDs and their relationships with foresters in the study area (Table 5). This means that the income level or affluence of a local community dweller has a significant influence on his interaction and cooperation with the forest officers in the study area. In addition, how rich or poor a person is could influence his behavior, interaction and communication with people.

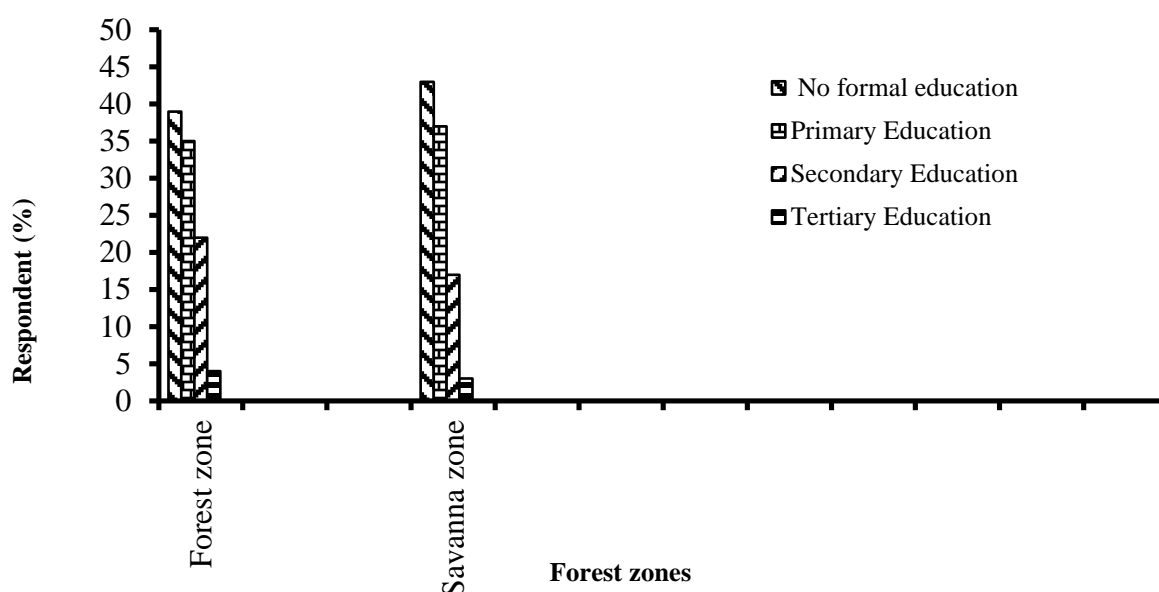


Fig 2: Educational Qualification of respondents (LCDs) in the study area

Table 3: Annual income of the Local Community Dwellers in the study area

Annual income of LCD	Forest Zone		Savanna Zone	
	n	(%)	n	(%)
Below ₦100, 000	52	43	54	45
₦100,000 - ₦200,000	33	28	21	17
₦201,000 - ₦300,000	15	13	18	15
₦301,000 - ₦400,000	10	8	14	12
₦401,000 - ₦500,000	6	5	8	7
Above ₦ 500, 000	4	3	5	4
Total	120	100	120	100

Source: Field Survey, 2013

**Table 4: Participation of the local community dwellers in forestry activities in the study area**

Area of dealing of LCD with foresters	Forest Zone		Savanna Zone	
	Total	Percentage (%)	Total	Percentage (%)
Tree seedlings planting	56	47	48	40
Taungya	65	54	73	61
Training/Lectures by foresters	6	5	0	0
Selling of forest products	62	52	58	48
Exploitation of forest products	85	71	82	68
Processing of forest products	52	43	58	48

Source: Field Survey, 2013

Note = There is multiple choice by the respondents

**Table 5: Chi-square test of association results for the study areas**

Hypotheses	$\chi^2$ cal.	$\chi^2$ Tab	DF	Remark
Association between socio-economic class of LCDs and their Participation in forestry activities in the study area	42.70	31.4	20	significant
Association between educational attainment of LCDs and their cooperation with foresters	330.25	79.10	60	significant
Association between income earnings of LCDs and their cooperation with foresters	297	79.10	60	significant

**Table 6: Areas of co-operation between foresters and LCDs in the study area (Household Heads)**

Area of dealing of LCD with foresters	Forest Zone		Savanna Zone	
	Total	Percentage (%)	Total	Percentage (%)
Tree seedlings distribution and planting.	106	88	117	98
Taungya	112	93	120	100
Training/Lectures by foresters	90	75	112	93
Social gathering or ceremonies	4	3	2	2

Source: Field Survey, 2013 \* N.B: There are multiple choices by respondents

**Table 7: Areas of co-operation between foresters and LCDs in the study area (Forestry Personnel)**

Areas of cooperation b/w LCD and foresters	Forest Zone		Savanna Zone	
	Total	Percentage (%)	Total	Percentage (%)
Tree seedlings distribution and planting.	8	100	8	100
Taungya	8	100	8	100
Training/Lectures by foresters	8	100	8	100
Social gathering or ceremonies	1	13	1	13

Source: Field Survey, 2013

\* N.B: There are multiple choices by respondents



### Recommendations on how the relationships between foresters and Local Community Dwellers can be improved.

In view of the findings of this study, the following recommendations can help to improve the relationships between foresters and LCDs in the study area.

1. Africans have high regard for social ceremonies like weddings, chieftaincy coronation, naming ceremonies and local festivals. Attendance at these social ceremonies is usually highly appreciated and often perceived as a sign of love and friendship. Attendance of foresters at social ceremonies of rural people can therefore boost the cooperative efforts between them.
2. Foresters should endeavour to advise LCDs to strive and improve their literacy level by attending adult literacy centres. Education is important to the development of individuals

and the society. This will help to improve interaction between foresters and LCDs.

3. Nigerians tend to disregard forest laws because they need forest resources for survival and source of additional income. Attempts by foresters to stop illegal acts often results into conflict which usually affects inter-personal relationships.
4. Foresters should ensure continuous production and distribution of tree seedlings to LCDs. This is because LCDs are happy with the distribution of tree seedlings and it will go a long way in helping to maintain a cordial relationship between them.

### Conclusion and recommendation

This study revealed that the fringe communities of forest reserves in the study area are involved in forestry activities such as tree planting, taungya farming, tree products selling and processing. The study also showed that forester officers are enjoying cordial relationships from LCDs in the discharge of their official duties like tree seedling distribution and planting and taungya.

Forest Officers are involved in training of LCDs. It was discovered that these forest officers were not participating in LCDs' social ceremonies like weddings, naming ceremonies chieftaincy coronation and local festivals. It is recommended that foresters should be involved in LCDs' social activities because it can enhance social forestry programmes and CBFMS in the rural areas.

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