INFLUENCE OF POVERTY ON FOREST / FOREST MANAGEMENT POLICIES OF CROSS RIVER NATIONAL PARK, AKAMKPA

E. M. USHIE

ABSTRACT

This research attempts to investigate and examine the influence of poverty on forest/forest management in the rural areas of Mbarakpa, Igbofia, Uyanga, Oban, Nsan and Obutong in Akamkpa Local Government Area of Cross River State. The population of this study comprised the total number of 620 household heads in the six communities. The primary objective of this study was to investigate factors responsible for high poverty rate in the rural areas that has made the application of forest management policies unworkable. Analysis of data from the 150 sampled household heads in the study area revealed that the level of poverty and general standard of living in the study area are highly deplorable, leading to high rate of forest exploitative drive. The study further indicated that majority (68.67 percent) of the sampled respondents had no gainful employment, hence the propensity for forest resource exploitation. It showed further that about 77.33 percent of the sampled respondents were ignorant of the forest bye-laws. Based on these findings, it was recommended that the rural people in the study area should be empowered to take active part in sustainable management of the forest as this would help to reduce the level of poverty. Also other sources of income and nutrition (example, fish and snail farming) apart from forest resources should be developed and encouraged.

KEYWORDS: Rural Poverty, Forest Management Policies

INTRODUCTION

About 1.8 billion people in the World today live in abject poverty (Yesufu, 2000). It is a global phenomenon. In Africa and sub-Saharan Africa, majority of the populace especially in the rural areas are the worse victims of poverty. These people are "caught in a vicious cycle of poverty". This is evidenced in the pattern of housing, income distribution and inequalities, level of malnutrition which from available statistics are responsible for more than 60 percent of infant mortality, and 86 percent morbidity (infants and adults alike) (FOS, 1996). All obstructions to the regular flow of income would certainly bring about poverty. The severity of poverty in the rural areas are partly attributed to absence of government (Federal) presence, imbalance in social emenities and infrastructural development, lack of implementation of policies and programmes in favour of the rural areas etc.

At the micro-level, other poverty-inducing factors such as death, illness, accident, old age and lack of employment of the head of the household are prevalent. These are complemented by lack of occupational training and excessive family size (World Bank, 1994). At the macro-level, Nigeria is classified as a low – income and severally indebted economy and by implication a poor country (World Bank, 1994). Given this scenario, the World Development Report (WDR) considers the various mechanism adopted by successive government at resolving poverty crisis as effective. Accordingly, four mitigation measures have been identified as having the potentials to increase the income of the poor. These measures are:

(i)   increasing the demand, and therefore, the price for those factors of production that the poor own (example, their labour);

(ii)   transferring physical assets to the poor (e.g. land);

(iii)   providing social services to the poor (e.g. land; and

(iv)   transferring current income to the poor (e.g. through cash or food subsidies) (CBN Bullion, 1997).

However, community forestry and stakeholders' participation in sustainable development has never been recognized as an effective measure for poverty reduction in Nigeria and Cross River State in particular. Forest management and policies development was seen by successive governments since independence as the extraction of timber for maximum revenue generation. Poverty was not the only factor that has degenerated the forest reserves of the National Park in the study area but the population pressure as evidenced in the large number of children in the rural communities nationwide.

In view of this traumatic situation, it then became imperative for the present government to tackle the problem of rural poverty through effective forest management policies. The present Poverty Alleviation Programme (PAP) introduced by the present government is geared towards ameliorating poverty especially in the rural settlements of Nigeria.

The specific objectives of the study are:

(i)   To investigate factors responsible for the high poverty rate in the rural areas;

(ii)   To determine the relationship between rural poverty and management of forests and forest policies;

(iii)   To evaluate the socio economic background of the respondents;

(iv)   To determine the consequences of rural poverty on effective forest management;

(v)   To make useful recommendations for alleviating rural poverty based on the findings.

RESEARCH METHODOLOGY

The study which seeks to reveal the relationship between rural poverty and management of forest and forest policies was carried out in six rural communities (Mbarakpa, Igbofia, Uyanga, Oban, Nsan and Obutong) in Akamkpa Local Government Area of Cross River State. The population of this study comprised a total number of 620 identified household heads. Out of the total population of 620 household heads, 150 respondents were randomly sampled.

E. M. USHIE, Institute of Public, Policy and Administration, University of Calabar, Calabar.

Data generated for the study were collected from 150 sampled respondents through the use of structured questionnaire (primary data) and from published academic journals and bulletins (secondary sources). Administration of the survey instrument (questionnaire) were adopted by the use of random sampling techniques in the six wards. Twenty-five questionnaires were administered to household heads in each of the wards making a total of 150 questionnaires in the entire wards.

Several statistical procedures such as descriptive statistics (frequency tables, percentages etc.) inferential statistics such as student t-test and F-test and the regression analysis (bivariate function) were adopted to investigate and examine the level of rural poverty as it affects forest exploitation vis-a-vis management policies. The inferential statistics such as the F-ratio and the t-test were used to determine the degree of associations and to estimate the differences between two means (variable) respectively.

Two hypotheses were generated for the study. These include:

(1) There is no significant relationship between rural poverty and management of forest resources.

(2) There is no significant difference in the rate of poverty (income level) and poor housing pattern in the study area.

RESULTS AND DISCUSSION

Table 1 indicates the level of poverty in Nigeria from 1996. The data shows that out of the estimated population of 65 million in 1980, 17.70 million Nigerians were under poverty level representing 28.10 percent. In 1985, the population rose by 13.33 percent (75 million), 34.70 million Nigerians were under poverty level, representing 46.30 percent. The trend of poverty became alarming in 1996. Out of the estimated population of 102.30 million, 67.10 million Nigerians were living below $1 (US dollar) – representing 65.60 percent poverty level in the country. Despite the introduction of Poverty Alleviation Programme (PAP) in 1999 by the government, poverty level is still on the increase with the rural settlements being the worse victims. In the first place the programmes were hijacked by the political elites who use them for political patronage. Equally, most of the programmes like NAPEP (National Poverty Eradication Programme) did not take the interest of the rural dwellers into consideration while implementing their programme. Infact, there was no direct and sustainable empowerment of the rural dwellers, in terms of modern amenities and employment opportunities generation.

Table 1: Trends in Poverty Level in Nigeria (1980 – 1996).

Year	Poverty Level (%)	Estimated Total Population (m)	Population Poverty (m)
1980	28.10	65	17.70
1985	46.30	75	34.70
1992	42.70	91.50	30.20
1996	65.60	102.30	67.10

Source: Federal Office of Statistics, National Census Survey, 1999.

Table 2 summarizes the age bracket of sampled respondents. 13.33 percent of the sampled respondents were below 20 years of age, 25.33 percent are within the age range of 20 – 30 years, while 14.00 percent fell into 31 – 40 years age bracket and 32 percent fell into 41 – 50 age category. This suggest that those within the age of 41 – 50 years (representing the older people) were dominant in the study area, while those below the age of 20 years were least dominant. In terms of size of household, the table further revealed that only 2.00 percent of the respondents had 1 – 3 household members, 12 percent had 7 – 9 household size, and 34 percent had 13 or more members in their household. A further revelation from the table shows that majority of the respondents (46.0 percent) had large family size of between 10 – 12 or more members. Large family size is of immense importance to farmers in the farming communities in that it provides cheap labour since it is not costed (Eyo, et al, 2000). Large family size has dual effects on the economic wellbeing of the household especially in rural settlements. This is consistent with the positions held by Silva and Bysouth (1992), Arsenio (1995) and Adeleke (1985) that "poverty has both social and economic implications which cannot be alleviated through a short term piece-meal approach".

Table 2: Distribution of Respondents by Age and Family Size

Age Bracket	Frequency	Percentage	Family Size	Frequency	Percentage
<20	20	13.33	1 – 3	3	2.00
20 – 30	38	25.33	4 – 6	9	6.00
31 – 40	21	14.00	7 – 9	18	12.00
41 – 50	47	32.00	10 – 12	69	46.00
Above 50	23	15.33	13 and above	51	34.00
Total	150	100	Total	150	100

Source: Field Survey Data, 2001

Table 3 shows the level of educational attainment in the study location. The table reveals that 16.00 percent of the samples respondents had no formal education, 30.00 and 42.00 percent had primary and secondary schools education respectively; while only 12 percent of the respondents had attained tertiary institutions. The implication of this low level of educational attainment is that majority of the people in the study location are not gainfully employed resulting in growing poverty level in the area. Such growing army of the unemployed therefore fall back on the available forest resources with grave consequences on the forest and forest management in the study location.

Table 3: Distribution of Respondents According to Educational Level

Level of Education	Frequency	Percentage
No Formal Education	24	16.00
Primary School	45	30.00
Secondary School	63	42.00
Tertiary Institution	18	12.00
Total	150	100

Source: Field Survey Data, 2001

Table 4 shows that 68.67 percent of the study population are not gainfully employed, while only 31.33 percent are employed. The employment policy in both the rural and urban areas have not been adequately addressed by the past and present government. This explains why Yesufu (2000) opined that, "the Federal Government and the Central Bank authorities seem suddenly and inexplicably, to be bereft of viable economic and monetary ideas and policies to move the economy forward". This scenario has implication for the income level of the study area as evident in table 4. The table indicates that majority of people in the study area earned x5,000/month representing 64.67 percent of the sampled population; while 18 percent earned less that x5,000 per month. This presents a picture of low income level among the study population Thus, low level of income and growing poverty became clearly the most visible and challenging phenomena

Table 4: Distribution of Respondents According to the Acquisition of Gainful Employment and Level of Income (N)

Employment Level Responses	Frequency	Percentage	Monthly Income (N)	Frequency	Percentage
Yes	47	31.33	<5,000/month	27	18.00
No	103	68.67	5,000/month	97	64.67
			11,000 – 15,000	24	16.00
			16,000 – 20,000	2	1.33
			21,000 and above		
Total	150	100	Total	150	100

Note: A dash (-) means no response
Source: Field Survey Data, 2001

Table 5 presents the species of animals hunted by the communities. Among the animals most frequently hunted for were Rabbits (29.65 percent), Antelopes (21.29 percent) and Monkeys (12.84 percent). Others are Squirrels (10.95 percent), Chimpanzees (0.20 percent), and 11.05 percent and 14.03 percent constitute all endangered species and only few endangered species respectively. This exploitative habits of the study communities is also true for other areas where national park exists. Such hunting drive among the people in the study population pose serious danger to the continued existence of these important species of animals.

The reasons for such illegal exploitation of forest reserves were as follows:

(a)   poverty;
(b)   lack of employment;
(c)   forest products were sold for means of livelihood;
(d)   habits of the people

Measures adopted as a panacea to end exploitation of the forest resources include: fine, jail terms for serious offences and conviction, and corporal punishment for offenders.

Table 5: Distribution of Respondents Based on Kind of Animals Hunted

Kind of Animal	Frequency	Percentage
Monkeys	129	12.84
Squirrels	110	10.95
Chimpanzee	2	0.20
Antelope	214	21.29
Rabbit	298	29.65
All endangered species	111	11.05
Only few endangered species	141	14.03
Total	1005	100

Note: Total frequency indicates multiple responses
Source: Field Survey Data, 2001

Table 6 shows the prospects of effective management policies on forest resources. The table revealed strongly that tourism is one of the major prospects of management policy of forest resources representing 24.12 percent of the sampled population. This is followed by ecological balance, representing about 23.28 percent. Others include; aesthetic value (20.17 percent), educational services (16.22 percent); recreation (12.68 percent) and employment opportunities (3.53 percent).

Conversely, table 7 presents problems that beset forest management policies. The most dominant of these problems are incessant poaching (30.15 percent), followed by anti-bush activities such as illegal logging for timber and fuel wood (27.08 percent), etc. (Table 7)

Table 6: Distribution of Respondents Based on Prospects of Effective Forest Management Policies

Prospect	Frequency	Percentage
Ecological Balance	112	23.28
Tourism	116	24.12
Education	78	16.22
Recreation	61	12.68
Employment	17	3.53
Aesthetic Value	97	20.17
Total	481	100

Note: Total frequency indicates multiple responses
Source: Field Survey Data, 2001

Table 7: Distribution of Respondents Based on Problems of Forest Management Policies

Problem	Frequency	Percentage
Fragmenting Information	41	12.62
Hunting with Primitive Tools	77	23.69
Anti-bush Legislation	88	27.08
Lack of Technical and managerial Expertise	21	6.46
Incessant Poaching	98	30.15
Total	325	100

Note: Total frequency reflects multiple responses
Source: Field Survey Data, 2001

As shown in table 8, the calculated R-value was 0.34, on conversion to t-test, 4.38 was obtained. While the tabulated value (t-critical) at 0.05 level of significance with 148 degree of freedom obtained was 1.64. By this results, the alternative hypothesis was accepted. The increasing rate of poverty is responsible for forest management lapses and consequently accounts for the wanton exploitation of forest wealth (Hypothesis 1).

Results of the analysis of variance (ANOVA) for income level and poor housing in the study area was statistically significant at 0.05 level of probability (with calculated value of 3.22 against the critical value of 3.11). The implication here is that it is the level of income that justifies the housing types of the people. Hence, the null hypothesis was rejected in favour of the alternative hypothesis (Table 9). The low income level of the people made it impossible for the people to adopt a meaningful standard of living vis-à-vis housing pattern with well defined facilities and standard engineering parameters.

Table 8: Summary of the Correlation Coefficient Results (R) Between Rural Poverty and Management of Forest Reserves

Respondents' Category	Observed Frequency	R	t_{cal}	$t_{critical}$
Rural Poverty X Management Y	150 150	0.34	4.38*	1.64

* P < 0.05   R2 = 0.11

Source: Computed from Field Survey Data, 2001

Table 9:Summary of the Analysis of Variance for Income Level
and Poor Housing in the Study Area

Sources of Variations	Degree of Freedom	Sums of Square	Mean Square	F_{ratio}	$F_{critical}$
Total	17	8104.28	476.72		
Between				3.22*	3.11
Income	5	4644.11			
Level/poor housing	12	3460.17			
Within (Error)					

*P < 0.05   df = 17

Source: Computed from Field Survey Data, 2001

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary Of Findings

(a)   This research revealed that the level of poverty and standard of living in the study area are highly deplorable and devastating – culminating in forest exploitative drive;

(b)   The level of educational attainment in the study area is low.

(c)   Some species of animals in the forest reserve are getting extinct due to the high rate of hunting among the people in the study area.

(d)   The income level among the people in the study area is generally low with grave consequences on forest and forest management policies.

CONCLUSION

Poverty, especially among the rural dwellers has continued unabated due largely to the imbalance in resource allocation vis-à-vis the seeming lack of opportunities for high level of educational attainment and gainful employment. This scenario has accounted largely for the dislocations in most of our rural communities today in terms of rural – urban migration, high crime rates and over exploitation of forest resources even in reserve areas in complete defiance of existing forest management policies/legislations. Such neglect or imbalance can only be corrected when policies and programmes are largely oriented towards the needs and development aspirations of the people in the rural areas, especially in the study location.

RECOMMENDATIONS

Based on the findings and conclusion of this research, the following recommendations are made:

(a)   The rural people in the study area should be empowered to take active part in the sustainable management of the forest as this would help to reduce the level of poverty.

(b)   Forest-based jobs should be created to enable rural dwellers massively take part in forestry activities, especially tourism development.

(c)   Other sources of nutrition and income should be introduced and encouraged (example, piggry, goatry, fishery and snail farming) to help discourage over reliance in forest wealth by the rural dwellers.

(d)   Finally, the rural people should be kept abreast with forest management bye-laws/legislations to reduce the rate of illegal hunting (poaching) on forest resources, especially endangered species.

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