SHORT COMMIUNCATION

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SOCIO-ECONOMIC CONDITIONS OF RURAL SETTLERS IN KPASHIMI FOREST RESERVATION AREA OF NIGER-STATE NIGERIA: IMPLICATIONS FOR RESOURCE CONSERVATION.

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ABSTRACT

The survey examined five village communities adjacent to kpashimi forest reserve and how their activities in search of livelihood had depleted the abundant natural resources of the forest reserve. These communities were purposely sampled for this study because they had direct and indirect influence on the reserve. Primary and secondary data were collected from various sources. The participatory rural appraisal approach was used to collect the primary data, while secondary data were collected from relevant published literature and unpublished reports. The result revealed that about eighty three percent (83.3%) of the community members said that they had depended largely on the reserve for livelihood. It is suggested that the community members are fully involved in the management programmes of government to restore the biodiversity of the reserve. The educational attainment of the respondents showed χ^2 = 149.90 significant at (p < 0.05). The provision of basic infrastructural facilities such as good water supply, health care facilities, access to good roads and schools among others were found to be grossly inadequate. This situation the respondents had said largely contributed to the endemic poverty found in the communities as they lived on less than N135 per day. Government should set up functional programmes such as provision of potable water, health care facilities, education, access roads, housing and markets among others. It is hoped that the income generated by the inhabitants living around the forest reserve would be sustained when the villages are encouraged to be part of decision making process on all aspects relating to the developments of the community. Government should regularly train the personnel who work in the reserve on new technologies that would lead to sustainable developments of the reserve.

KEY WORDS: Poverty among village forest settlers

INTRODUCTION

Today, Nigeria faces a number of developments challenges. Environmental degradation and poverty have continued to affect the socio-economic well being of the rural settlers around the forest reserves of the nation (FEPA, 1999 a). The environmental problems such as deforestation, loss of biodiversity, and soil erosion among others do impose high social and economic costs to people who live around the forest reserves. Nigeria is the 6th largest world producer of oil, and blessed with abundant human (population of over one hundred forty million people) and natural resources, nevertheless, she ranks as one of 25 poorest countries in the world (FGN, 2002). Poverty is a significant persistent problem in the developing world. Therefore, h is essential that concrete steps are taken in order to solve these problems, if this nation is to be reckoned with by the developed nations of the world. The earth summit held in Rio de Jeneiro a decade ago recognized the inherent dangers caused by the environmental degradation and destruction of biodiversity as a result of climate change. Nigeria participated in the conference hence, she signed two legally binding treaties, the Rio declaration on environmental development. The treaties are now being implemented in order to bring about sustainable forest development not only to protect the nation's forest reserves, but also ensuring the improvement of standard of living of rural communities that reside in the vicinity of the forest reserves (Gana, 1999). Kpashimi forest reserve was constituted by defunct Lapai Native Authority Forest Reserve order of 1961. It was later gazetted in the Northern Regional Public Notice N.R.N 20 of 1961 of the forest ordinance on 26th January, 1961. The village communities around kpashimi forest reserve live on less than N135 (U.S \$1) per day. Their main income is derived from the resources of the forest. This has led to unwanted destruction of flora and fauna, resulting in the extinction of many species of plants and animals in the reserve. Migrants from neighboring states such as Sokoto, Kebbi and the Federal

Capital Territory do contribute to incessant removal of trees, wildlife and fruits from the forest reserve. (MOA/NR 1990). In the face of increasing pressure for available resources in Kpashimi forest reserve and its periphery by the village settlers, there is need for a comprehensive assessment, which is currently lacking on the existing situations with respect to the availability of the vast potentials of the forest reserve. Hence, it is considered that new information emanating from this study will, among other things, ensure the adoption of appropriate measures which will lead to sustainable developments of the reserve and ensuring continuous improvement of standard of living of the village settlers. Diagnostic survey was conducted in five village communities adjacent to Kpashimi forest reserve in order to find out how their activities had depleted the abundant natural resources of the forest reserve.

The objectives of the study are: (i) examining how to preserve the renewable and non-renewable natural resources of Kpashimi forest reserve; (ii) to manage the resource of the forest reserve in a sustainable yield basis in order to alleviate the poverty of the village settlers; and (iii) to provide basic infrastructure for the village settlers.

METHODOLOGY

Area of study

The Kpashimi forest reserve is located in Lapai Local Government Area of Niger State. It lies between latitude 8°45'N and 8°48'N longitudes 6°46'E and 6°50'E. It is at an altitude of about 300m above sea level. The total area of the forest reserve is 167.04km². The reserve consists of 60% savanna woodland, 30% forest outline and 10% transition forest (Okojie, 1992). The reserve has great potentials of wildlife such as giant rats, grass cutters, antelopes, partridges, buffaloes and bees, which can be domesticated. The five village communities randomly selected for the diagnostic study were Mayaki, Nasarawa, Kunko, Gulu Angwar and Fapo. The choice of these village communities was based on variation in

terms of ethnic groups and physical access. The survey was conducted between 12th October 2005 and 13th Feb, 2006. Participatory rural appraisal method was used to gather relevant information. Primary data were obtained through discussion with the community leaders, Government forestry officials, women groups and individual informants. Structured interview schedule were centered in the village's social life, community history, migration background, village governance, land tenure, occupation and the importance of the forest reserve in meeting the basic needs of the settlers. Secondary data were collected from published literature and unpublished reports. One hundred and five well completed and useful

copies of the interview schedule were selected for analysis. The data were analyzed using percentages, frequency distribution, and chi-square χ^2 test at 0.05 level of significance to test the existence of relationship between the characteristics of respondents and the variables under consideration.

RESULTS AND DISCUSSION

The ethnic structure of the settlers consists mainly of Nupe, Gwari, Bassa, Mada and Pangu tribes. The remaining were Hausa, Igbo and Yoruba.

Table 1: Demographic Characteristics of Respondents around Kpashimi Forest Reserve.

S/B	Age (years)	Frequency	Percentage
1.	Below 21	15	10.0
2.	21-30	26	17.3
3.	31-40	65	43.3
4.	41-50	15	10.0
5.	51-60	14	9.3
6.	61 and above	9	6.0
7.	Not sure	6	4.0
Total		150	100
/lean =	30.5		

The result in Table 1 shows that the majority of the respondents (60%) were between the ages of 21 and 40 years, while 10% of them were either under the ages 21 or between 41-50 years old. From the distribution, it could be

inferred that majority of the sampled respondents were young and middle aged, having a mean age of 31 years hence they were still active members of the community.

Table 2: The Educational Status of Respondents in and around Kpashimi Forest Reserve

Variables	Frequency	Percentage	
No formal education	50	33.3	
Adult education	30	20.0	
Islamic education	35	23.3	
Primary education	20	13.3	
Secondary education	15	10.0	
Others	09	0	_
Total	150	100	

The results showed that χ^2_{cal} at 0.05 level is 149.90 while the χ^2 tabulated at the same level is 90.53.

Table 2 reveals that (33%) of respondents have no formal education, (23%) had Islamic education, while (20%) had adult education. There is clear indication that those who were educated did not go beyond secondary school and this might be attributed to the remote nature of the area under

study, which is mainly rural. Those that completed secondary education represent (10%) of the respondents. The opportunity opened to rural communities with respect to education attainment is not encouraging since 23% of them had only Islamic education. This might also be due to financial constraint due to poverty, which abounds in rural areas, (Adeyeye and Carim, 2002).

Table 3: Distribution of Respondents by access to infrastructural facilities around Kpashimi Forest Reserve

S/B	Variables	Do not have access Frequency	Percentage	Have access	Percentage
A.	Rural Physical Infrastructures			Frequency	
	i. Reliable roads	145	96.6	5	3.4
	ii. Cottage industries	135	90.0	15	10.0
	iii. Storage facilities	146	97.3	.4	2.7
В.	Rural social Infrastructures				
	i. Provision of schools	148	98.6	2	1.4
	ii. Health care facilities	148	98.6	2	1.4
	iii. Good water supply	147	98.0	3	2.0
	iv. Electric supply	143	95.3	7	4.7
	v. Security	148	98.6	2	1.4
C.	Rural institutional Infrastructures				
i.	i. Cooperatives	146	97.3	4	2.7
ii.	ú. Markets	130	86.6	20	3.4
iii.	iii. Credit facilities	143	95.3	7	4.7

Table 3 revealed the dearth of basic infrastructive such as pipe borne water, health care facilities (dispensaries, clinics and drugs) electricity supply, accessible roads, literacy and numerical skills to mention a few were almost not

available. This agrees with Igbozurike, (1983) that reported the situation of inadequacy of social services in rural Nigeria and accessibility to basic infrastructure among the village dwellers.

Table 4: Income of the Respondents in and around Kpashimi Forest Reserve

S/No	Activities	Income N	Frequency	Percentage
i.	Collection of fruits, vegetables, building materials and medicinal herds e.t.c. Farm produce e.g.	6075	45	30.0
ii. iii.	cereals, legumes and root crops. Poaching of wildlife	4725	35	23.3
iv.	Fishing	3375	25	16.7
V.	Trading	2700	20	13.3
vi.	Others (e.g. weaving, tailoring	2160	16	10.7
_	and barbing e.t.c.)	1215	9	6.0
Total		20250	150	100

Table 4 revealed that there was a lot of economic activities in and around the reserve by village community members and visitors from neighbouring states. There was a lot of farming for food crops on small fragmented holding. This situation has given rise to serious erosion problems and depletion of the flora and fauna in the forest reserve. The villagers engaged in collection of fruits (shea butter, locust beans, palm oil and bush mango) medicinal herbs, building materials, fishing and trading. Poaching of wildlife on a large dimension without consideration to their replacement continued unabated. It was found that up to 83.3% of the village dwellers lived on income of less than N135.00 (US\$1) per day, (FEPA, 1999b). The majority of village community members had agreed to totality of collaboration with the government in the management of the forest reserve. Village Forestry Management Committee (VFMC) had already been set-up by the Niger State Forestry Division to assist Government in finding solutions to the problems of the Forest Reserve. A few Non-Governmental organizations (NGOs) such as Agricultural, Environmental and Rural Developments Agency (AERDA) assisted Government in providing potable water by constructing cemented hand-dug wells for the rural communities. The village communities had requested for cottage industries to enable them (villagers) process shea butter and oil palm fruits harvested from the reserve.

Implications for Nigeria's Position Regarding Sustainable Forestry Developments and Recommendations.

Nigeria signed the treaty on climate change and biodiversity in 1998. The Federal Government, through decree No.58 of 1998, later amended by decree 59 established the Federal Environmental Protection Agency (FEPA). Through this body, a national policy on environment was formulated with overall goal of achieving sustainable developments based on proper management of the reserve. The policy stipulated that communities living around the forest reserve should benefit from the exploitation of the natural resources of the forest reserve.

To achieve this goal, the communities were to fully participate in the decision making process of exploiting the potential resources of the forest reserve. Forest reserves in Nigeria were established for the benefit of both urban and rural communities. The rural communities should therefore be involved in the planning and management of the forest reserves. It is hoped that solutions will be found in achieving sustainable forest developments in a short time.

CONCLUSION

From the foregoing, the Kpashimi forest reserve is one of the dormant rural reserves yet untapped. It requires a quick intervention of Government and stakeholders to bring about practical sustainable developments to the reserve. The

petroleum resource which the nation sorely depends on is fast dwindling. It is assumed that the Kpashimi forest reserve and the rest of the forest reserves of the nation will contribute positively to the much needed alternative revenue base for the nation.

Therefore there is need to develop essential infrastructure and social services found to be grossly inadequate in the study area. These measures would motivate the inhabitants to generate higher income for their livelihood. Subsequently the standard of living of both the present and future rural communities around Kpashimi forest reserve would be improved upon, on a continuous basis. The rural poverty will be minimized and finally eliminated

RECOMMENDATIONS

Based on the findings, the following recommendations are put forward for consideration:

- (i) The village communities around Kpashimi forest reserve should be directly involved in the decisionmaking process of all aspects related to the development of the forest reserve.
- (ii) Government should set-up a machinery to encourage village communities establish mixed forest farming of economic trees to ensure availability of raw materials for cottage industries in the area.
- (iii) Functional cooperative groups and development associations should be established to enable the village communities manage the resources of the reserve in line with government aspirations.
- (iv) Government and stakeholders should provide basic infrastructure such as potable water, health care facilities, electricity, access road and housing among others to the village communities.
- (v) Personnel who work in the reserve should be adequately trained regularly on new technologies that will bring about sustainable improvement of the reserve.

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REFERENCE

Adeyeye, V.A. and Carim, A. A., 2002. Food Cricis and Rural Poverty in Nigeria: Implications for Programming

- Community level Participation in Rural Developments. Nigeria Journal of Rural Sociology. Vol. 3, Nos 1 and 2: 118 129.
- FEPA., 1999a. National Master plan for Awareness on Environmental and Natural Resources Conservation in Nigeria: 50.
- FEPA., 1999b. National Masterplan for Awareness on Environmental and Natural Resources Conservation in Nigeria: 50.
- FGN., 2002. Sustainable Developments in Nigeria. Ten years after Rio (UNCED). National Assessment for presentation at the World Summit on Sustainable Developments held Johannesburg. South African between August 26th 4th September 2002: 126.
- Gana F. S., 1999. Socio-Economic survey of eight village communities around Kpashimi forest Reserve. Federal Department of Forestry Nigeria: 40.
- Igbozurike, U. M., 1983. Rational for Rural developments efforts. Social services in rural Nigeria: Location and Accessibility. Development and Quality of life. (Proceedings of the seminar on quality of life in rural Nigeria) held at the Agricultural and Rural Management Training Institution: 46-55.
- MOA/NR., 1990. Ministry of Agriculture and Natural Resources, Forestry Annual Report, Niger State.
- Okojie., 1992. Cited by Environmental Assessment Forest Reserve Management Component, Kpashimi Forest Reserve. Report of February 1994.