

Assessing Indigenous Communities Socio-Economic Status as Catalyst for Forest Resources Conservation in Akamkpa Local Government Area, Nigeria.

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Abstract

Forest resource exploitation is one of the major issues that has generated serious attention by various scholars due to its implications in the forest ecosystem. This paper attempt a critical assessment of the influence of socio-economic status on indigenous people awareness and attitude towards forest resource conservation. However, one hundred copies of questionnaire were administered to ten communities in order to evaluate community awareness and attitude towards forest resource conservation. Findings reveal that the socioeconomic status of the people significantly influences the people's awareness as evidence in the data analyses which shows a high significant level. Therefore, if the forest resources must be conserved, adequate measures must be put in place to tackle excessive exploitation of the forest resources.

Key Words: Attitude, awareness, conservation, forest, resources.

Introduction

In recent times, man has become a predator rather than a protector and has thoughtlessly destroyed the natural landscape through large-scale logging, mechanized farming, forest engineering and construction. These phenomena have caused the disappearance of biodiversity. Besides, vegetation that is untouched by human activities probably no longer exists in Nigeria (Anijah-Obi, 2000). Accordingly, Ajake and Eja, 2012 observed in Cross River State, farming, logging, grazing, hunting, bush burning, exploitation for a variety of products, industrialization, commercialization, urbanization and infrastructural development for die enhancement of socio-political and economic benefits to the vagary of climate change are still being carried out at an unprecedented rate (Rain Forest Movement Report, 1992). Yet it is in this region of the country and state that the Forestry Commission is exercising its control of checkmating forest-related activities such as timber extraction, game hunting, non-timber products extraction, and hauling and transportation of these products. Given the extent to which forest resources have been destroyed by man in Cross River State, particularly in Akamkpa Local Government Area, it becomes necessary to carry out a study to ascertain man's activities in the remaining forests in this region of the state.

However, several studies have been carried out in the recent past to checkmate these unsustainable attitudes of rural communities towards the forest, yet the issues still linger on - the forests are gradually disappearing while animals are becoming more and more endangered. Indeed, some pertinent questions among others which come to bear with this high rate of deforestation which is the bases of this research to critically evaluate the influence of indigenous people socio-economic status on forest resource conservation with specific reference to assessing the people socio-economic characteristics and it influence on forest resource conservation in the area.

Literature review

Effect of socio-economic status and people's awareness and attitude towards conservation of forest resources

Socio-economic has to do with the social class as indicated by education, income and occupation. There is a hypothesis that states: "environmental concern is positively associated with social class and is indicated by education, income and occupational prestige" (Van-Liere & Dunlap, 1980). Inglehart (1990) gave an explanation for this hypothesis based on the Tact that once people solved their basic material and physical needs, they opt for more aesthetic aspects of human existence or "quality of life" such as a better environment. According to World Bank (1992), in sphere economics, the discussion on environmental Kuznets curve (EK.C) supports the family relationship between income and environmental quality. It states that the improvement of environmental quality is achieved as income (Gross Domestic Product - GDP-per capita) increases. The environmental Kuznets curve postulates that an inverted curve relationship exists between income level and environmental quality. Ibis suggests that environmental quality deteriorates as income increases but as it gets to the peak, that quality starts to improve with income increase. The relationship is identified both in terms of time series and cross-national series.

One other hypothesis states that as individuals become more educated, they are more concerned about the environment and the need to protect, conserve and preserve resources to meet the needs of both the present at

future generations. (Kohut & Shriver, 1989; Vining & Ebreo, 1990). Higher education is associated with higher concern since it is directly related to the access to information on environment and ability to process the information into knowledge. A study by Arcury (1990) supports a consistent and positive relationship between environmental knowledge and environmental attitudes. This is because the more knowledge one acquires through education, the more awareness he has towards the conservation of forest resources. His attitude towards the environment would be positive. He would secure lucrative jobs that would make him survive well through other means rather than depending solely on forest resources. Furman (1998) cautions that there is need to directly link the educational level to high level of environmental concern since educational level also involves other social factors. For instance, better education generally means a better job. Thus having more economical surplus which may allow individuals to pay more attention to the "Luxury good" such as environmental quality and conservation of forest resources. Also, the social background that permits individuals to have better education could have some effect on their thinking process. In another related study in Kenya, Lindsey, Toit and Mills (21) discovered that there are different factors affecting attitude towards conservation of forest resources like the level of education of the participants. The higher education the people have, the more positive attitude they have to adjacent conservation areas. Economic factors are also important. It was discovered- that having more money results in a better attitude toward; conservation of forest resources. The source of income also has an effect on the environment. Those who earn money from conservation are more positive than those who earn money from other sources. This is because by the time those who generate their income from conservation impact negative attitude towards conservation of these resources, these resources will be destroyed and they would not have any resources that can generate income for them again. So they need a positive attitude towards conservation of these resources and prudently use them.

The forest is a highly valued environmental resource especially in Africa. It is a priceless heritage handed down from one generation to the other. In some parts of Africa, land is synonymous with life. Some communities go to war in order to protect their land. In some traditional rural communities land with forest was not to be bought or sold. It was sacrilegious to do so, and in fact, a curse to part with one's only permanent heritage. Many Nigerian cultures still offer sacrifices to the gods of the land and their ancestors for protection, and for the fertility of man, animals and land. Thus, Nigerians' and indeed Africans' closeness to nature has been broken because of man's quest for civilization and development. Today, land is sold, pawned and battered, it is treated like any other commodity, to be bought and sold when the need arises. Urbanization and agricultural development have destroyed land and forest resources. Oil and mineral exploitation has also caused land degradation and ecosystem destabilization (Anijah- Obi, 2001).

Rodwell, Rodwell, Rice, and Hart, (2003) opine that poverty is a situation whereby the basic human needs of food, shelter and clothing are not met. That means poor people do not have enough food for themselves, neither in quality or quantity. Their shelter is over-crowded and poorly equipped and clothing is inadequate. A poor society thereby operates below the minimum acceptable poverty line. There seems to be a high positive correlation poverty and environmental degradation. Poverty therefore constitutes one of the most devastating forms of environmental problems in developing countries. Most poor societies depend solely on their natural environment for their livelihood and survival. As such, the idea of conservation and sustainable utilization of such an environment does not exist. Poor countries have neither the facilities, the urge nor the knowledge base to fight environmental problems, Social status is seen as a factor in environmental degradation because the poor operate at the subsistence level thereby putting a lot of pressure on the environment especially the forest and its resources.

The study conducted by Buyinza and Nabalegwa (2005) on the impact of forest degradation in the mid-hills of Mount Elgon Catchment, Eastern Uganda, it was discovered that despite agriculture being the major source of highland people's livelihood in Mbale region, little attention has been paid to the conservation of forest resources and development. The study results show that the average income contribution to the household economy comes from farm (59%), livestock (21%), fruits (11%), vegetables (7%), cash crops (3%) and cereal crops (2%) respectively. Population densities are in general high in these areas and most forests are cleared down for cultivation, retracing farmland and planting fodder trees on terrace edge and on terrace risers are traditional farming practices in order to minimize soil erosion and to maintain crop production. Slash and burn activities are continuously being practiced in the on-site for many years. Few farmers adopted soil conservation techniques such as use of mulching, hedgerows, mixed cropping of cereals with legumes and minimum tillage and establishing fruit orchards and vegetables farming. To improve the economic condition of people in the hilly area, there is a need to promote commercialization and diversification of agricultural practices with minimum degradation of forest resources.

Buyinza and Nabalegwa (2005) went further to explain that forest and culture have been intertwined throughout human history. Forest landscapes are formed and are strongly characterized by cultural beliefs and management. Human ecology and household dynamics greatly influence the performance of community forestry

projects. The major household socio-economic factors that influence the success or failure of community forestry projects include literacy, major occupation, farm size, annual gross household income, private forest holdings, accessibility to the forest site and source of household earning. Galbreath and Alters (2009) pointed that the socioeconomic status of people can be classified into three namely: high, medium and low. Those people with high 'socio-economic status in the society do not impact great pressure on forest resources as they can afford other means of livelihood rather than depending solely on forest resources, although there are some high socioeconomic individuals who use their wealth to impact negatively on forest resources. They clear or cut down large areas of forest for mechanized agriculture and industries thereby causing the loss of the forest and its resources. The medium socio-economic people in the society are always between the high and the low socio-economic status. Finally, those with low socio-economic status in the society impact negatively on forest resources. They depend entirely on forest resources for their livelihood. This group of people do not have the urge to embrace forest conservation measures as they see it as waste of time. All they think of is to earn a living through the forest.

Galbreath and Auers (2009) went further to state that for all the categories of people (social class) in the society to be conscious of the need to embark on conservation of forest resources, there must be awareness creation through these media; mass media, bill boards, films leaflets, age grades, religious organizations, traditional means of information dissemination, etc. All these mediums should be utilized effectively by environmentalists to ensure that people of all social classes participate in the conservation of forest resources for posterity and sustainable development. However, even though researches have been conducted on community attitude towards resources conservation, little or no researches has been conducted with regards to community socio-economic attitude and awareness towards resource conservation in Akamkpa Local Government Area, Nigeria.

Methodology

This research work was conducted in Akamkpa Local Government Area taking into consideration ten communities which include Oban, Mfamosing, Ekong Enaku, Aningega, Ifumkpa, Iko Esai, Ekuri, Mkpote, Old Ndebiyi and Okarara. The entire study area was stratified into four location based on the natural geographical location of roads and water bodies. A random sampling procedure was adopted in selecting the communities used for this study while accidental sampling procedure was used in selecting the population sampled of each community used for this research. However, six hundred (600) copies of questionnaire were distributed to inhabitants in the study area to capture variables such as the socio-economic attributes of the people and also the level of awareness and attitude of the indigenous community towards forest resource exploitation and conservation. Furthermore, the analysis of variance (ANOVA) was used to analysed the data collected in the field.

Findings

The Socio-Economic Characteristics of the People

The socio-economic characteristics of the sample population presented in table 1 indicate that majority of the sampled population (30.78%) asserted to be married. This was followed by those who were single (179 or 29.8%). Others were; 107 (19.8%) widowed, 62 (10.3%) separated, and 68 (11.3%) divorced. Those who were single were competing with married people. While the people in this study area do not mind being unmarried, the rate of divorce is also significantly high (11.3%). However, the level of education indicated in table 1 shows that host sampled population who took part in this study 198 or 33.0% asserted to have attended the primary level of education: 180 (30.0%) asserted to have attended the secondary level; 96 (16.0%) the tertiary level, while 126 (21.0%) asserted to have not been to school, nor attended level of education, and so could not read or write. If those without education are joined with those with primary level it could as well as be asserted that that level of illiteracy in the study area is still very high with only 16% being actually educated, while the whole bulk of other people (that is $126 + 198 + 180 = 504$ or 84%) are uneducated, even though those from the secondary education level could read and write. Accordingly, it was observed that most of the respondents who participated in this study were civil servants 216 or 36.0% (either working with the public service or with the numerous quarrying companies in the area). Others were farmers (150 or 25.0%); traders/business people (120 or 20.0%); politicians (84 or 14.0%) and those who claimed to be unemployed (30 or 5.0%) but feed through utilization of forest resources. The occupational nature of these respondents is indicative that a lot of dependence is still placed on forest resources in this region of the country or state. Nevertheless, table 1 revealed that majority of the sampled population (200 or 33.3%) professed to generate their income per annum from government service. Others were: 150 (25%) who depended on farming as their income source, 120 (20%) through trading/ business, 80 (13.3%) through politics and 50 (8.3%) were from forest resources. It is also noteworthy that politicians, civil servants and even traders/business persons at times make crop farms for

domestic consumption while still engaged in their usual occupation for money generation.

Table 1: Socio-economic characteristics of the sampled population

Sex	Sampled population	Percentage (%)
Male	351	58.5
Female	249	41.5
Total	600	100.0
Marital status	Sampled population	Percentage (%)
Single	179	29.8
Married	184	30.7
Divorced	68	11.3
Widowed	107	17.8
Separated	62	10.3
Total	600	100.0
Education	Sampled population	Percentage (%)
No formal education	126	21.0
Primary education	198	33.0
Secondary education	180	30.0
Tertiary education	96	16.0
Total	600	100.0
Occupation	Sampled population	Percentage (%)
Farming	150	25.0
Trading	120	20.0
Civil servant	216	36.0
Politician	84	14.0
Unemployed	30	5.0
Total	600	100.0

Source: Field survey, 2012

The data analyzed in table 2 revealed that the calculated values of awareness (26.35*) and attitude (20.61*) were all higher than the critical F-value of 3.002 needed for significance at 0.05 alpha level, with 2 and 597 degrees of freedom. With these results, the null hypothesis was rejected. This means that there is a significant influence of socio-economic status on people's awareness and attitude towards the conservation of forest resources in Akamkpa community. However, in order to determine which level of socio-economic status influences most people's awareness and attitude towards conservation of forest resources as presented in table 2, a pattern of analysis was further explored using the Fisher's Least Significant Difference (LSD) which is a multiple comparison analysis.

Table 2: The influence of socio-economic status on people's awareness and attitude towards conservation of forest resources

s/n	Conservation of forest resources	Sources of variability	SS	df	MS	F. val sign
1	People's awareness	Between: groups	19,475.82	2	9739.91	26.35*
		Within groups	22,065.30	597	360.96	
		Total	41,541.12	599		
2	People's attitude	Between: groups	14,052.59	2	7026.29	20.61*
		Within groups	20,358.09	597	341.00	
		Total	16,088.93	599		

Source: Data analysis, 2012

Furthermore, for people's awareness presented in table 3 the significant Fisher's t-values of 8.238^{bc}, 14.8587^{bc} and 7.45^{bc} indicated that people's awareness towards conservation of forest resources is higher with citizens in the high socioeconomic status = 23.28^b) than with those in the average and low socioeconomic stays (mean_{md} = 16.66^a, mean_w = 8.81^a). However, those in the average socioeconomic status are more aware of conservation activities than their counterparts in the low socioeconomic status (mean_w = 8.81^a and mean_{md} = 16.66^a). Similarly with respect to attitude, the significant Fisher's t-values of 12.517^{bc}, 14.075^{bc} and 6.263^{bc} are indicative of the forest that the attitude of the citizens (respondents) of the high socioeconomic status (t_h = 12.517^{bc}) and average t_{md} = 14.075^{bc}) are by far, more positive towards the conservation of forest resources than that of those in the low socioeconomic status (mean = 24.74^a) exhibit the most positive attitude towards conservation activities than others in the average (mean = 18.06^a) and low (mean = 12.60) socioeconomic status.

Table 3: Fisher's least significant difference (LSD) multiple comparison analysis of influence of socio-economic status on people's awareness and attitude

s/n	Conservation of forest resources	Level of socioeconomic	High N=223	Average N=216	Low N=159
1	People's awareness	High: 233	23.28 ^a	6.62 ^b	14.47 ^b
		Average: 216	8.238 ^{*c}	16.66 ^a	7.85 ^b
		Low :179		14.858 ^{xc}	8.81 ^a
			MSw = 360.96		7.45 ^{*c}
2	People's attitude	High: 233	24.24 ^a	6.68 ^a	12.6 ^b
		Average: 216	12.517 ^{*c}	18.06 ^a	5.46 ^b
		Low :159		599	12.60 ^{*c}
			MSw = 341.00		6.263 ^{*c}

Source: Data analysis, 2012

Conclusion

This study has shown that although indigenous communities who solely depend on forest resources for livelihood sustenance, their socioeconomic status significantly influence the people's awareness and attitude towards forest resources conservation and exploitation in the area. Therefore, effective mechanism must be put in place to avert the situation as regards forest resource exploitation so as to ensure the sustainability of the forest ecosystem.

Recommendations

Today, indigenous communities whose livelihood depends solely on the forest resources have seriously depleted the natural ecosystem. To this end, this study recommends the following if the forest resources must be sustained:-

- The government should provide other alternative sources of livelihood to the people
- The authorities involved in forest resource conservation should provide a taskforce that would monitor forest resource exploitation
- However, since socioeconomic status can influence people's awareness and attitude to conservation of forest resources, the government should initiate programmes for the indigenous communities whose livelihood depends on the forest resources
- The government should initiate and provide projects to the people that would yield positive results to the people, this would help control the rate of forest resource exploitation

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