

ECOTOURISM IMPACTS ON SUPPORT ZONE COMMUNITIES AROUND CROSS RIVER NATIONAL PARK, NIGERIA

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ABSTRACT

The impacts of ecotourism in Cross River National Park (CRNP) on its Support Zone Communities (SZC) were assessed in this study. Multistage random sampling procedure was used to select 20% of the 105 Support Zone Communities in Oban and Okwango Divisions of CRNP. Twenty percent of households in each of the selected communities (a total of 602) were sampled in the two divisions using systematic random sampling. Findings showed that a significant number (60%) of the respondents had positive perception of ecotourism impact amongst which are enhancement of conservation education, increased tourist visitation and realization of tourism income earning activities while few (40%) of them had negative perception such as forest resources deprivation and farmland deprivation. The Cross River National Park through its Support Zone Community Programme extended some projects and services to the support zone villages and a total of N100, 336,050 was allotted for infrastructural development (71.9%), educational facilities (18.0%), empowerment programme (5.4%), health care delivery (3.0%), and social amenities (1.7%) while 60% of low cadre staff in the park were employed from the support Zone Communities. Positive perception of ecotourism impacts within the support zone communities provided satisfactory ground for the development of ecotourism in the park.

Keywords: Ecotourism, Community, Forest resources, Investment, Perception, Impacts, National Park

INTRODUCTION

Ecotourism has grown faster than the tourism industry as a whole (International Ecotourism Society, 2008). As defined by Boo (1991), ecotourism is a nature tourism that contributes to conservation, through generating funds for protected areas, creating employment opportunities for the local communities, and offering environmental education. It encompasses not only the natural and conservation components, but also the economic and educational elements. Boo suggested that for ecotourism to reveal its benefits, it requires effective planning strategies so that conservation of resources could address for sustainable management of such resources. Ecotourism is usually accompanied by impacts either positively or negatively. Evaluation of the knowledge of ecotourism impacts can be considered by understanding the host community sensitivity to the positive and negative environmental, economic and social impacts of ecotourism (Walker, 1995). When identifying and analyzing the different impacts that ecotourism can have on a society either positive or negative, social economic characteristics are part of the characteristics acknowledged (Wall, 2002).

The potential benefits of conserving natural ecosystems and developing an ecosystem industry might in some cases outweigh the environmental and social cost. It is therefore important to ensure that efforts are made to plan and ensure that tourism is sustainable, and thus responsive to the socio-cultural and economic needs of local communities that both now and in future; operate within natural capacities for the regeneration and future productivity of natural resources; recognize the contribution that people and communities customs and lifestyles, make to the tourism experience, accept that these people must have an equitable share in the economic benefits of tourism; are guided by the wishes of local people and communities in the host areas. The community based approach to biodiversity conservation in Nigeria is known as the Support Zone Community Programme (SZCP). This is the means through which the Nigeria National park Authority provides incentives and benefits to local communities to enlist their interest and participation in biodiversity management. The support zone comprises those villages affected by creation of the park, including land associated with private or communal management by their indigenes. This work involved assessment of the impacts of ecotourism development in Cross River National Park on its Support Zone Communities.

MATERIALS AND METHOD

Description of the Study Area

Cross River National Park

This globally important National Park is located in the extreme South Eastern corner of Nigeria. Wholly situated in Cross River State, between latitude 5° 05' and 6°29' N and longitude 8°15' and 9° 30' E with a total area of 4000sq.km. It is mainly conceived around the moist tropical primary rainforest in the north and central parts and mangrove swamps on the coast of the south eastern part of the country. Cross River National Park has two distinct areas known as Okwango and Oban Hills Divisions. Okwango Division is rich in biological diversity while the Oban Hills Division, which is only separated from the Koroup National Park in the Cameroon by the international boundary, is reputed to be the richest ecosystem in Nigeria in terms of biodiversity (Myers, Mittermeier, Mittermeier, Da Fonseca, and Kent, 2000).

Cross River National Park is also home of about 78% of the primate species recorded in Nigeria as well as 30 species of other non-primate mammals. Notable among these are drills *Mandrillus leucophaecus*, lowland gorillas, *Gorilla gorilla* and Chimpanzees, *Pan troglodytes* (Marguba, 2002). The forest elephant, *Loxodonta africana cyclotis*, is much present in the park. The park is one of the three National Parks by which Nigeria fulfill its international obligations under the endangered migratory species treaty of the United Nation Environmental Programme (UNEP). The forest elephant migrates seasonally between Koroup National Park in Cameroon and Cross River National Park (Marguba, 2002). One hundred and five (105) communities are found in the support zone of Cross River National Park (CRNP, 2008).

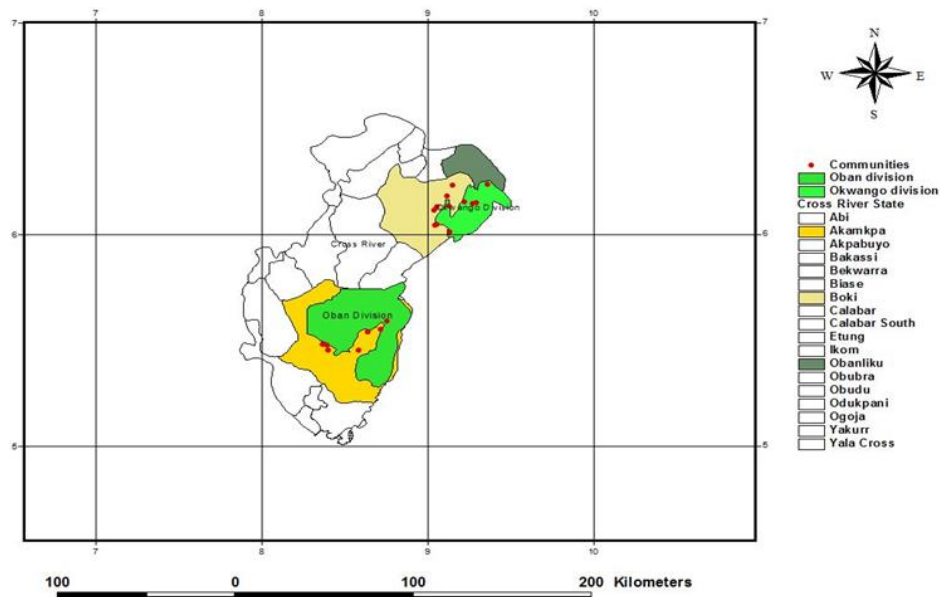


Figure 1: Map of Cross River National Park and the Local Government Areas of Selected Support Zone Communities.

Sampling Technique and Sample Size

Multistage random sampling procedure was used to select 20% of the 105 SZC in Cross River National Park represented by sixty six (66) and thirty nine (39) communities in Okwango and Oban respectively. Within each of this division 20 % of the total communities were selected making a total of twenty one (21) communities (13 and 8) situated around the perimeter and in a series of enclaves from Okwango and Oban divisions respectively. Afterwards, 20% of each community was sampled to ensure fair representation as was done by Omonona (2000) based on the number of households by counting total number of households in each community using indigenes of the various communities who are conversant with the communities with the assistance of key informant as was done by Ijeomah (2007). A total of 602 household representatives were sampled in the study area using a systematic sampling method (Table 1).

Table 1: Proportional distribution of household in the selected communities around Cross River National Park

Selected Communities	Number of Household Sampled	Latitude	Longitude
Abo Obisu	31	06.14952	009.04524
Abo Mkpan	30	06.15448	009.05330
Aking	29	05.44005	008.63774
Anape	25	06.42386	009.35898
Bamba	31	06.28037	009.12597
BashuKaku	21	06.10992	009.13582
BashuOkpambe	25	06.10881	009.13470
Bokalum	30	06.34241	009.11641
Butatong	30	06.41550	009.14731
Kayang 1	25	06.25028	009.03615
Kayang 2	18	06.27305	009.05250
New Ndembiji	21	05.45800	008.71721
Nsan	34	05.31890	008.39655
Oban	35	05.31547	008.58063
Obung	40	05.34825	008.39429
Okwa 1	12	06.29342	009.27238
Okwa 2	17	06.29925	009.29459
Okwango	28	06.30260	009.21827
Old Netim	67	05.35510	008.36733
Orem	27	05.50882	008.75526
Osomba	26	05.44156	008.63836
Total	602		

Field Survey, 2011

RESULTS AND DISCUSSION

Demographic Features of the Sampled Communities in the Study Area

The study revealed that male folks (95.70% and 87.78%) were more across the sampled communities in Oban and Okwango divisions of the park respectively (Table 2) since it is often not common for a household to be headed by female. This is in agreement with NPC (2006) that majority of rural households in Nigeria are headed by males. Age composition shows that majority (45.60% and 51.58%) were between 21-40 years followed by respondents between 41- 60 years (43% and 39.30%) while age group greater than 60 years were 11.50% and 8.70% in Oban and Okwango divisions respectively. The fair large incidences of the age bracket are mature enough to provide the needed information about the park. Highest percentage

(83.50% and 83.90%) of the respondents were married and have large families dominated by household size range of between 6 and 10 people to cater for in both Oban and Okwango division respectively. This implies that there is a tendency for a heavy dependence on park resources. This agrees with the findings of Development Research Bureau (2004b) that without adequate family planning programme, there is tendency of high birth rates in neighbourhood of protected areas, and this will pose a serious problem to sustainable management of forest and wildlife resources. Occupation structure in Figure 2 reflects the nature of local economy and various commercial employment opportunities of the people. Very high percentages (77.00%) of the household heads in Oban and Okwango divisions were involved in crop farming as their major livelihood option. Others livelihood strategies include trading, hunting, artisans, government servants or retired persons earning monthly pensions, fishing, clergy and hired labour. Since the major occupation of respondents was crop farming, it could be attributed to the fact that Cross River state is an agrarian state and farming has long been the occupation of rural dwellers. This is an indication that farmers are likely to need some parts of the park for farming as majority of the respondents requested that park boundary should be shifted backward to enable them have adequate land for farming which implies greater pressure on the park resources. This agrees with Bode (2006) observation in the relationship between occupation and resource conservation in the neighbouring communities of Kainji Lake National Park. Respondents without formal education in Oban and Okwango divisions are represented by 39.80% and 39.90% while those with primary, secondary and tertiary education (NCE, OND, HND and B.Sc. degree) are represented by 35.80% and 29.70%, 20.80% and 18.90%, 4% and 11% respectively in Oban and Okwango divisions which is an indication that people living in the rural communities of Cross River National Park do value education. Edet (2004) reported similar high level of education among local people in the enclaves of Cross River National Park which made it possible for indigenous people to appreciate the Support Zone Development Programme adopted by the management of Cross River National Park. Stoian (2003) study also affirms that education is one of the important human capitals, which plays important role in determining household status in the society. It is the main factor of socio-cultural and economic change in a society. Without education people's attitude and knowledge cannot be developed and the same in the society. Education helps in the adoption of new technologies that relate to ecotourism development.

Table 2: Socio-demographic Features of Respondents in the Sampled Communities of Oban and Okwango

Variables	Oban N=279	Okwango N=323
Gender		
Male	267 (95.70)	290 (89.80)
Female	12 (4.30)	33 (10.20)
Age		
<30	37 (13.30)	49 (15.20)
31-40	90 (32.30)	119 (36.80)
41-50	67 (24.00)	81 (25.10)
51-60	53 (19.00)	46 (14.40)
>60	32 (11.50)	28 (8.70)
Marital Status		
Single	10 (3.60)	10 (3.10)
Married	233 (83.50)	271 (83.90)
Divorced	14 (5.00)	14 (4.30)
Widowed	22 (7.90)	28 (8.70)
Educational Attainment		
Non Formal	111 (39.80)	129 (39.90)
Primary	100 (35.80)	96 (29.70)
Secondary	58 (20.80)	61 (18.90)
Tertiary	10 (3.60)	37 (11.50)
Household size		
1-5	60 (21.50)	77 (23.80)
6-10	197 (70.60)	225 (69.70)
11-15	18 (6.50)	13 (4.00)
16-20	4 (1.40)	8 (2.50)

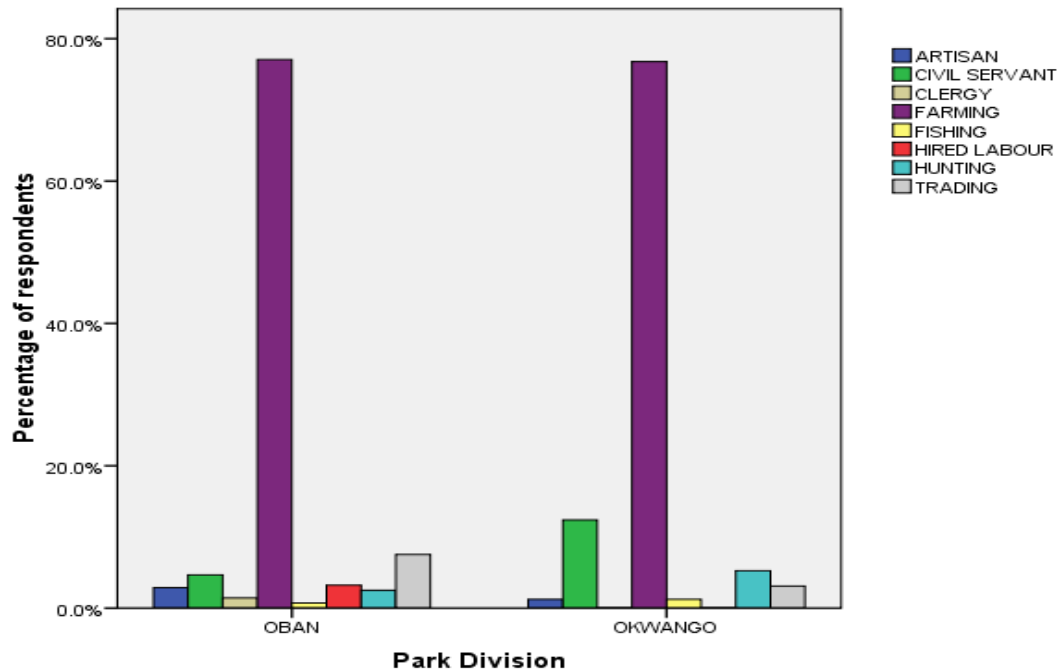


Figure 2: Livelihood Options of the respondents of Oban and Okwango of CRNP

The perceived impacts of ecotourism activities in CRNP on the support zone communities were of interest because a significant number of the respondents had positive perception of ecotourism impact while few of them had negative perception (Table 3). Perceived positive impacts were indicated as enhancement of conservation education (16.11%), tourist visitation (15.10%), employment opportunities (12.30%), community development (9.50%), and provision of alternative livelihood options within the communities (6.83%). This implies that ecotourism promote conservation education as it is dependent on the natural resources in the park, enlightenment campaign about the judicious utilization of the resource to enhance ecotourism development is being realized within the communities. Visitation of tourists to rural communities brings about appreciation and prides which invariably makes the communities realize the value of their cultural and natural resources that form the major attraction for the tourists. Employment opportunities have been enhanced as tourism related income earning activities are made available. Also, constant improvement of the community’s infrastructure becomes realizable as ecotourism is being developed and diversification of livelihood options to redirect the communities from total dependent on the natural resources become evident. These perceived impacts are in consonance with the assertion made by WWF-International (2001) which states that ecotourism constitutes a tool for both social empowerment and long-term economic development of the local communities. It also agrees with the findings of Mbaiwa (2003) that ecotourism sites offer potential benefits to the individual, communities and the nation as a whole, in areas such as the creation of employment, foreign exchange earnings and improving the welfare of local people among others. Perceived negative impacts were reported by 21.80%, 12.60% and 5.80% number of respondents as forest resources deprivation, farmland deprivation, and failed developmental promises by park management respectively. The reason for the perceived negative impacts was because indigenous people whose survival depends heavily upon the exploitation of the natural resource perceive ecotourism as a threat that deprives them of their livelihood by competing with them over land and resource as they demand for de-

reservation of part of the conservation areas. When people could not derive sufficient benefit, negative attitude is inevitable (Ross and Wall, 1999, Manu, Kuuder and Comrad., 2012).

Table 3: Perceived Impact of Ecotourism Activities in Oban and Okwango Divisions of Cross River National Park

Perceived Impacts	Oban (N=297)		Okwango (N=323)		Total=602	
	Frequen cy	Percentage %	Frequen cy	Percentage %	Frequen cy	Percentage of Respondents in both divisions (%)
Positive	163	58.38	197	61.04	360	59.81
Negative	116	41.62	126	38.96	242	40.19
Positive Impacts						
Community Development	33	11.81	24	7.43	57	9.46
Conservation Education	41	14.68	56	17.34	97	16.11
Employment Opportunities	37	13.24	37	11.43	74	12.30
Empowerment (alternative Livelihood)	20	7.18	21	6.53	41	6.83
Tourists Visitation	32	11.48	59	18.30	91	15.11
Negative Impacts						
Failed Developmental Promises	12	4.31	23	7.10	35	5.80
Farmland Deprivation	42	15.07	34	10.53	76	12.63
Forest Resources Deprivation	62	22.24	69	21.34	131	21.76
Total		100		100		100

Field Survey, 2011

Support Zone Developments by Cross River National Park

The Cross River National Park adopted a system of identifying the requirements and needs of its support zone communities in order to get their support for the conservation efforts to enhance ecotourism in the park and has extended some projects and services to the support zone villages. A total of ₦100, 336,050 was spent on infrastructural development (71.9%), educational facilities (18.0%), empowerment programme (5.4%), health care delivery (3.0%), and social amenities (1.7%) while 60% of low cadre staff in the park were employed from the host communities (Table 4). In addition, a micro credit

scheme was established and is open to members that were trained on alternative means of livelihood (bee-keeping, poultry, raising of improve seedling like bush mango, oil palm etc.) in order to reduce pressure on the park.

The underlying concept of ecotourism development is empowerment of local people as opined by Scheyvens (1999) which can be divided into four different categories: economic, psychological, social and political. In economic terms, ecotourism generates long-term benefits that are distributed equitably within the host communities and can be used for the constant improvement of the community's infrastructure. Moreover, ecotourism contribute to the psychological empowerment of the local people by enhancing their sense of self-esteem and by cultivating pride for their cultural and natural heritage. This happens because ecotourism reveals to the public the value of host community in terms of natural beauty or cultural uniqueness. In addition, ecotourism also strengthen social bonds within the community by promoting cooperation among its members. Finally, ecotourism brings about political empowerment, since it creates a forum for the expression of peoples' voices concerning issues of local development.

Social amenities, educational facilities, health care delivery, empowerment programme, employment opportunity and infrastructural development were identified in the support zone communities as park contributions towards livelihood improvement. Osomba community has had its town hall re-roofed, two bore holes were provided for Akamkpa LGA, and Netim community road was graded. Benches were donated to Butatong and Orem Primary school, Bundles of zink were provided in Bashu community to aid school building project, rehabilitation of classroom blocks at Aking, Orem health centre was renovated and health centre was also built in Kayang. Bulldozing and grading of more than 300km access roads to enhance transportation of products within the support zone communities to markets. Drugs and basic health care equipment were provided at the support zone villages' health centres. Provision of roofing sheets and other building materials for the renovation of community base projects. Retraining of 20 hunters in new trade/professions to provide alternative employment to reduce pressure on the park resources. Review and introduction of modern farming practices for increased productivity and distribution of improved varieties of cassava, bush mango, banana, oil palm and other crops to farmers and beneficiaries in each community were provided with micro credits to start up. 10 cocoa dryers were also giving to some farmers in the support zone communities and employment opportunities especially to the lower cadre staff of the park (rangers, security, caterers, driver, guide, clerks, etc.). These were identified as park contributions towards livelihood improvement in the communities which agrees with the assertion of Africa Resources Trust, (2002) on best practices in community conservation. The Support Zone Integrated Rural Development (SZIRD) Programme has assisted to increase the economic viability of the support zone communities through the yearly rehabilitation of rural roads to enhance transportation of agricultural produce and the distribution of agro-chemicals, farm inputs, as well as drugs and basic health care needs this corroborate with the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE) project in Zimbabwe where most benefits of the CAMPFIRE project have accrued to local people, providing them with a route out of poverty. Furthermore, Manwa (2012) argue that for tourism to be sustainable the community has to benefit directly from it, this will enable them to protect and conserve the resources upon which it is based. These benefits received are in consonance with the assertion made by Ghana Tourism Authority (2010), that the gains in community-based ecotourism have been consolidated as a show of significant impact on poverty alleviation.

Table 4: Analysis of Cross River National Park Projects within the Support Zone Communities

Projects	Amount (₦)	Percentage %
Infrastructural Development	72,117,400	71.88
Educational Facilities	18,048,650	17.99
Alternative Livelihood programmes (empowerments)	5,420,000	5.40
Health Care Delivery	3,000,000	3.00
Social Amenities	1,750,000	1.74
Total	100,336,050	100
Employment Opportunities	-	60% of low cadre staff in the park are from the host communities.

Field Survey 2011

CONCLUSION

It is evident from the findings of this research that ecotourism development in Cross River National Park has shown significant positive impact on the support zone communities as perceived by 60% of the residents through the promotion of conservation education, realization of the values of communities cultural and natural resources, employment opportunities, realization of tourism income earning activities, diversification of livelihood to redirect the communities from total dependent on the natural resources, improvement of communities' infrastructures, educational facilities and healthcare delivery amongst others. The contributions of the park towards livelihood improvement in the communities equally influenced residents' perception for the positive impacts. Positive perception of ecotourism impacts within the support zone communities notwithstanding, there is need to address the negative impacts and take into account the immediate and future needs of the host communities in order to ensure sustainability in the development and management of the ecotourism potentials that abound around them.

Therefore, the management of Cross River National Park needs to sustain and also improve on its Support Zone Community Rural Development Programme to consciously promote beneficial linkages with the rural poor since sustainable ecotourism development supports the empowerment of people to be involved in the decisions that influence the quality of their lives. Moreover, sustainable development ideally should be economically viable, environmentally sensitive and culturally appropriate.

ACKNOWLEDGEMENTS

The author is thankful to the research supervisors; I.A. Ayodele and A.O. Adetoro for the advice and guidance throughout the study period. Conservator General of Nigeria National Park Service is highly acknowledged for approval to conduct research in CRNP and profound appreciation goes to the Conservator of Park and technical assistants of the CRNP staff as well as the Community Heads. Your contributions to the success of this work are highly appreciated.

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