



Improving the Livelihood of Support zone communities in Protected Areas: Case Of Old National Park, Nigeria.

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Abstract

This study was carried out to investigate the roles of Old Oyo National Park in improving the livelihood of the support zones communities. Observation techniques and interview methods were used for the study and the data were analysed using descriptive statistical tools. Results revealed that 6 out of the 68 communities surrounding the park had benefitted from the park in one way or the other. Five different types of development projects were executed which include borehole drilling, road development, supply of electricity poles, building of classrooms for school and construction of drainage and culvert. Other benefits derived by the support zone communities are provision of security, employment opportunity and provision of loan to the women in the communities. As the occupation of a greater percentage (73%) of support zone communities is farming, loss of farmland was a major negative way they have been affected. Only 2% were positively affected through improvement in their economy as a result of sales of souvenirs and other items to eco-tourists coming into the park. Suggestion was made on organizing empowerment training programme to actively engage youths in order to keep their focus off the protected area.

Key words: Protected area, Park management, Support zones, Livelihood, Communities.

Introduction

The importance of protected areas to the future of biodiversity cannot be overemphasized. Protected areas not only conserve nature, they provide hope for the planet earth, provide a wealth of essential ecosystem services that benefit communities, provide solutions to global challenges such as water provision, food security, human health and welfare, disaster risk reduction and climate change (IUCN, 2012). In recent times, it has been recognized that protected areas should play a role in sustenance of local people's livelihoods (IUCN, 2003) hence, in line with the 'sustainable use' goals of the Convention on Biological Diversity (CBD), protected areas are expected to directly contribute to national development and poverty reduction (Naughton-Treves *et al.*, 2005).

A strong association exists between protected areas and the livelihood of the rural populations living near the area due to their being the custodian of the resources before establishment of the protected areas; their means of livelihood (such as hunting, fishing, farming, firewood collection, mining, and logging) having been taken by the highest authority of the land for the purpose of

conservation for biodiversity (Salafsky and Wollenbery, 2000). Because the long-term sustainability of parks and protected areas is hinged on public involvement and support for the conservation of natural resources, communities adjoining the park should be more involved with the activities going on in the park and be provided with more social infrastructure as dividends for their loss of access to the park. Protected areas can provide significant livelihood benefits to local communities, this includes benefits provided by successful protection of forest ecosystem services, and those directly gained from the management structure of the protected area which may be in terms of direct income to provision of local amenities.

The type of benefits that protected areas might provide to the people living within them or close by can be in two main ways: 1) compensatory mechanisms: this are in form of steps taken to support communities in and around protected areas to address problems of benefits foregone and in some cases to counter additional problems created by the protection. It includes management responses to reduce negative impacts such as support for education and capacity-building; providing alternative

livelihoods and homelands; and sometimes direct compensation or insurance schemes as cases of human wildlife conflict, and 2) direct benefits these are tangible results in form of potential or actual benefits from the protected area. It includes resources; different types of environmental benefits; a wide range of social and cultural attributes; and political considerations. It can also be in terms of provision of income for poor communities through sales or jobs and payment for environmental services schemes.

Davis *et al.*, (2000) and CBD, 2008 highlighted benefits that protected areas can provide to support zone communities as important and essential to individual well-being for example access to clean water, increasing resource productivity and safeguarding human health. It was however stated that provision of these benefits may not actually reduce poverty but may contribute to people not falling into poverty. Mhlanga (2001) reported that local people believe that they should be allowed access to natural resources. Sara *et. al.*, 2004 also reported that some biodiversity solution lead to increased poverty, food insecurity and stated that the expansion of Public Park and protected areas at the expense of local people by excluding them from usage of the resources for food production has led to world food problem and insecurity. In addition, establishment of a protected area may necessitate or trigger some form of compensation in terms of alternative living space or support for livelihood options. Leisher and Peter (2004) however observed that it may not necessarily be the protected area that provides the benefit but rather the measures put in place as a result of declaring an area protected.

One of the management objectives of Old Oyo National Park (OONP) is to enhance the development of buffer zones around the Park for socio economic benefits of the local inhabitants. It is in view of this that this study investigates the contributions of the park to improvement of the livelihood of the residents of support zone communities and assess the level of developmental facilities provided by the park for support zone communities.

Materials and Methods

Study area

Old Oyo National Park, one of the seven National Parks in Nigeria is located in Oyo State, South Western part of Nigeria. It lies between latitude $8^{\circ} 15^1 - 9^{\circ} 00^1$ N and longitude $3^{\circ} 35^1 - 4^{\circ} 42^1$ E. and has a total land area of 2,512km². The park is surrounded by twelve (12) Local Government Areas out of which eleven (11) falls within Oyo State. These include Atiba, Atisbo, Irepo, Iseyin, Itesiwaju, Iyamopo/Olorunsogo, Oorelope, Orire, Oyo West, Saki East and the only one in Kwara State is Kaiama. The Park lies in plain lowland between 330m and 508m above the sea level with a gentle slope along the Ogun river valleys. The Park is well drained by rivers Ogun, Owu, Owe and their tributaries in the central and southern parts, while river Tessi drains the north east part of the Park. There are four vegetation types in the Park: deciduous forest and dense savannah mosaic woodland; dense and open savannah, woodland mosaic; dense savannah woodland, and open savannah woodland north east of the park. Annual rainfall in the Park ranges between 900mm and 1500mm and main annual temperature is between 12^oc and 37^oc. The rainy season begin in April through September with the highest rainfall record between July and August. The dry season begins in October through early April and the driest and hottest period is between March and April. The Park experiences the harmattan period from November through February (OONP, 2012).

Data Collection

Questionnaire and observation methods were used for the study. Data were collected through primary and secondary data sources. The total number of communities surrounding the park was obtained from the Park head office, which as at the time of study was 68. The names of communities where the park had carried out projects to improve and enhance the livelihood of the residents were also obtained from the park head office. These communities were visited to assess projects and questionnaires administered there. In each of the communities visited, questionnaire were

administered to 5 households randomly selected to elicit information on the benefits that have been derived since the establishment of the Park and how it has affected the community/village as well as the lives of inhabitants. In the household selected, the eldest or any adult whose age was greater than 30 years and was willing to participate were interviewed; these were born prior to establishment of the Park. The participants support for the overall objectives of the protected area, benefits obtained/gained from park and their attitude towards the

development projects executed by the park to their communities were equally investigated. Finally, their expectation from the park management was asked.

During observation, visits were made to sites of projects and facilities constructed by the park management for the support zone communities to identify the project which had bearing on the livelihood of the people. These were assessed for functionality. The data obtained from the study were subjected to descriptive statistics using SPSS 16.

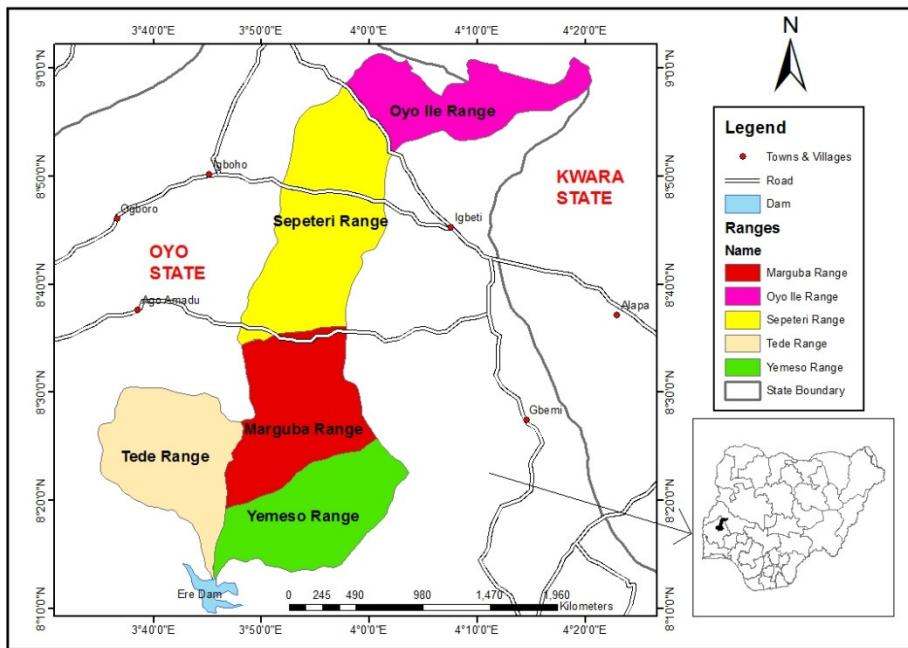


Figure 1: Map of Old Oyo National Park

Results and Discussion

Majority (40%) of the respondents were between 40-50 years, 33% were 50 years and above while 27% falls between ages 20-40 years. There were 67% males and 33% females. A greater percentage (83%) were primary school leaving certificate holders while 7% had secondary school education, 7% also had tertiary education while only 3% had no formal education. Majority of the respondents (73%) were farmers, 23% were traders while only 4% were artisans such as welders, bricklayer and so on. Analysis of the occupation of the respondents in the study area shows that the area is dominated by farmers; hence the assertions by a greater percentage that establishment of the park had led to increase in

poverty since they did not have enough land for farming.

Out of the 68 communities surrounding the 5 ranges of Old Oyo National Park, only 6 communities have benefited from the establishment of the park in terms of rural development and projects executed for improved livelihood. Five different types of projects were identified to have been executed by the park management and 3 other benefits were derived by the support zone communities Old Oyo National Park towards improvement of their livelihood as shown in Table 2.

The livelihood of two communities in Marguba range, Sepeteri was positively influenced by the development of road network 36%, electricity poles 29%, employment

opportunities 14%, constructions of drainage 14% and of block of classrooms 7% while Aba-nla benefitted through road development 71% and provision of security 29% as shown in Table 4. Oloka community in Yemoso range had benefitted in terms of development of road with 46% affirming, loan disbursement 27%, security 18% and employment 9% (Table 5). All the respondents in Alaguntan community affirmed that the borehole for provision of water is of great benefit to them as reflected in Table 6. Ogundiran community in Oyo ile range had benefitted from park establishment through employment opportunities 31%, drainage and culvert 31% road development 23% and provision of loan to empower women 15% (Table 7)

Table 1: Demographic characteristics of respondents

Variables		Frequency	Percentage
Age	20-40	8	27
	40-50	12	40
	50 & above	10	33
Gender		33	67
Educational level	Primary	25	83
	SSCE	2	7
	Tertiary	2	7
	No formal education	1	3
Occupation	Trading	?	23
	Farming	?	73
	Others	?	4

Table 2: Ranges/ Communities where projects on livelihood improvement were executed

S/N	Range	Community	Benefits
1	Marguba	Sepeteri,	Road, electricity poles, school, employment and drainage & culvert.
		Aba-nla	Road and provision of security
2	Yemoso	Oloka	Loan, road, provision of security and employment.
3	Oyo-ile	Ogundiran	Employment, drainage & culvert, Road, Loan.
4	Sepeteri	Alaguntan	Bore-hole.
5	Tede	Tede	Bore-hole, employment and provision of security.

Table 3: The benefits derived by Tede Community in Tede Range

Benefits	Percentage (%)
Security	46
Borehole	36
Employment	18
Total	100

Source: Field Survey, 2013

Table 4: The benefits derived by Sepeteri and Aba-nla Communities in Marguba Range

Benefits	Percent. (%)
Sepeteri	
Road Development	36
Electricity Poles	29
Employment	14
Drainage and Culvert	14
School	7
Aba-Nla	
Road Development	71
Security	29

Source: Field Survey, 2013

Table 5: The benefits derived by Oloka Community in Yemoso Range

Benefits	Percentage (%)
Road Development	46
Loan	27
Security	18
Employment	9
Total	100

Source: Field Survey, 2013

Table 6: The benefits derived by Alaguntan Community in Sepeteri Range

Benefits	Percentage (%)
Borehole	100
Total	100

Source: Field Survey, 2013

Table 7: The benefits derived by Ogundiran Community in Oyo-ile Range

Benefits	Percentage (%)
Employment	31
Drainage and Culvert	31
Road Development	23
Loan	15
Total	100

Source: Field Survey, 2013

The projects executed and other benefits in the support zone communities are as follows;

Borehole: two boreholes were initially constructed for park staff but later allowed for communities' usage. Plate 1a and 1b show the water tanks for the borehole in Tede and Alaguntan communities respectively.

Electricity: Plate 2 shows the concrete electricity poles supplying electricity to Akoto Base Camp at the same time being used by Sepeteri community.

Road development: the road development projects were executed in Sepeteri, Aba-nla, Ogundiran and Oloka communities Plates 3a, 3b, 3c and 3d respectively.

Drainage and culvert: These projects were initially constructed in Sepeteri and Ogundiran by the park management for easy accessibility to the park and now also serve the

communities for easy transportation of farm produce to the market (Plate 4)

Employment: Establishment of the park has afforded qualified indigenes opportunity to work in the park

Security: the location of park rangers' base camp at Tede, Aba-nla and Oloka have aided and supported the communities against thieves by providing security for them.

School: a block of two classrooms was constructed by the park management for Sepeteri community (Plate 5).

Loan: a programme was initiated by the park for women empowerment to the support zone communities. Two communities, Ogundiran and Oloka were used as the pilot. In the programme, (4) women were given a loan of ₦50,000:00 each making a total of ₦200,000:00.



Plate 1a: Provision of Water tanks attached to borehole in Tede community



Plate 1b: Provision of water through borehole to Alaguntan community



Plate 2: Electricity supply in Sepeteri community



Plate 3a: Road development in Sepeteri community



Plate 3b: Road development in Oloka



Plate 3c: Road development in Ogundiran community.



Plate 3d: Road development in Aba-nla community



Plate 4: Drainage and culvert construction in Ogundiran community



Plate 5: Block of class-rooms donated to Sepeteri community

Discussion

The communities surrounding Old Oyo National Park have benefitted from park establishment through construction of five (5) projects which were executed in six (6) out of the seventy-two communities surrounding the National Park. Three (3) other benefits were

derived by five (5) communities surrounding the Park toward improvement of their livelihood. There were thirteen (13) communities in Tede range, only one (1) benefitted from the park through provision of borehole for drinking water, security and employment of indigenes as staff of the protected area. One project was executed and 2 others benefits were derived only in Tede community; however the other 12 communities in Tede range had not benefitted from the park establishment.

In Marguba range, two of the six communities benefitted from Old Oyo National Park establishment while the remaining four communities had not felt the impact of park establishment. The two communities that have benefitted are Sepeteri and Aba-nla communities, 4 projects were executed and 1 other benefit was derived by Sepeteri community, these are; road development, electricity, employment, school, drainage and culvert construction, whereas 1 project and 1 other benefit were derived by Aba-nla community these are; road development and provision of security for improved livelihood in their communities.

In Yemoso range, only one community, Oloka benefitted from Old Oyo National Park establishment, possibly due to the presence of a base camp in the heart of the village while other 19 communities in this range had not benefitted from the park establishment. In Sepeteri range, Alaguntan community happened to be the only community out of 14 communities in this range which benefitted from park establishment while thirteen other communities surrounding Sepeteri range had not derived any benefit as a result of Old Oyo National Park establishment in their communities. This was in form of provision of borehole for community dwellers.

In Oyo-ile range, study revealed that out of the 12 communities surrounding this range only 1, (Ogundiran) where the based camp was located benefitted from Old Oyo National Park.

Influence of Old Oyo National Park on support zone communities

Protected areas normally influence and are also influenced by the communities where they are located, this may be positive or negative and can determine the extent to which conservation efforts succeed in the protected area. Most of the residents affirmed that the park had influenced them negatively through loss of their farmlands to practice agriculture and that the establishment of the park had led to increase in poverty level due to inability of the villagers in the area to farm. This result is in line with Mhlanga (2001) that local people believe that they should be allowed access to natural resources and Sara et. al,(2004) who stated also that some biodiversity solution led to increased poverty and food insecurity. He further stated that the expansion of Public Park and protected areas by excluding local people from usage of the resources for food production has led to world food problem and insecurity. Reduction in meat and protein consumption through loss of access to hunt animals was and loss of wood and plant materials as a result of inability to log trees from the area was among the loss stated as a result of park establishment. Most of these people were fully dependent on the protected area as a source of meat, fuel-wood, wildlife and other forest products which are vital to their livelihoods.

However, mentioned that the park had positively affected them due to increase and boost in their market/economy through sales of souvenirs and other items to eco-tourists coming into the park. With majority of the residents being farmers, loss of farmland was recorded as a major negative influence that the park has on the surrounding areas of Old Oyo National Park.

Status of facilities provided by Old Oyo National Park for the Support Zone Communities

Development facilities provided by the park management for the support zone communities were in good and functioning conditions for use of the villagers and they have improved the livelihood of the communities. The facilities are as follows; Borehole: two boreholes provided for portable drinking water in 2 communities, Tede in Tede

range and Alaguntan in Sepeteri range. The boreholes in the two communities are powered by electricity supply from the base camp and are maintained by the park authority. The borehole was originally drilled to provide water supply for the park staff (rangers) at the base camp and at the same time for the people of Tede and Alaguntan communities to have access to water supply.

Electricity supply: only Sepeteri community in Marguba range have benefitted from electricity supply. The hitherto wooden electricity poles meant for Sepeteri Township was replaced with concrete as a result of park involvement in electricity supply to Akoto Base Camp of Old Oyo National Park, and it is functioning. It is also maintained by the park management,

Road development: The road development project was executed in Sepeteri and Abanla communities in Marguba range, Ogundiran community in Oyo-ile range and Oloka community in Yemoso range. The road which was initially constructed for easy accessibility of the tourists to the park also serves the communities thereby making their communities accessible and for easier transportation of farm produce.

Drainage and culvert construction: the construction of drainage and culvert were executed in 2 communities, these communities are Sepeteri in Marguba and Ogundiran in Oyo-ile ranges respectively. These projects were constructed by the park management for easy accessibility to the park during raining season and now also serve the communities thereby making it easier to transport their farm produce and other goods out to adjoining markets and areas

School: A block of class-rooms built by the park management for Community High School, Sepeteri in Marguba range. The class-rooms project was executed in the year 2004 to improve education activities within the community.

Conclusion

The result of the study on rural livelihood benefits of the support zone communities in Old Oyo National, revealed that the park had affected only 6 out of the 68 communities surrounding the 5 ranges of the

park. Though the park management is contributing to community development activities in some of these areas, the observed benefits seems not to be extending to the other 62 communities surrounding the protected area.

The study identified a number of influences that the establishment of Old Oyo National Park has had on the lives of members of the fringe communities. Resident however expressed the negative influence through loss of their farmlands to practice agriculture and that the establishment of the park had led to increase in poverty level due to inability of the villagers in the area to farm and reduction in meat and protein consumption, loss of wood and plant materials as a result of inability to log trees from the area. This is because the major occupation of the support zones dwellers is farming. Most of these people are fully dependent on the protected areas as a source of timber, fuel-wood, wildlife and other forest products vital to their livelihoods. However, the park has positively affected them due to increase and boost in the local market/economy through sales of souvenirs and other items to eco-tourists coming into the park and also improved educational facilities by building a block of two 2 classrooms.

The study also revealed that development facilities provided by the park management for the support zone communities were in good conditions and were functioning for the use of the villagers. Some of the development facilities are borehole, electricity, road development, and school as well as drainage and culverts construction. The borehole was provided for portable drinking water, powered by electricity supply from the base camp and are being maintained by the park authority.

Recommendation

The following is hereby recommended:

The provision of social amenities and development facilities should be extended to the remaining 62 communities surrounding the park.

The park should mount programme for youth empowerment so as to actively engage them in productive ventures. Programmes such as

training in grass-cutter farming, honey farming/ Bee-keeping, snail rearing and so on could be in conjunction with Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and National Directorate of Employment (NDE). This would also remove their focus from the wild and also compensate for loss of farmlands.

Provision of loan benefit for the villagers should extend to other ranges to alleviate poverty.

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