

THE SPATIAL DISTRIBUTION, ANALYSES AND COMPOSITION OF LAKES AS ECOTOURISM POTENTIALS IN CROSS RIVER STATE, NIGERIA

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ABSTRACT

This paper employed recognizance survey research design to critically examine the spatial distribution, analyses and composition of lakes as an eco-tourism potential in Cross River State. The major issues discussed are the biophysical characteristics of the lakes, the population threshold of each lake location, various classification, among others. The Global Positioning System (GPS) was used to ascertain various coordinates of each lake. Findings revealed that Cross River State harbours great tourism potentials which are untapped and at the same time have the capacity for jobs creation and fight against poverty. Therefore, the efficient use of these great tourism potentials in Cross River State would act as a powerful engine for poverty reduction and also economic incentive for environmental protection.

Keywords: Tourism, global positioning system, tourist, destination

INTRODUCTION

The abundant natural resources and the unique attractions of unexplored pristine environment such as the beautiful landscape, friendly folk, lakes, falls as well as Table Mountain and the smoking hills fostered the involvement of both the government and private sector in tourism development, hence making Cross River State a hub of tourism activities and destination of choice. Tourism could be related to the biblical study of the visit of the queen of Shaba to King Solomon. Tourism is seen as a leisure activity which is international in character. The industry continues to expand faster than average world economic growth, as disposable income and free time increase in developing countries (Chandra, 2006). By the year 2020, a recent report by the World Tourism Organization (1999) (Tourism: 2020 vision) forecasts that there will be increase in the number of international tourist arrivals in most countries of the world especially countries with great tourism potentials. Today, tourism has become the single most important economic incentive for environmental protection. It is a dynamic, market-led phenomenon which has swept across developed and developing countries of the world (Stralsund, 2000).

In Cross River State the tourism industry over the years has suffered a setback caused by negligence on the part of the stakeholders. Cross River is the least visited tourism area in West Africa because its tourism potentials have not been developed to attract tourists to the region, yet it combines the best of the world wildlife and scenery which draw tourists to other parts of the world. However, the physical features such as the beautiful landscape, smoking hills, table mountain, agreeable climate offer lovers of nature and fan seekers, the satisfaction of their heart desires. The emerging bright spots of this gloomy spectra is the recent wave of interest spearheaded by the Cross River government in the promotion and development of the state's tourism resources for domestic and international consumption.

This study is a vivid testimony in this regard in the upgrading and development of infrastructure at Obudu Ranch Resort, Tinapa Business Resort, Marina Tourism Resort as well as bringing to limelight the enormous potentials of lakes in the state. Nevertheless, the seeming general acceptability of tourism as providing the antidote for development, diversifying the economy growth of Cross River State is a welcome development. The Cross River State government over the last decided to embark on the development of most tourism potentials in the state. However, these laudable tourism potentials have yielded much dividend to the entire people of Cross River State such as income generation, employment and investment opportunities.

In spite of all these, the major ecotourism potentials such as lakes, warm springs, monoliths and the water falls lay waste with little attention paid to them. To this end, this paper seeks to investigate the spatial distribution of lakes in Cross River State, the biophysical composition of lakes in Cross River State and the population threshold of each locational site.

ECOTOURISM IN THEORY AND PRACTICE

The importance of tourism globally, cannot be overemphasized. In 1986, it generated 12 per cent of the world's Gross National Product (GNP). In the same year, Chandra (2007), 340 million international travelers spent about 115 billion dollars and turned in tourism receipt, with a value amounting to 5.4 per cent of world trade. According to him, it was only in 1976 that decree 54 established the Nigeria Tourist Association. This board according to him was charged with the main aim of promoting tourism and providing tourist facilities all over the country, while the states of the federation are to set up tourism committees to assist and advise it on tourism development. This role has for a long time been criticized stating that their role is rather obstructive and retrogressive.

Tourism is seen as an exclusive preserve of the rich and affluent who can afford both the cost and time needed for trips. Moreover, there has been much emphasis on international tourism, characterized by the development of game reserves, the construction of international hotels and city-based recreational facilities. This emphasis is responsible for the weak impact tourism has on national and regional development in the country. Thus, it is the extent to which recreational activities are based on local resources like waterfalls, beaches, lakes, wildlife and environment that enables backward linkage with local development efforts. Each estimated at

311,726 days as average stay of all tourist to Sri-Lanka. However, some travelers stay several months of swimming, surfing and the friendly ambience, with the average expenditure at US\$32 per day. This also applies to places like Sikkim Himalaya, an area of high biodiversity and cultural heterogeneity with distinctive ethnic groups, mountain peaks, sacred lakes and monasteries, making it a place of tourist attraction. The annual influx of visitors into Sikkim has increased by 155 per cent over a span of 5 years (1988-1994). Trekking, nature and recreational tourism are growing very rapidly in the Sikkim Himalaya (Fillion, Foley and Jacquemot 1992).

Furthermore, they have stated that ecotourism is growing and was expected to earn Ca400,000 tourist per year by the end of the century. There is a vast scope for increased ecotourism in Sikkim that must be viewed with response to environment preservation and local communities must be involved in such programs. Ecotourism has remained a high profit yielding business for those who have invested in it. It is estimated for instance that in 1988 there were 157 and 236 million international ecotourists worldwide. In addition, many North American birders are now taking trips to faraway places. In Costa Rica tourism values associated with visits by birds watching to observe the resplendent quetzal of the vanishing cloud forests of Montere de. Yet contributions to the economy arising from bird watching are often under rated. Financial benefits derived from nature tourism are only of value to the resources when part of it is used to maintain those resources. In the USA revenue regenerated by tourism in visits to national parks amounts to US\$3billion a year. However, the proceeds have gone mainly to hoteliers, restaurants, purveyors of gasoline, fishing gear and t-shirts. But this revenue could benefit the parks if those who currently receive it formed a lobby for improved protection. Native tourism cannot be equated with tourism unless it directly produces better protection. This is one reason the Australian government is seeking to ensure that operators who make profit from the Great Barrier Reef contribute to its maintenance.

Income, however, is only part of the park unless it helps resolve root causes of environmental degradation. Most threats to parks arise from the need of local populations to use the parks' natural resources for subsistence purposes. Yet traditional rural activities such as agricultural and hunting may have to be limited or prohibited precisely because of the protected area development. One of the challenges facing nature-based tourism therefore is to ensure that the local communities earn appropriate share of the profits derived from tourism while at the same time conserving the natural and cultural heritage upon which these profits depend.

LAKES AS ECOTOURISM POTENTIALS

The uses of lakes to man cannot be over emphasized; lakes have over the years been put to such uses as - recreation, fishing, irrigation, hydro-electric power generation and many others. Lakes are also important in the regulation of the micro-climate. Fruit farming thrives in the area surrounding the great lakes, because of the wind from it. Water from lakes has in many cases been conserved for various uses as mentioned. Lake Cle Elum, in Washington has had a reservoir constructed across it to create a dam for hydro - electric power generation.

They return moisture to the air by evaporation, changes in their areas effect the amount of precipitation. Large lakes affect some elements of the climate of adjacent areas. The lake Chad is the primary source of water for irrigation of the surrounding areas, this makes lakes even more important in agriculture, fishing is carried out in lakes, sometimes in large quantities that feed a whole region. Lakes when well develop can change the economic fortunes of an area through recreation, agriculture, hydro-electric and much more. Its huge potentials are largely untapped in Cross River State even when they constitute the largest fresh water lakes in Southern Nigeria.

METHODOLOGY

Cross River State is situated within the tropics sharing common boundary with Cameroon republic in the east, Benue State in the North, Enugu and Abia State in the West and Akwa Ibom State in the South. It lays between latitudes 50⁰32 and 40⁰22 North and longitude 70⁰50 and 90⁰28 east. Obudu Plateau with an altitude of 157,576 meters above sea level enjoys a temperate climate like other temperate regions of the world. Eight lakes were studied in Cross River State They are Ochako, Ejagham, Refome, Wobie, Akaebob lakes. Others include Egwebe, Ebien and Tooka lakes. The residents around these lakes form the population of the study. The data were collected utilized oral interviews, physical observation and Global Positioning System (GPS) readings. The Global Positioning System (GPS) was used to determine the size of the lakes; this was done through the use of a canoe around the lake because of the marshy environment. These co-ordinates were computed for each of the lakes studied.

RESULTS AND DISCUSSION

A careful observation of Table 1 shows a spatial distribution and analysis of the biophysical characteristics of lakes in Cross River State. It was observed that eight lakes were in Cross River State. These include Refome Lake at Ebom in Abi Local Government Area, Egwebe in Afono, Biase Local Government Area Egwebe is Ejagham lake located at Abia village in Etung Local Government Area. Others are Akae-bob at Ibini village in Biase Local Government Area; Ebien at Abamwan also is Biase Local Government Area, Ochako at Ekprinyi, Yala Local Government Area, Tooka at Etana and Wobie at Biase Local Government Area. This is followed by a list of vegetation land, wild as well as aquatic life in various lakes. In respect to depth, Table 2 shows that Egwebe Lake located at Afono village in Biase Local Government Area ranks first followed by Ejagham at Abia village in Etung Local Government Area with a depth of 59m. Others according to the level of their depth are Refome Lake, Akae-bob, Ebien, Tooka, Wobie and Ochako.

Table 3 shows the classification of lakes according to their sizes. It was observed that each lake as stated above varies in size and location. The data show that Refome Lake in Abi Local Government Area has the largest size, followed by Egwebe and Ejagham. In trying to analyses the population threshold and the number

of household in each location in terms of population growth, it was observed that Ikom has a large urban population followed by Okpoma, Higidi and others in Akpet, Biase Local Government Area although various locations varies in rural population.

Table 4 shows that Ekprinyi in Yala Local Government Area shows a higher rural population as compared to other location such as Abia, Ebom, Urugbam, Ibini, Afono, Abnwa, and Efana. It was further observed that number of household equally varies as the data collection shows that Ikom has a higher household with a value as compared to other existing location such as Okpoma, Ebom, Urugbam, Ibini, Afono, Abanwan, and Etana.

CONCLUSION AND RECOMMENDATIONS

Ecotourism precludes more intensive exploitation of natural resources in rural areas of developing countries by providing economic returns that exist as positive incentives to local residents who are enlisted in natural resource protection. Cross River State is undeniably a natural paradise with great ecotourism potentials which are yet untapped, their locations are far flung and seem to be neglected by both the government and private sector. These laudable resources are capable of generating additional income and general transformation of the entire area hence reducing poverty and diversifying the economy of the rural communities. Therefore, both the government and private sector need to ensure effective and maximum utilization of these potential resources in the state, for enhanced tourism development.

Table 1: Spatial Distribution of Lakes in Cross River State

| Lakes | Location | GPS ordinates | Vegetation | Aquatic/Wildlife |
|----------|------------------------|------------------------------|------------------------|---|
| Ochako | Eprinyi (Yala L.G.A.) | N 05.951150 E 007.946880 | Savanna Forest | |
| Ejagham | Abia (Etung L.G.A.) | N 05.921190 E 008.873950 | Raffia Palm | Water bed (Kingfisher) Flamingoes crocodile |
| Refome | Ebom (Abi L.G.A.) | N 05.8244080 E 007.950020 | Raffia and Nipper Palm | Cat fish, crocodile, monkeys guenon |
| Wobie | Urugham (Biase L.G.A.) | N 05.756330 E 007.964120 | Elephant grass | Crocodiles and fish |
| Egwebe | Afono (Biase L.G.A.) | N 05.733680 E 007.966580 | High rain forest | Tilapia |
| Ebien | Abanwan (Biase L.G.A.) | N 05.698200 E 007.980130 | Elephant grass | Cat fish, Tilapia and other species |
| Tooka | Etana (Biase L.G.A.) | N 05.697850 E 007.979720 | Elephant grass | Cat fish, Tilapia and other species |
| Akae-bob | Ibini (Biase L.G.A.) | N 05.759040 E 007.9645780 | Elephant grass | Cat fish, Tilapia and other species |

Source: Research Survey, 2008

Table 2: Biophysical data of lake according to depth (m)

| Lake | Settlement | Depth |
|----------|------------------------|-------|
| Ochako | Eprinyi (Yala L.G.A.) | 26m |
| Ejagham | Abia (Etung L.G.A.) | 59m |
| Refome | Ebom (Abi L.G.A.) | 47m |
| Wobie | Urugham (Biase L.G.A.) | 28m |
| Egwebe | Afono (Biase L.G.A.) | 63m |
| Ebien | Abanwan (Biase L.G.A.) | 34m |
| Tooka | Etana (Biase L.G.A.) | 31m |
| Akae-bob | Ibini (Biase L.G.A.) | 44m |

Source: Research Survey, 2008

Table 3: Classification of lakes according to size

| Small lakes (5km ² - 100km ²) | | Large lakes (101km ² - 1000km ²) | |
|--|--------------------------------|---|--------------------------------|
| Name of Lake | Size (km ²) (Est.) | Name of Lake | Size (km ²) (Est.) |
| Tooka | 7 | Ejagham | 250 |
| Ochako | 100 | Refome | 1000 |
| Wobie | 5 | Egwebe | 900 |
| Akae-bob | 40 | | |
| Ebien | 30 | | |

Source: Research Survey, 2008

Table 4: Population threshold in the study area

| Lakes | Location | Settlement | | Population | | House-holds No. | Sample Size | Percentage |
|----------|-----------------------------|------------|---------|------------|-------|-----------------|-------------|-------------|
| | | Urban | Rural | Urban | Rural | | | |
| Ochako | Eprinyi (Yala L.G.A.) | Okpoma | Eprinyi | 11769 | 1414 | 748 | 60 | 8.02 |
| Ejagham | Abia village (Etung L.G.A.) | Ikom | Abia | 37869 | 5,344 | 2450 | 160 | 6.53 |
| Refome | Ebom (Abi L.G.A.) | Itigidi | Ebom | 10491 | 5540 | 909 | 47 | 5.17 |
| Wobie | Urugham (Biase L.G.A.) | Akpet | Urugham | 5914 | 2995 | 506 | 27 | 5.34 |
| Akae-bob | Ibini (Biase L.G.A.) | Akpet | Ibini | 5914 | 2455 | 475 | 16 | 3.37 |
| Egwebe | Afono (Biase L.G.A.) | Akpet | Afono | 5914 | 1555 | 426 | 12 | 2.82 |
| Ebien | Abanwan (Biase L.G.A.) | Akpet | Abanwan | 5914 | 5224 | 632 | 20 | 3.16 |
| Tooka | Etana (Biase L.G.A.) | Akpet | Etana | 5914 | 640 | 372 6518 | 8 350 | 2.15 5.3 |

Source: Research Survey, 2008

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