

ASSESSMENT OF LAKES AS ECOTOURISM POTENTIALS IN CROSS RIVER STATE, SOUTH SOUTH NIGERIA

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Abstract

Tourism the world over is being viewed as a viable means of economic enhancement. Different kinds of tourism destination have been identified and patronised due to how it is appealing to tourists. After the industrial revolution in the eighteenth century, there has been a shift to tourism development as a means of economic development. This has however caused urban-rural migration as most natural destinations are located in the rural areas, making rural areas very popular attracting domestic and international tourist to patronise the potentials of rural tourism. In the entire mix, the exploration of rural areas where they enjoy their holidays preferring to interact with nature in a pristine ecosystem with the touch of nature away of the hustle and bustle of city life. In the middle of all these, lie tourism resources of which lakes are highly priced. Eight lakes were identified by carrying out a biophysical assessment of the lakes. The analysis of variance (ANOVA) was used to assess the importance of infrastructure around lakes for tourism development. Infrastructures such as hotels, roads, health facilities, electricity, security and communication were surveyed using the One-way analysis of variance, the analysis revealed a critical F-value of 1.92 at 0.5 significant level, this was found to be greater than the critical F-value of 1.54. From the output of the analysis, it could be deduced that there is a significant value in the level of infrastructure around lakes as rural tourism potentials. Therefore, the conclusion that tourism support infrastructure is important in lake development and stake holders should endeavour to provide tourism support infrastructures in sampled Lake areas, knowing that as the rural tourism potentials is improved there will be a corresponding increase in tourist traffic to the rural area of the state.

Keywords: Lakes, rural tourism, potentials, development, tourist

Introduction

The spade at which rural tourism grows is really unprecedented in recent times than any recorded period in history of human kind. This is not unconnected with the current realities of environmental degradation and artificial destinations in urban centres. This realization has pushed both domestic and foreign tourists to patronise rural tourism destination more because of the natural scenarios which adds varieties to the pleasures of nature which the urban areas have long lost, most especially in the last three decades. This new reality however, has brought the rural areas into the central focus of tourism considering the spade of interest being shown on a wide range of rural tourism potentials. Rural tourism is a kind of tourism that is usually practiced in rural areas because most of its activities involve the natural environment such as lakes, national parks, waterfalls, beaches and rural environments among several others.

Monisola (2012) observed that rural tourism is one of the surest ways to open up rural areas, especially in the provision of infrastructure, noting that nature and rural environment are the main preconditions for rural tourism development. Page and Connel (2006) consider rural tourism to be a form of tourism that takes place in the country side. Rural tourism emerged as an identifiable activity in Europe during the late half of the eighteenth century and could be traced back to history when journeys were made to wild mountainous regions such as the Canadian Rockies, the Swiss Alps and English Lake Districts; this began to attract aristocrats initially, then middle-class tourist (Sharply and Sharply, 1997).

Rural tourism has in recent times becomes very popular and its relevant because of its contribution tourism development in general perspective revealing rural potentials of the man's physical environment, it is against this background that the paper seeks to establish the importance of potentials in rural tourism with particular focus on Lakes which are widely used for recreation boating, swimming, water skiing and generally people enjoy the beautiful ambience of the environment. Apart from the usage of lake mentioned earlier, Lakes are also used in industries for dilution and removal of municipal industries wastes, septic tank treatment, cooling purposes, irrigation among others. Typical example is the Lake Chad, which is used to irrigates most of the farm lands in north eastern Nigeria, again, lakes are also used for power generation like Lake Cle Elum in Washington D.C which has a reservoir constructed across it to create a dam for hydro power generation (Encyclopedia Britannica, 2012).

Lakes are favourable sites for recreation and are extensively used for summer homes and pleasure resorts (McManus, 1993). They return moisture to the air by evaporation; their

requirements vary considerably among regions, climates and countries. The economic importance of water ways as means of communication is enormous. In the early times when travel by many societies was substantially by water, travel routes became established that resulted in relationship between cultures. Lakes are the major means of transportation of heavy cargo across continents because of the convenience. Fishing in commercial quantity is also carried out in lakes, thus its importance in industrialization (Lane, 2013), lakes when well develop can change the recreation fortune of an area. Their huge potentials have remained untapped in Cross River State (Oba, 2006). These reveals the roles and contribution of lakes to tourism development and socio-economic advancement of the world. Therefore, there is need to explore the rural tourism potentials of associated with Lakes in Cross River State, Nigeria.

The Concept of Resource and Implication on Rural Tourism

The concept of resource was propounded by Zimmermann (1933) provides a functional interpretation of resources which is as relevant today as when it was propounded. The proponent of the concept argued that neither the environment as such nor part of the environment is a resource until it is considered to be capable of satisfying man's need. He further in his postulation stressed that "resource can no longer be concerned as a tangible object but a functional relationship that exist between man's wants, his abilities and appraisal of his environment". To further buttress his point, Zimmermann noted that coal was not a resource until its capabilities gave it utility. It could be inferred from his assertion that resource availability for human use and not mere physical presence, is the main criterion of resources. Zimmermann (1951) elaborated upon this functional interpretation of resources and stressed further that natural resources are dynamic, becoming available to man through a combination of increased knowledge and expanding technology as well as changing individual or societal needs. Appraising the potentials offered by the lakes situated in Cross River State, with respect to their value as rural tourism resources, is the core of this paper.

Tourist quest to seek pleasure and comfort in a natural environment, has brought about the growth of rural tourism adventure. Since industrial revolution, industrialization has grown in leaps and bounds where the need to create modern cities has also resulted in massive urbanization resulting in deforestation and degradation of the physical environment. This trend has caused man to move to rural areas which is still considered to be close to nature to enjoy the peaceful and serene environment thereby causing urban-rural migration. Typically, there is bound to be high tourist traffic to rural areas for rural tourism adventure. The purpose of tourists trip to rural areas is not unconnected with the quest to be reconnected to nature, and enjoy the serene ecosystem which is only offered in the rural areas.

In his view, Bramwell, (1994) has tried to bring out the special characteristics of rural areas when he asked the question of whether special characteristics of rural areas shape the

pattern of tourism, creating a specific form of 'rural' tourism. Bramwell, further observed that the commodification of rural space which has taken place in recent years means that rural tourism has moved into a new era. The lakes in Cross River State offers much to desire and it quite appealing to both local and international tourists. These indeed shows the unique of rural tourism in the study location, most especially the lake sites.

Study area

The study was carried out in Cross River State, south east Nigeria. The study area situated within the tropics and shares 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 lies between latitudes 4⁰20' and 7⁰5' North and longitude 7⁰34' and 9⁰8' east

Figure 1: Map of Cross River State showing lakes (insect map of Nigeria)

Cross River State is within the tropical rainforest regions of West Africa. The rainforest is characterized by woody plants and scrubs, climbers and also palm trees and rare animal species like Elephant, Pangolin Monkeys including gorillas and chimpanzees which are endangered species the world over. According to Faniran and Ojo (1980) the climate is within the equatorial south, characterized by high rainfall of about four to six thousand millimetres. Some part of the state has rain for up to eight months while others have rain throughout the year. The northern part of the state experience serious harmattan spanning up to four months, November to February, due to the North east trade winds blowing across this area. Maximum rainfall is recorded between June and September with a slight break in August often referred to as the August break. This indicates the double maxima. Relative humidity is usually about 80-90 percent in the afternoon. The hottest months fall within temperatures of about 26⁰ C-30⁰C in the dry season and 24⁰ to 26⁰C in the rainy season, the temperature range is small with a higher daily temperature range. The study area is blessed with numerous tourism potentials including waterfalls, one of the largest remaining pristine rainforest in the world, natural lakes, mountains amongst others.

Methodology

Method of data collection

The survey design was used to carry out this study. The selection of the lakes was based on the size, location depth other physical attributes such as aquatic/wildlife and vegetation resources as well as potential for economic benefits. Field measurement and participant observation was the basis for the perimeter survey. Based on the sizes of the lakes chosen for the study, lakes < 100km² were considered to be small lakes, while the big lakes in this study were considered to be lakes > 1000km².

Two sets of data were used for the study namely: biophysical and socio-economic. The size, depth vegetation and wild life constituted the biophysical while the socio economic included

the perception of the value of lakes as rural tourism potential, level of infrastructural development, marketability etc. the physical data were gotten with the help of a Global Positioning System (GPS) to determine the sizes of lakes, this was done with the help of a canoe around the lakes because of the marshy environment.

Five coordinates were gotten from each of the lakes studied; this was used to determine the size of the lakes. The questionnaire was used to elicit information on the respondents' views regarding lakes, as rural tourism potentials. Both descriptive and qualitative statistics were used to analyze the data. Data were presented in terms for ease of analysis accordingly.

Result and discussion

The data generated were presented in tables and analysis was basically on descriptive and quantitative statistics. To fulfil the above objective, information on the sizes and depths of lakes were collected from the survey as shown in the table below.

Table 1: Biophysical data of lakes in Cross River State according to their sizes

| Lake | Location | GPS | Size km ² | Vegetation | Aquatic/wildlife |
|----------|---------------------|--|----------------------|------------------------|---|
| Ochako | Ekprinyi (Yala LGA) | N6.807018 ⁰ E8.792933 ⁰ | 10km ² | Savanna forest | |
| Ejagham | Abia (Etung LGA) | N05.92119 ⁰ E00.8.87395 ⁰ | 250km ² | Raffia palm | Water bed (kingfishers) flamingos crocodile |
| Reforme | Ebom (Abi LGA) | N05.824408 ⁰ E007.95002 | 1000km ² | Raffia and nipper palm | Cat fish, crocodile, monkeys guenon |
| Wobie | Urugham (Biase LGA) | N05.75633 ⁰ E007.96412 ⁰ | 5km ² | Elephant grass | Crocodiles and fish |
| Egwebe | Afono (Biase LGA) | N05.73368 ⁰ E007.96658 ⁰ | 900km ² | High rain forest | Tilapia |
| Ebien | Abanwan (Biase LGA) | N05.69820 ⁰ E007.98013 ⁰ | 30km ² | Elephant grass | Cat fish, tilapia and other species |
| Tooka | Etana (Biase LGA) | N05.69785 ⁰ E007.97972 ⁰ | 71m ² | Elephant grass | Cat fish, tilapia and other species |
| Akae-bob | Ibini (Biase LGA) | N05.75904 ⁰ E007.964578 ⁰ | 40km ² | Elephant grass | Cat fish, tilapia and other species |

Source: Research Survey, 2019.

A careful observation of the table 1 above shows that Reformed Lake at Ebom in Abi local Government Area has the largest size of 1000km², followed by Egwebe in Afono, Biase Local Government Area with a total size of 900km² next to Egwebe is Ejagham lake with 250km² located at Abia village in Etung Local Government Area then followed. Others accordingly to their sizes are Akae-bob (40km²) at Ibini village, in Biase Local Government Area Ebien (30 km²), at Abanwan also in Biase Local Government Area, Ochako (10km²), at Ekprinyi, Yala Local Government Area Tooka (7 km²) at Etan and Wobie at Urugham Biase Local Government Area (0.4 km²). This is followed by types of vegetation, wild life as well as aquatic life in various lakes.

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

| Lake | Settlement | Depth |
|----------|-----------------------|-------|
| Ochako | Ekpeinyi (Yala L.G.A) | 26m |
| Ejagham | Abia (Etung L.G.A) | 59m |
| Reforme | Ebom (Abi L.G.A) | 47m |
| Wobie | Urugbam (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) | 31 |
| Akae-bob | Ibini (Biase L.G.A) | 44m |

Source: Research survey (2019)

In respect of depth, Egwebe Lake located at Afono village in Biase Local Government Area ranks first with a depth of 63m followed by Ejagham at Abia Village in Etung Local Government Area with a depth of 59m. Others according to the level of their depths are Reforme Lake (47m), Akae-bon (44m), Ebien (34m) Tooka (31m) Wobie (28m) and Ochako (26m).

Socio-economic attributes

In respect of the socio-economic attribute of lakes, responses from 350 questionnaires gotten from 6518 households sampled shows clearly the importance of lakes in Table 3.

Table 3: Respondent perception and ranking of socio-economic importance of lakes.

| Activities | No. of respondents | Percentage | Ranking |
|----------------------|--------------------|------------|---------|
| Religious activities | 115 | 32.86 | 1 |
| Fishing festivals | 70 | 20.00 | 2 |
| Recreation center | 65 | 18.57 | 3 |
| Economic activities | 60 | 17.14 | 4 |
| Employment | 40 | 11.43 | 5 |
| Total | 350 | 100 | |

Source: Research survey, 2019

The perception of the respondents in the questionnaire shows that socio-economic activities such as recreation, fishing activities, religious activities etc thrive in the area where lakes are found. Other activities include trading etc. some respondents also believed that activities around lakes like recreation, trading etc. can create employment for the areas where lakes are situated and even beyond. For example, in Reforme Lake, the major socio-economic activity is fishing within the lake area. Meanwhile, due to the aesthetic and natural state of Akae-bob, a lot of tourists traffic is evident as recreation activities take place and it in turn encourages development of small scale businesses, which in so many ways boost the resident's socio-economic status.

Several studies had affirmed that lakes are rich sites for recreation in rural areas. This assertion is because of the general beauty of the environment around them. People are

used to visiting recreation centres after a hard days' job or during annual vacations. It was discovered that people of the age bracket of 47 years and above were more interested in rural tourism, this is because they both have the financial resources and time to enjoy themselves. Both the financial level and interest are necessary attributes for rural tourism growth. This position discovered in the field from the levels of respondent's income distribution, and it was in consonant with the study findings of Chokor (1993). The Akae-bob Lake festivals, is said to be carried on there and the experience, pleasure it offers fun seekers make it comparable to the Argungu fishing festival in Kebbi state. Hecky (1978) has also written that fishing in the Tanganyika lake especially of the "Tangabyika Sadine", (*stolothrisa tanganyikae*, Herring family) support the local economy of the area. This argument was further supported by the output of some local people (respondents) through questionnaire administration in Ebom, suggesting that, if Reforme Lake is well developed, its potentials will be fully harnessed as it will create employment opportunity to the locals. From the foregoing, it is evident to conclude that rural tourism is worth developing to increase the tourist traffic and thus boost the socio-economic profile of the locals.

Summary of findings

Details from the study analysis reveals that the large sizes of lakes support fishing activities in the local areas as in the case of Reforme Lake, Ejagham and Akae-bob. The sizes also serve as a link between one community to another in terms of transportation as it is with larger lakes like Lake Victoria which links Kenya, Tanzania and Uganda. Furthermore, it was discovered that the lakes in Cross River State in terms of sizes and depth were relatively appreciable like most popular lakes in other climes. The sizes of lakes like Reforme, Egwebe, Ejagham among others studied were not very much different in terms of size as compared with other large lakes in the world. Issyk-kul, Kyrgyztan (2,394sqkm), Great salt, US (1,800 sqkm), Kiogu, Uganda (1,700 sqkm). The sizes of the afore mention lakes are not much different from the once that exist in Cross River State, which also support rural tourism activities in large scale, they support the economy, through transportation, agriculture, sales of local crafts, emergence of small scale business among others of the local area. Thereby improving the standard of living of the locals. This is what development of rural tourism advocates in Cross River State, which has unique lakes that has the potentials to attract both domestic and foreign tourists. Hence, the call for the development of the sampled lakes.

Conclusion

The study examined the contribution of lakes to the development of rural tourism in Cross River State, Nigeria. The potentials of the eight lakes studied were seen to be significant to different sector of the economy, such as: hydro-electric power generation, industrial uses such as cooling and dilution, transportation, irrigation and most importantly leisure and recreation etc. Very thrilling was the identified lakes potentials to regulates the micro climate of the area, forming the main fishing ponds in some parts and saves as the basic source of water for some locals. Reforme Lake is recommended for recreation activities such

as water skiing. The myth associated to the Egwebe Lake, makes it very important to be developed not forgetting the presence of a huge number of crocodiles. It was also discovered that the lake has inherent healing powers, no wonder the level of visit by religious and traditional faithfuls. All these facts are great resources boost rural tourism in Cross River State. The spade of interest in rural tourism recently in the study area, especially in the last three decades is not unconnected with the massive urbanization and industrialization in the city centre. Once the potentials of each sampled lake is fully developed, there will be high tourist traffic to the area, with a corresponding improvement in the socio-economic livelihood of the locals and the state in general perspective.

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