IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT)
e-ISSN: 2319-2402,p- ISSN: 2319-2399.Volume 14, Issue 6 Ser. I (June 2020), PP 22-32
www.iosrjournals.org

Assessment of the Socio-Cultural and Economic Challenges of Ecotourism Industry in Pandam Game Reserve, Plateau State, Nigeria

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Abstract
Background: *The complexity of ecotourism activity makes it require tools to assist in effective decision making so as to meet up with the competing economic, social, and environmental demands of sustainable development. Pandam Game Reserve in Qua'an Pan Local Government area of Plateau State is one of the largest Game Reserves in Nigeria. The park has over the years provided a place for visitors to learn about the beauty of nature and enjoy the natural environment. Parks such as the one in Pandam exist to ensure that pleasure seekers now and in the future, are able to experience for themselves their country's rich natural heritage. Even though the park is a good instrument for biodiversity conservation, ignoring the dependence of local people on park resources created conflicts between local communities and the park authority.*
Materials and Methods: *Assessment of the socio-cultural and economic challenges of pandam game reserve, Plateau State, Nigeria was studied using structured questionnaires, field survey, in depth interviews of key informants and administrative records. Questionnaire was randomly administered to tourists in the park to obtain information on tourists' experience and level of satisfaction with the park. Another set of questionnaire were randomly administered to park officials to obtain information on the impact of management strategies and challenges in the park. Test of relationship between socio-cultural and Economic satisfaction level using Z-test were significant. Correlation and Principal Component Analysis (PCA) were employed in analyzing the data from the Socio-cultural and Economic factors affecting Pandam Game Reserve.*
Result: *From the PCA analysis, it was discovered that the sustainable development of ecotourism in Pandam game reserve is affected by the increases literacy level amongst locals, adjustments to custom and values of the people due to associated income and generation of income in the Game Reserve.*
Conclusion: *Capacity building for community members, ecotourism business owners and government resource managers can help to mitigate against these factors.*
Keyword: *Ecotourism, Socio-Cultural, Economic, Challenges, Game Reserve.*

Date of Submission: 21-05-2020 Date of Acceptance: 08-06-2020

I. Introduction

Ecotourism is one of the fastest growing segments of the sustainable tourism industry[7], which focuses on wildlife conservation, environmental protection, poverty alleviation and economic development. Ceballos (1983) coined the term, "Ecotourism" to describe the nature-based travel to relatively undisturbed area with an emphasis on education[7]. There is no such universally accepted definition of ecotourism. It is nature-based tourism as it helps in sustainable rural development and makes biodiversity conservation economically viable for local communities[6]. Ecotourism is one of the preferred tools for conservation and community development in many rural areas. Its effectiveness depends on its potential to provide local economic benefits by maintaining ecological resource integrity through low-impact and non-consumptive use of local resources[20].

Ecotourism is another form of tourism which embraces tourism in the biophysical environment in natural areas. It incorporates ecologically sustainable activities, conservation supporting measures and involvement of local communities[10]. It looks at nature and focuses on capitalist development, community development, poverty alleviation, wildlife conservation and environmental protection[11]. Traditional economic activiies like agriculture, livestock and hunting are not compatible with protected territories so change in traditional economic activities can be done by shifting cultural attitudes towards ecotourism enhancement[4]. Ecotourism provide jobs for the local people and a market for local products. It encourages cultural sensitivity in guest–host relations and acts as a catalyst for ecologically sustainable development. It enhances wildlife conservation and equitable sharing of benefits from ecotourism[19]. It helps in the conservation of natural, cultural

and built resources and maintains the quality of life of local area[17]. With an objective of environmental conservation, it creates sustainable economic development and balances the conflicting goals of economic development and biodiversity conservation[3,5,4]. Considering the sustainable principles and practices, it fulfills goals of biodiversity conservation, poverty reduction and business viability[15]. In ecotourism, local people realize the importance of conservation and protect the environment in active manner. They maintain national standards of atmospheric quality, sound quality, drinking water, sewage[9].

Locals need to be educated about sustainability to preserve the product that actually offers them a living[12]. In the local enterprise model, a community takes ownership of its surrounding ecosystem by formal community business incorporation. This is built upon the local community's deep knowledge of wildlife, including endangered species, their traditional culture that respects nature, and economic motivations to balance livelihoods derived from natural resources[18]. Sustainable ecotourism, in the long run, has to be ecologically durable, economically executable, but also socially and ethically fair in relation to the local population[8]. Opportunities for ecotourism exist in many different locations worldwide. Despite the popularity of ecotourism, there are several challenges of ecotourism as well as management.

Ecotourism can bring negative social, cultural and economic impacts, in addition to its potential environmental drawbacks. The terms nature, low impact, bio and green tourism are often interchanged with ecotourism and these do not usually meet the principles defined by organizations like the Nature Conservancy or the International Ecotourism Society. Increased tourism to sensitive areas without proper planning and management can actually harm the ecosystem and its species because the infrastructure needed to sustain-tourism such as roads can contribute to environmental degradation. Ecotourism also have a negative impact on local communities because the arrival of foreign visitors and their wealth can shift political and economic conditions and sometimes make the area dependent on tourism as opposed to the domestic economic-practices. Regardless of these challenges ecotourism and tourism in general are increasing in popularity all over the globe and tourism plays a large role in many economies worldwide.

Nigeria is endowed with huge natural resources which provide sustenance and foundation for her social and economic development. Unfortunately, these resources especially natural resources are misused due to ignorance, poverty, overpopulation and greed[14]. This has led to series of environmental degradation in the form of soil, air and water pollution, increased deforestation, decreasing upstream of water flow and extinctions of plants, animals and other types of species.

Therefore, this study is an attempt to explore the critical importance of ecotourism assessment as a viable means of advancing ecotourism industry in Nigeria.

II. Materials and Methods

- **The Study Area**

Pandam Wildlife Park is located North of Benue River[13] and South of Plateau State[1] along Lafia–Shendam Road in Qua'anpan Local Government Area of Plate State[16]. It lies between latitudes $8^{0}35^{1}$N and $8^{0}55^{1}$N, and longitudes $8^{0}00^{1}$E and $8^{0}45^{1}$E. The park covers an area of 224 square kilometers. Pandam Park is located at a height of 175 - 310 meters above sea level and it is bounded by a river to the North and by Pandam to the west and bounded by Namu, Kayarda and Aningo settlements to the south and east.

Pandam Game Reserve and Wildlife Park in Plateau State is home to some rare animals and exotic birds. A natural animal habitat that has drawn tourists and researchers both locally and from foreign countries, but now suffers from years of neglect. The over three hours' journey from Jos, the Plateau State capital, to Pandam Game Reserve at the Southern Senatorial District of the State, held more excitement than seeing the sorry State of one of Plateau's abandoned natural tourist destinations. Obviously suffering from years of neglect, a part of the Game Reserve has been converted into a park called the Pandam Wildlife Park and is considered to be Plateau's largest forest area containing animals and protects 224sq km of unspoiled savanna wetlands and forest.

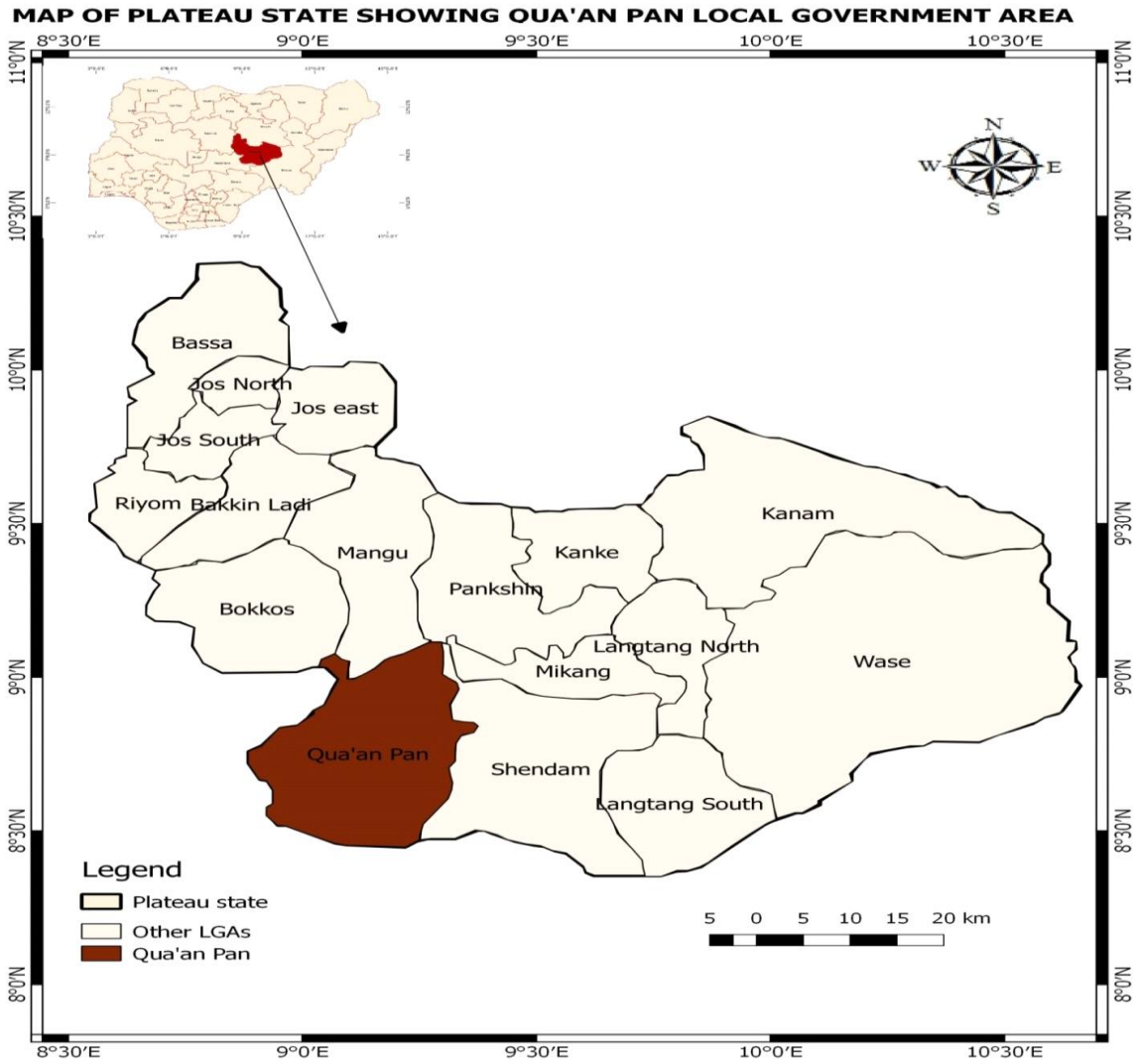

Fig. 1: Plateau State showing Qua'an Pan LGA
Source: Plateau State Ministry of Land and Survey, 2010.

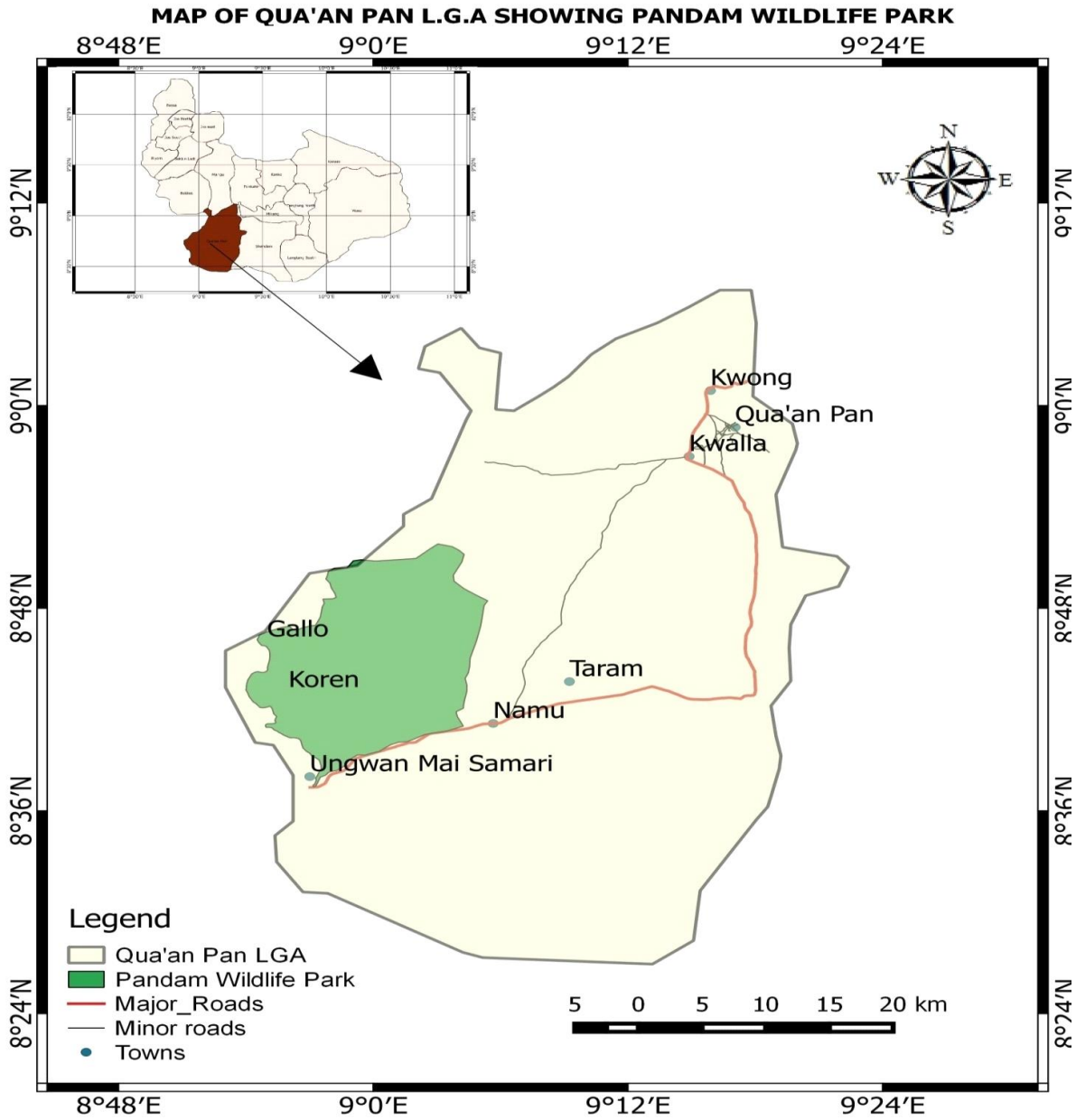

Fig. 2: Qua'an Pan L.G.A Showing Pandam Game Reserve
Source: Plateau State Ministry of Land and Survey, 2010.

- **Method of Data Collection**

The data were obtained through key informant interviews, informal discussions, questionnaire survey and field observation. Open-ended and close-ended questionnaires were administered to Plateau State Tourism Corporation, Tourism professionals and Stakeholders and host communities. For reliability and proficiency in this study, a structured questionnaire of about 400 was administered to the host communities, professionals in ecotourism and stakeholders. This provided insight to the challenges of ecotourism industry.

- **Method of Data Analysis**

At the end of the data collection process, all the codes and their corresponding data were entered into the collation sheet according to the various locations within the study area. The qualitative data from the Likert scale structured questionnaire response were coded using values such as; 5, 4, 3, 2, and 1 for strongly agreed, agreed, disagreed, and strongly disagreed, undecided respectively. These were further converted to quantitative data using weighted mean. This conversion enabled further analysis of the generated data. The method used to

analyse the data obtained from the field are descriptive analytical statistics and inferential statistics. Descriptive statistics such as simple percentages, standard deviations and mean were used.

The Principal Component Analysis (PCA) was also employed in the study. PCA which is a data extraction technique was used to reduce the number of variables while retaining as much of the original variance as possible. One Sample T-test which is a parametric test was used to test difference in means of two independent samples. It was used to determine whether two means (x1 and x2) were significantly different at a 0.05 level of significance. Hence, it was used to test the hypothesis of the study. Weighted Mean was used for item by item analysis. Qualitative responses were converted to quantitative data using coding for the five point likert question items. Weight (code) was attached to each response such as 5, 4, 3, 2 and 1. Weighted mean was therefore used to determine the averages of the responses by the respondents.

- **Sampling Frame and Techniques**

A sample is the finite part of a statistical population whose properties are studied to gain knowledge about the whole. Hence, there are different types of sampling methods (random, judgmental, cluster or multi-stage, systematic, quota and the random walk sampling). Simple random sampling technique was used to sample population within the study area. The simple random technique permits (gives) each member of the population an equal chance of being selected. Data was collected by use of a structured questionnaire for Government establishments, local communities and stakeholders within the study area.

The sample size for this research was statistically determined using "Taro Yamane" (1967) Formula:

$$n = \frac{N}{I + N(e)^{*}2}$$

Where:

n is the sample size:

N is the finite population,

E is the level of significance (limit of tolerable error), that is 0.05(5%) and

L is unity (a constant).

$n = 295914/1 + 295914 \times (0.05)^2$

$n = 295914/1 + 295914 \times (0.0025)$

Therefore, $n = 295914/739 = 400$ (target population)

Using the sample frame formula with 2017 projected population of 295,914, approximately 400 respondents were be sampled at 0.05 level of significance.

A stratified sample technique was used, a random sample from each stratum is taken in a number supposedly proportional to the stratum's size when compared to the population. These subsets of data were then pooled to form a random sample. This technique captures key population characteristics and was most suitable for this study because it provided information about the population attributes. Stratified random sampling is a method of sampling that involves the division of a population into smaller groups known as strata.

Therefore, the strata were randomly chosen. Although there were no population figures for each stratum from population commission, published materials and the internet, the researcher made calculations based on the number of strata within the study area.

The number of questionnaire distributed in each stratum was statistically determined using the projected population for 2017 from the 2006 population census figures. This gave rise to a sample size of 400 respondents. Simple random sampling was used to select the respondents so that all members of the population had an equal chance of being selected.

III. Results and Discussion

The field data were collated and presented in frequency tables. A total of four hundred (400) copies of the questionnaire were distributed and retrieved for the analysis.

Table 1: Distribution of Gender of the Respondents

Status	Frequency	Percent
Male	250	62.5%
Female	150	37.5%
Total	**400**	**100.0**

Source: Field Survey, 2018

Table 1 shows the distribution of gender of the respondents. From the result, it was discovered that 250 representing 62.5 percent of the respondents were males while 150 which represents 37.5 percent are females. This indicated that there were more males respondents than female respondents in the study.

Table 2: Distribution of Educational Qualification of the Respondents

Educational Qualification	Frequency	Percent
Certificate/Ordinary Diploma	80	20.0%
First Degree/HND	190	47.5%
Masters/Ph.D	100	25.0%
Others	30	7.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

The results in Table 2 shows that 80 (20.0%) of the respondents were Certificate/ Ordinary Diploma holders, 190 (47.5%) were First Degree/HND holders, 100 (25.0%) were Masters/Ph.D. holders, while 30 (7.5%) had other qualifications not specified in this study.

Table 3: Distribution of monthly income of the Respondents

Monthly income	Frequency	Percent
Less than ₦50,000	110	27.5%
₦51,000 – ₦150,000	150	37.5%
₦151,000 – ₦250,000	110	27.5%
₦251,000 and above	30	7.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

Table 3 shows the distribution of the monthly income of respondents. The result shows that a total of 110 (27.5%) of the respondents had monthly income of less than ₦50,000 and₦151,000 – ₦250,000 respectively. About 150 (37.5%) earned ₦51,000 – ₦150,000 monthly, while only 30 (7.5%) of the total respondents earn ₦251,000 and above per month. This indicates that the respondents majorly are low income earners.

Table 4: Respondents purpose for visiting Pandam Game Reserve

Purposes of visiting	Frequency	Percent
Tourist	240	60.0%
Resident	90	22.5%
Work	70	17.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

From the result in Table 4, it is shown that most of the respondents visit Pandam game reserve for tourism than for living and work purposes. Particularly, the result shows that a total of 240 respondents representing 60.0% of the respondents visit Pandam game reserve for tourism; 90 (22.5%) visit the reserve for living while 70 (17.5%) visit the reserve for work.

Table 5: Respondents opinion on the major economic activity in Pandam game reserve locality.

Economic Activity	Frequency	Percent
Farming	160	40.0%
Fishing	70	17.5%
Trading	140	35.0%
Tourism	30	7.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

Table 5 shows that economic activities at Pandam game reserve include farming, fishing, trading, and tourism. From the result, it is shown that the major economic activity in the area is farming (40.0%) followed by trading (35.0%), fishing (17.5%) and lastly tourism (7.5%).

Table 6: This Table Shows the Respondents description of Pandam community

Description	Frequency	Percent
Religious	110	27.5%
Secular	50	12.5%
Cultural	230	57.5%
Others	20	5.0%
Total	**400**	**100.0%**

Source: Field Survey, 2018

Result in Table 6 indicates that the respondents consider Pandam community as a cultural community rather than religious or secular community.

Table 7: Respondents Perception of safety in Pandam community

Level of safety	Frequency	Percent
Extremely safe	30	7.5%
Very safe	190	47.5%
Neutral	120	30.0%
Very unsafe	60	15.0%
Extremely unsafe	0	0.0%
Total	**400**	**100.0%**

Source: Field Survey, 2018

Table 7 presents the respondents perception of safety in Pandam. From the result, it was shown that Pandam is safe and people in the area feel safe.

Table 8: Respondents distance to Pandam

Distance	Frequency	Percent
Less than 15km	80	20.0%
16-50km	30	7.5%
51-100km	120	30.0%
Above 100km	170	42.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

Table 8 presents the respondents distance from Pandam. The result shows that the people travel far (about 51 km and above) to Pandam. Particularly, the result shows that 80 (20.0%) travel less than 15km to Pandam, 30 (7.5%) travel 16-50km to Pandam, 120 (30.0%) travel to Pandam, while 170 (42.5%) travel above 100km to Pandam.

Table 9: Respondents frequency of visit to Pandam game reserve

Frequency of visit	Frequency	Percent
Weekly	50	12.5%
Monthly	30	7.5%
Every three months	0	0.0%
Every 6 months	20	5.0%
Annually	130	32.5%
Seasonally	170	42.5%
Total	**400**	**100.0%**

Source: Field Survey, 2018

From the results in Table 9, it is shown that visits to Pandam game reserve is often seasonally and annually than weekly and monthly. Specifically, about 42.5 percent of the respondents visit the Pandam game reserve seasonally; 32.5 percent visits the reserve annually; while about 12.5 percent and 7.5 percent of the respondents visit the reserve weekly and monthly, respectively.

The likert questionnaire data gathered from the field were analyzed using the weighted mean and standard deviation as appropriate. The hypothesis was tested using the Z-test. Decision was taken at 5 percent level of significance.

More so, before testing the hypothesis, the numerical information obtained from the field were subjected to factor analysis to extract the major factors affecting the ecotourism development in Paandam Game Reserve.

Principal Component Analysis (PCA) was used to test the socio-cultural and economic factors impacting on ecotourism development. According to Anyadike[2], PCA assumes that all variations (i.e. explanation) in a given population are contained within the variables the researcher uses to define the population. The largest amount of variation to the data set is called "Eigen vector" and is regarded as the first principal component. Furthermore, a "Varimax rotation" is employed for interpretation of the component and eigen value greater than 1.00 are usually extracted and considered for interpretation. Having generated the necessary information needed on the socio-cultural and economic factor impacting on ecotourism development in Pandam game reserve, effort was made to examine the nature of the relationships among the various socio-cultural and economic parameters identified and the basic underlying configuration. Table 4.10 presents the coding and labeling of the 9 socio-cultural and economic parameters affecting Ecotourism in Pandam Game Reserve.

Table 10: Coding and Labeling of the 9 socio – cultural and Economic Parameters affecting Ecotourism in Pandam Game Reserve

S/N	Variable Description	Variables Labels	Variables Codes
1	The Pandam game reserve generates expected revenue	REV	X1
2	The Pandam festival showcases the importance of the Pandam Game Reserve	FES	X2
3	Pandam Game reserve is responsible for distortion of local customs	CUS	X3
4	Pandam Game reserve is responsible for the loss of traditional industry in the Local Area.	IND	X4
5	Tourism activities in Pandam promotes peace and unity among local residents and visitors	PEA	X5
6	Tourism activities in Pandam helps to keep the environment clean	CLE	X6
7	Tourism activities in Pandam increases literacy level amongst locals	LIT	X7
8	Ecotourism raises awareness about political and social issues.	AWA	X8
9	There is adequate income from the ecotourism services to natives	ECO	X9

The field data obtained regarding the socio-cultural and economic factors affecting ecotourism in the Pandam game reserve have been presented. These were properly coded to ensure easy handling of data for PCA analysis. This is shown in Table 10. The result of the correlation analysis is shown in Table 11. The variables labeling and codes were made for convenient.

Table 11: Field Data of the 9 socio – cultural and Economic Parameters affecting Ecotourism in Pandam Game Reserve

Districts within the Games Reserve	X1	X2	X3	X4	X5	X6	X7	X8	X9
Zone 1	144	0	80	35	16	18	12	0	13
Zone 2	60	22	160	235	24	90	14	16	167
Zone 3	66	23	100	54	20	112	70	15	118
Zone 4	110	237	40	20	194	135	238	299	90
Zone 5	20	118	20	56	146	45	66	70	12

This was followed by a correlation analysis of the variables which yielded a 14 x 14 symmetrical matrix with unity along the diagonal.

Table 12: Correlation Matrix of the Socio – cultural and Economic Parameters affecting Ecotourism in Pandam Game Reserve

	X1	X2	X3	X4	X5	X6	X7	X8	X9
X1	1.000								
X2	-.039	1.000							
X3	.050	-.662	1.000						
X4	-.355	-.410	.816	1.000					
X5	-.166	.970	-.772	-.429	1.000				
X6	-.094	.519	.127	.062	.338	1.000			
X7	.152	.932	-.541	-.494	.828	.699	1.000		
X8	.176	.965	-.531	-.398	.877	.608	.972	1.000	
X9	-.168	-.107	.771	.697	-.274	.707	.039	.006	1.000

Table 12 reveals a high as well as low association between some variables which indicates the presence of serial autocorrelation as many of the factors showed strong and weak correlation with each other. For example, X2 is strongly correlated with X_5, X_7 andX_8.Furthermore, X_5 is very highly correlated with $X_7$and X_8 while X_1 is weakly and negatively with X_2, X_4, X_5, X_6 and X_9. With these very serious autocorrelations that characterize the data, another statistic was employed to properly explain the data. The data set was subjected to Principal Component Analysis (PCA). This is a powerful multivariate statistical analytical technique which is often employed in geographical studies to simplify the relationship between large bodies of variables. The PCA analysis was able to collapse the 9 variables into three significant and orthogonal components that explained the variations in the observed data (Table 13).

Table 13: Varimax Rotated Component Matrix of the Variables for Socio-cultural and Economic factors

Variable code	Variable Label	Components I	II	III
X1	REV	-.004	-.092	.976
X2	FES	.966	-.186	-.085
X3	CUS	-.530	.836	.108
X4	IND	-.382	.737	-.379
X5	PEA	.883	-.355	-.239
X6	CLE	.711	.634	.028
X7	LIT	.983	-.038	.169
X8	AWA	.973	-.056	.145
X9	ECO	.085	.992	-.065
Eigen Values		**4.566**	**2.802**	**1.226**
% variance		**50.728**	**31.131**	**13.625**
Cumulative percentage variation		**50.728**	**81.859**	**95.485**

The varimax rotation was employed in order to maximize the loadings on each component so as to achieve as many high and as many low loadings as possible while maintaining the orthogonality (i.e. the uncorrelation) of the original components. From Table 13, it is clear that the three components explained 95.48 percent of the variance while all the three components had eigen values greater than 1.00. The variables with the highest loadings on each of the components were picked and presented in Tables 4.14 – 4.16 with their corresponding variables.

Table 14: Variables with high loadings on Component I

VARIABLES	VARIABLE NAME	LOADINGS	INDEX
X2	The Pandam festival showcases the importance of the Pandam Game Reserve	0.966	*Source of socialization and peace building*
X5	Tourism activities in Pandam promotes peace and unity among local residents and visitors	0.883	
X7	Tourism activities in Pandam increases literacy level amongst locals	0.983	
X8	Ecotourism raises awareness about political and social issues.	0.973	

Table 15: Variables with high loadings on Component II

VARIABLES	VARIABLE NAME	LOADINGS	INDEX
X3	Pandam Game reserve is responsible for distortion of local customs	0.836	*Adjustment to custom and values due to associated revenue*
X9	There is adequate income from the ecotourism services to natives	0.992	

Table 16: Variables with high loadings on Component III

VARIABLES	VARIABLE NAME	LOADINGS	INDEX
X1	The Pandam game reserve generates expected revenue	0.926	*Generation of income in the Game Reserve.*

From the extracted tables for the components, it is clearly depicted that components 1, 2 and 3 have eigen values of 4.566, 2.802 and 1.226 respectively. Thus, component 1 explains 50.73 percent of the variations in the socio-cultural and economic factors affecting ecotourism; component 2 explains 31.13 percent and component 3 provides explanation to 13.62 percent of the variation. In the Principal Component Analysis, it was clearly established that the promotion of the Pandam game reserve by the pandam festival, promote peace and unity among the locals due to tourism activities attracted by the pandam reserve, increase in literacy level

and creation of awareness on pressing political and social issues by ecotourism loaded highly on component 1. In component 2, distortion of local customs and income generation loaded highly while in component 3, Generation of income in the Game Reserve loaded highly. Consequently, it is clear based on the foregoing that the sustainable development of ecotourism in Pandam game reserve is affected by the following:

- Increases literacy level amongst locals
- Adjustments to custom and values of the people due to associated income
- Generation of income in the Game Reserve

IV. Conclusion/Recommendation

Increasing human activity results in negative effects for the natural areas, threatening the existence of plants, animals, and other types of species. It is generally admitted that the extinctions of plant species are occurring at an unprecedented rate in recent years. Thus, conservation of biological diversity is an issue gaining greater importance in today's world. Various tendencies also occur in the understanding of the impact of tourism upon changing living conditions. More tranquil, natural and original spaces are preferred to ordinary tourism centers. Likewise, individuals have begun to prefer activities, which they can particularly perform in natural and cultural areas and with which they can learn original cultural values and be within the nature, instead of sea-sand-sun tourism. At this point, "Ecotourism" activities have particularly recently become sectors which can create great changes both in socio-cultural and economic aspects. Main purpose is not only ensuring the socio-economic development but also the protection of natural and cultural landscape values to ensure awareness of nature conservation on the other hand. Ecotourism should be seen in direct relation to nature conservation (protected areas), with preservation of the authentic ecosystem, and involving local communities in all stages of the process.

Ecotourism activities which are not performed according to the purpose, the principles and the characteristics cause the disturbance economic and socio-cultural fields due to over-intensification that occurred in sensitive ecosystems such as natural and cultural areas. Therefore, in order to provide sustainability in ecotourism, it is necessary to know the social and economic effects of ecotourism activities and to consider these effects during the planning.

Ecotourism development must promote educational development and create awareness in people of the need to jointly maintain the ecosystem of the area. There is a need to implement development plans and manage natural resources in a way that ensures ecological and environmental integrity. Successful interpretive components of ecotourism products will foster appreciation and support for conservation efforts, local communities and culture.

Nigeria is never left out of the trail. The country has all that is required to be one of the best ecotourism destinations in the world. The country has natural, man-made and cultural attractions which are still underutilized. Security and safety are very important when it comes to ecotourism operation and implementation in a country. Proper safety and security mechanism should be put in place, the country's security is too loose and serious action needs to be taken to correct this. However, the government should endeavor to put in place proper safety and security mechanism in the country to curtail all forms of insecurity such as; kidnapping, killings, armed robbery, and bombing including crises in both internal and external environment. The safety of the people should be paramount in the mind of the government. When this is done it will be a great contributor to the success of development of ecotourism industry in the country.

Also, the government should inject funds into the ecotourism industry for upgrading of facilities needed in the industry. Facilities like good roads, bridges, electricity, internet facilities, and hospitality spots should be developed and upgraded to world class. Apart from these, the government should encourage private and foreign investors into the industry by making available different forms of supports to boost their enthusiasm. There are so many business opportunities in Nigeria's ecotourism industry which are yet to be exploited. Rail and water recreation transportation services are still very poor and there is large business potential in this area too.

Furthermore, the government should pay serious attentions to the various ecotourism sectors in the State. Every sector of the tourism industry should be monitored by government designated bodies to ensure accountability in the country's tourism sector. Host communities should be fully involved on ecotourism matters, in areas such as employment opportunities to hunters, and farmers which should be a priority, as these will reduce conflict as well as the degradation of the ecotourism sites. There should be an out-reached program to schools and worship centers on the significance of environmental protection and conservation. Staff salaries and other benefits should be paid as at when due to encouraged workers in Pandam game reserve. More Rangers (Park Guides) should be employed and equipped with modern and efficient equipment in other to curb the problems of poaching, hunting and deforestation.

Capacity building needs to be conducted regularly for community members, ecotourism business owners and government resource managers. Community members should have access to training in handicraft

creation, cooking, customer service and language skill. Pandam Game Reserve has a lot to offer ecotourists in the form of cultural artifacts, wildlife viewing, artisanal fishing, gorgeous views and friendly people. Without good marketing of Pandam Game Reserve the game reserve will continue to attract minimal volume of tourists. Marketing should be done through diverse marketing streams, many of which can be done for low cost or free. For instance Internet based advertisements such as social media campaigns.

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