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DEVELOPING A PUBLIC-PRIVATE PARTNERSHIPS MODEL FOR SUSTAINABLE MANAGEMENT OF ECOTOURISM SITES IN NIGERIA

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Abstract

Public-Private Partnerships (PPPs) is an agreement between a public organizations and Organized Private Sectors (OPS). Four ecotourism sites in Nigeria were used for this study. Stratified sample technique was used to select 368 respondents. Data collected were analyzed using 5-point Likert-type scale; the contingent valuation method was applied to find the tourists' total willingness to pay the new gate fees and for other recreational facilities and services in the ecotourism sites resulting from the proposed PPPs management model. Maximum likelihood estimation of the Logit regression coefficient was applied to find the factors influencing the tourists' willingness to pay. Results showed that respondents strongly disagreed with the present management system of the ecotourism sites with a mean score of 1.38. Result of the tourists' willingness to pay increased considerably, ranging from 40.59% to 133.83% above the current prices. Result of the logit regression model revealed that bid amount, age^{2,} and estimated annual income, among others, were the variables that influence the tourists' willingness to pay. Anew sustainable and efficient PPPs management model was proposed for the ecotourism sites that can be adopted in Nigeria and Sub-Sahara Africa.

Key words**:** *ecotourism sites, sustainable, public-private partnership, management model, Nigeria*

INTRODUCTION

Impactful economic transformation depends on a well-defined and functional market of natural resources management within a country [11]. Therefore, there is a need for natural resource management development that will ensure the optimum performance of the interactions between the market forces. This is one of the reasons for the inclusive governance of natural resources as a driver of structural transformation [3]. The ultimate aim of economic positive change in the management of natural resources of any nation is to ensure transparency, accountability, and well-defined value chains that will create economic opportunities, which will eventually lead to the national economic development of such a nation. Therefore, to achieve this major objective, there is a need for a paradigm shift in the management of natural resources of such a nation, especially the ecotourism sites. Hence, the need for the private sector as a major player in the market forces to be adequately involved in ecotourism sites management.

Again, improving the level of private sector participation in ecotourism site management to take economic responsibilities would mean establishing a framework for proper economic valuation of the activities of the ecotourism site management [6]. So, using Public-Private Partnerships (PPPs) model between the Government (Public) and the Organized Private Sector (OPS) will create the expected inclusive system of ecotourism site management that will enhance the institutional capacity development of managing Nigeria's natural resources. Partnership which is defined according to [31] as a relationship that ensure power, work, support and information are distributed among the parties involved to enhance achievement of common objectives and mutual benefits. One of the major reason for establishing partnerships is because of its importance as a means of promoting long-term startegic planning.

Many factors are responsible for the formation of partnership. According to [28], various factors that may account for formation of partnership include:

i)the intent to reduce risk and cost of penetrating new market by pooling financial and human resource together,

ii)ensuring expansion of operational performance such as affliation of small organizations with the large companies at the international markets,

iii)possessing competence and technical know-how,

iv) ensuring effecient and effective channel of distributions,

v) the formation of new products or services, and

vi) reaching higher levels of productivity and economies of scale among others.

Four ecotourism sites in Nigeria, namely Cross river national park in Cross river state, Kainji lake national park in Niger and Kwara state, Old Oyo national park in Oyo state and Idanre Hill in Ondo state, Nigeria, were used as a case study of natural resources (Ecotourism sites) that can be managed using the Public-Private Partnerships (PPPs). The Federal and state government were considered as the public sector and the financial institutions/facilities manager as the Organized Private Sector (OPS). The paper presents a new conceptual model for the achievement of Public-Private Partnerships (PPPs) for the positive economic change of Nigeria ecotourism sites management and also considered the willingness of the financial institutions in Nigeria to partner with the Federal and state government to ensure that Nigeria natural resources (Ecotourism sites) are managed sustainably to ensure domestic resource mobilization that will boost economic development in Nigeria.

Again, the paper determined the amount the tourists would pay for the new gate fees and other recreational services provided by the ecotourism sites because of the PPPs management model proposed. From the paper, factors influencing the tourists' willingness to pay the new gate fees and other recreational services were equally determined. Therefore, the findings of the paper will assist the government at all levels on how to harness the new model to sustainably manage the ecotourism sites in the Country and Sub-Sahara Africa generally.

Public-Private Partnerships Concept

Public-Private Partnerships (PPPs) involve collaboration between governments and businesses [30]. Furthermore, PPP can be descibed as a lasting legal association between two or more partners of which at least one is a public organization and the other is a private organization. They both bring resources (e.g., money, property, authority, knowledge) to the partnership, and in which obligations and liabilities (e.g., financial, economic, social) are shared to deliver public infrastructure-based products and services [13]. PPPs are becoming a common phenomenon in the developed and developing countries. [5]. PPPs are expected to achieve effectiveness, ensure improved product quality, better deal and accountability on the part of the government [17], effeciecy in product and service delivery and reduction of cost in project delivery [10]; [19].

Existence of PPPs in infrastructure arises in diverse shapes and sizes [17]. Among the various definitions stated above, scholars were able to distinguish between concession and alliance models [16]; [7]. In the concessional model, there is formal and orderly client–contractor relationship. The private contractor is majorly concerned with the execution; he prepares the blueprint, provides the needed fund, and construct a public sector project. Duties are shared among the partners as stated in the contract [30]. Alliance models are majorly concern with the horizontal relationships between public and private partners. While concessional models majorly considered how to share risks among the partners [31]. The partners are after the same goal, duties, and responsibilities in the project execution. Projects are jointly done by the project partners. In most alliance models, new organization is established where the partners share the customers such as joint venture [26]. Most forms of alliances model have a legal obligation between public and

private partners, where the customers remain with the public partner [30].

Due to limited funding and increasing constraints, many government agencies are looking into different models of Public-Private Partnership (P_3) to maintain updated infrastructures and its application in the management of natural resources such as ecotourism sites is becoming inevitable in most developing countries. These management models can be beneficial, but their costs must be closely controlled to make them cost-effective solutions. Public-private partnerships are considered by many to be the future of management model for the natural resources because they offer solutions to problems of financing, maintenance, and sustainability without sacrificing government finances. There are different public-private partnerships models to fit various operation, ownership, and revenue-generating scenario of natural resources such as ecotourism sites [14].

MATERIALS AND METHODS

Study Area

Cross River National Park

The cross-river national park was founded by the Federal Government of Nigeria in 1991. The park which is surrounded by tropical rainforest in the northern and central parts and mangrove swamps on the coastal fringes. The Okwangwo Division of the Cross River national park is in the Cross-river state, south-south Nigeria, 5°04′–6°25′N and 8°30′–9°30′E and covers an area of 1,000 km². It is ecologically contiguous with the Takamanda forest reserve in the Republic of Cameroon. Okwangwo division is in a region where, for climatic reasons, rainforest persisted throughout the Ice age of the Pleistocene epoch. This explains the area's richness of biodiversity and implies that the Okwangwo Division (OD) of the Cross River national park will contribute disproportionately to the preservation of the world's species [22]. The OD contains the largest intact closed-canopy forest in Nigeria, representing 40% of Nigeria's remaining forest. The primate fauna of the park is diverse, with confirmed existence of at least 2 wildlife sub-species of gorillas [8]. According to [22] that the endangered Cross river gorilla (Gorilla gorilla diehli) resides in this region. Furthermore, the OD is significant for regional watershed protection, prevention of 'savannization', protection of biodiversity and the potential for gorilla-based tourism [8]. The OD is surrounded by 66 villages with a total population of approximately 36,000 people [9].

Idanre Hill

Idanre Hill is in Ondo State, Nigeria. The hills, which can be reached using the six hundred and sixty-seven steps, remain one of the admiration of nature with an awesome view from the top of the hills. The ecotourism destination is estimated to be over 800 years; it is in the ancient town of Idanre, Ondo State, Southwest Nigeria (Ondo State Ministry of Culture and Tourism, 2018). It is fifteen kilometers (15km) Southwest of Akure, the State capital. To complete the ecotourism attraction of the hill, a resort was built around the hill known as Idanre hill resort. The resort has a lot of other attractions. They have lodges available for people who would like to stay overnight. The lodges are wooden chalets that come in different sizes. They also have swimming pools, an outdoor entertainment area, a playground, indoor sport facilities, and hall (Ondo State Ministry of Information [23]; [24].

K**ainji Lake National Park (KLNP)**

Kainji lake national park was founded in 1979 as a result of combination of the two former game reserves – Borgu game reserve (located in Niger and Kwara state) and Zugurma game reserve (located in Niger state), the two components had been gazetted in 1962 and 1971 individually as game reserves by the then Northern Regional Government (NRG) [1]. KLNP was the first national park and the second largest of all the eight national parks in Nigeria. It is located between latitude 9°40'N and 10°30'N and longitude 3°30'E and 5°50'E in Niger and Kwara states. The total landmass of the lake is 5,370.82km^2 and It has a savanna climate. Around Oli river, the night temperature can be as low as 70C^0. Oli, Menai and Doro rivers (Borgu

sector) and Manyara and Nuwa Zurugi Rivers (Zurguma sector) are responsible for the maintenance of the drainage system in the two sectors of Kainji lake national park. The value of the the mean annual rainfall varies from 1,100mm in the eastern part to 1,150mm in the western part [26]. Some of the common animals found in Kainji lake national park are the African elephant (*Loxodonta africana)*, buffalo (*Syncerus caffer*), roan antelope (*Hippotragus equinus*), Senegal kob *(Adenota kob*), lion (*Panthera leo*), leopard (*Panthera pardus*), Nile crocodile (*Crocodilus niloticus*), python (*Python sebae*) and monitor lizards (*Veranus niloticus*) among others [20].

Old Oyo National Park

The old Oyo national park is in Oyo state, Nigeria. Oyo state is one of the 36 states in the Southwest Nigeria. The total land area of the state is 28,454 km^2. The state shared boundary in the East with Osun state, in the South with Ogun State, in the North with Kwara state, and in the west partly with Ogun state and the Republic of Benin. The park covers the Northern part of the state, between latitude 8°15, and 9°0'N and longitude 3°35 and 4°42'E. The park is rich in biodiversity - flora, and fauna that include buffaloes, bushbuck, and a wide variety of birds [27]. Facilities available include chalets, tourist camps, standard restaurants, air-conditioned buses, and facilities for boat cruising and sport fishing. These unique ecosystems and historical relics were changed to Game Reserves in 1952 and ultimately reformed to the current position of National Parks [21]. The outstanding remarkable nature of the Old Oyo National Park is a captivating pocket of archaeological, cultural, and historical sites dotted within and around the Park. Old Oyo National Park is the most distinctive of all the National Parks in the country because it is the only one with the double likelihood of both archaeological as well as cultural/historical Park [20].

Sampling Techniques and Size

A stratified sampling technique was used to select respondents for the study in the host of the ecotourism sites, and other stakeholders were equally interviewed. In each ecotourism site, ten elementary school teachers, ten high school teachers, five clergymen, five youth leaders in the community, ten artisans, ten market women, two community leaders, and twenty tourists were interviewed for this study. Again, ten staff of each ecotourism site who were directly involved in the management of the ecotourism site were interviewed. Ten staff of financial institutions operating around each ecotourism site were interviewed for this study. As shown in Table 1, the total number of respondents who were interviewed for the study were 368 respondents.

Table 1. Distribution of Respondents According to Strata per Ecotourism Site

S/N	Respondents	Number of respondents
1	Primary school teachers	10
2	Secondary school teachers	10
3	Clergymen	5
4	Youth leaders	5
5	Artisans	10
6	Market women	10
7	Community leaders	2
8	Tourists	20
9	Staff of each ecotourism site	10
10	Staff of financial institutions	10
Total		**92 x four ecotourism sites = 368 respondents**

Source: Own research and processing.

Nature and sources of data

Primary data were used for this study. Primary data were obtained by a well-structured questionnaire administered on the respondents to determine the appropriate new inclusive systems of management that will enhance Public-Private Partnerships (PPPs) of the ecotourism sites. Focus Group Discussion (FGD), Key Informant Interview (KII), and in-depth interview were also used to validate the information collected The primary school teachers, secondary school teachers, clergymen, youth leaders, artisans, market women, community leaders, the staff of each ecotourism site and staff of financial institutions around each ecotourism site were

used for the FGD, KII and in-depth interview. The willingness of the financial institutions to partner with the government currently managing these ecotourism sites was equally determined. This is to enhance the development of a PPPs management model that will enhance the profitability and sustainability of ecotourism sites. The information collected from the financial institutions includes their willingness to partner with the Government on the provision of modern facilities befitting an international ecotourism site under the best practices. Information on how to manage the ecotourism sites under the market forces interplay that will ensure profitability, sustainability, and create enabling environment for economic development through value chain effects on both micro and macro-economic indices were collected. Again, the socio-economic profile of the tourists, such as age, household size, education, gender, and occupation, willingness to pay criteria, and estimated annual income, were collected.

Data analysis

Data collected were analyzed using descriptive statistics; the respondents' perception of the new inclusive and sustainable system of management of the ecotourism sites was done using a 5-point Likert-type scale. Respondents were asked to respond to perception statements relating to the new PPPs management model of the ecotourism sites using Strongly Agree (SA), Agree (A) Undecided (U), Disagree (D), and Strongly Disagree (SD). The responses were scored as 5, 4, 3, 2 and 1 for SA, A, U, D, and SD, respectively. The mean from each statement was obtained and used to classify the responses on each statement into SA (>4.50), A (3.50-4.49), U (2.50-3.49), D (1.50-2.49) and SD (<1.50). The respondents were asked to respond to statements relating to the willingness of their financial institutions to partner with the Government in the provision of recent facilities befitting an international ecotourism site under the best practices using frequency distribution mean and simple proportions.

Contingent Valuation Method (CVM) was used to determine the tourists' total Willingness to Pay (WTP) for the new gate fees and other recreational services in the ecotourism sites resulting from the proposed PPPs management model. The maximum likelihood estimation of the Logit regression coefficient was applied to find the mean willingness to pay for the gate fees and other recreational services. The Logit model was equally applied to find the factors influencing the tourists' WTP. The Logit regression model was stated thus:

$$Li = Log \frac{Pi}{1-Pi} = \frac{1}{1+exp-(\beta 0+\beta 1X1)} \quad \ldots\ldots (1)$$

P_i = Respondents probability of acceptance to the bid offered
β_o = Constant/ Intercept
β_i = Coefficients to be estimated
$1-P_i$ = Respondents probability of non-acceptance to the bid offered
X_i = Set of independent variables

$$Li = \frac{1}{1+exp-(\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\cdots \beta 11X11)} \quad \ldots\ldots (2)$$

X_1 = BID amount (Naira)
X_2 = Gender of the tourist (male = 1, female = 0)
X_3 = Age of tourist (Years)
X_4 = Age^2 of tourist (Years)
X_5 = Frequency of visitation to the ecotourism site (Yearly =1, quarterly =2, bimonthly =3, monthly = 4)
X_6 = Year of formal education (Years)
X_7 = Marital status (married = 1, 0 otherwise)
X_8 = Household size (number of persons)
X_9 = Estimated annual income (₦)
X_{10} = Location of the tourist (Within the state =1, outside the state =2 and outside the country = 3)
X_{11} = Main occupation of the tourist (Government staff =0, private staff =1, self-employed =3)
X_{12} = Knowledge of another ecotourism site within the Country (Yes = 1, No = 0)
X_{13} = Do you visit other ecotourism site within the Country (Yes = 1, No = 0)

X_{14} = Frequency of visitation to another ecotourism site (Yearly =1, quarterly =2, bimonthly =3, monthly =4)
μ = Error term.
Li is a proxy for WTP. It represents the dependent variable, which is a dummy of the binary choice Logit model adopted to determine the factors influencing tourists WTP for the gate fees and other recreational services in the ecotourism sites. It is defined as "1" if respondents accept bids elicited and "0" if not. X_1 represents the bids elicited in the Dichotomous Choice Contingency Valuation Method (DC-CVM) survey. This is the variable price (shadow price).
The unrestricted mean WTP (P+) according to [4] was calculated from the coefficient derived by the model:

$$P^{+}=a/|\beta| \quad \ldots\ldots (3)$$

This has the possibility of producing the undesirable negative WTP, the restricted WTP (P+) adopted for this study was shown as:

$$P^{+}=1/|\beta|*In(1+exp^{bo}) \quad \ldots\ldots (4)$$

where, b_o = intercept,
β = coefficient of the bid
Total WTP = Mean WTP * Total population of respondents.
The results were collated and used to develop a new PPPs management model that will enhance efficient and sustainable management of the ecotourism sites in Nigeria under the best practices and which can be applied to other ecotourism sites in Sub-Sahara Africa (SSA) countries.

RESULTS AND DISCUSSIONS

Table 2 presents the stakeholders' perception of the need for a paradigm shift in the management of the ecotourism sites in Nigeria. It was revealed from the table that respondents strongly disagreed with the present management system of the ecotourism sites with a mean score of 1.38. With the mean score of 4.27, the respondents indicated their desire for a change in the management of the ecotourism sites. Result (4.81) obtained showed that the stakeholders strongly agreed that the government should partner with the organized private sector in the management of ecotourism sites. They believed this will enhance the efficiency and sustainability of ecotourism sites. However, the respondents strongly disagreed (1.42) that the partnership should be with the financial institutions alone. The respondents also opined that the partnership should not be limited to the facilities manager alone (2.46) but agreed that the partnership should be with both the financial institutions and the facilities manager (4.52).

Table 2. Perception of The Stakeholders on The Ecotourism Sites in the Study Area

Questions	SA	A	U	D	SD	Means	Remarks
Do you like the present management system of the ecotourism sites?	37 (10)	44 (12)	15 (4)	88 (24)	184 (50)	1.38	Strongly Disagree
Do you desire a change in the management of the ecotourism sites?	136 (37)	132 (36)	7 (2)	74 (20)	19 (5)	4.27	Agree
Do you think the Government forming partnership with the Organized Private Sector (OPS) in the management of the ecotourism sites will enhance the profitability and sustainability of the ecotourism sites?	239 (65)	129 (35)	0 (0)	0 (0)	0 (0)	4.81	Strongly Agree
Do you agree that the Government should form partnership with only financial institutions in the management of the ecotourism sites?	37 (10)	55 (15)	15 (4)	144 (39)	117 (32)	1.42	Strongly Disagree
Do you think the Government should form partnership with only facilities manager in the management of the ecotourism sites?	44 (12)	74 (20)	52 (14)	81 (22)	117 (32)	2.46	Disagree
Do you think the Government should form partnership with the financial institutions and the facilities manager in the management of the ecotourism sites?	125 (34)	162 (44)	4 (1)	40 (11)	37 (10)	4.52	Strongly agree

Source: Own research and processing.

As shown in Figure 1, 80% of the staff of financial institutions working around the ecotourism sites agreed that their organizations will provide funds for the Government to procure modern facilities that will promote increased patronage of the ecotourism sites. The bureaucratic system of the Government was mentioned in the interview as affecting the performance of the ecotourism sites as it delays funding and the introduction of new and creative ideas. Therefore, the result obtained indicating the willingness of the financial institutions (OPS) to partner with the Government in the management of the ecotourism sites is in line with the findings of [2] who stated that if the Nigerian government will amend the laws that established most of the Government businesses, the organized private sector are equally willing to partner with the Government.

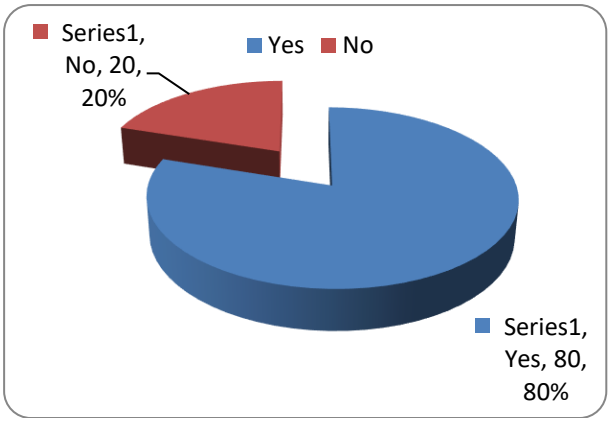

Fig. 1. Willingness of Financial Institutions To Finance Facilities Provision In the Ecotourism Sites
Source: Own research and processing.

The unwillingness of the Government to release part of their equity holding in most businesses owned was the fear expressed by the 20% of the respondents that said they were not willing to partner with the Government. According to them, usually, people in the Government are not always willing to partner with the organized private sector because they often see such businesses as a means of enriching themselves, which may be impossible to do if partners are involved in the management and ownership of such businesses. According to [12], most leaders in Africa often use such businesses to provide jobs for their political cronies, whereas such may not be competent to handle the business. This was the basis for the 20% that said no to partnering with the Government on the management of ecotourism sites. Therefore, since 80% of the financial institutions would form a partnership business with the Government on the management of ecotourism sites, such business will be registered as a separate entity and jointly owned by the Government (Public sector) and the organized private sector. The Public-Private Partnerships (PPPs) will be premised on concurred shareholding, and board members will be constituted by both the Government and the private sector. The profit will be shared on the agreed shareholding between the two sectors (Public and private sector).

Price Tourists are WTP for Ecotourism Sites

The total value for the entrance and park/hill viewing fees, guide fees, and guest house by the tourists based on the proposed PPPs management model were obtained by calculating the restricted mean willingness to pay. To examine the tourists' acceptability of the new entrance gate fees and payment for other recreational facilities and services because of the proposed PPPs management model, we estimated their mean willingness to pay by calculating the restricted means WTP calculated using equation 4. From the result in Table 3, the respondents in the Cross river national park would pay 147.57% increase for the entrance and park view fees, 82.53% increase for the guide fees, 89.20% increase for the standard room in the guest house and 139.57% increase for the executive room in the guest house. Likewise, the respondents would pay 45.08% increase for the entrance fees in Idanre hills. However, the guest house at Idanre Resort Center (IRC) was not functioning at the time of carrying out this study. At Kainji lake national park, the respondents would pay 133.83% increase for the entrance and park viewing fees, for the guide fees, they were willing to pay a 54.10% increase for the standard room in the guest house, they would pay 70.86% increase, and

for the executive room in the guest house they would pay 99.35% increase. In the Old Oyo national park, the respondents would pay 106.69% increase for the entrance and park viewing fees, the respondents would pay 40.59% increase for the guide fees for the standard room in the guest house, they would pay 66.98% increase, and for the executive room in the guest house, they would pay 80.64% increase. The willingness of the respondents to pay the various percentage increases in the fees and the guest house rates was because of the expected improvement in the facilities and services of the ecotourism sites because of the expected change in management based on the proposed PPPs management model.

The findings buttress the assertion of [25] "tourists are willing to pay for tourism facilities and services as long as they can enjoy better services". Natural resources like ecotourism sites provide recreational services for relaxation for those on vacation. Therefore, there is a need to improve the environmental conditions in which such services are being provided. The findings revealed the state of the ecotourism sites and how they have not been properly managed, hence, loss of revenue to the ownership, which is the Government. Therefore, the ecotourism sites can contribute reasonably to the economic if there is an improvement in the facilities and services of the ecotourism sites. According to [15] most ecotourism sites in Sub-Sahara Africa (SSA) needs to be managed efficiently and sustainably to create the expected conducive vacation centers that will enhance reasonable contribution to national economic growth and development.

Table 3. Estimated Mean Willingness to Pay per Tourist

Ecotourism Site	Entrance and park viewing fees			Guide fees			Guesthouse per night (Standard room)			Guest House per night (Executive room)		
	Current (₦)	Estimated (₦)	% Change	Current (₦)	Estimated (₦)	% Change	Current (₦)	Estimated (₦)	% Change	Current (₦)	Estimated (₦)	% Change
Cross river national park	800	1,980.50	147.56	1,000	1,825.30	82.53	3,000	5,675.90	89.20	4,500	10,780.50	139.57
Idanre hill	1,000	1,450.75	45.08									
Kainji lake national park	800	1,870.65	133.83	1,000	1,540.95	54.10	3,000	5,125.85	70.86	4,500	8,970.79	99.35
Old Oyo national park	800	1,653.55	106.69	1,000	1,405.85	40.59	3,000	5,009.45	66.98	4,500	8,128.60	80.64

Source: Own research and processing.

Factors Influencing Tourists' WTP

The factors influencing respondents' willingness to pay for the new entrance fees and other recreational facilities services in the ecotourism sites are presented in Table 4 and were analyzed using logit regression model. The Table revealed that six variables significantly influence the tourist's willingness to pay the new entrance fees and for other recreational facilities and services in the ecotourism sites. These variables are bid amount, Age^2, household size, estimated annual income, location of the tourist, and knowledge of another ecotourism site within the Country. The bid amount poses a significant negative relationship on the tourists' willingness to pay the new entrance fees and for other recreational facilities and services in the ecotourism sites. This implies that as bid amount of the new entrance fees and for other recreational facilities and services in the ecotourism sites increase, there is a probability of a decrease in tourists' willingness to pay. The bid amount was significant at 1% level of significance, which implies that the bid amount positively affects the decision of the tourists' willingness to pay the new entrance fees and for other recreational facilities and services in the ecotourism sites. This is in line with assertions by [29]; because the negative sign indicates that as the bid amount increases, the respondents would be less likely to pay. This implies that a higher bid amount induces a lower likelihood of saying yes to an offered bid.

Age^2 (above 60 years) was statistically significant at 1% probability level with a positive coefficient. This implies that an increase in the age of the elderly tourists above 60 years will probably increase the willingness to pay the new entrance fees and other recreational services in the ecotourism sites. This implies that an increase in the years of tourists above 60 years expected to be retirees had a positive influence on the willingness to pay new entrance fees and other recreational services in the ecotourism sites in the study area. This shows that older people who are retired are always willing to pay for the recreation facilities. Such are always willing to go on vacation and enjoy their retirement. Household size was statistically significant at 10%, meaning that a unit increase in the household size will likely reduce the tourist willingness to pay for the new entrance fees and other recreational services in the ecotourism sites in the study area. This is because the larger the household size, the more expensive to go to relaxation centers like the ecotourism sites. The cost of the entrance fees and other recreational services in the ecotourism sites will be expensive for a larger household compare to a smaller household size.

Estimated annual income was statistically significant at one 1% and the results shows that an increase in the annual income of the tourist will probably lead to an increase in willingness to pay for the new entrance fees and other recreational services in the ecotourism sites. The result shows that the disposable income of the tourist influences their willingness to pay for the improved services in the ecotourism sites. This revealed that tourists are willing to for better and improved recreational facilities if they will enjoy their vacation. The location of the tourist increases their willingness to pay for the new entrance fees and other recreational services in the ecotourism sites. The result indicates that the location of the tourist was statistically significant at 10% and had a positive relationship with the tourists' willingness to pay for the new entrance fees and other recreational services.

Table 4. Factors Influencing Respondents' WTP for Ecotourism Sites

Variables	**Coefficient**	**Std. Error**	**P>/Z/**	**Z values**
Bid Amount	-0.0300049	0.0060219	0.000***	-4.98
Gender	-0.12940719	0.718260	0.798	-0.18
Age	-0.0880310	0.101009	0.372	-0.87
Age^2	0.09012193	0.022811	0.001***	3.95
Frequency of visitation to the ecotourism site	-0.4993589	0.3385821	0.174	-1.47
Years of formal education	1.695781	0.998658	0.098	1.70
Marital status	-2.97882	2.07981	0.290	1.43
Household size	-0.19181475	0.10237	0.076*	-1.87
Estimated annual income	0.1990024	0.041361	0.001***	4.81
Location of the tourist	1.989508	1.108627	0.058*	1.79
Main occupation	-0.9968327	1.8933720	0.717	-0.53
Knowledge of another ecotourism site within the Country	-2.389053	1.298919	0.058*	-1.84
Visit to other ecotourism site within the Country	-1.08968	1.14591	0.417	1.09
Frequency of visitation to another ecotourism sites	0.3909694	0.388792	0.361	1.00
Constant	5.898659	4.907698	0.298	1.20
Number of Observation	80			
Log likelihood	-22.79860			
Prob > chi^2	0.0000			
LR $chi^2(13)$	49.68			
Pseudo R^2	0.5591			

Source: own research and processing.
***Significant at 1%, **Significant at 5%, *Significant at 10%

With the coefficient of 1.989508, which implies that the nearness of the tourists to the ecotourism sites will have a positive influence on the tourists' willingness to pay the new

entrance fees and other recreational services. This buttress the findings of [18] that nearness to the ecotourism sites encourages the tourists to patronize such ecotourism sites for relaxation.

However, as shown in the result, knowledge of another ecotourism site within the Country was statistically significant at 10% but negative. The negative coefficient of -2.389053 implies that when the tourist know there are other ecotourism sites within the Country where they can go for relaxation, their willingness to pay for the new entrance fees and other recreational services will likely reduce. This is in line with the economic principle of competition that says a rational consumer wants to compare the cost of goods and services before buying. The Loglikelihood Ratio (LR) statistics exhibited signs and was significant at 1% probability level, meaning that the explanatory variables included in the model explained the probability of willingness of the tourists and shows there was **a** significant relationship between socio-economic factors and willingness of the tourists to pay for the new entrance fees and other recreational services in the study area.

Therefore, based on the results from Table 2, Figure 1, Table 3, and Table 4 regarding the effective and sustainable management of the ecotourism sites as a partnership between the Government (public sector), the financial institutions, and facilities managers (private sector) led to the proposed Public-Private Partnerships (PPPs) management model in Figure 2. The proposed model has a focal point that comprises of a stakeholder relationship network (Government, financial institutions, facilities manager, tourists, and the host community). With the PPPs management model of the ecotourism sites, taking into consideration the resources and attractiveness of the ecotourism sites, the positive effect of the partnership goals and the major components that may affect the success of the partnership, the goals are based on the products, infrastructure, human resources, marketing, promotion, and funding. The major success elements are based on the formality of the agreements, clear goals definition, organizational structure, leadership and flexibility, social networks, and the effectiveness of the partnership performance. The model represents an interactive PPPs system.

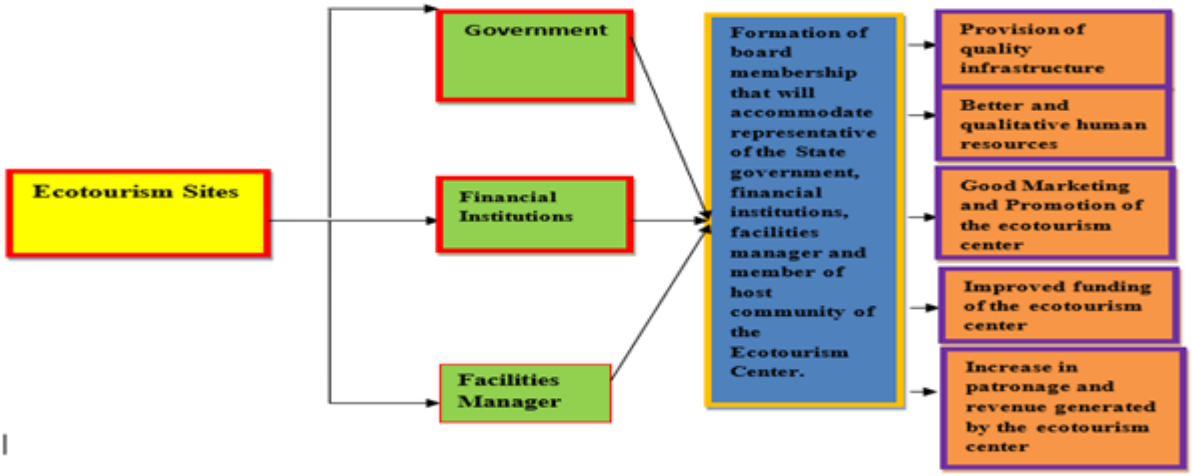

Fig. 2. Proposed Management Model of Public-Private Partnership (PPP) of Ecotourism Sites in Nigeria and Sub-Sahara Africa
Source: Own research and processing.

If there is accord between the relationships and variables, these nexuses will contribute to the success of the partnership and will serve as a model for the Public-Private Partnership of the ecotourism sites management in Nigeria and Sub-Sahara Africa. Figure 2 presents a management model for successful Public-Private Partnerships of ecotourism sites in Nigeria and Sub-Sahara Africa.

CONCLUSIONS

From the study, the respondents who are stakeholders in the ecotourism sites agreed that there is need to change the current management of ecotourism sites. They agreed that the PPPs management model enhances the efficiency and sustainability of ecotourism sites. Most of the staff of the financial institutions interviewed agreed that their organizations will partner with the Government in the management of the ecotourism sites. The result of the tourists' willingness to pay for the new entrance fees and other services of the ecotourism sites based on the proposed PPPs management model of the ecotourism sites increased considerably. Ranges from 40.59% to 133.83% above the current prices being paid. This is because of the expected improvement in the facilities and service of the ecotourism sites based on the new PPPs management model being proposed. The result of the logit regression model revealed that bid amount, age^2, household size, estimated annual income, location of the tourist, and knowledge of another ecotourism site within the country were the variables that influence the tourists' willingness to pay the new entrance fees and for other recreational facilities and services provided by the ecotourism sites.

The policy implication of the study, among others, is that the government should form a partnership with the private sector in the management of the ecotourism sites across the Country. Since this will enhance the efficiency and sustainable management of such natural resource in the country. Again, since bid amount is a critical variable influencing the tourists' willingness to pay, it is pertinent for the new PPPs management to be cautious of the amount they will charge for the entrance fees and other facilities and services provided by the ecotourism sites. Based on the findings of the study that the age^2 above (above 60 years) are positively willing to pay the new entrance fees and for the facilities and services provided by the ecotourism sites. Therefore, the new PPPs management model should design a vacation program in the ecotourism sites for the senior citizens in the country that will make payment flexible for them. For instance, creating a system that would encourage making monthly deposits for the purpose of vacation in the ecotourism sites.

Findings from the paper revealed that the annual income of the tourists also influence their willingness to pay the new entrance fees and for the facilities and services in the ecotourism sites. Hence, government can grant tax subsidy for the ecotourism sites and subsidize the public servants who are willing to patronize the ecotourism sites for vacation. This will make the ecotourism sites attractive to the citizens. There is a need for a new PPPs management model to take into cognizance the location of the tourists in determining the new entrance fees and other facilities and services fees in the ecotourism sites. Price disparity based on location may be adopted by the new PPPs management to encourage tourists from distant places to patronize the ecotourism sites. Additionally, since household size negatively impacted the tourists' willingness to pay the new entrance and fees of other facilities and services in the ecotourism sites, large households (above 6 persons) could be considered for rebates.

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