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## WATER RESOURCES AND SUSTAINABLE DEVELOPMENT IN BAYELSA STATE, NIGERIA

*By*

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### Abstract

**This study investigated the relationship between water resources and sustainable development in Bayelsa State of Nigeria. The quasi-experimental with cross-sectional method that employed convenient sampling technique to gather data and analyse from a sample of 400 respondents using a questionnaire. Bivariate analysis was employed to analyse 296 completed copies of the questionnaire. The findings revealed that water resources had positive and significant relationship with the three measures of sustainable development (economic, environment and socio-cultural development). This study concluded that appropriate development of tourism products in a destination especially in terms of water resources is very important in the sustainable development of the tourism destination region if the government will develop appropriate tourism policy. The study therefore recommended that tourism business experts and government should invest in tourism centres across water resources since water resources proved to be a strong predictor for sustainable tourism development, Public- Private-Partnership Initiative where government and stakeholders can jointly invest in water-way infrastructures that will engender water tourism developments should be encouraged and the management of Bayelsa state should be concessioned to private tourism expert in order to boost the attraction of these visitor attractions.**

### Keywords

**Water Resources. Economic Development. Environmental Development. Socio-Cultural Development.**



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## Introduction

The Niger Delta region of Nigeria contributes about 90% of the Nigerian gross domestic product but it is generally characterized with abject poverty, lack of infrastructure, oil spillage and job opportunities (Bribena, 2017). The traditional occupations of fishing, farming, and canoe carving have been destroyed because of the activities of the multinational oil and gas prospecting companies. Consequently, the teeming youth population, being the worst victims, has turned the area to a theatre of crime and criminality. However, before the advent of oil exploration and exploitation activities in the Niger Delta, with reference to Bayelsa State, the Ijaw people have used the rich cultural festivals and heritage sites with farming, fishing, and canoe carving as economic activities with visitors coming to these sites as local and international tourists to provide and guarantee socio-economic sustainability. Globally, tourism is fast growing and creating opportunities of economic and physical development to some areas through varying business, occupation and income promotion particularly in developing countries. Nigeria as a nation is richly endowed with a wide variety of tourism attractions which gives it a strong potential for tourism development that can easily be transformed into highly attractive and profitable tourism destinations. These attraction ranges from historical monuments to holiday resorts, natural parks to rich cultural heritage, beaches which can be promoted as attractive international events thereby generating a flow of tourist and also income for the industry and country at large.

The importance of tourism in providing economic empowerment and sustainability in developing countries cannot be overemphasized. Tourism business contributes to three high-priority goals of developing countries: the generation of income, employment, and foreign-exchange earning (Salawu, 2020; Adeola et al., 2020; Backman, & Klaesson, 2021). Hence, countries, particularly, developing countries with comparative advantage of attractive tourist sites do not hesitate to utilize them (Purnomo et al., 2020; Gohori & Van Der Merwe, 2021; Uduji et al., 2020). Consequently, countries like Costa Rica, followed by Ecuador, Tanzania, Kenya, and Nepal have tailored their tourism industries towards the above three goals (Joo et al., 2020; Sarr et al., 2020). The desire of tourists according to (Haiying, 2020; Yasa, 2020; Putri et al., 2020) is to discover new attractive tourism destinations to have a different or more satisfying tourism experience.

Tourism sites are many in Bayelsa State: the bronze head museum in Opume, Oligi museum, oil and gas museum in Oloibiri, mangrove museum in Sangana beaches: Polaku, Koluama, Odi, Famgbe, Sagbama, and Agge Palm Beach to mention a few. Other tourism attractions are; the Whiteman Grave yard and the British Consulate Building in Town Brass, Akassa Light House, and Akassa slave transit camp all in Brass Local Government Area (LGA), Major Isaac Jasper Adaka-Boro Monument in Kaima, the Oxbow Lake in Swali in Yenagoa, Oki cultural dance and Iyantoru cultural dance in Okoroba in Ogbia LGA, the Asi cultural dance in Ekeremor, the Amasinghan cultural dance in Aleibiri, the Egbelegebele cultural dance in Amassoma, Abayasa Forest Reserve in Ngoro in Ekeremor LGA, Edumanon Forest Reserve in Ogbia LGA. Kafura, (2013 as cited in Bekewuru, & Agbai, 2021) and Ogechukwu (2012 as cited in Bekewuru, & Agbai, 2021) in their separate writings opined that, if the several tourism sites and cultural festivals are adequately invested by both the private and public sectors, the state would achieve sustained growth and imbibe the idea of the United Nations Sustainable Development Goals (SDGs) towards achieving them. The nascent beaches in Bayelsa State are worthy of a visit. The development of these beaches will turn them into a busy recreational centre and holiday resorts that will offer tourists a serene atmosphere for sight-seeing activities such as social events, e.g. parties, swimming, boat trips, boat regatta. Fishing takes place in the beaches, particularly during festival periods like Christmas, New Year and Independence Day Celebration, such beaches are found in Polaku, Koluama, Okpoma, Odi, Famgbe, Sagbama as well as the Agi Palm

Beach in Ekeremor Local Government Area. They are all fine, sandy and beautiful beaches found in Bayelsa State which is already major tourist sites. Bayelsa State has several beach attractions spread across the state. The names are Okpoama Beach, Odioma Beach, Bayelsa ferry Terminal and Resort, Lake Efi, Opokuma Beach among others. Tourism development depends on attractions and activities related to the natural environment, history, heritage and cultural patterns. Tourism development depends on attractions and activities related to the natural environment, history, heritage and cultural patterns. The location of Bayelsa State close to the Atlantic ocean and many rivers with various tributaries encourages many coastal tourist activities such as fishing, shell fishing, shell collection, swimming, diving, boating, surfing, wind-surfing, jet-skiing, bird watching and snorkeling among others. Bayelsa State is creating awareness towards protection of her beach areas in order to sustain the natural beauty and one of the strategies to conserve these resources is by managing them as tourism destinations.

Beach resource is an indispensable tool for development of a nation if not the whole world. Despite some of its negative effects on the environment, it is still the devil people cannot do without. Beach tourism also known as coastal tourism and recreation are important parts of the largest and most rapidly growing activity in the world (Houston, 1995). It embraces the full range of tourism, leisure and recreational oriented activities that take place in the coastal zone and the off shore coastal waters across the world/globe. They include beach resources, for instance, the hotels, resorts, restaurants, food industry, vacation homes, second homes and so on, the infrastructural facilities supporting beach business like retail businesses, marinas, dive shops, fishing tackle stores, recreational boating harbors, fishing facilities, boating, cruises, swimming, snorkeling and diving as well as public and private programmes affecting the aforementioned activities (Houston, 1995).

However, the relationship between beach resources and tourism development is as old as tourism itself. Early tourists favoured beaches and made journeys to fashionable resorts to bathe in sea water, to take advantage of its alleged curative powers (Lencek & Bosker, 1999). Hall and Page (2005) observed that "the beach resource is a magnet for tourist although its role in leisure activities has changed in time and space, as beach destinations have developed, waned, been reimagined and redeveloped in the twentieth century. The beach resource is a complex system which is utilized by the recreationist for day trips, while juxtaposed to these visits are those made by the domestic and international tourists".

Beach resources constitute a strong force (both positive and negative) in shaping coastal areas and national economies, yet it is not seen as a reputable sector requiring policy, planning and management attention and resources because of lack of data collected and aggregated under this heading. Beach Resource in Bayelsa State is still growing because most of these beaches, sea, lakes, rivers, streams and so on have turned to be hideouts for kidnappers, militants, terrorists and criminals. Additionally, in these riverine areas, the beaches, lakes, ocean and creeks are used as places for refuse dumps, defecation, and centres to commit all sorts of crimes. Also, spoilt ships and boats are usually abandoned in the ocean thus causing problems in the ocean and health hazards for the nation.

Through an appropriate coastal tourism development initiative, the water resources in Bayelsa State could contribute greatly to the sustainable development of Bayelsa State in particular and Nigeria in general. However, extant literature seems not to have much studies to show how water resources could account for the sustainable development of Nigeria. This understating constituted the main motivation for this current study.

### **Aim and Objectives of the Study**

The aim of this study is to empirically investigate the extent of relationship that exists between water resources and tourism development in Bayelsa State. The specific objectives are;

1. To ascertain the extent of relationship that exists between water resource and economic development in Bayelsa State.
2. To ascertain the extend of relationship that exist between water resources and sociocultural development in Bayelsa state.
3. To ascertain the extend of relationship that exist between water resources and environmental development in Bayelsa state.

### **Literature Review**

#### **Theoretical Framework**

##### **Social Exchange Theory**

Complementary to community attachment, although emphasizing reciprocity rather than solidarity, social exchange theory involves the trading and sharing of resources between individuals and groups. These interactions can occur between individuals, role occupants, or groups acting as single units. Resources can be any item, concrete or symbolic, and may be material, social, or psychological in nature. Social exchange theory has interested tourism researchers based on the assumption that tourism development comes with economic benefits in exchange for social and environmental impacts. According to Jurowski et al. (1997), social exchange theory assumes that social relations involve an exchange of resources among parties seeking mutual benefit from the exchange relationship. Presumably, the primary motive for exchange is the improvement of the community's social and economic well-being by private entrepreneurs and public economic developers. They suggested that when exchange of resources is higher balanced, or high for the host party in an unbalanced relationship, tourism impacts are viewed positively by residents. When resource exchange is low in either balanced or unbalanced exchange relations, impacts are viewed negatively by those involved. Using exchange logic, Perdue et al. (1987) examined relationships between perceived impacts and resident support for additional tourism development in 16 rural Colorado communities. The authors found that, when controlling for personal benefits of tourism, perceptions of its impacts were unrelated to sociodemographic characteristics. In addition, support for additional tourism development was positively or negatively related to perceived positive or negative impacts of tourism. Support for additional tourism development was also negatively related to the perceived future of the community.

Getz (1994), in a study of Scotland's Spey Valley, found that the increased negative attitudes toward tourism development suggested that residents believed benefits had declined or not matched expectations. Conversely, Hernandez et al.'s (1996) study of Isabela, Puerto Rico, which at the time of the study was the planned site of a large resort, took a neutral approach, speculating that resident ambivalence toward future development resulted from uncertainty regarding the terms of the exchange. Supporting these studies, Jurowski et al. (1997) found in a study of Virginia that the potential foreconomic gain as an exchange item had a direct and positive effect on resident support. The strongest effect of the economic gain variable was on social impacts, although it had very little effect on environmental impact variables.

## Conceptual Review

### Sustainable Tourism Development

World Tourism Organization defines sustainable tourism development as development that meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes and biological diversity and life (Cooper et al., 2005). The United Nations Conference on Environment and Development (Earth Summit 1) outlined sustainable development inputs for all industries as a remediation measure to the wanton consumption of global resources that manifested in landscape degradation (UN 1992). The United Nations agencies. WTTC et al (1997) embarked on a plan of action for tourism industry with interrelated goals of environmental protection and sustainable development. The produced report was a global sustainable plan of action for all the 182 governments that was signatory to Earth Summit 1. The agenda is a major guideline for each nation to set tourism development plan at national, state, local government and community level. The concept of sustainable tourism varies from one nation to the other but remains a developmental strategy for any tourism destination that does not reduce the availability of natural capital and does not deny visitors the opportunity to enjoy the same experience. WTTO & IHRA(1999) defines sustainable tourism as leisure industry “which operates within natural capabilities for regeneration and future productivity of natural resources; recognizes the contribution that people and communities, costumes and lifestyles make to the tourism experience; accepts that these people must have equitable share in the economic benefit of tourism and guided by the wishes of the local people and communities in the host area.” This definition is particularly relevant to the case study and the Federal Government decree 81 that mandated Nigeria Tourism Development Corporation to package tourism as a vehicle for rural transformation (NTDC, 2002). The definition highlights three variables that make up sustainable tourism namely ecological socio-cultural and economic sustain abilities. This current study adopted economic development and socio-cultural development.

**Economic sustainability:** Economic sustainability emphasizes continuous benefit for all generations in terms of income and revenues.

**Environmental Development:** Conservation efforts that focus on repairing and improving natural ecosystems can contribute to the fight against pollution while protecting a wide variety of plant and animal species. It bears repeating that protecting the environment necessitates ensuring that water and air are unpolluted, coastal ecosystems are flourishing, and recreational activities are risk-free (due to erosion, storms, flooding, etc.).

**Socio-cultural Development:** socio-cultural variable makes sure that the tourism development retains community identity.

### Empirical Review and Hypotheses Developemnt

#### Water Resources and Sustainable Development

Broadly, water-based tourism can be classified either as inland water based or marine based, depending on features of the water body on which the tourism activities are taking place. Honey and Krantz (2007) submitted that development of water resource has led to the constant and often uncontrolled growth of tourism activity in many coastal areas over many decades. Consequently, the benefit of water resource has become so enormous that it is generally regarded as one of the fastest



growing forms of tourism. Water resources have been defined by Orams (1999) as comprising recreational activities that involve travel away from one's place of residence, which has as their host or focus the water environment and the coastal zone. It entails leisure derived from activities on or in water bodies in addition to those obtained from the adjoining coastal land environment that borders the water bodies. Owing to the wide range of leisure activities that water bodies can be put through, water resource has become endearing to fun seekers (Jennings, 2007). In addition to taking place in water resource zones, seas, oceans, and ice-associated areas, areas of leisure activities within the scope of beach tourism include sports, fishing, water sports and recreation, coastal events and attractions, marine wildlife tourism, cruise industry, seafood tourism, coral reefs, boating and yachting, resort tourism, island tourism, underwater archaeology, and polar tourism (Jennings, 2007). Moreover, clean water and healthy coastal ecosystems are essential to the maintenance of beach tourism and recreation. Foreign tourists do not go to areas where the water is polluted, beaches are closed or fishes are tainted (Ebhuoma & Simatele, 2017; Owolabi & Okwechime, 2007).

Nevertheless, there are several opportunities to harness within the context of beach tourism in Bayelsa State. Unlike what is obtained in countries with developed water tourism sector, water resource activities in Bayelsa State are mostly available in a few private resorts. Examples of such activities include marine cruise, sailing, scuba diving, surfing, and kayaking. In recent times, the growing interest of youths and their participation in various coastal and marine tourism activities has led to increased tourism activities on Nigerian coasts. For example, activity such as scuba diving has received attention recently in Lagos State where the first open-water scuba diving center called "Scuba Lagos" has commenced operations. Boat rides are receiving small-scale attention. Yachting is also receiving attention, although the number of individuals who can afford to rent or buy these boats is a very small proportion of the Nigerian population. The ventures mentioned above are indicators that these activities have immense potential to thrive in Nigeria's water ways, even though the tourism products are still few. Rapid growth and development of the State's beach tourism will become better performing with adequate government policies, investment, and participation as well as the provision of favourable business climate (Lordkipanidze et al., 2005).

Water Resource stimulates the establishment of various outdoor and indoor recreational activities. Sporting activities, such as swimming, beach soccer, beach volleyball, and boat racing, among others, have been developed to maximize the use of coastal and marine tourism centers. Indoor games such as table tennis, tennis, card games, local games such as "Ayo Olopon," local music, and dances can be integrated into the beach resources as additional activities of recreation. The complexity of water resource management is determined by its natural and social attributes. At present, the planning and management of water resources in China are carried out in line with their attributes and industries for exploitation and utilization and according to the fields and departments, which is an extension of the management functions of the exploitation departments of various water resources (Zhang, 2009; Chen & Ye, 2009).

Ajani et al. (2016) investigated on socio-cultural and economic benefits of tourism in Alpha Beach (Lagos State) and the level of tourist's satisfaction. Two tiers of stakeholders, 100 consenting local residents and 101 tourists were administered structured questionnaire to elicit information on socio-demographic characteristics, economic benefits, level of infrastructural development, tourists attraction to the resort centre, the level of satisfaction and willingness to revisit. In-depth interview was carried out. Chi square and Pearson's Moment Correlation (r) analyses was done at 5% level of significance. One hundred percent respondents (residents) revealed that the establishment of Alpha beach resort has provided enormous socio economic benefits to the host community while they agreed that the resort centre provide inadequate infrastructural development to the local community.

Identified infrastructure that the community is not very satisfied with were highlighted. 98.0% of the respondents were unsatisfied with the health services in the community. No association was obtained between respondents age, sex and educational level. The correlation between tourist attraction and satisfaction of Alpha beach resort is not significant.

Eshun et al. (2019) study focuses on ensuring clean beaches in Ghana for robust and sustainable coastal tourism development. The study specifically addressed the following objectives: policies to ensure clean beach, stakeholders' participation, promotional activities and sanitation challenges facing beaches in Ghana. The study employed both quantitative and qualitative approaches. This involved administering semi-structured questionnaires to a total of 150 residents from the study community through convenience sampling. Using purposive sampling, key stakeholders from the Ministry of Tourism, Arts and Culture, Environmental Protection Agency, Accra Metropolitan Assembly and Ministry of Sanitation were interviewed. Also, through purposive sampling, management from Labadi Beach Resort, La Pleasure Beach Resort, Coco Beach, Next Door Beach, Laboma Beach, Bojo Beach, and La Palm Royal Beach were interviewed towards addressing the study objectives. The quantitative data were analysed using descriptive and inferential statistics with the aid of IBM SPSS Version 20.0. The data from the interviews were subjected to thematic explication. The findings revealed that there are some policy measures and practices in place to clean beaches, especially in Accra. However, factors such as limited local participation in beach cleaning, a poor image in some of the sites due to poor sanitation, poor facilities, ineffective coordination among stakeholders remain to be addressed towards achieving sustainable coastal tourism in Ghana.

Akendor et al. (2020) study focused on promoting the growth of tourism destinations in Nigeria, and this was achieved through a review of the extant literature, which led to the formulation of the research hypotheses. The population of this study consisted of twenty-six (26) tourism destinations in South South region of Nigeria comprising Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers States. In generating the necessary data for the study, a triangulation of primary and secondary sources of data collection was used. The questionnaire, which served as the instrument for primary data collection was tested and adjudged to be valid and reliable before it was administered through a cross sectional survey research design on twenty-six (26) General Manager of the tourism destinations in South South region of Nigeria. The data generated from the study were descriptively analysed using mean and standard deviation while the Ordinary Least Squares (OLS) regression technique and the t-statistic were used in testing the significance of the association between the study variables at 95% confidence interval. The findings of the study revealed that a significant and positive relationship exist between marketing effort and growth of tourism destinations in South South, Nigeria; destination attributes exhibit a positive and not significant relationship with the growth of tourism destinations in South South, Nigeria; and a negative but not significant relationship between management of demand variation and growth of tourism destinations in South South, Nigeria.

Suratini et al. (2019) studied on Beach Development Strategy as Tourism Destination in Tabanan Bali. The research location was determined by purposive sampling Pasut Beach, located in Tibubiu Village, Kerambitan District, Tabanan on the basis of having a very suitable potential to be developed into a tourist destination. The sample of the study was taken by 49 people consisting of elements from the Government, community leaders and tourism actors. This study uses qualitative analysis method (giving more detailed reviews and interpretations of the data obtained) and SWOT analysis. Furthermore, in the SWOT method the External Strategy Factor Matrix (EFAS) model and the Internal Strategy Factor Matrix Model (IFAS) are used, followed by IFE matrix and EFE matrix to determine the weight, rating and score and to determine the strategy and position of the quadrant I – Ematrix, Beach Pas po is in the position in quadrant I, with the S-O strategy where

the values of strength and opportunity are equally high (use the power to get opportunities) by improving the quality of humanresources, especially in the field of mastering technology, communication and information.

Okhiria et al. (2014) study was conducted to assess tourism activities andthe possible threats it may be posing to indigenousculture, human lives and environment at Oron and Ituvillages in Akwa, Ibom, Nigeria. Data were collected with pretestedand validated questionnaires which were randomlyadministered to workers traders and inhabitants at the touristsites. The total respondents were150. Simple frequency andmean score were used to analyze the data. The study revealedthatinspite of some confirmed benefits of tourism to hostcommunities, some negative effects, which constitute threatswere identified. Some of these threats include; environmentalpollution, displacement from farm land, biopiracy of local plants,unfair labour and wages etc.

Rutty and Scott (2013) studied on Differential climate preferences of internationalbeach tourists. A survey of 472 beach tourists is the basis for comparing the climatic preferences ofdiverse tourism market segments on the Caribbean islands of Barbados, Saint Lucia and Tobago.Key findings include warmer temperature preferences and tolerances for tourists originating fromtropical regions, with lower heat preferences and tolerances for tourists from temperate regions.Statistically significant differences ( $p < 0.05$ ) were also found between temperate and tropical residentsfor every climate variable examined (temperature, rain, sky conditions, wind).

Ijeomah et al. (2020) study surveyed the tourist attractions and activities in selected coastal destinations in Niger delta region of Nigeria using information for collected through Field survey and in-depth interview. Among these popular coastal destinations are: Finima nature park, Bomadi beach, Lake Efi, Opukuma beach, Seigbenogugu lake, Port Harcourt tourist beach, River Ethiopeand Rivotel river resort. The major tourist activities in these destinations are swimming, picnicking, boat cruising, sport fishing, enjoyment of sea breeze, sun bathing, sand bathing and cultural festivals. Cruising in a hired boat is one of the major activities cherished by tourists in Rivotel river resort. Based on this ground, the following hypotheses were formulated:

The following null hypotheses were formulated in line with the objective and research questions of the study:

- H<sub>01</sub>:** There is no significant relationship between water resource and economic development in Bayelsa State.
- H<sub>02</sub>:** There is no significant relationship between water resource and environmental development in Bayelsa State.
- H<sub>03</sub>:** There is no significant relationship between water resources and sociocultural development Bayelsa State.

## Methodology

This study adopted a quasi-experimental research design. This method was considered most appropriate since the object of the study involves humans; unlike animals, plants or other object whose actions can be completely put under the control of the researcher. The study's population consists of adults in the Bayelsa East Senatorial District. The Nigerian Census figures from the National Population Commission were utilized in the study (NPC). Bayelsa State's population is expected to reach 2,537,400 by 2022, according to NPC figures. Consequently, the 2, 537, 400 individuals of Bayelsa State served as the study's population. The researcher used TaroTamane



formula for sample size determination to obtain a sample size of 400. The beaches where the study was conducted are as follows: Okpoama beach, Odioma beach, Bayelsa Ferry Terminal and Resorts, Polaku beach, Famgbe beach, Sagbama beach, Koluma beach, Agei Palm beach, Forapa beach and Opokuma beach.

The primary data was collected from all the ten (10) selected beaches in Bayelsa State aided by structured copies of questionnaire. The unit of analysis in this study are top management and other staff of beach sites in Bayelsa State. In this regard, forty (40) copies of structured questionnaire were hand delivered to these respondents representing four hundred (400) copies of questionnaire.

For the questionnaire's "beach resources and sustainable tourism development" variables, a 5-point Likert scale format (5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree) was derived from Kigenyi (2017) and modified in line with the goals of this study. The Likert-type scale of measuring variables was chosen. Beach sand resources was the predictor variable (adapted from Arcana & Wiweka, 2015; Dantata, 2011). On the other hand, the dependent variable Tourism development was measured with economic development, socio-cultural development and environment development (adapted from Dantata, 2011; Sharpley & Telfer, 2002).

The instrument used in this study was a structured questionnaire. The questionnaire was divided into four (4) sections (section A-D) containing sixteen(16) item questions in all. Section A has five (5) questions on the demographics characteristics of the participating respondents. In section B, twelve (4) questions were generated regarding water resources dimensions; section C was made-up of the same twelve (12) questions on the measures of sustainable tourism development while section. A 5-point Likert measurement scale was used in weighting the responses. The face and content validity were confirmed by experts in the field of Tourism. In terms of reliability, the Cronbach Alpha test with a threshold of 0.7 was employed to measure dependability. The value of .783 showed that the research instrument achieved internal consistency.

## **Analyses and Results**

### **Questionnaire Distribution and Retrieval**

The distribution of questionnaire to respondents and retrieval revealed that Four hundred questionnaires were administered, while three hundred and seventy seven (377) copies (91.2%) were retrieved. A total of thirty 23 (5.75%) copies distributed questionnaire were not retrieved. The two hundred and ninety six (296) questionnaires were all useful.

### **Demographic Profile**

The distribution shows the gender of respondents as having 118 respondents (39.8%) as male, while 178 respondents (60.2%) were female. This information implies that majority of the respondents were female. Information on age brackets of the respondents revealed that 72 respondents (24.3%), were within 20-30 years, 98 respondents (33.1%) were within 31–40 years, 78 respondents (26.3%) were within 41–50 years, while 48 respondents (16.3%) were greater than 51 years. This information shows that majority of the respondents were within the ages of 31 – 40 years. Marital status of respondents revealed that 132 respondents (44.6%) were married, 148 respondents (49.3%) were single, 16 respondents (6.1%) were divorced/separated. This information implies that majority of the respondents were single. The educational background of respondent revealed that SSCE (24) (8.1%),

OND/NCE (58) (19.6%), Degree/HND (111) (37.5%), M.Sc/MBA (72) (24.3%), Ph.D/DBA (31) (10.5%). From the information it shows that respondents with B.SC are of the majority.

**TEST OF HYPOTHESES**

**Pearson Correlation Coefficient**

For this study, Pearson Correlation Coefficient analysis was performed to predict the extent of sustainable tourism development in terms of qualitative and quantitative attributes: economic development and socio-economic development based on one independent factor of water resources.

**Correlation Analysis**

**DECISION RULE**

If  $PV < 0.05$  = Reject Ho  
 If  $PV > 0.05$  = Accept Ho

**Water resources and economic development**

HO<sub>1</sub>: There is no positive and significant relationship between water resources and economic development

**Table 1: Water resources and economic development**

Correlations			
		Water Resources	Economic Development
Water Resources	Pearson Correlation	1	.935**
	Sig. (2-tailed)		.000
	N	296	296
Economic Development	Pearson Correlation	.935**	1
	Sig. (2-tailed)	.000	
	N	296	296

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Information in Table 1 shows the result of Pearson Correlation Coefficient analysis. The correlation coefficient (r) = .935. This value shows that a very strong positive relationship exists between water resources and economic development. The positive sign of the correlation coefficient is an indication that a direct association exist between water resources and economic development. The extent of this relationship is shown in the regression result below

**Table 2: Model Summary**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.809		.840

a. Predictors: (Constant), Water Resource

**Table 3: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.416	.157		15.387	.000
	Water Resources	.035	.057	.935	.620	.000

a. Dependent Variable: Economic Development

The table above shows the model summary and coefficients of the regression analysis. While correlation establishes that there is a significant relationship between the constructs, regression analysis shows the magnitude of the relationship.

Thus from the result,  $R^2$  value of 0.874 shows that water resources is a high predictor of economic development as it boast of 87.4% predictive capacity on economic development. This implies that water resources can predict economic development to the tune of 87.4%. The result also reflects a beta value  $\beta$  of 0.935 (p-value 0.000). The regression models becomes  $=2.416+.0935*WR$ . Since the p-value 0.000 is less than the level of significance (0.005), the null hypothesis  $H_0$  is not upheld. Therefore the alternative hypothesis is which states that there is a significant relationship between water resources and economic development.

#### Water resources and environmental development

$H_{O2}$ : There is no positive and significant relationship between water resources and environmental development

**Table 4: Water resources and environmental development**

Correlations			
		Water Resources	Environmental Development
Water Resources	Pearson Correlation	1	.963**
	Sig. (2-tailed)		.000
	N	296	296
Environmental Development	Pearson Correlation	.963**	1
	Sig. (2-tailed)	.000	
	N	296	296

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Information in Table 4 shows the result of Pearson Correlation Coefficient analysis. The correlation coefficient ( $r$ ) = .963. This value shows that a strong positive relationship exists between water resources and environmental development. The extent of this relationship is shown in the regression result below.

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 <sup>a</sup>	.927	.966	.838

a. Predictors: (Constant), Water Resources

**Table 6: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.733	.202		13.551	.000
	Water Resources	.078	.066	.963	1.169	.000

a. Dependent Variable: Environmental Development

The table above shows the model summary and coefficients of the regression analysis. While correlation establishes that there is a significant relationship between the constructs, regression analysis shows the magnitude of the relationship.

Thus from the result,  $R^2$  value of 0.927 shows that water resources is a high predictor of environmental development as it boast of 92.7% predictive capacity on environmental development. This implies that water resources can predict environmental development to the tune of 92.7%. The result also reflects a beta value  $\beta$  of 0.963 (p-value 0.000). The regression models becomes  $=2.733+.0.963*WR$ . Since the p-value 0.000 is less than the level of significance (0.005), the null hypothesis  $H_0$  is not upheld. Therefore the alternative hypothesis is which states that there is a significant relationship between water resources and environmental development.

### Relationship between water resources and socio-cultural development

$H_{O3}$ : There is no significant relationship between water resources and socio-cultural development

**Table 7: Water resources and socio-cultural development**

Correlations			
		Water Resources	Socio-Cultural Development
Water Resources	Pearson Correlation	1	.922**
	Sig. (2-tailed)		.000
	N	296	296
Socio-Cultural Development	Pearson Correlation	.922**	1
	Sig. (2-tailed)	.000	
	N	296	296

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The information in Table 7 above shows the result of Pearson Correlation Coefficient analysis. The correlation coefficient ( $r$ ) =0.922. This value indicates that strong relationship exists between water resources and socio-cultural development. The positive sign of the correlation coefficient is an indication that a direct association exist between water resources and socio-cultural development. The extent of this relationship is shown in the regression result below.

**Table 8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922 <sup>a</sup>	.850	.841	.475

a. Predictors: (Constant), Water Resources

**Table 9: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.090	.191		16.161	.000
Water Resources	.108	.063	.922	-1.723	.000

a. Dependent Variable: Socio Cultural Development

The table above shows the model summary and coefficients of the regression analysis. While correlation establishes that there is a significant relationship between the constructs, regression analysis shows the magnitude of the relationship.

Thus from the result,  $R^2$  value of 0.850 shows that water resources is a high predictor of Socio-Cultural development as it boast of 85.0% predictive capacity on Socio-cultural development. This implies that water resources can predict Socio-cultural development to the tune of 85%. The result also reflects a beta value  $\beta$  of 0.922 (p-value 0.000). The regression models becomes  $=3.090+0.922*WR$ . Since the p-value 0.000 is less than the level of significance (0.005), the null hypothesis  $H_0$  is not upheld. Therefore the alternative hypothesis is which states that there is a significant relationship between water resources and socio-cultural development.

### Discussion of Findings

The first findings of the study emanated from the result of hypotheses one, two and three which examined the relationship water resources and the measures of sustainable tourism development; which are economic, environmental and socio-cultural developments.

The study found that there is a significant relationship between water resources (as a dimension of beach resource) and the sustainable tourism development. Specifically, the result showed a value of ( $r=.935, 963,922$  at  $p=000<.050$ ) for economic development, environmental development and socio-cultural development respectively.

The result is consistent with previous studies such as Val et al (1985), and Lankford (1994).

Water Resource stimulates the establishment of various outdoor and indoor recreational activities, which enhances economic sustainability. For example swimming, beach soccer, beach volleyball, and even boat racing are just some of the activities that have been developed to profit on the growing popularity of coastal and marine tourist destinations. Table tennis, tennis, card games, traditional games like "Ayo Olopon," local music, and dances may be added to the list of activities that can be enjoyed at the beach.

In a study that is similar to this, Krantz (2007) claimed that the development of water resources has contributed to the continual rise of tourism in many coastal locations over the course of many decades. This growth has sometimes been unrestricted. As a direct result of this, the value of water resources has expanded to the point that the tourist industry today considers it to be one of the industries with the greatest potential for expansion. It has been determined which water resources are available. According to Orams (1999), a water resource includes travel-related recreational activities that have the water environment and the coastal zone as its host or focus point. This is because a water resource incorporates travel-related recreational activities. It includes recreational activities that take place on or in bodies of water and those that are impacted by the surrounding coastal land environment, which interrupts the bodies of water. Additionally, it includes activities that are disrupted by the surrounding coastal land environment. Amusement-seekers have shown a growing



interest in water resources as a consequence of the abundance of chances for leisure provided by these resources. This has led to greater economic prosperity for the host towns as well as improved sociocultural status (Jennings, 2007).

It is impossible to stress how important it is to have access to water while participating in athletic events. Coastal events and attractions, coral reefs, boating and yachting, seafood tourism, resort tourism, island tourism, marine wildlife tourism, submerged archaeology tourism, are all examples of the types of tourism that fall under the umbrella term of "beach tourism." Additionally included are ice-associated areas, seas, and oceans in addition to water resource zones (Jennings, 2007). In addition to the enormous financial benefits, these events bring together people from all walks of life, encourage tolerance and cultural variety, and eventually contribute to the social development of the town that is playing host to them (Ebhuoma&Simatele, 2017; Owolabi &Okwechime, 2007). Researchers (Zhang, 2009; Chen & Ye, 2009) have also stated that the aforementioned businesses are evidence that tourism-related industries have the potential to develop in Nigeria's waterways, despite the fact that there are currently very few of them. This is despite the fact that there are currently very few of them. In comparison to nations that have robust water tourist sectors, Bayelsa State has a relatively small number of private resorts, which means that the bulk of the state's water resource activities are supplied by these resorts. The tourist industry at state beaches is expected to experience rapid expansion and development; but, its performance may be improved if the government passes the necessary legislation, makes the necessary investments, participates, and creates an atmosphere that is favourable to business (Lordkipanidze et al., 2005).

The water resources of the beach have been slowly but surely contributing to the beach's assets in terms of their environmental development. The administration of the beach has always placed a significant emphasis on protecting the beach's water quality. Even though the political, economic, and social systems are what make up the human components of beach resource management, beach values are only created within the context of the social system (Kennedy and Thomas, 1995; Ayensuet al., 2003). These values of the beach, which manifest themselves in the form of environmental legislation, legislative spending plans, volunteer labour, voting behaviour, and management decisions, fundamentally determine the course of events regarding the natural systems that are necessary for the survival of civilization. According to Hearne and Salinas (2001), local decision-makers and managers of protected beach areas, such as the coast, should understand and incorporate visitor preferences in order to provide sufficient tourist infrastructure and access to the beach while also protecting the resources. Hearne and Salinas cite the example of the coast as an example. According to Val et al. (1985) and Lankford (1994), the use of water resources for tourism would require the construction of a coastal area management system that protects the ecosystem and improves both environmental and human welfare. This system would be necessary in order to make use of the water resources.

## **Conclusion**

Overall, this study examined the relationship between water resources and sustainable tourism development in Bayelsa state from the community residents' perspective. The results of the empirical analyses have revealed that water resource is very important factor in contributing to the sustainable development of Bayelsa state with appropriate tourism policy initiatives of the government. Accordingly therefore, this study concludes that appropriate development of tourism products in a destination especially in terms of water resources is very important in the sustainable development of the tourism destination region if the government will develop appropriate tourism policy.

### **Recommendations**

In line with the empirical analyses and findings, the following are recommendation of the study;

- i. To achieve a reasonable success in the pursuit of sustainable tourism development, tourism business experts and government are advised to invest in tourism centres across water resources since water resources proved to be a strong predictor for sustainable tourism development.
- ii. This study recommends a Public- Private-Partnership Initiative where government and stakeholders can jointly invest in water-way infrastructures that will engender water tourism developments
- iii. Concession of the management of Bayelsa state tourism water resources to private tourism expert could also be considered; this may boost the attraction of these tourist sites since private business would ensure the maintenance of water quality and that these facilities are well kept. This could in turn engender tourism development in the state.

### **Contribution to knowledge**

The study provides an example of using the Water Resources–Sustainable Tourism Development (WRSTD) model to empirically test the relationship between water resources and sustainable tourism development in Bayelsa state. Another major contribution to knowledge is that the empirical research effort focused on water resources which is not being exploited because of its huge tourism potentials.

### **Areas for Further Study**

The research had some limitations;

- (i) Data were obtained in one aspect of the tourism resources (water tourism resources)
- (ii) Only residents constituted the unit of analysis.

It is expected that future research should broaden the unit of analysis to include international tourists/visitors to Nigeria. It is also envisaged that further studies should consider other tourism resources which could form part of the composite tourism product.

## References

- Adeola, O., Boso, N., Osabutey, E. L., & Evans, O. (2020). Foreign direct investment and tourism development in Africa. *Tourism Analysis*, 25(4), 395-408.
- Ajani, F., Fadairo, O.S., Oyebanji, H.O. (2016). Performance goals and evaluation of socio-cultural and economic indicators: a case study of Alpha Beach Resort, Lagos State, Nigeria. *American Journal of Research Communication*, 4(8), 45-69
- Akendor, C. O., Korolo, E. O. & Diriyai, A. S. (2020). Promoting the growth of tourism destinations in Nigeria. *Journal of Social and Administrative Science*, 4(1), 81 – 102
- Arcana, K., & Wiweka, K. (2015). The potential development of community based tourism at Ambengan Village, Buleleng Regency, Bali. *Journal of Business on Hospitality and Tourism*. 1(1), 11.
- Ayensu, E., van, R., Claasen, D., & Collins, M. (2003). International ecosystem assessment. *Science*, 28(6), 685–89.
- Bribena, E. K. (2017). Developmental implications of a region: the case of the Niger Delta. *Gender and Behaviour*, 15(2), 8970-8979.
- Backman, M., & Klaesson, J. (2021). *The importance of the hospitality sector in integrating foreign-born individuals in Sweden. In regional science perspectives on tourism and hospitality* (pp. 79-100). Springer, Cham.
- Ballance, A., Ryan, P.G. & Turpie, J.K. (2000). How much is a clean beach worth? The impact of litter on beach users in the Cape Peninsula, South Africa. *South African Journal of Science*, 96(5), 210-230.
- Baridam, D.M. (2001). *Research methods in administrative Sciences*. Port Harcourt. Sherbrooke Associates, (2<sup>nd</sup> ed).
- Bekewuru, B. & E. Agbai (2021). A case for tourism development and economic empowerment in Bayelsa State, Nigeria. *Journal of Sustainable Development in Africa*, 23(1), 1-18
- Browne, J.N., Niven, S.J., Galloway, T.S., Rowland, S.J. & Thompson, R.C. (2013). Microplastic moves pollutants and additives to worms, reducing function linked to health and biodiversity. *Current Biology*, 23(23), 2388-2392.
- Cameron, L., Olivia, S. & Shah, M. (2019). Scaling up sanitation: evidence from an RCT in Indonesia. *Journal of Development Economics*, 138, 1-16.

- Campbell, M.L., Slavin, C., Grage, A. & Kinslow, A. (2016). Human health impacts from litter on beaches and associated perceptions: A case study of 'clean' Tasmanian beaches. *Ocean & Coastal Management*, 126, 22-30.
- Chen, G. and Ye, X. (2009). *Sustainable development and countermeasures of marine resources*. *Ocean Development and Management*, 2009.
- Choudri, B.S., Ahmed, A-S., Hamed, A-N. & Khalifa, A-Z. (2016). A study of beach use and perceptions of people towards better Management in Oman. *Indian Journal of Geo-Marine Sciences*, 1327-1333.
- Cooper, C., Fletcher, J., Fyall, A., Gilbert, D. & Wanhill, S. (2005). *Tourism: Principle and practice*. Pearson Education Ltd.
- Dantata, M. (2011). *Tourism development in Nigeria: Challenges and prospects for resource diversification*. A leadpaper delivered by Director General National Institute for Hospitality and Tourism (Nihotour), March, Abuja, Nigeria. development in Okpoko P.U (ed) *Issues in tourism planning & development*. Afro-Orbis Publishing Ltd.
- Dika, J.L. (2017). *Effects of pollution on coastal environment and socio-economic life of the people of Elmina*. PhD thesis, Ghana: university of Ghana, Legon.
- Dyck, I.P.V., Nunoo, F.K.E. & Lawson, E.T. (2016). An empirical assessment of marine debris, seawater quality and littering in Ghana. *Journal of Geoscience and Environment Protection*, 4, 21-36.
- Ebhuoma, E., & Simatele, D. (2017). Defying the odds: Climate variability, asset adaptation and food security nexus in the Delta state of Nigeria. *International Journal of Disaster Risk Reduction*, 21, 231-242.
- Eshun, G. (2019). Towards the dual mandate of ecotourism in Africa-comparative evidence from Ghana. *Africa insight*, 44(3), 164-184.
- Friedrich, J. & Jannik, S. (2019). *Beach tourism and climate along South Africa's coastline*. Master Theses at the University of Göttingen, Germany.
- Getz, D. (1994). Residents' attitudes towards tourism: A longitudinal study of Spey Valley, Scotland. *Tourism Management*, 15(4), 247-58.
- Gohori, O., & van der Merwe, P. (2021). Tourism and community empowerment: the perspectives of local people in Manicaland province, Zimbabwe. *Tourism planning & development*, 1-19. doi: 10.1080/21568316.2021.1873838

- Haiying, Z. (2020). *Egypt tourism and its importance in sustainable development goals*. In Third International Conference on Social Transformation, Community and Sustainable Development (ICSTCSD 2019) (pp. 202-205). Atlantis Press.doi: 10.2991/icstcsd-19.2020.4
- Hall, C.M. & Page, S.J. (2005).*The geography of tourism and recreation (3rded)*,Routledge.
- Hawkins, D. E., & Mann, S. (2007). The world bank's role in tourism development. *Annals of Tourism Research*, 34, 348-363.
- Hearne, R., Salinas, Z. J. (2002).*Environ Manag*,65, 153-163.
- Hernandez, S. A., Judy, C. & Hector, L. G. (1996). Residents'attitudes towards an instant resort enclave. *Annals of Tourism Research*,23(4), 755-79.
- Honey, M., & Krantz, D. (2007). *Global trends in coastal tourism*. Centre on Ecotourism andSustainable Development, Marine Program World WildlifeFund.
- Houston, J. R. (1995). *The economic value of beaches, cercular, coastal engineering research centre*. CERC- 95-4.
- Ijeomah, H.M., Eniang, E.A. &Umukoro, O. (2020). *coastal tourism in Niger Delta region of Nigeria*
- Jędrzejczak., M.F. (2004). *The modern tourist's perception of the beach: Is the sandy beach a place of conflict between tourism and biodiversity?* Institute of Oceanology, PolishAcademy of Sciences, Poland (IO PAS) Interfaculty Study Programme in EnvironmentalProtection, Warsaw University, Poland (ISPEP).
- Jennings, G. (2007). *Coastal and marine tourism, sport, leisure, and recreation experiences*.Routledge.
- Joaquin, A., Pou, L. &Sard, M. (2017). High unemployment and tourism participation. *Current Issues in Tourism*, 1138-1149.
- Joo, D., Woosnam, K. M., Strzelecka, M., &Boley, B. B. (2020). Knowledge, Empowerment, and Action: Testing the empowerment theory in a tourism context. *Journal of sustainable tourism*, 28(1), 69-85
- Jurowski, C., Muzaffer, U. & Daniel, R. W. (1997). Atheoretical analysis of host community resident reactions to tourism.*Journal of Travel Research*,36(2), 3-11.
- Kennedy, J.J. & Thomas, J.W. (1995). Managing natural resources associal value. In: Knight RL and Bates SF (Eds). *A new century for natural resource management*. IslandPress.
- Kigenyi, E. M. (2017). *Staff welfare and teachers' performance in public primary schools*. In Bugisu sub- region in Uganda. Mbarara University of Science and Technology



- Kladou, S., Kavaratzis, M., Rigopoulou, E. & Salonika, E. (2017). The role of brand elements in destination branding. *Journal of Destination Marketing & Management*, 6(4), 426-435.
- Kothari, C. (2010). *Research methodology, methods and techniques*. (2<sup>nd</sup> ed.) New Age International Publishers,
- Kothari, C.K. (2004). *Research methodology*. New Age International (P) Ltd.
- Krelling, A.P., Williams, A.T. & Turra, A. (2017). Differences in perception and reaction of tourist groups to beach marine debris that can influence a loss of tourism revenue in coastal areas. *Marine Policy*. 85, 87-99.
- Lankford, S. V. (1994). Attitudes and perceptions toward tourism and rural regional development. *Journal of Travel Research*, 32(2), 35-43.
- Leiper, N. (1990). *Tourism systems: An interdisciplinary perspective*. Department of Management Systems, Occasional Paper 2, Massey University.
- Lencek, L. & Bosker, G. (1991). *Coastal planning and management*. E & F Nspon.
- Lordkipanidze, M., Brezet, H., & Backman, M. (2005). The entrepreneurship factor in sustainable tourism development. *Journal of Cleaner Production*, 13(8), 787-798.
- Marfo, A.K. (2014). *Tourism development and its effects on host community: A case study of Kakum national park in the central region of Ghana*. MA Dissertation. KNUST.
- Markovic, M, Salta, A; Skkaricie, Z; & Trumbric, I; (2009). *Sustainable coastal tourism: An integrated planning and management approach Milan France: United Nation's Environmental Programme (UNEP)*.
- Ndu. E. C, & Umoh. G. I. (2020). System quality and economic sustainability of Nigerian Tourist sites: A leadership challenge for operations managers. *European Journal of Hospitality and Tourism Research* 8 (2), 32-54.
- Okeke, I.C. (2003). *Coastal challenges and the challenge of coastal education in Nigeria*. Conek International ltd.
- Okhiria, A. O., Adebayo, A. D. & Usdame, J. O. (2014). Threats and challenges of tourism to indigenous culture in some selected tourism sites in Akwa Ibom, Nigeria. *European Journal of Business and Social Sciences*, 3(4), 20-28
- Okpoko, (2002). *Resources consists of the wealth and materials available to an individual or nation which can be used to achieve desired objectives*, pp 38
- Orams, M. (1999). *Marine tourism: Development, impacts and management*. Routledge

- Orams, M. (1999). *Marine tourism: Development, impacts and management*. Routledge.
- Owolabi, O., & Okwechime, I. (2007). Oil and security in Nigeria: The Niger Delta crisis. *Africa Development*, 32(1), 1–40.
- Perdue, R. R., Patrick T. L. & Lawrence, A. (1987). Rural resident tourism perceptions and attitudes. *Annals of Tourism Research*, 14, 420-29.
- Poeta, G., Conti, L., Malavasi, M., Battisti C. & Acosta, A.T.R. (2016). Beach litter occurrence in sandy littorals: The potential role of urban areas, rivers and beach users in central Italy. *Estuarine, Coastal and Shelf Science*, 181, 231-237.
- Purnomo, S., Rahayu, E. S., Riani, A. L., Suminah, S., & Udin, U. D. I. N. (2020). Empowerment model for sustainable tourism village in an emerging country. *The Journal of Asian Finance, Economics, and Business*, 7(2), 261-270.
- Putri, A. E., Khadijah, U. L. S., & Novianti, E. (2020). Community empowerment in the development of mangrove tourism in Batu Karas of Pangandaran, West Java. *Geo Journal of Tourism and Geosites*, 31(3), 972-978.
- Rutty, M & Scott, D. (2013). Differential climate preferences of international beach tourists. *Climate Research, Clim Res*, 57, 259–269,
- Sarr, B., Sène-Harper, A., & Gonzalez-Hernandez, M. M. (2020). Tourism, social representations and empowerment of rural communities at Langue de Barbarie National Park, Senegal. *Journal of Sustainable Tourism*, 1-20. doi: 10.1080/09669582.2020.1855437
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, 5th ed. Prentice Hall.
- Sharpley, R. & Telfer, D.J. (2002). *Aspects of tourism; tourism and development: concepts and issues*. Channel view publications
- Simpeh, K. N., Simpeh, M., Abdul-Nasiru, I., & Amponsah-Tawia, H. (2011). Servicescape and customer patronage of three star hotels in Ghana's metropolitan city of Accra. *European Journal of Business and Management*, 3(4)122-139.
- Suratini, N. L. P., Arnawa, K. & Wiswasta, G. N. A. (2019). *Beach development strategy as tourism destination in Tabanan Bali*. *Beach development strategy as tourism destination in Tabanan Bali*, 10(1), 21219-21228
- Uduji, J. I., Okolo-Obasi, E. N., Onodugo, V. A., Nnabuko, J. O., & Adedibu, B. A. (2020). Corporate social responsibility and the role of rural women in strengthening agriculture-tourism linkages in Nigeria's oil producing communities. *Journal of Tourism and Cultural Change*, 1-27. doi: 10.1080/14766825.2020.1826500

UNEP (2009). *Sustainable coastal tourism: An integrated planning and management approach*, Paris: United Nations Environment programme available at: [www.unep.org/pdf/DTIE\\_PDFS/DTI\\_x1091\\_x\\_PA\\_Sustainable\\_Coastal\\_Tourism\\_Planning.pdf](http://www.unep.org/pdf/DTIE_PDFS/DTI_x1091_x_PA_Sustainable_Coastal_Tourism_Planning.pdf) (accessed 24 April 2015).

UNEP, (2009). *Sustainable coastal tourism an integrated planning and management approach*.

UNESCO, (2009). *Sustainable tourism development in UNESCO*. (Manuals and Guidelines).

UNESCO, (2019). *Brazilian Atlantic Islands: Fernando de Noronha and Atol das Rocas Reserves*. [WWW Document]. URL. <https://whc.unesco.org/en/list/1000> accessed 2.10.19.

UNIDO Coast Project. (2013). *Sustainable tourism governance in coastal areas in Africa*. UNIDO Coast Project.

United Nations World Tourism Organization. (2008). *Understanding tourism: Basic glossary*. Retrieved from <http://media.unwto.org/en/content/understanding-tourism-basicglossary>

United Nations Environment Programme (2002). *Environmental impacts of tourism*. March 14, 2007. Retrieved from: <http://www.uneptie.org/pc/tourism/sust-tourism/home.htm>

UNWTO (1993). *Report on world tourism day and adoption of themes for 1994 and 1995*. A/10/161993 (1) Citation PDF (275 KB)

UNWTO (2017). *Definitions committee on tourism and competitiveness (CTC)*. <http://cf.cdn.unwto.org/sites/all/files/docpdf/ctcdefinitionsenweb.pdf>

UNWTO (2018). *Report on tourism and culture synergies*. UNWTO.

UNWTO (The World Tourism Organization), (2019). *Sustainable development of tourism*. [WWW Document]. URL. <http://sdt.unwto.org/es/content/definicion> accessed: 1.30.19.

UNWTO. (2016). *Tourism highlights*. Retrieved from <http://www.e-unwto.org/doi/pdf/10.18111/9789284418145>

Var, T., K.W. Kendall, & Enis, T. (1985). Resident attitudes towards tourists in a Turkish resort town. *Annals of Tourism Research*, 12(4), 652-58.

Vikas, M. & Dwarakish, G.S. (2015). Coastal pollution: A review. *Aquatic Procedia*, 4, 381-388

World Travel & Tourism Council. (2017). *Travel and tourism economic impact 2017 world*. Retrieved from <https://www.wttc.org/-/media/files/reports/economic-impactresearch/regions-2017/world2017.pdf>

Wyles, K.J., White, M.P., Hattam, C., Pahl, S., King, H. & Austen, M. (2019). Are some natural environments more psychologically beneficial than others? The importance of type

and quality on connectedness to nature and psychological restoration. *Environment and Behavior*, 51(2), 111-143.

Xue, S., & Wang, Z. (2013). Protection and exploitation of marine resources based on sustainable development. *Chinese Fisheries Economics*, 31(06), 152-156.

Yasa, I. (2020). Community empowerment in tourism development during the digital era in North Badung. *South East Asia Journal of Contemporary Business, Economics and Law*, 21(5). Retrieved from: <http://seajbel.com/wp-content/uploads/2020/07/SEAJBEL21265.pdf>

Yasong, A. W. (2008). Residents' attitudes toward tourism and perceived personal benefits in a rural community. *Travel Research*, 47, 84-93.

Zhang, F. (2009). *Discussion on the construction of the relationship model between local governments in regional ocean management*. Xiamen University, 2009.