



## Perceived Socio-Economic and Environmental Impacts of Eco-Tourism Development on Host Communities: Evidence from Owalla Resorts, Southwestern Nigeria

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**Abstract:** Though eco-tourism has the potential to boost the rural economy and ensure the conservation of the environment, the perception of the benefits of such tourism by the host communities is too sparse to obtain in some of the emergent eco-tourism destinations in Nigeria. This study examined the socio-economic, social and environmental impacts of the development of the eco-tourism in Owalla Resorts, at the southwestern part of Nigeria, as perceived by the residents. The cross-sectional quantitative survey design was used. Overall, 133 questionnaires were distributed to the stakeholders of the resort, including visitors, employees of the resort and local residents of the surrounding communities, yielding a response rate of 96.2% (128 valid questionnaires returned). It was used a likert scale ranging from one to five with respect to attitude towards impacts of eco-tourism; descriptive statistics and multiple regression analysis were used in analyzing the data. The economy, social and environmental/infrastructure were all perceived favourably by the respondents. Most individual means in this study were for RAE environmental awareness ( $M = 4.23$ ,  $SD = 0.69$ ), RAE employment opportunities ( $M = 4.21$ ,  $SD = 0.71$ ), and RAE cultural exchange ( $M = 4.18$ ,  $SD = 0.76$ ). The regression model was statistically significant ( $R^2 = 0.62$ ,  $F = 31.45$ ,  $p < 0.001$ ). The reported socio-economic development outcome was positively correlated with employment creation ( $\beta = 0.41$ ,  $p < 0.001$ ), income generation ( $\beta = 0.36$ ,  $p < 0.001$ ) and business development ( $\beta = 0.29$ ,  $p = 0.002$ ). The results indicate that the stakeholders generally have a positive view of the effects that the eco-tourism at Owalla Resorts has had on the economic opportunities, social development and environmental awareness of the area they belong to. The increased involvement of local communities, local enterprise partnerships and strengthening tourism infrastructure can improve these perceived benefits. Due to the study's cross-sectional and perception-based design, an interpretation of associations and not indications of causal effects is indicated.

**Keywords:** Community participation, Eco-tourism, Environmental sustainability, Host communities, Socio-economic Development, Sustainable tourism.

### Introduction

Eco-tourism has become an important strategy for sustainable development, conservation of the environment and socio-economic development especially in developing countries with an abundance of natural and cultural resources. Eco-tourism is a type of tourism that uses the same approach as traditional tourism but aims to travel responsibly and ensure that defined natural areas are suitably protected and maintained and also enhances the benefits to the local community. In rural areas, this possibility of sustainable tourism also provides an opportunity for the communities to earn income and enjoy sustainable development, being that this is also a very important tool for sustainable development (Torsney et al., 2025; Mohammed, 2022). Eco-tourism programs are now known to bolster natural ecosystem preservation, promote community enterprises and livelihood improvements, and increase the employment opportunities of local residents.

Tourism also is a significant energy to economic development and job creation and has a global presence which brings frontside to culturally specific areas, development of regions etc. Research also demonstrated that development of tourism is often found as a catalyst for socio-economic development in particular in rural area or less-developed areas where alternative sources of income are limited (Baloch et al., 2022; Gautam (2023). Eco-tourism is an eco approach

that creates new economic opportunities for local residents through the development of services in tourism, including services for craft production, guiding, transportation and hostelry. Moreover, tourism revenue can support improved infrastructure, public facilities and investment as well, favoring both tourists and host communities.

Nigeria's quest to diversify its economy and eliminate dependency on oil returns has brought eco-tourism to the fore in recent times. Nigeria has rich natural resources that have strong possibilities of eco-tourism development such as National Parks, Wildlife Reserves, Waterfalls, Forests and culturally and historically significant sites. Eco-tourism, if managed effectively, could be a source of income, conservation, sustainable livelihoods to farmers in rural areas (Mohammed, 2022; (Abuhay et al., 2023; Mazengiya, 2022; Samani et al., 2023). In addition, eco-tourism can also foster responsible tourism and active involvement of the community in conservation, helping to make tourism a force for both conservation and community development. Also, eco-tourism can help insure responsible tourism, and it's welcoming involvement by the local community in conservation activities, which will help make tourism a forces for conservation and the community as well.

The State of Osun in South Western Nigeria is one such area with huge potentials for developing eco-tourism attractions in Nigeria, owing to the characteristics of its biodiversity, natural and cultural features. Local and international tourists are flocking to tourism sites like the Osun-Osogbo Sacred Grove, waterfalls, forest reserves and inland water sources. In spite of these assets the tourism sector is still underdeveloped in Osun state with problems of poor infrastructure, poor tourism promotion and low investments in tourism facilities. Eco-Tourism Resorts however have started to exploit natural resources to develop tourism in an ecologically sustainable way and generate economic development by these resorts in the Province of Røros, in the state.

Owalla resorts, which is in Osun state, is one of the emerging eco-tourism locations in the state. The resort is surrounded by natural landscapes, water bodies and high biodiversity that will allow for nature-based tourism activities. Eco-tourism establishments like this resort enable the opportunity for the visitors to learn more about ecology, have leisure time and share cultural values with their neighbor regions. Such forms of tourism can provide opportunities for employment, promote small business entrepreneurship and vivify town infrastructure by tourist investment.

It is therefore important to study the socio-economic benefits for local communities which is an area of research more significant for developing countries, where tourism could also provide tools for poverty reduction and rural development. A global grasp of the effects of eco-tourism programs on jobs, income, cultural heritage, and social-economic progress is critical for developing sound and sustainable tourism policies. Eco-tourism has many advantages, but it can also bring problems in the distribution of the revenue from tourism, in the commercialisation of the culture and over-pressuring the environment if not managed well. Hence, empirical research is essential to assess the degree of community development that is gained from eco-tourism projects.

Though relatively new studies have focused on the importance of eco-tourism and sustainable rural development, there are a number of significant empirical gaps in the Nigerian context. Most of the current literature is based on the national or regional aspects of tourism development with relatively fewer empirical studies focused on the emerging tourism enterprises on a destination level and the perceptions of the stakeholders who offer direct services to them. Moreover, economic, social and environmental measures are frequently analysed individually and the consequences of the interdependency of the three dimensions of sustainability have yet to be sufficiently understood, particularly around how host destinations simultaneously accommodate economic, social and environmental outcomes.

This mismatch is especially pertinent to the success of tourism businesses in eco-tourism area of emerging interest along the south west region of Nigeria situated within communities grappling with the challenges of livelihood diversification, infrastructure development and environmental conservation simultaneously. Thus, there is a need for evidence to determine whether such tourism development is viewed as creating opportunity for stakeholders, but at the same time also affecting community and ecological outcomes. Therefore, the Valley of the Flowers and the resort village of Owalla serves as a helpful example at the HRB level to review these connections.

Thereby, this study attempts to combine the three elements of economic, social, and environmental / infrastructure conditions in evaluating the perceptions of the stakeholders towards eco-tourism development in Owalla Resorts. The study did not take the position of assuming that the development of tourism has a direct consequence of benefits for communities, but has examined on the empirical level the perceived size of such benefits and the relationship that exists between certain economic indicators and the reported socio-economic development results.

With this backdrop, this study investigates the socio-economic challenges and benefits of the growth of eco-tourism in the local communities based on location of Owalla Resorts, in Osun state, Nigeria. The research aims at evaluating the contribution of the resort in terms of employment generation, income generation, community development and improved livelihoods of the local communities. The study was based on the experiences and perceptions of visitors, senior and also local residents, analysing their experiences; the role of eco-tourism in promoting sustainable rural development in Nigeria was regained. The result is anticipated to be a part of the increasing volume of books being written on eco-tourism, thereby offering practical guidelines that would assist the decision makers, that is the policy-makers, tourism planners and investors in curbing sustainable development in eco-tourism in Nigeria and other developing economies.

### **Study Objectives**

The overall goal of the study was to determine the socio-economic and environmental effects that may accrue from the development of a “pari-kyunyo” at Owalla Resorts, Osun State, Nigeria.

Specifically, the study aimed to: Characterize the socio-demographic attributes of stakeholders involved in the eco-tourism activities at Owalla Resorts; and

evaluate perceived economic advantages of the development of eco-tourism; for example, related employment, income opportunities, local business creation, investment and capacity building for the tourism sector;

Critically discuss social effects that are perceived by eco-tourism such as cultural exchange, community development, quality of life, community pride, community participation;

evaluate the impacts on the environment and infrastructure that was being felt due to an eco-tourism development; and

Review the relationship between specific variables (or indicators) of eco-tourism and the socio-economic development benefit reported.

### **Conceptual Framework**

This study considers eco-Tourism development as multidimensional, and the alleged results of the development being economic, social and environmental. The framework is based on the assumption that the judgment criteria of the stakeholders on tourism development are based on their perception of benefits from the tourism activities, such as creating jobs, job opportunities, business development, cultural interactions, community development, awareness and appreciation of the surrounding environment, conserving biodiversity, and improving infrastructure.

The conceptual reasoning is in line with the logic of Social Exchange Theory, suggesting that individuals and communities tend to assess development projects in terms of costs and benefits of involvement in or exposure to development projects. Within the tourist sector, then, positive preperceptions are more likely to occur where the sector's development is 'purely' related to positive economic, social, or environmental outcomes for the people who derive benefit from it.

In this study, the range of perceived impacts on eco-tourism was considered along three broad dimensions – economic, social and environmental/infrastructure impacts. Economic considerations were employment opportunities, local income, development of small business, investment in the community and tourism infrastructure. Social indicators included cultural exchange, community developments, quality of life, community pride and community participation. Environmental/infrastructure indicators comprised the beliefs about environmental awareness, the conservation of biodiversity, environmental protection efforts, and infrastructure development.

The empirical analysis then tests stakeholder perceptions against these, and looks into the relationship between the selected economic indicators and the reported Socio-Economic Development outcome. As this is a cross sectional design, the framework aims to identify patterns of association, not causal pathways.

## **Methodology**

### **Research Design**

The study used quantitative cross-sectional research design to examine the socio-economic impact of the development of eco-tourism in local communities around Owalla Resorts in Owalla LGA of Osun State in Nigeria. The cross-sectional survey methodology was adopted to allow the researcher to gather empirical data from a specific population of a community over a single time period, and assess the relationship between the various intervals of eco-tourism activities and other socio-economic developments related to income generation, employment opportunities, infrastructure development and community satisfaction. The quantitative designs are commonly employed in the tourism impact studies due to the possibility of measuring the tourism impact perceptions, attitudes and socio-economic indicators statistically during tourism development (Baloch et al, 2022; Gautam, 2023).

This study was descriptive in qualitative type and design. The demography descriptive component gave insights into the demographic characteristics and perceptions of the described stakeholders on the impact of eco-tourism while the demography explanation component analysed the relationship of eco-tourism development with socio-economic impacts in the host community.

### **Study Area**

The study was carried out in the population of the village of Owalla Resorts which falls under the Egbedore Local Government Area of Osun State, South West of Nigeria. The state is known for its rich cultural resources, biodiversity and natural tourism potential with forests, rivers, waterfalls of international significance and the Osun-Osogbo Sacred Grove. As it has abundant natural resources and cultural sites, the state has significant potential for eco-tourism.

Owalla Resorts is located in a natural landscape that includes picturesque natural features and water bodies, which offer a good backdrop to eco-tourism activities including nature recreation, cultural tourism and environmental learning. It is an appealing place to stay for people of various Nigerian communities and provides job opportunities, hospitality, and enables tourisms among others to boost the economy of the community.

### **Population of the Study**

The target population included stakeholders who directly and indirectly associated with activities of eco-tourism at Owalla Resorts. These included:

1. People who go to the resort and visit the town (local and foreign tourists)
2. Teaming Up with Resort Employees Management Staff.
3. Local residents and business owners of surrounding communities.

The groups were chosen as related parties which affect from the activities of eco-tourism. The area of accessible population for the study involved 200 respondents which are the people interacting with the resort as an employee, tourist, or a citizen of the host community.

### **Sampling Technique and Sample Size**

To minimize sampling bias and to ensure equal chance in recruitment of the respondents, simple random sampling technique was adopted from the target population. Due to the improvement in representativeness and reliability of tourism and social science results, (Creswell & Creswell, 2023), random sampling is widely used in this research type.

The sample size for the study was determined using the Taro Yamane (1967) formula, which is suitable for determining sample sizes in finite populations.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- $n$ = required sample size
- $N$ = total population
- $e$ = level of precision (0.05)

Substituting the values:

$$n = \frac{200}{1 + 200(0.05)^2}$$
$$n = \frac{200}{1 + 0.5}$$
$$n = \frac{200}{1.5} = 133$$

Thus, the sample size was 133 respondents. A total of 133 questionnaires were distributed, and 128 valid responses were retrieved, representing a 96.2% response rate, which is considered adequate for statistical analysis in survey-based studies.

### **Data Collection Methods**

Data were collected using primary and secondary sources.

#### **Primary Data**

Primary data were collected using a structured questionnaire designed to capture respondents' perceptions of the socio-economic impacts of eco-tourism development at Owalla Resorts. The questionnaire consisted of four main sections:

1. Section A: Demographic characteristics of respondents (gender, age, education, occupation).
2. Section B: Perceived economic impacts of eco-tourism (employment creation, income generation, business opportunities).
3. Section C: Social impacts (community development, cultural exchange, quality of life improvements).
4. Section D: Environmental and infrastructure impacts associated with eco-tourism development.

Responses were measured using a five-point Likert scale ranging from:

1 – Strongly Disagree 2 – Disagree 3 – Neutral 4 – Agree 5 – Strongly Agree

Likert scales are widely used in tourism impact studies because they enable the measurement of attitudes and perceptions toward tourism development (Nunkoo et al., 2021).

#### **Secondary Data**

Secondary data were obtained from academic journals, government tourism reports, books, and policy documents related to eco-tourism development, community participation, and sustainable tourism in Nigeria.

### **Reliability of the Research Instrument**

A pilot study involving 20 respondents from a comparable tourism setting was conducted before the main survey to assess the internal consistency and clarity of the questionnaire items. Internal consistency was evaluated using Cronbach's alpha. The overall scale produced a Cronbach's alpha coefficient of 0.82, indicating good internal consistency among the measured items. Feedback obtained during the pilot exercise was also used to improve the clarity and comprehensibility of the questionnaire before administration in the main study.

## **Validity of the Research Instrument**

Content validity was addressed through expert review of the questionnaire. Experts with relevant knowledge of tourism management and sustainable development assessed the instrument for clarity, relevance, and coverage of the economic, social, and environmental dimensions examined in the study. Questionnaire items were also informed by constructs reported in previous tourism-impact literature. Revisions were made following the expert assessment to improve clarity and alignment between the questionnaire items and study objectives.

Although these procedures provided evidence of content relevance, no separate exploratory or confirmatory factor analysis is reported in the present study. Consequently, claims regarding the factorial or construct validity of the measurement structure are made cautiously.

## **Data Analysis**

Completed questionnaires were checked for completeness, coded, and analysed using IBM SPSS Statistics version 26. Descriptive statistics, including frequencies and percentages, were used to summarise respondents' socio-demographic characteristics. Means and standard deviations were used to summarise responses to the five-point Likert-scale items measuring perceived economic, social, and environmental/infrastructure impacts of eco-tourism.

Multiple regression analysis was used to examine the association between the selected economic indicators and the reported socio-economic development outcome. Standardized regression coefficients ( $\beta$ ), t-statistics, and associated p-values were reported for the available predictor estimates. Model explanatory power was evaluated using the coefficient of determination ( $R^2$ ) and the overall F-test. Statistical significance was evaluated at  $\alpha = 0.05$ .

Because the study employed a cross-sectional design, regression coefficients were interpreted as statistical associations rather than causal effects.

## **Ethical Considerations**

Ethical guidelines were strictly followed during the research process. Participation in the study was voluntary, and respondents were informed about the purpose of the research before completing the questionnaire. Confidentiality and anonymity of respondents were guaranteed, and all data collected were used strictly for academic purposes. Respondents were also given the right to withdraw from the study at any stage without any consequences.

## **4. Results**

### **4.1 Response Rate and Characteristics of the Study Population**

Of the 133 questionnaires administered to visitors, employees of Owalla Resorts, and residents of the surrounding communities, 128 were completed and returned, yielding a response rate of 96.2%. Only five questionnaires (3.8%) were not returned. Consequently, all subsequent analyses were based on 128 valid responses.

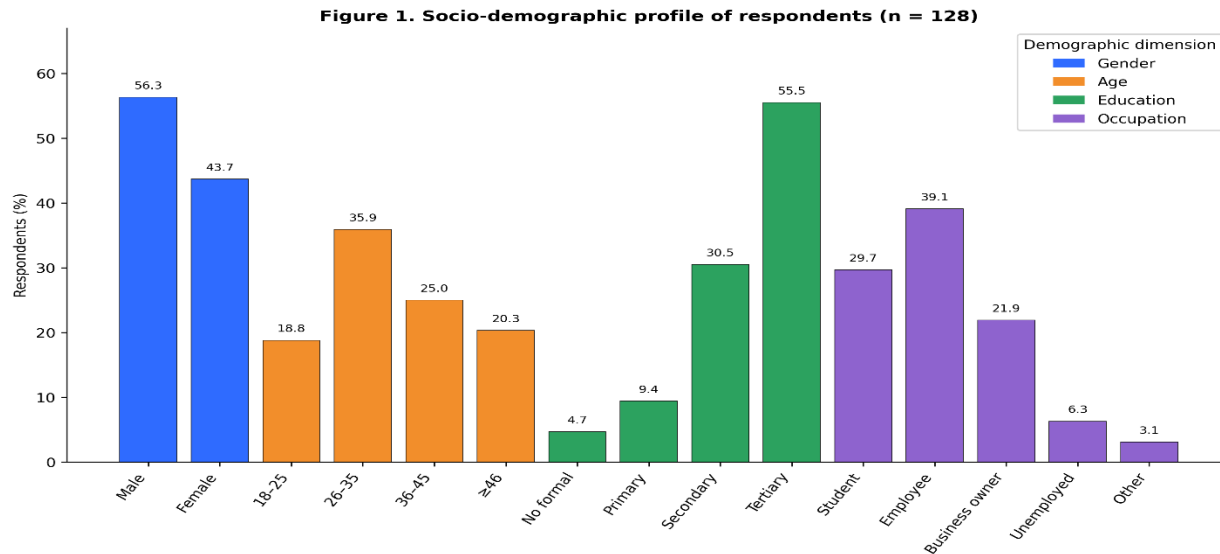


Figure 1. Socio-demographic profile of respondents.

*Legend/Note:* n = number of respondents. Percentages are calculated using the 128 valid questionnaires, except questionnaire-status percentages, which are based on the 133 questionnaires distributed. Percentages may not total exactly 100.0 because of rounding.

The sample was relatively balanced by gender, although males constituted a slightly larger proportion (56.3%) than females (43.7%). Respondents aged 26–35 years formed the largest age category (35.9%), followed by those aged 36–45 years (25.0%). More than half of the participants had attained tertiary education (55.5%), while employees constituted the largest occupational category (39.1%). The demographic distribution therefore indicates participation across different age, educational, and occupational groups.

*Legend:* Bars represent the percentage of respondents within each socio-demographic category based on 128 valid questionnaires. Age, gender, educational attainment, and occupational categories are presented descriptively and should not be interpreted as mutually comparable constructs.

#### 4.2 Perceived Economic, Social, and Environmental Impacts of Eco-Tourism

Respondents generally reported favourable perceptions of the contribution of eco-tourism at Owalla Resorts to the host community. The strongest perceived economic benefit was employment creation ( $M = 4.21$ ,  $SD = 0.71$ ), followed by increased local income ( $M = 4.12$ ,  $SD = 0.74$ ) and small-business development ( $M = 4.05$ ,  $SD = 0.82$ ).

Within the social dimension, cultural exchange recorded the highest mean score ( $M = 4.18$ ,  $SD = 0.76$ ), while community development ( $M = 4.06$ ,  $SD = 0.80$ ) and community pride ( $M = 4.01$ ,  $SD = 0.83$ ) were also favourably rated. Environmental awareness produced the highest mean score across the environmental/infrastructure indicators ( $M = 4.23$ ,  $SD = 0.69$ ).

Table 2. Respondents' perceptions of the economic, social, environmental, and infrastructural impacts of eco-tourism

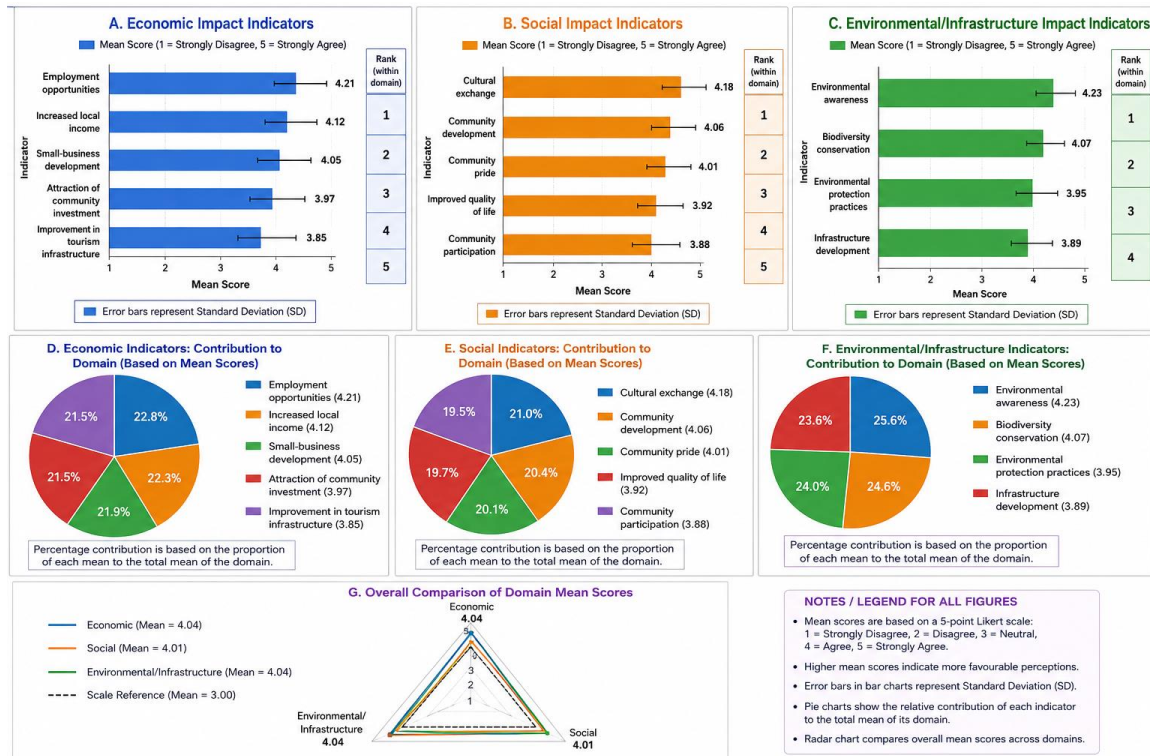


Figure 2. Mean perceived impacts of eco-tourism across the economic, social, and environmental/infrastructure domains.

**Legend/Note:** M = arithmetic mean; SD = standard deviation. Higher mean scores represent more favourable perceptions of the contribution of eco-tourism. Rankings are calculated separately within each impact domain. Interpretation of the absolute means should be made with reference to the response scale used in the questionnaire.

Across the economic indicators, the mean score was 4.04, indicating an overall favourable perception of economic benefits. The corresponding domain means calculated from the reported item-level statistics were approximately 4.01 for social impacts and 4.04 for environmental/infrastructure impacts. Thus, perceptions were consistently favourable across all three dimensions, with only limited differences between their aggregate mean scores.

At the individual-item level, environmental awareness ( $M = 4.23$ ,  $SD = 0.69$ ) and employment creation ( $M = 4.21$ ,  $SD = 0.71$ ) received the highest ratings. Conversely, improvement in tourism infrastructure ( $M = 3.85$ ,  $SD = 0.91$ ) and encouragement of community participation ( $M = 3.88$ ,  $SD = 0.91$ ) received comparatively lower ratings. The latter indicators also displayed relatively larger standard deviations, suggesting greater heterogeneity in respondents' perceptions.

**Legend:** Bars represent domain-level mean scores calculated from the constituent indicators. Economic impact:  $M = 4.04$ ; social impact:  $M \approx 4.01$ ; environmental/infrastructure impact:  $M \approx 4.04$ . Higher scores represent more favourable perceptions of eco-tourism impacts. Domain means are descriptive summaries and no statistical significance between domains should be inferred from this figure.

### 4.3 Association Between Eco-Tourism and Socio-Economic Development

The hypothesised relationship between eco-tourism and socio-economic development was examined using regression analysis. The model was statistically significant ( $F = 31.45$ ,  $p < 0.001$ ) and explained 62% of the observed variance in socio-economic development ( $R^2 = 0.62$ ).

Among the reported predictors, employment creation showed the strongest positive association with socio-economic development ( $\beta = 0.41$ ,  $t = 5.82$ ,  $p < 0.001$ ), followed by income generation ( $\beta = 0.36$ ,  $t = 4.97$ ,  $p < 0.001$ ) and business development ( $\beta = 0.29$ ,  $t = 3.88$ ,  $p = 0.002$ ).

Table 3. Regression model examining the relationship between eco-tourism indicators and socio-economic development

| Predictor            | Standardized $\beta$ t |             | p-value | Statistical decision |
|----------------------|------------------------|-------------|---------|----------------------|
| Employment creation  | 0.41                   | 5.82        | <0.001  | Significant          |
| Income generation    | 0.36                   | 4.97        | <0.001  | Significant          |
| Business development | 0.29                   | 3.88        | 0.002   | Significant          |
| Model statistics     | $R^2 = 0.62$           | $F = 31.45$ | <0.001  | Model significant    |

*Legend/Note:*  $\beta$  = standardized regression coefficient;  $t$  = test statistic;  $R^2$  = coefficient of determination;  $F$  = overall model test statistic. Statistical significance was evaluated at  $\alpha = 0.05$ . Positive  $\beta$  coefficients indicate positive associations with socio-economic development.

The magnitude of the standardized coefficients indicates that employment creation was the strongest predictor, followed by income generation and business development. All three predictors were positively and statistically significantly associated with socio-economic development.

Figure 3. Standardized regression coefficients for predictors of socio-economic development.

*Legend:* Bars represent standardized regression coefficients ( $\beta$ ). Employment creation ( $\beta = 0.41$ ,  $p < 0.001$ ), income generation ( $\beta = 0.36$ ,  $p < 0.001$ ), and business development ( $\beta = 0.29$ ,  $p = 0.002$ ) were statistically significant positive predictors. Larger positive coefficients indicate stronger positive associations with the outcome variable.

#### 4.4 Hypothesis Test

$H_{01}$ : Eco-tourism development at Owalla Resorts does not significantly contribute to the socio-economic development of local communities.

The regression model was statistically significant ( $F = 31.45$ ,  $p < 0.001$ ) and accounted for a substantial proportion of variation in the socio-economic development outcome ( $R^2 = 0.62$ ). Accordingly,  $H_{01}$  was rejected. Within the limits of the cross-sectional study design, the findings demonstrate a statistically significant positive association between the measured eco-tourism indicators and perceived socio-economic development in the host community.

#### 4.5 Summary of Principal Findings

Three principal patterns emerged from the analysis. First, respondents reported consistently favourable perceptions of the economic, social, and environmental contributions of eco-tourism at Owalla Resorts. Second, employment creation and environmental awareness emerged as particularly highly rated benefits. Third, the regression analysis demonstrated a statistically significant relationship between the eco-tourism indicators and socio-economic development, with employment creation showing the largest standardized coefficient.

Collectively, the results suggest that the perceived benefits of eco-tourism around Owalla Resorts extend beyond direct economic outcomes to encompass social and environmental dimensions. However, the relatively lower scores for tourism infrastructure and community participation identify areas in which the benefits of eco-tourism development may be comparatively less pronounced.

### Discussion

This study examined stakeholder perceptions of the economic, social, and environmental implications of eco-tourism development associated with Owalla Resorts in southwestern Nigeria. Three findings are particularly noteworthy. First, respondents reported consistently favourable perceptions across the three impact domains, with environmental awareness, employment opportunities, and cultural exchange receiving particularly high ratings. Second, the findings

suggest that stakeholders perceive the benefits of eco-tourism as extending beyond direct economic opportunities to include social and environmental outcomes. Third, the regression results indicate significant positive associations between employment creation, income generation, business development, and the reported socio-economic development outcome.

The relatively high rating assigned to employment opportunities is important in the context of rural and peri-rural tourism development. Tourism enterprises can create direct employment within accommodation, recreation, maintenance, food services, and administration while generating indirect opportunities through transportation, food supply, retailing, and other local services. The present finding should nevertheless be interpreted as evidence of stakeholders' perceptions of employment benefits rather than as a direct estimate of the number of jobs created by Owalla Resorts. This distinction is particularly important because the cross-sectional survey did not independently measure changes in community employment before and after resort development.

The results revealed that eco-tourism development at Owalla Resorts significantly contributes to employment creation and income generation within the host community. Respondents strongly agreed that the presence of the resort has created job opportunities in areas such as hospitality services, tourism guiding, transportation, and local trade. These findings are consistent with evidence showing that community-based ecotourism can contribute to employment creation, income-generating opportunities, and livelihood improvement, although the magnitude and distribution of such benefits may vary across host communities (Angessa et al., 2022; Mazengiya, 2022).

The findings further indicate that eco-tourism activities contribute to the development of local businesses and entrepreneurship. Many respondents reported that eco-tourism has stimulated local economic activities such as craft production, food supply, transport services, and informal trading. This finding aligns with the work of Scheyvens and Biddulph (2018), who argued that eco-tourism can generate multiplier economic effects by supporting local supply chains and small-scale enterprises. In the context of Owalla Resorts, tourism demand appears to stimulate local market opportunities, allowing community members to participate in tourism-related economic activities.

Beyond economic benefits, the study also identified several social impacts associated with eco-tourism development. Although the present study did not directly quantify the distribution of tourism benefits among different community groups, benefit distribution remains an important consideration when interpreting the developmental potential of eco-tourism. Future research should therefore examine whether employment, enterprise opportunities, and other tourism-derived benefits are equitably accessible across socio-economic groups within the host communities.

The study also found that eco-tourism contributes to improved quality of life and social cohesion within host communities. Tourism-related investments often lead to infrastructure improvements such as better roads, improved water access, and increased availability of services. These improvements not only support tourism activities but also enhance the overall living conditions of local residents. Previous studies have similarly reported that tourism development can stimulate rural infrastructure development and enhance community welfare (Baloch et al., 2022; Abuhay et al., 2023; Mazengiya, 2022; Samani et al., 2023).

Environmental awareness and conservation efforts also emerged as important outcomes of eco-tourism development in the study area. Respondents reported that eco-tourism activities have increased awareness of environmental conservation and biodiversity protection. This finding supports the fundamental principles of eco-tourism, which emphasize responsible tourism practices that minimize environmental degradation while promoting conservation (TIES, 2021). Research by Samani et al. (2023) also demonstrated that eco-tourism can serve as a powerful tool for environmental education by encouraging tourists and local communities to participate in conservation initiatives such as wildlife protection and habitat restoration.

Despite these positive outcomes, the findings also suggest that some socio-economic benefits may not be evenly distributed among all community members. While many residents benefit from tourism-related employment and business opportunities, others may have limited access to these opportunities due to skills, capital, or market access constraints. Similar concerns have been raised in previous studies, which highlight that eco-tourism development may sometimes produce unequal benefit distribution if not properly managed (Scheyvens & Biddulph, 2018). Therefore, ensuring inclusive community participation remains an important consideration for sustainable eco-tourism development.

The regression analysis further confirms that eco-tourism development significantly predicts socio-economic development in the host community. The relatively high explanatory power of the model indicates that eco-tourism activities such as employment creation, income generation, and business development are key drivers of local socio-economic improvement. This finding supports the Sustainable Tourism Development framework, which suggests that tourism can serve as a catalyst for economic diversification and community empowerment when appropriately managed (UNWTO, 2023).

Overall, the findings of this study demonstrate that eco-tourism development at Owalla Resorts plays a substantial role in promoting socio-economic development in surrounding communities. The resort contributes to employment creation, stimulates local entrepreneurship, enhances cultural preservation, and promotes environmental awareness. These outcomes highlight the potential of eco-tourism as a strategic development tool for rural communities in Nigeria. However, maximizing these benefits requires effective collaboration between tourism operators, local communities, and government authorities to ensure that eco-tourism development remains sustainable, inclusive, and environmentally responsible.

### **Practical and Policy Implications**

The findings have implications for tourism managers, community leaders, and policymakers seeking to maximise the developmental value of emerging eco-tourism destinations. The comparatively strong perceptions of employment creation, environmental awareness, and cultural exchange suggest that these areas represent important pathways through which eco-tourism may generate local value. Tourism development strategies should therefore strengthen linkages between resorts and local labour, suppliers, entrepreneurs, cultural organisations, and conservation initiatives.

At the same time, comparatively lower ratings for tourism infrastructure and community participation indicate potential areas for improvement. Mechanisms that provide local residents with meaningful opportunities to participate in tourism planning, enterprise development, and destination management may strengthen community ownership of tourism initiatives. Investments in tourism-supporting infrastructure should likewise be designed, where possible, to produce benefits extending beyond visitors to surrounding communities.

For policymakers, the findings underscore the importance of approaching eco-tourism not solely as a recreational or revenue-generating activity but as a potential component of integrated rural development. Policies encouraging local procurement, workforce development, community participation, environmental education, and biodiversity protection may increase the extent to which tourism development contributes to locally perceived benefits.

### **Limitations and Directions for Future Research**

The findings should be interpreted in light of several limitations. First, the cross-sectional design captures stakeholder perceptions at a single point in time and therefore does not permit causal conclusions regarding the effects of eco-tourism development. Longitudinal studies examining communities before and after tourism development would provide stronger evidence of change over time.

Second, the study relied primarily on self-reported perceptions rather than independently verified economic or environmental indicators. Future studies could complement perception-based measures with objective indicators such as employment records, household income changes, tourism-generated business revenue, visitor expenditure, infrastructure investment, biodiversity indicators, and conservation outcomes.

Third, the study focused on a single eco-tourism destination in Osun State. Although this provides valuable destination-specific evidence, caution is required when generalising the findings to other tourism destinations in Nigeria. Multi-site studies incorporating different types of eco-tourism destinations would improve external validity.

Finally, future research should further examine the dimensional structure of the measurement instrument using appropriate psychometric procedures and investigate whether perceptions differ among residents, resort employees, visitors, business operators, gender groups, age categories, or other stakeholder groups.

### **Conclusion**

This study provides destination-level evidence on stakeholder perceptions of the socio-economic, social, and environmental implications of eco-tourism development at Owalla Resorts in Osun State, Nigeria. Respondents generally perceived eco-tourism favourably across the three domains examined, with environmental awareness, employment opportunities, and cultural exchange emerging among the most highly rated benefits. The regression

results further demonstrated significant positive associations between employment creation, income generation, business development, and the reported socio-economic development outcome.

The findings indicate that the perceived developmental value of eco-tourism extends beyond direct economic opportunities and encompasses community and environmental dimensions. Nevertheless, the relatively lower ratings observed for tourism infrastructure and community participation suggest areas where additional attention may be required. Strengthening local participation, enterprise linkages, infrastructure, and conservation-oriented management could enhance the contribution of emerging eco-tourism destinations to sustainable local development.

These conclusions should be understood within the study's cross-sectional and perception-based design. The evidence demonstrates stakeholder perceptions and statistical associations rather than causal effects of resort development. Future longitudinal and multi-destination research integrating objective economic, social, and environmental indicators would provide stronger evidence regarding the long-term developmental effects of eco-tourism in Nigeria.

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