

Investigating the Relationship between Awareness and Ecotourism Engagement among Academic staff in the Faculty of Agriculture Usmanu Danfodiyo University, Sokoto, Nigeria

ABSTRACTS

The study examined awareness of ecotourism among academic staff in the faculty of agriculture, Usmanu Danfodiyo University Sokoto using semi structured questionnaire to elicit information on socioeconomic factors, awareness, participation in ecotourism, constraints to participation in ecotourism and perception of respondents towards ecotourism. Complete enumeration was used to administer questionnaire to eighty respondents (N=80) belonging to seven departments: Agricultural economics (n=10), Agricultural extension and rural development (n=08), Animal science (n=15), Crop science (n=12), Fisheries and Aquaculture (n=09), Forestry and Environment (n=09) and Soil science (n=16). Data was analysed using descriptive statistics, chi-square and ordinal regression. Results showed that majority of the respondents are male (96.3%) and married (98.8%). Majority have PhD (78.7%) with 10-20 years lecturing experience. Most of the respondents are aware of ecotourism (90%) and they got the information through academic line (52.2%) but only 36.3% have ever embarked on ecotourism trip. Busy office schedules were the major problems that affect respondents' participation in ecotourism (55%). A significant relationship exists between age and respondents' participation in ecotourism activities ($\chi^2 = 13.137$). Ordinal logistic regression results showed that age (1.315) and educational qualifications (1.671) are significant predictors of respondent's perception towards ecotourism

($R^2=0.27$). Travels to ecotourism destinations are quite poor among the members of academic staff in the faculty of Agriculture in Usmanu Danfodiyo University Sokoto, despite their level of education and their stance on biodiversity conservation practices. Academic staffs in tertiary institutions are encouraged to make use of their annual leave to embark on ecotourism trip.

Key words: Ecotourism, Perception, Awareness, Academic staff

1.0 Introduction

Ecotourism is gaining traction as a variable approach to biodiversity conservation and livelihoods sustenance in sub-Saharan Africa (Gadinga *et al.*, 2022). It has also been identified as an effective way to revitalize the economy of any nation and widely recognized as one of the fastest growing industries globally. Communities across the globe have considered Tourism as an instrument for economic development, and scholars from many disciplines have embraced it as a subject worth studying (Kenneth and Munanura 2015). Ecotourism is a subset of tourism that reflects the responsible involvement of people with the environment. It includes but not limited to nature hiking, wildlife viewing, and cultural tourism (Ijeoma *et al.*, 2011).

Many developing countries have over the years considered ecotourism development as a strategy to achieving biodiversity conservation, economic development and enhancing community livelihoods (Wondirad , 2020). On such desired experience is travelling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring and enjoying the scenery and its wild biological diversity, as well as any existing cultural manifestations. The benefits ecotourism offer travelers are sometimes personal but their effects are widespread. Through visiting areas of natural beauty, seeing animals in their natural habitat and meeting members of local communities; traveler's awareness on the importance of conserving natural

resources and avoiding waste can be increased. They are encouraged to live more sustainably wherever they find themselves; it also increases their sensitivity to other people's cultures (Ochala *et al.*, 2017). Nigeria is well endowed with various ecotourism potentials including diverse culture, biodiversity and scenic landscape which have attracted both local and international patronage. There is hardly any community in Nigeria without unique ecotourism attractions (Adebowale *et al.*, 2021)—unique culture, food and environment, however, the antagonistic relationships, for instance farm animals depredation by wildlife, zoonosis transmission, crop destructions and several attacks occurring between human and wildlife species such as Patas monkey (*Erythrocebus patas*), Wild pig (*Sus scrofa*), Senegal parrot (*Poicephalus senegalus*), Duiker (*Sylvicapra grimmia*) and Bush buck (*Tragelaphus sylvaticus*) within and around forested ecosystems in Nigeria negatively influence peoples' perception and support for wildlife based initiatives (Adebowale *et al.*, 2021) which a classic example could be ecotourism.

Ascertaining the level of awareness and peoples' participation in ecotourism activities among many Nigerians has been overlooked, as many see it as a waste of time and resources without even looking at the benefits it offers them (Alarape and Oladele, 2018). Many people are oblivious of the benefits of ecotourism, how it affects the environment we live in, what we can do in order to promote ecotourism even as faculty of the tertiary institution in the field of natural resource management and tourism studies who should be active propagators of ecotourism indulgence among the general society. This was reaffirmed (Gadinga *et al.*, 2022) who reported that the West and Central African continents are relatively behind with respect to ecotourism governance.

Despite the advantages present in ecotourism activities, Nigerians have a negative attitude and perception to ecotourism partly because most of them are ignorant of its benefits. This entirely end up becoming a serious problem in the society which may eventually affect the rate at which individuals strive to conserve the scenic places nature has given to us. Nigeria is blessed with several tourist destinations, but their patronage is still very low, possibly due to lack of proper awareness of the importance of nature trips (Ajani *et al*, 2018). Both public and private agencies that provide and manage recreational facilities need to understand the demand for the services they offer while natural resource management professionals especially the academia should be actively involved on the need to intensify effort in advocating and propagating the goodwill of ecotourism across board. Due to the aforementioned gap in literature, it is therefore important to conduct a study that will unfold the linkage between demands and factors that constraint the demand for ecotourism travel among members of academic staff in the faculty of Agriculture, Usmanu Danfodiyo University Sokoto.

Research questions

- i. What are the socio-economic characteristics of academicians in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto and how do they differ?
- ii. What is the level of awareness of ecotourism among academicians in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto and how do they differ?
- iii. What are the problems that affect participation in ecotourism activities by the members of academic staff in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto and how do they differ?
- iv. What is the contribution of selected socio-economic factors on the perception of ecotourism among academicians in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto?

v. What is the relationship between some selected socioeconomic factors and level of participation in ecotourism activities by the academicians in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto??

2.0 Materials and Method

The study was conducted in the Faculty of Agriculture, Usmanu Danfodiyo University Sokoto, situated between the latitude 13.01°N and longitude 5.27°E with an altitude of 296m above sea level in Wammakko local government area, Sokoto state, Nigeria. Sokoto state is located in the North Western part of Nigeria, situated near the confluence of the Sokoto River and the Rima River (Adamu *et al*, 2017).

2.1 Sampling Procedure and Sampling Size

A three-stage sampling technique was used for this study. The faculty of Agriculture was purposively selected based on the fact that it constitutes several natural resource management and biodiversity conservation inclined departments and programs. Secondly, all the departments in the faculty such as Agricultural Economics, Agricultural Extension & Rural Development, Animal Science, Crop Science, Fisheries and Aquaculture, Forestry and Environment and Soil Science and Agricultural Engineering were selected. Thirdly, all academic staffs of each department were selected as participants for this study. A total copy of eighty (80) Semi-structured questionnaire were administered to eighty (80) faculty participants to elicit information on the perception of members of staff towards the level of ecotourism awareness, the demand and issue constraining participation in ecotourism activities. The data collected was subjected to simple descriptive statistics in the form of frequency, tables and percentage where necessary while Cross-tabulation with the deployment of Chi-square was used to establish the

relationship between demographic characteristics and factors that affect participation and those influencing respondents' perception about ecotourism.

Table 1. Sample size distribution (Faculty of Agriculture)

S/N	Departments	No of academic staff	Sample size
1	Agricultural economics	10	10
2	Agricultural extension and Rural Development	08	08
3	Animal science	16	16
4	Crop science	13	12
5	Fisheries and Aquaculture	09	09
6	Forestry and Environment	09	09
7	Soil science	16	16
	Total	80	80

3.0 RESULTS and DISCUSSION

Table 2. shows that majority of the faculty members were male (77%), who are married (98.8%), with academic qualification up to the extent of Ph.D. (78.7), having spent up to 20 years in service, with a household of about 6 to 10 individuals (50%) and are between the age range of 51 to 60 years.

Table 2: Socioeconomic characteristics of the respondents (N=80)

Variables	Frequency	Percentage
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Gender		
Male	77	96.3
Female	03	3.7
Marital status		
Married	79	98.8
Single	01	1.2
Educational qualification		
M.Sc	17	21.3
PhD	63	78.7
Years of lecturing experience		
<10 years	15	18.7
10-20 years	39	48.8
>20 years	26	32.5
Family size		
1-5	15	18.7
6-10	40	50.0
11-15	17	21.3
16-20	08	10.0
Age		
30-40 years	17	21.3
41-50 years	28	35.0
51-60 years	30	37.5
>61 years	5	6.2

Table 3 illustrated that the majority (90%) of the faculty members were so much aware about the concept of ecotourism, who got to know about it through several educational trainings (52.5%) they have had in the past. However, majority (63.7%) of the faculty have never embarked on an ecotourism travel in the past, the few (16.2%) who did, only visited the zoological garden due to personal research studies (48.3%) on a biannual occasion (58.6%) and such trips were self-sponsored.

Table 3: Respondents' Awareness of Ecotourism (N=80)

Variables	Frequency	Percentage
Awareness		

Aware	72	90.0
Not aware	08	10.0
Source of information		
Media	07	8.8
Co-workers	28	35.0
Educational line	42	52.5
Friends	03	3.7
Embarked on ecotourism before		
Yes	29	36.3
No	51	63.7
Places visited		
National parks only	07	8.8
Game reserves only	05	6.3
Zoological garden only	13	16.2
Both national parks and Zoological garden	04	5.0
None	51	63.7
Reasons for the visit		
Educational	09	31.0
Passion of adventure	06	20.7
Research	14	48.3
How often you go for ecotourism		
Weekly	02	6.9
Monthly	04	13.8
Annually	06	20.7
Biannual	17	58.6
Sponsor		
Self	19	65.5
Employer	01	3.4
Friends	09	31.1

In Table 4, it was observed that the demand for ecotourism travel among faculty members was quite low (11.2%).

Table 4: Demand for Ecotourism holiday travel by the respondents (N=80)

Variables	Frequency	Percentage
Yes	09	11.2
No	71	88.8

Table 5. Depicted the major constraint for ecotourism participation as busy office schedules (55.0%), followed by financial constraint (17.5%) and lack of awareness (11.3%).

Table 5: Constraints to respondents' participation in ecotourism activities (N=80)

Variables	Frequency	Percentage
Busy office schedules	44	55.0
Financial constraint	14	17.5
Poor health	05	6.2
Lack of interest	01	1.2
Lack of awareness	09	11.3
Poor management of ecotourism sites	03	3.8
High cost of entrance/gate fees	04	5.0

Table 6: Chi-square test of association between socioeconomic factors and Constraints to respondents' participation in ecotourism activities

Variables	χ^2	P-value
Age*respondents' participation in ecotourism activities	13.137	0.013**
Family size*respondents' participation in ecotourism activities	10.253	0.002**
Educational qualification*respondents' participation in ecotourism activities	15.42a	0.213ns
Gender*respondents' participation in ecotourism activities	11.31a	0.346ns

Table 7: Ordinal Regression results on factors influencing the perception of the members of academic staff in the faculty of Agriculture towards ecotourism in the study area (N=80)

Variables	Coefficient values	Standard error	P-value
Age	1.315	0.813	0.002**
Educational qualification	1.671	0.491	0.000**
Family size	0.143	0.231	0.213ns
Gender	-0.862	0.638	0.435ns

Significant at $p \leq 0.005$, ns= not significant, **=significant at $P \leq 0.05$, $R^2=0.27$

It was evident in this study that male respondents were more than their female counterparts. This may not be unconnected with the traditional and religious belief of the people in this part of the country. It further reflects an environment that enables men to pursue academic endeavors quite more when compared to their female counterparts. It also shows the power dynamics in the household where the roles of males are often associated with being the major bread winners and could move out frequently in search of their daily needs, hence, put them at an advantage to seek for adventurous practices compared to the females. This is in line with Ijose (2018) who reported that males are more exposed and energetic in respect to initiatives bothering on nature conservation more than the female.

Education is an important factor in tourism industry (Ibun, 2016). The ages and educational qualifications of the respondents imply that they are still in their prime ages and the quest for knowledge on ecotourism as well as travel to natural destinations is expected to be high. The high level of education recorded in this study is due to the study population and characteristics of the study respondents who were all academic staff. This is in line with Alarape *et al* (2017) who recorded high level of education due to metropolitan nature of their study area which may translates to increase in knowledge about issues bothering on natural resource management. On

this basis, respondents' interest, and level of awareness about ecotourism is expected to be high considering their level of education. This is in conformity with Alarape and Oladele (2018) who reported that youths that are highly educated generally like adventure that is beneficial and highly rewarding. This was further reaffirmed by Ibun (2016) who reported low awareness on the tourism sector among the local people in Zanzibar as one of the contributing factor for the stagnation of ecotourism in Zanzibar. Findings on marital status indicates that majority are married, a possible indication of population growth, a situation that can affect their interest on embarking on ecotourism trips, as most of their resources will be used to cater immediate family needs.

Majority of the members of academic staff in the faculty of Agriculture, Usmanu Danfodiyo University Sokoto, Nigeria, are conversant with the concept of Ecotourism. This implied that refusal of some of them to embark on ecotourism trip was not based on ignorance, but because of other reasons. Such reasons were affirmed to be busy office schedules and lack of adequate funds. This was reaffirmed by Kenneth and Munanura (2015) who reported shortages of financial capital and entrepreneurship skills among local communities coexisting with Wildlife have constrained the potential of ecotourism practitioners in Africa to take full advantage of a growing ecotourism market. However, this finding contradicts the findings of Kukoyi and Ijose (2023) who affirmed that majority of the workers of manufacturing companies in Lagos State, Nigeria agreed that they could use their own money to pay for leisure and holiday activities. In addition, it was also observed that most of the workers participated in leisure activities outside of their regular workday activities, which are often brief in nature. However, with respect to the biannual vacation frequency observed under this study, Kukoyi and Ijose (2023) affirmed that aside from the daily break commonly used for recreation activities at work by workers of

manufacturing companies, they often engage in other leisure activities on a monthly and weekly basis, while a considerable number of these workers indulge in recreational activities whenever it suits them. Furthermore, the findings of this study also contradict that of Alarape and Oladele (2018) who reported a low level of awareness of ecotourism among tertiary institutions students.

The high level of awareness recorded in this study is expected to be a trigger for constant participation in ecotourism activities but reverse was the case. Furthermore, the high level of awareness of ecotourism exhibited by the academicians may not be unconnected with their level of education. The medium necessitating respondents' awareness of ecotourism varied from educational line to media, friends, and co-workers. The major media contributing to respondents' high level of awareness is educational line that includes conferences, seminar and workshops. This is contrary to Emmanuel *et al.* (2017) who reported that the major media platform creating awareness about the tourists' destinations are mainly billboard, Television and radio programmes as well as internet.

Despite the fact that respondents' level of awareness of ecotourism was high, it doesn't correspond with the level of their participation in ecotourism activities. Only few of them (36.3%) had ever embarked on ecotourism trip. This implies low level of respondents' participation in ecotourism activities which might not favour promotion of ecotourism among members of academic staff in tertiary institutions. This is in agreement with Gunay and Akinci (2017) who found that 38.8% of tertiary students engaged in ecotourism activities. This study is also in agreement with Alarape and Oladele (2018) who reported that very few tertiary students engaged in ecotourism activities compared to those that have never embarked on ecotourism trip. The few respondents who embarked on ecotourism trip in this study visited zoological garden, National Parks and game reserves and were found to have travelled alone, mainly for research

purposes. Some said they travelled to avoid noise pollution in the city and enjoy fresh air in the natural areas while some travelled to learn about the scenic natural view of the areas, to know the local people in the region and make new friends.

Results of this study revealed that finance and busy office schedules are the major constraint to ecotourism participation by the respondents. These factors can result to significant decrease in the demand for ecotourism holiday travel, as it may be attributed to the fact that the parties concerned are salary earners and their salaries might not even be enough to fend for their families before the one for the next month comes (considering the massive hike in the prices of goods and services) that are essential to meet the needs of their immediate families. Most of these academic staff depends on their salary which is not even enough, including the inconsistency that comes with their salaries; hence, finance stability poses to be a significant threat to their participation in ecotourism activities, unless when trips to nature areas are properly planned for ahead of time based on accumulated savings for several months. This is in tandem with the findings of Asuk and Nchor (2018) who reported that lack of finance resources limits full participation of communities in community-based ecotourism. In line with participation in ecotourism activities, different governance principles were integrated in ecotourism governance research across Africa, among these, participation (96%) was found the most investigated principle in sub-Saharan Africa, with a special focus on local community participation (Gadinga *et al.*, 2022). Similar constraining factors were reported by Wondirad (2017), Eshum and Tichaawa (2019) in East Africa and Ghana respectively. Lack of participation in ecotourism activities is a common problem not only in Nigeria but across sub-Saharan Africa which is caused by a number of factors, among them is lack of finance and unawareness (Wondirad, 2017). The study recommends that allowances for ecotourism trips should be added to the salary

schedule of academic staff in tertiary institutions to ensure effective participation in order for ecotourism to contribute to its conservation goals.

A significant relationship exists between age and constraints to respondents' participation to ecotourism. This implies that young academics are more willing to embark on ecotourism travel than elderly people. This is consistent with Alarape and Oladele (2018) who reported that youths like adventures that is beneficial and highly rewarding than elderly people.

Most of the study respondents have a positive and good perception about ecotourism. These results are expected considering the formation of the study respondents who are all academics in the areas of natural resource management and expected to have a detailed understanding of what nature conservation through ecotourism implies. This reveals that they are sensitive to the environment, and they have a high level of environmental awareness. It can therefore be deduced that any initiation on ecotourism promotion would be welcomed by the study respondents. Age and educational qualification were found to be significant predictors of respondents' perception of ecotourism. This implies that the favorable perception on ecotourism by the academic staff in the faculty of Agriculture, Usmanu Danfodiyo University Sokoto, Nigeria, is linked to their experience based on their trips to tourism destinations for research purposes and their sufficient knowledge of ecotourism benefits. This is in tandem with the findings of Mirjam (2013) who reported that tertiary students had favorable perception towards the economic and sociocultural impacts of ecotourism.

5.0 Conclusion

Based on the findings emanating from this study, it can be concluded that travels to ecotourism destinations is quite poor among the members of academic staff in the faculty of Agriculture in Usmanu Danfodiyo University, Sokoto despite the fact that they are all intellectuals in their field

of study as well as their stance on biodiversity conservation practices. Therefore, demand for ecotourism holiday travel by members of academic staff will make significant contribution to the awareness about ecotourism among members of academic staff in Nigeria. This is because academic staffs that embarked on ecotourism are more conscious and have sufficient knowledge about ecotourism than members who have never participated in ecotourism activities. The results of this study will therefore serve as a reference material to encourage ecotourism participation in Nigeria. The study recommends that special consideration be given to staff training and development as most of the study respondents got to know about ecotourism through conferences, seminars and workshops. Further studies with larger samples from other faculties and Universities are needed to make more comprehensive and detailed comparison. Academic staffs in tertiary institutions are encouraged to make use of their annual leave to embark on ecotourism trip.

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