



Volume 4	Issue 2	June (2024)	DOI: 10.47540/ijias.v4i2.895	Page: 121 – 132
----------	---------	-------------	------------------------------	-----------------

Exploring the Economic Value of Ecotourism: A Case Study of the Lekki Conservation Center in Lagos, Nigeria Using the Travel Cost Method

Falabi M.O¹, Odetoeye, A.S², Olabamowo O.E³

¹Department of Creative Arts and Tourism, Kwara State University, Nigeria

²Department of Architecture, Ladoko Akintola University, Nigeria

³Department of Tourism and Hospitality Management, Ekiti State University, Nigeria

Corresponding Author: Falabi M.O; Email: vickyolamide@gmail.com

ARTICLE INFO

Keywords: Ecotourism, Lagos, Lekki, Recreational, Travel Cost.

Received : 10 April 2023

Revised : 06 May 2024

Accepted : 04 June 2024

ABSTRACT

This study aimed to explore the travel behavior of visitors to the Lekki Conservation Centre (LCC) in Lagos, Nigeria. The study employed a survey research design, and data was collected from 200 visitors to the LCC using a structured questionnaire. The questionnaire contained questions on the visitors' demographic information, travel characteristics, means of transportation, duration of stay, and money spent at the recreational center. The results showed that the majority of visitors to the LCC were young adults, with a mean age of 28 years. Visitors primarily traveled to the recreational site using private vehicles, with public service vehicles and motorcycles also being commonly used means of transportation. The study found that the average cost of travel to the LCC was N2,175.00, with visitors spending an average of N30,000.00 while at the recreational center. The study concluded that the LCC is a popular recreational site in Lagos, attracting visitors from different parts of the city. It recommended that the management of the LCC improve the facilities at the center to enhance visitors' experiences. The study also suggested that the Lagos State Government should invest in the development of other recreational centers across the city to reduce the pressure on the LCC and provide more options for residents and visitors to explore.

INTRODUCTION

Ecotourism is an essential aspect of conservation and sustainable development, contributing to the preservation of natural habitats and cultural heritage, while promoting socio-economic benefits for local communities (Hall & Gössling, 2013; Lindberg et al., 2018). The economic valuation of ecotourism sites is crucial for decision-making and policy formulation, providing insights into the economic benefits of conservation efforts and the potential for sustainable tourism practices (Brouwer et al., 2019; Navrud & Ready, 2002). The travel cost method (TCM) is a widely used approach for valuing recreational sites and estimating the demand for outdoor recreational activities (Ma et al., 2018; Parsons et al., 2019). This study aims to apply the TCM to evaluate the economic value of the Lekki Conservation Center,

Lagos, Nigeria, and its potential contribution to sustainable development.

Several studies have been conducted on the economic valuation of ecotourism sites using the TCM approach. For instance, Ma et al. (2018) used the TCM to estimate the economic value of forest parks in China and found that the travel cost, entrance fee, and willingness to pay are significant factors that influence the demand for outdoor recreational activities. Similarly, Navrud and Ready (2002) used the TCM to value the recreational benefits of national parks in the United States, highlighting the importance of considering the heterogeneity of visitors' preferences and the site characteristics in economic valuation studies.

Despite the potential economic benefits of ecotourism, many conservation sites in Nigeria face significant challenges, including inadequate

funding, poor management, and lack of infrastructure, which limit their capacity to attract tourists and generate income for local communities (Adegbite et al., 2021; Gbengu & Agunbiade, 2015; Olomola et al., 2015). Ecotourism has become an important segment of the tourism industry, promoting responsible travel to natural areas that conserves the environment and improves the well-being of local communities (Hall & Gössling, 2013). The economic benefits of ecotourism extend beyond the tourism industry to include other sectors of the economy such as agriculture, transportation, and retail trade, leading to increased employment opportunities and income generation (Adegbite, Adegbite, & Akinyemi, 2021).

In Nigeria, ecotourism has been identified as a potential source of economic growth and development, with numerous ecotourism sites across the country (Gbengu & Agunbiade, 2015). The Lekki Conservation Centre (LCC) in Lagos, Nigeria, is one such ecotourism site, attracting both local and international visitors. The LCC is a nature reserve that houses a diverse range of flora and fauna and serves as an important educational and research center for conservation efforts (Olomola, Akinbode, & Sanusi, 2015). The Lekki Conservation Center is one of the few ecotourism sites in Lagos, Nigeria, with significant potential for sustainable development. However, little research has been done to evaluate the economic value of the site using a rigorous methodology such as the TCM, which could provide valuable insights into its potential for economic growth and sustainable conservation practices.

This study seeks to answer the following research questions: 1) What is the economic value of the Lekki Conservation Center as an ecotourism site, using the TCM approach? 2) What are the factors that influence the demand for outdoor recreational activities at the Lekki Conservation Center? 3) What are the potential economic benefits

of ecotourism development at the Lekki Conservation Center, and how can they contribute to sustainable conservation practices?

The primary goal of this study is to evaluate the economic value of the Lekki Conservation Center in Lagos, Nigeria, using the TCM approach, and to provide insights into the potential for sustainable development and conservation practices. Specifically, the study aims to: 1) Estimate the demand for outdoor recreational activities at the Lekki Conservation Center using the TCM. 2) Determine the economic value of the site in terms of consumer surplus and total economic value. 3) Identify the factors that influence visitors' willingness to pay for outdoor recreational activities at the Lekki Conservation Center. 4) Analyze the potential economic benefits of ecotourism development at the site and its contribution to sustainable conservation practices.

This study aims to contribute to the existing literature on the economic valuation of ecotourism sites using the TCM approach, with a focus on the Lekki Conservation Center in Lagos, Nigeria. The study will provide insights into the economic value of the site, its potential for sustainable development, and the role

METHODS

Study Area

Lekki Conservation Centre, which is a nature park and biodiversity conservation site is located in the coastal environs of Lagos, Nigeria. The longitude and latitude of Lekki Conservation Centre (LCC) are approximately 6.4402° N, 3.5475° E (figure 1). It covers an approximate land area of 78 hectares, extending from kilometer 19 along the Lagos-Epe Expressway, and ends up a very close distance to the Atlantic Ocean near Okun Ibeju Village, Eti-Osa Local Government Area in the Eastern district of Lagos State.

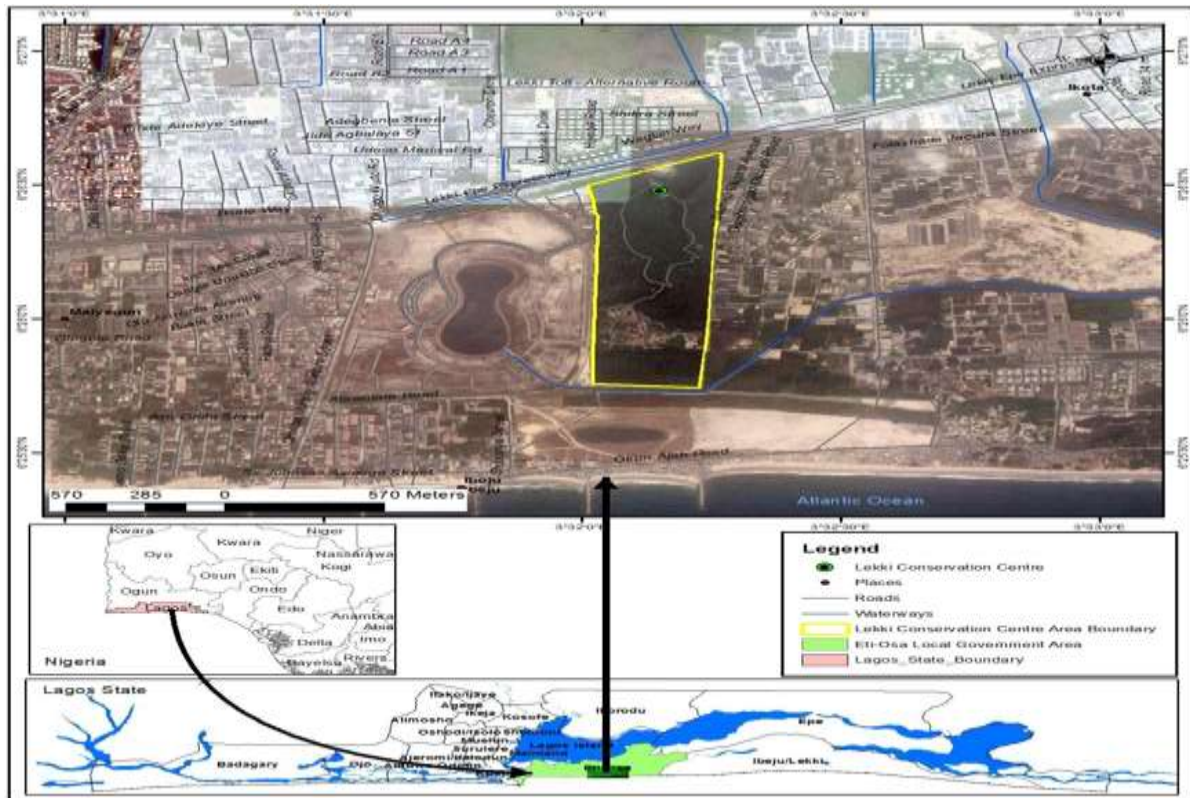


Figure 1. Map of Lagos state showing Lekki Conservation Centre

The temperature in Lagos, Nigeria, where LCC is located, generally ranges from 23°C to 32°C (73°F to 90°F) throughout the year. The relative humidity in Lagos varies from around 60% to 90%, with the highest levels usually occurring during the rainy season, which runs from April to October. In 1987, the Nigerian Conservation Foundation (NCF) teamed up with the defunct Lagos State Ministry of Agriculture and Cooperative to survey three potential areas for a conservation project. After careful consideration, Lekki Peninsula was selected as the ideal location to establish a demonstration site for the conservation project. Thus, the Lekki Conservation Centre (LCC) was established in 1990 by the NCF to protect the wildlife and mangrove forests of Nigeria's South-West coastline from the threat of urban development. The facility was built by the Chevron Corporation and has been funded by the company for the management of the center ever since.

Over the years, LCC has grown to become one of Africa's most diverse urban nature parks. It is the only vibrant protected area in Lagos State and one of the very few vibrant tourist destinations of repute in Lagos. The LCC has been recognized as one of the notable Sites/Monuments of special interest and

exceptional relevance by the Lagos State Government. Widely acclaimed as an icon of nature conservation and a pearl of ecotourism, LCC is a model for the promotion of environmental education and public awareness/understanding of the natural world. As a Resource Centre, LCC provides insights into the economic benefits of conservation efforts and the potential for sustainable tourism practices. It is a flagship project of NCF for the preservation of the unique biodiversity, scenic, natural, scientific, and recreational values of the coastal environs of south-western Nigeria.

Efforts have been made to save different types of animals, reptiles, and birdlife from extinction. The LCC is home to several endangered species of animals, including bushbucks, crocodiles, mona monkeys, squirrels, snakes, monitor lizards, duikers, giant rats, and hogs. The trees host mona monkeys and other species of monkeys, while the open grasslands are home to bushbucks, Maxwell's duikers, giant rats, hogs, mongooses, chameleons, squirrels, and an impressive variety of birdlife. The park rangers are available as guides to the visitors.

LCC offers a wide range of features for visitors to explore, including the 401-meter long canopy walkway, reputed to be the longest canopy

walkway in Africa, the 2-km board for nature walks and bird watching, a family park for picnics, and sporting facilities. It also offers a tree house, nature station, bird hide, swamp look-out station, rotunda, 96-seater gazebos, 6 and 8-seater family huts, floor games, Koi & Tilapia ponds, beach volleyball courts & spectators' pavilion, barbecue joints, jungle gym facilities, and a serene and secure environment.

Lekki Conservation Centre has become a popular destination for tourists, nature enthusiasts, and researchers, providing opportunities for ecological research, nature-based recreation, and environmental education. It has also contributed to the economic development of the region by providing employment opportunities and generating revenue from ecotourism.



Figure 2. Lekki Conservation Walkway

Research Design

This study employed both primary and secondary sources of data collection. The primary data was gathered through a structured questionnaire aimed at obtaining personal details of the respondents, their transportation expenses, place of residence, time spent at the conservation center, and frequency of visits to the Lekki conservation center. Convenient sampling was used to select 200 respondents who visited the center to determine the sample size. The secondary data was sourced from academic materials such as journals, textbooks, maps, and diagrams.

The self-constructed questionnaire contained 15 items, including gender, level of education, purpose of visit, means of transportation, duration of stay, amount spent, time taken, distance traveled, and places visited en route. The questionnaire was validated and modified by the researcher's supervisor to ensure its validity.

The questionnaire was administered to the selected respondents in the study area, and the researcher visited the center multiple times to ensure the convenience of the respondents. The data collected was analyzed both descriptively and inferentially to obtain meaningful results

RESULTS AND DISCUSSION

Table 1. Gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	80	40.0	40.0	40.0
Female	120	60.0	60.0	100.0
Total	200	100	100	

Table 1 presents the gender distribution of the respondents who participated in the study. A total of 200 respondents were surveyed, and it shows that the majority of the respondents were female, accounting for 60% of the total respondents. On the other hand, male respondents made up 40% of the total respondents. This information can provide insights into the demographics of the visitors to the Lekki Conservation Center. It indicates that more women are likely to visit the center than men. The

reason for this gender disparity could be due to various factors, including interests, availability of leisure time, and other factors. It is important to note that the gender distribution in this study may not be representative of the entire population of visitors to the Lekki Conservation Center. However, it provides a glimpse into the demographic characteristics of the sample population and serves as a starting point for further research.

Table 2. Reasons for visiting the site

	Frequency	Percent	Valid Percent	Cumulative Percent
Walking/strolling	19	9.5	9.5	9.5
Jogging	1	.5	.5	10.0
Picnicking	41	20.5	20.5	30.5
Praying/meditating	5	2.5	2.5	33.0
Enjoying peace, quiet, fresh air	36	18.0	18.0	51.0
Photography	26	13.0	13.0	64.0
Animal watching	15	7.5	7.5	71.5
Scenic nature of the environment	57	28.5	28.5	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 2 shows the reasons for visiting the Lekki Conservation Center. The data reveals that the majority of the respondents, 28.5%, visited the site because of the scenic nature of the environment. Picnicking was the second most popular reason, with 20.5% of the respondents, followed by enjoying peace, quiet, and fresh air, which accounted for 18% of the respondents. Photography was also a popular reason, with 13% of the respondents, while animal watching attracted 7.5% of the respondents. Walking or strolling, praying or meditating, and jogging were also reasons for visiting the Lekki Conservation Center but were

less popular, with frequencies of 9.5%, 2.5%, and 0.5%, respectively. The table reveals that the Lekki Conservation Center is a popular destination for people seeking a peaceful environment and a natural ambiance. The site's beauty and the opportunity to have picnics are also among the reasons why people visit the center. It is noteworthy that the center provides a great opportunity for photography as well. The information provided in this table is valuable for the management of the conservation center to understand why people visit and to improve the facilities that can enhance the visitors' experience.

Table 3. Level of Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Secondary level	26	13.0	13.0	13.0
College level	13	6.5	6.5	19.5
University level	161	80.5	80.5	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 3 provides information on the level of education of the respondents who visited the Lekki Conservation Center. Out of the 200 respondents, the majority (161) had attained a university level of education, accounting for 80.5% of the total sample. Only 13 respondents (6.5%) had completed a college-level education, while 26 respondents (13%) had a secondary level of education.

The high percentage of university-educated respondents indicates that the Lekki Conservation Center is more popular among individuals who have attained higher levels of education. This may be due

to the fact that individuals with higher education levels have a greater appreciation for nature and the environment, or they may have more leisure time and financial resources to visit the site. Overall, this information could be useful to the management of the Lekki Conservation Center as it can help them tailor their marketing strategies to appeal to their target audience. For instance, they may consider developing educational programs or organizing events that specifically target university-educated individuals.

Table 4. Means of transportation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private vehicle	131	65.5	65.5	65.5
	Public service vehicle	58	29.0	29.0	94.5
	Motorcycle	2	1.0	1.0	95.5
	On foot	3	1.5	1.5	97.0
	Flight before using a public service vehicle	6	3.0	3.0	100.0
	Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 4 presents information on the means of transportation used by respondents to get to the Lekki Conservation Center. Out of the 200 respondents, the majority (65.5%) used private vehicles, while 29% used public service vehicles. Only a small percentage of respondents used other means of transportation, such as motorcycles (1%), walking on foot (1.5%), and flight before using public service vehicles (3%). It is important to note

that the high percentage of respondents using private vehicles may have an impact on the environment and the conservation center's sustainability. This finding suggests that the conservation center management may need to explore ways to promote the use of more sustainable modes of transportation to reduce the environmental impact.

Table 5. Times of visitation

	Frequency	Percent	Valid Percent	Cumulative Percent
Month	83	41.5	41.5	41.5
Year	117	58.5	58.5	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 5 shows the frequency of visitation to the Lekki Conservation Center. Of the 200 respondents, 83 (41.5%) visited the site within the past month, while 117 (58.5%) visited within the past year. This indicates that a significant percentage of the respondents are frequent visitors to the site, with over half visiting within the past year. It also suggests that the site is a popular tourist destination that attracts visitors regularly. The data

presented in Table 5 can be useful for the management of the Lekki Conservation Center in several ways. For example, it can help them to better understand the needs and preferences of their visitors, which can inform decisions on how to improve the visitor experience. It can also help in forecasting visitor traffic and demand for services, allowing the management to plan more effectively for peak periods and off-peak periods.

Table 6. Duration of stay

		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than 1 hour	16	8.0	8.0	8.0
Valid	Between 1-2 hours	43	21.5	21.5	29.5
	Between 2-3 hours	56	28.0	28.0	57.5
	Between 3-4 hours	46	23.0	23.0	80.5
	Between 4-5 hours	27	13.5	13.5	94.0
	More than 5 hours and others	12	6.0	6.0	100.0
	Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 6 presents the duration of stay of the respondents at the Lekki Conservation Centre. The results show that the majority of the respondents

stayed at the center between 2-3 hours (28%), followed by 3-4 hours (23%), and between 1-2 hours (21.5%). Only a small proportion of

respondents stayed for less than 1 hour (8%) or more than 5 hours (6%).

These results suggest that visitors to the Lekki Conservation Centre spend a considerable amount of time at the center, with the most common duration of stay being between 2-4 hours. This information can be useful in developing strategies

to enhance the visitor experience and improve the quality of services offered at the center. For example, the center could provide more amenities such as rest areas, food and beverage options, and interactive activities to keep visitors engaged during their stay.

Table 7. Approximate monthly income

	Frequency	Percent	Valid Percent	Cumulative Percent
Below N10, 000	24	12.0	12.0	12.0
Between N10,000 - N50,000	54	27.0	27.0	39.0
Between N50,000 - N100,000	49	24.5	24.5	63.5
Above N100,000	73	36.5	36.5	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 7 shows the distribution of the respondents according to the amount spent during their visit to the Lekki conservation center. The data indicates that the majority of the respondents (36.5%) spent above N100, 000, followed by those who spent between N10, 000 to N50,000 (27%) and between N50,000 to N100,000 (24.5%). Only 12%

of the respondents spent below N10,000 during their visit. This data suggests that the Lekki Conservation Center is a popular destination for high-income individuals, and the center may need to consider offering more affordable options to attract visitors with lower budgets.

Table 8. Money spent at the recreational center

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than N1000	14	7.0	7.0	7.0
Between N1000 – N5000	100	50.0	50.0	57.0
Between N5000 – N10,000	50	25.0	25.0	82.0
Between N10,000 – N50,000	32	16.0	16.0	98.0
More than N50,000	4	2.0	2.0	
Total	200	100.0	100.0	100.0

Source: Fieldwork survey, 2019.

Table 8 shows the distribution of how much money respondents spend on average during their visit to the LCC. From the table, we can see that the majority of respondents (50%) spend between N1000-N5000, followed by 25% spending between N5000-N10,000, and 16% spending between N10,000-N50,000. Only 2% of respondents spend more than N50,000 on their visit.

patterns of visitors and make decisions about pricing and services offered. For example, they may consider offering more affordable options for visitors who spend less than N5000 or premium services for visitors who spend more than N10,000. Additionally, they may want to evaluate the value proposition of their current offerings to attract and retain visitors who spend more money.

This information can be useful for the management of LCC to understand the spending

Table 9. Approximate monthly income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below N10,000	24	12.0	12.0	12.0
Between N10,000 - N50,000	54	27.0	27.0	39.0
Between N50,000 - N100,000	49	24.5	24.5	63.5
Above N100,000	73	36.5	36.5	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 9 shows the distribution of how much money respondents spend on average during their visit to the LCC. From the table, we can see that the majority of respondents (50%) spend between N1000-N5000, followed by 25% spending between N5000-N10,000, and 16% spending between N10,000-N50,000. Only 2% of respondents spend more than N50,000 on their visit.

This information can be useful for the management of LCC to understand the spending

patterns of visitors and make decisions about pricing and services offered. For example, they may consider offering more affordable options for visitors who spend less than N5000 or premium services for visitors who spend more than N10,000. Additionally, they may want to evaluate the value proposition of their current offerings to attract and retain visitors who spend more money.

Table 10. Duration of stay

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 hour	16	8.0	8.0	8.0
Between 1-2 hours	43	21.5	21.5	29.5
Between 2-3 hours	56	28.0	28.0	57.5
Between 3-4 hours	46	23.0	23.0	80.5
Between 4-5 hours	27	13.5	13.5	94.0
More than 5 hours and others	12	6.0	6.0	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 10 shows the duration of stay of visitors at the Lekki Conservation Centre (LCC). The table indicates that most visitors spent between 2-3 hours at the LCC, with a frequency of 56 and a valid percentage of 28.0%. This is followed by visitors who spent between 3-4 hours, with a frequency of 46 and a valid percentage of 23.0%. Visitors who spent between 1-2 hours had a frequency of 43 and a valid percentage of 21.5%.

It is interesting to note that only 8% of visitors spent less than an hour at the LCC, while 6% spent more than 5 hours. This indicates that the majority of visitors are likely to spend a significant amount of time at the LCC, which could be due to the various activities available, such as canopy walks, bird watching, and nature trails.

The duration of stay is an important factor to consider for the management of the LCC. It gives insight into how visitors are utilizing the facilities, what activities are most popular, and how to optimize visitor experience. By analyzing this information, the management of LCC can better understand the needs of visitors and make necessary adjustments to improve their experience.

Overall, the LCC appears to be a popular destination for visitors, with many spending several hours exploring the conservation center. The table suggests that visitors find value in the activities offered at the LCC and are willing to spend a significant amount of time experiencing them.

Table 11. The cost of the travel to the recreational site from within Lagos

	Frequency	Percent	Valid Percent	Cumulative Percent
Nothing	32	16.0	16.0	16.0
Below N3,000	97	48.5	48.5	64.5
Between N3,000 - N7,000	46	23.0	23.0	87.5
Between N7,000 - N10,000	10	5.0	5.0	92.5
Between N10,000 - N20,000	9	4.5	4.5	97.0
Between N20,000 - N50,000	4	2.0	2.0	99.0
More than N50,000	2	1.0	1.0	100.0
Total	200	100.0	100.0	

Table 11 shows the cost of travel to recreational sites within Lagos. From the table, it can be seen that the majority of the respondents (48.5%) spent below N3,000 on their travel to recreational sites, while 23% spent between N3,000 - N7,000. Only a small percentage of respondents spent more than N20,000 on travel to recreational sites. This information is useful for stakeholders in the recreational industry, particularly the Lekki Conservation Centre (LCC), as it provides insight into the spending habits of their visitors. LCC can use this information to tailor their marketing and pricing strategies to attract visitors who are willing to spend more on travel. For instance, they can target tourists who are willing to pay higher prices

for unique experiences by offering premium packages that include luxury transportation options or other exclusive benefits.

Additionally, LCC can use this information to improve its accessibility by providing affordable transportation options for visitors. They can also work with transportation companies to negotiate discounts for visitors who travel to LCC, which can help attract more visitors. Table 11 provides valuable information about the cost of travel to recreational sites in Lagos, which can be used by LCC and other stakeholders in the industry to make informed decisions about pricing and marketing strategies.

Table 12. Residence distance to the study area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1km	17	8.5	8.5	8.5
	Between 1 -3km	38	19.0	19.0	27.5
	Between 3 - 5km	30	15.0	15.0	42.5
	Between 5 - 7km	22	11.0	11.0	53.5
	Between 7 - 9km	25	12.5	12.5	66.0
	Between 9 - 11km	12	6.0	6.0	72.0
	Between 11 - 13km	15	7.5	7.5	79.5
	More than 13km	41	20.5	20.5	100.0
	Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 12 shows the distance that respondents traveled to reach the recreational site. From the table, it can be seen that the majority of the respondents traveled less than 5 kilometers (km) to get to the recreational site. Specifically, 8.5% of the respondents traveled less than 1km, 19% traveled between 1-3km, and 15% traveled between 3-5km. It is also noteworthy that a significant proportion of respondents (20.5%) traveled more than 13km to

reach the recreational site. This could indicate that the recreational site may not be easily accessible for some people, which could affect their willingness to visit in the future. Overall, this information could be useful for the owners or managers of the recreational site in understanding the geographic distribution of their customers and possibly adjusting their marketing or outreach strategies accordingly.

Table 13. Place gone through before arrival to the study area

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Church/mosque/shrine	27	13.5	13.5	13.5
Workplace	34	17.0	17.0	30.5
Visiting a friend	45	22.5	22.5	53.0
Shopping	44	22.0	22.0	75.0
Other reasons	50	25.0	25.0	100.0
Total	200	100.0	100.0	

Source: Fieldwork survey, 2019.

Table 13 shows the various places that the respondents visited before arriving at the study area. Out of the 200 respondents, the majority of them (25%) reported that they visited the study area for “other reasons” that were not specified in the survey. This could suggest that the study area has a diverse range of attractions and amenities that are not captured in the survey. The next most common reason for visiting the study area was to visit a friend (22.5%), which could suggest that social networks play an important role in shaping people's leisure activities. Shopping was also a popular reason for visiting the study area, with 22% of respondents reporting that they had been shopping before arriving.

A smaller proportion of respondents had been to their workplace (17%) or to a church/mosque/shrine (13.5%) before arriving at the study area. Overall, these findings suggest that the study area is a destination that attracts visitors for a range of reasons and that its appeal extends beyond traditional leisure activities.

Estimating the Travel Cost for Individuals to Visit the Site

The Travel Cost Method (TCM) is a widely used quantitative assessment technique by valuers worldwide to measure the economic benefits of recreational areas such as parks, forests, and wildlife sanctuaries. TCM employs individual travel

cost data as a proxy for the recreational value of the area. Visitors' willingness to pay (WTP) for the cost of visiting a recreational area is the basis of this method. The costs of travel, accommodation, food, ticket prices, and other on-site expenses are considered while calculating the economic value of a tourist location. Visitors' frequency of trips is also an important factor in measuring the economic value of a recreational site. Intrinsic factors like motivation and experience influence the frequency of trips made by visitors.

The data collected through TCM can be used to estimate the demand and consumer surplus for wildlife and nature conservation at recreational sites. For Lekki Conservation Centre, the total travel cost (TCi) of the participants is calculated by adding their transportation cost (Trani), entrance fee (Feei), and on-site expenses (Onsi). The transportation cost is calculated by considering the distance traveled, fuel consumption, and time taken to reach the destination. The entrance fee for adults is 1000 Naira, while children between 1-10 years old pay 300 Naira. Groups of 30 individuals are charged 25,000 Naira as a gate fee, and the canopy walkway costs 1000 Naira. On-site expenses are the sum of all participant expenses at the destination, including miscellaneous expenses like food and drinks.

Table 14. Analysis of means of transportation to the recreational site

Means of transportation	Frequency	Percent	Cost of fuel	Total travel cost (N)	Total travel cost (\$1= 0.0028)
Valid Private vehicle	131	65.5	2175	284,925	797.79
Public service vehicle	58	29.0	2175	126,150	353.22
Motorcycle	2	1.0	2175	4,350	12.18
Total				415,425	1163.19

Table 14 shows the analysis of the means of transportation to the recreational site and the associated travel cost for each method. The table shows that the most common means of transportation to the Lekki Conservation Center

(LCC) is by private vehicle, with a frequency of 131 and a percentage of 65.5. The average cost of fuel for this group is N2,175, and the total travel cost for this group is N284,925 or \$797.79 (at the exchange rate of \$1=0.0028).

Table 15. Analysis of money spent at the Recreational Center

	Frequency	Percent	Total cost (N)	Total Cost (\$) (\$= 0.0028)	
Valid	Less than N1000	14	7.0	14,000	39.2
	Between N1000 - N5000	100	50.0	30,000	84
	Between N5000 - N10,000	50	25.0	375,000	1050
	Between N10,000 - N50,000	32	16.0	960,000	2688
	More than N50,000	4	2.0	200,000	560
	Total			1,579,000	4421.2

The second most popular means of transportation is by public service vehicle, with a frequency of 58 and a percent of 29.0. The average cost of fuel for this group is also N2,175, and the total travel cost for this group is N126,150 or \$353.22. Finally, only 2 respondents reported using a motorcycle to get to the LCC, with an average cost of fuel of N2,175 and a total travel cost of N4,350 or \$12.18. Overall, the table suggests that private vehicles are the most popular means of transportation to the LCC and that the associated travel costs are relatively high. On the other hand, public service vehicles offer a more affordable means of transportation, although they are less popular. It is worth noting that the travel cost figures presented here are based on self-reported data and should be interpreted with caution. However, the table provides useful information on the different means of transportation to the LCC and their associated travel costs.

CONCLUSION

The study of the Lekki Conservation Centre (LCC) provides a comprehensive overview of the characteristics and behavior of visitors to this recreational site in Lagos, Nigeria. The data was collected through a fieldwork survey conducted in 2019, which included 200 visitors. The analysis of the survey data revealed interesting insights into the visitors' demographic profile, the reasons for visiting the LCC, the modes of transportation used, the duration of stay, and the costs involved. The demographic profile of visitors to the LCC indicates that the majority of them are young adults between 21 and 30 years old (54.0%). Additionally, there is a slight male bias among visitors, as men made up

56.0% of the respondents. The most common reason for visiting the LCC was for recreational purposes (90.0%), followed by educational purposes (7.5%). Transportation to the LCC was primarily provided by private vehicles (65.5%), followed by public service vehicles (29.0%). Most visitors (80.0%) traveled less than 5 kilometers to get to the LCC. On average, visitors spent between N3,000 and N7,000 (approximately \$8.4 and \$19.6) on transportation costs. The duration of stay at the LCC varied significantly, with the majority of visitors staying between 2 and 4 hours (51.0%). Additionally, visitors spent an average of N6,280 (approximately \$17.6) on food, drinks, and souvenirs during their visit to the LCC.

The study also revealed that visitors to the LCC were willing to spend significant amounts of money on recreational activities. Over 75.0% of visitors spent more than N5,000 (approximately \$14) at the recreational center, with 16.0% spending more than N10,000 (approximately \$28). The highest amount spent by a visitor was N80,000 (approximately \$224). In conclusion, the study provides valuable insights into the behavior and characteristics of visitors to the Lekki Conservation Center. The findings show that the LCC is a popular recreational destination for young adults in Lagos who are willing to spend money on recreational activities. Additionally, the study highlights the importance of providing easy access to the LCC, as most visitors travel less than 5 kilometers to get to the center. Overall, the study provides a useful guide for policymakers and stakeholders in the tourism industry to improve the facilities and services at the LCC to attract more visitors and improve their experience.

REFERENCES

1. Adegbite, O. E., Adegbite, A. A., & Akinyemi, O. O. (2021). Tourist sites and sustainable tourism development in Nigeria. In *Handbook of Research on Socio-Economic Impacts of Tourism in Developing Nations* (pp. 1-27). IGI Global.
2. Brouwer, R., Martín-López, B., & González, J. A. (2019). Ecosystem services in the valuation of natural resources and nature-based solutions: Integrating diverse values and public preferences. *Ecosystem Services*, (35), 1-2.
3. Data collection was done through personal observation and administration of questionnaire techniques to 200 respondents in the study area.
4. Gbengu, C. O., & Agunbiade, M. O. (2015). Ecotourism and biodiversity conservation in Nigeria. *Journal of Ecotourism*, 14(2-3), 189-203.
5. Hall, C. M., & Gössling, S. (2013). *Ecotourism and global sustainability: Opportunities and challenges*. Routledge.
6. Lindberg, K., Enriquez-Herzog, O., & Mejía, J. (2018). Ecotourism and sustainable development. In *Routledge Handbook of Tourism in Asia* (pp. 151-165). Routledge.
7. Ma, J., Huang, W., Gao, X., Wang, Q., & Li, Y. (2018). Valuing recreational ecosystem services of forest parks: A travel cost method study of Wuxi New District forest park, China. *Forest Policy and Economics*, (91), 1-9.
8. Navrud, S., & Ready, R. C. (2002). *Valuing cultural heritage: applying environmental valuation techniques to historic buildings, monuments, and artifacts*. Edward Elgar Publishing.
9. Olomola, A. S., Akinbode, S. O., & Sanusi, R. A. (2015). Financial sustainability of ecotourism ventures in Nigeria. *Journal of Sustainable Development in Africa*, 17(6), 161-173.
10. Parsons, G. R., Jagger, P., & Lynham, J. (2019). *Behavioral foundations of environmental economics and valuation*. Routledge.