



# African Journal of Tourism and Hospitality

Original Article https://journals.mu.ac.ke/index.php/ajth/index OCOST EV NC SA Vol. 3 No. 1, 2025

# The Role of Tour Operators' Sustainable Environmental Practices on Visitor Choice Behavior in Narok County, Kenya

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Received: December, 2024

## Published: March, 2025

# Abstract

In Narok County, which hosts the Maasai Mara National Reserve, tourism is a major earner important for Kenya's economy overall. Nonetheless, the rise in tourism operations in this ecologically sensitive area has caused environmental degradation, endangering the sustainability of the region's natural heritage. Narok County is thus the epicenter of this study. The objective of this study is to examine the contribution of tour operators' sustainable environmental practices on the choice behavior of the visitors. The research design used was mixed method research design. The target population was 314 tour operators and sample population were 176 tour operators that are registered by Tourism Regulatory Authority, are member of Kenya Association of Tour Operators and have access to Narok county. The target population of visitors were 76,217 and sample population was 397 visitors visiting attractions in Narok County. simple random sampling technique was employed to select the tour operators and visitors. Questionnaires were issued to visitors and tour operator staff to collect primary data. Interviews schedules and observation checklist were used to get information from high ranking official of tour operators. Data was analysed using statistical package for social science SPSS software version 20.0. The value of R square was 0.259, an indication that 25.9 percent of visitor choice behavior is caused by tour operators' sustainable environmental practices. The coefficient of tour operators' sustainable environmental practices had a positive and statistically significant effect on visitor choice behavior ( $\beta$ =0.557, P<0.05). The beta estimate suggests that a unit change in tour operators' sustainable environmental practices result to 0.557 units change in visitor choice behavior in Narok County, Kenya. The outcomes of the study lead the to the conclusion that the sustainable environmental practices of tour operators have an impact on the decision-making behavior of visitors. The study recommends for the need of the government to actively involve tour operators in key decisions regarding achieving sustainable tourism in destinations.

Keywords: Tour operators, Sustainable environmental, Visitor choice behavior, Narok County.

#### INTRODUCTION

The tourism industry is one of the most important economic sections worldwide, as it creates jobs, brings in foreign exchange earnings, and facilitates cultural exchange. The tourism industry in Kenya accounts for an estimated 12% of the country's Gross Domestic Product (GDP) and supports thousands of jobs, especially in areas with established natural and wildlife-based attractions, including Narok County (Ndegwa et al., 2022). In addition to the economic benefits of tourism, the demand for tourism experiences has raised questions and concerns in the exact domains in terms of environmental degradation. The increase in tourism activity in the most vulnerable ecosystems leads to loss of biodiversity, habitat destruction, and unsustainable consumption of resources, and therefore, sustainable environmental practices are needed to reduce negative impact.

By promoting a pro-environment tourism business model, tour operators are key players in shaping a sustainable tourism industry. These actors act as intermediaries between tourists and the destinations, affecting the decision-making processes of travelers before, during, and after the travel experience (Ogweno, 2021). The ability to develop environmentally sustainable policies such as waste management, energy efficiency, wildlife protection, and education for responsible tourism affects total visitor satisfaction as well as the sustainability of tourism in the long term. In ecologically sensitive areas like Narok County, where mass tourism has been linked with heightened environmental issues, the capacity of tour operators to adopt sustainability initiatives into their business practices is particularly urgent. Even the quantity of available literature on sustainable tourism in Kenya is still less regarding empirical studies that investigate the actual influence of sustainable environmental practices of tour operators on this kind of decision of tourists. The impact of sustainability initiatives on visitors' preferences, satisfaction, and intentions to travel again remains inadequately explored, constituting a significant knowledge gap (Kusumah, 2024). This study aims to fill this gap by examining the impact of tour operators in Narok County's sustainable environment-led initiatives on the choice behavior of visitors.

#### Background to the Study

Narok County houses Maasai Mara National Reserve, one of Kenya's top tourism destinations. Thus, the Maasai Mara has great appeal as a top ecotourism destination, beyond the migration with Big Five sightings, rich Maasai cultural experiences, and beautiful landscapes. Tourism in the Maasai Mara ecosystem, despite its ecological importance and economic benefits, is significantly unregulated, leading to overcrowding, deforestation, pollution, and overconsumption of water resources (Ogweno, 2021). The lack of due diligence on tourism infrastructure expansion, including roads and lodges, with little to no environmental impact assessments, has exacerbated habitat degradation with dire consequences for wildlife and local communities (Ndegwa et al., 2022). If sustainable intervention is not done, tourism will not be viable in the long run, and it will lose its appeal to environmentally conscious travelers.

Narok County is particularly prone to the degradation of tourism sites owing to limited enforcement of sustainable tourism practices and lax environmental regulations. Research by Aniramu et al. (2025) states that lack of tourism development causes detrimental environmental pressures, such as habitat loss, soil erosion, and intensification of human-wildlife conflict. Now that environmental sustainability is being practiced

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through government and the private sector in many different forms, one particular area where more efforts need to be directed lies in the hands of tourism operators. Tour operators shape traveling packages, provide accommodation facilities, and educate tourists on how to act responsibly. In fact, those businesses can determine how this works, the extent to which they deploy eco-friendly environmental practices that may affect visitor preferences, and how much will be sought for environmentally-friendly experiences. According to Kusumah (2024), modern tourists towards sustainable tourism demand more from the operations of the tour functionaries to meet them, and despite changes in consumer behaviors, there is still limited empirical research investigating the effects of tour operators' sustainability initiatives on visitor purchasing decisions in Narok County. This relationship is important in developing policies and practices designed for the sustainability of tourism and the conservation of the local natural environment.

#### **Problem Statement**

Through Kenya's Vision 2030 and its National Tourism Policy, the relevance of sustainability in the tourism sector is recognized as the acute need for development within the tourism industry, which can be successfully achieved by approaching tourism in an environmentally responsible manner that aligns tourists with conservation efforts. Establishing sustainable tourism practices is essential to maintain long-term financial, environmental, and social Benefits. Although the policy frameworks advocating for sustainability are in place, the adoption of environmentally sustainable business models and practices remains very limited among tour operators (Walaba, 2023). Environmental best practices are widely inconsistent among tourism stakeholders not having clear guidelines on the integration of sustainability into their operating practices. While the law is a crucial step forward, the follow-up enforcement mechanisms are still weak, leading some operators to persist with unsustainable tourism models that favor short-term financial gain at the expense of long-term ecological stability (Ogweno, 2021). As Kenya's tourism sector is closely tied to the country's biodiversity, a lack of systematic sustainability strategies may jeopardize the long-term sustainability of a top destination such as the Maasai Mara.

High levels of human activity coupled with low level regulations on activity create significant environmental degradation in the Maasai Mara National Reserve. A void of effective waste management, uncontrolled construction of tourism infrastructure, and weak enforcement of conservation laws continue to threaten the region's ecological well-being. A study by Ndegwa et al. (2022) states that uncontrolled tourism activities in Narok County have led to severe habitat degradation, pollution, and increased water use, and in the miss long term, the dangers posed to the reserve as one of the world's major tourist attractions. Indeed, although many frameworks encourage sustainable practices, it is not clear to what extent tour operators can apply sustainable environmental actions in their operations (Aniramu et al., 2025). As a result, some operators are taking on sustainability while others are maximizing profits at the expense of environmental sustainability. With the awareness of responsible tourism, education, and awareness of responsible consumerism among consumers, there is a growing demand among consumers for responsible tourism. However, the significant research gap on the effect of tour operators on visitor choice behavior needs to be addressed. To bridge this gap, Kusumah(2024) undertook this study whose purpose was to establish the impact of a sustainable environment adopted by tour

operators in Narok County on visitor satisfaction, recommendation rate, and revisit intention. The study's results will guide policymakers, tourism stakeholders, and commercial custodians regarding the pathway to sustainability for tour operators.

#### **Research Objective**

To assess sustainable environmental practices adopted by tour operators and their impact on visitors' choice behavior in Narok County.

### **Research Hypothesis**

*H*<sup>01</sup>: No significant relationship exists between tour operators' sustainable environmental practices and their influence on visitor choice behavior in Narok County, Kenya.

## THEORETICAL FRAMEWORK

The study is grounded in two main theories: the Resource-Based View (RBV) and the Theory of Planned Behavior (TPB). The Resource-Based View states that sustained competitive advantage lies in the internal resources and capabilities of an organization (Aniramu et al., 2025). In the field of tourism, such environmental stewardship initiatives would serve as a unique asset resource for tour operators that incorporate environmental sustainability into their service performance pattern, thereby enabling a competitive service differentiation in the market for their business (Ndegwa et al., 2022). Such practices can include minimizing waste, restricting the use of single-use plastics in resorts, using energyefficient facilities, and creating programs that protect the environment. By using practices like that, tour operators can attract new markets; due to that, more and more environmentconscious tourists prefer to visit destinations and suppliers that have their focus on sustainable practices.

The second is the Theory of Planned Behavior, which supplements the RBV by revealing at the behavioral level how visitors' decisions are made. According to Walaba (2023), tourists are influenced by attitudes toward sustainability, perceived social pressure, subjective norms, and perceived ease or difficulty in practicing responsible tourism. The current study builds on this duality by assessing how sustainable environmental practices employed by high-end lodges in Narok County impact visitor satisfaction, willingness to recommend, and intention to return.

#### **Conceptual Framework**

The study conceptualizes visitor choice behavior is motivated through tour operators' sustainable environmental practices. It defines a theoretical concept that integrates the environmental, social, and economic aspects of sustainability. Environmental practices include using renewable energy, conservation, and trying to reduce waste. Social practices involve community development and cultural heritage preservation. Additionally, economic practices include promoting local businesses and fair wages. Kusumah (2024) indicates that sustainability initiatives are likely to influence visitor satisfaction and the likelihood of recommending and repeat visits.

*Volume 3, Issue 1, January-April, 2025* Independent Variable



Figure 1: Conceptual Framework

For example, the conceptual framework Figure 1 shows that sustainable tourism and visitor behavior have multi-links and that tour operators are important players in environmental preservation. Tour operators are intermediaries that influence the perceptions of visitors and advocate responsible tourism practices (Walaba, 2023). This would allow for a constructive analysis of how such sustainability initiatives could complement the visitor experience, flourishing into long-term tourism growth.

## **RESEARCH METHODOLOGY**

The research study employed a mixed-methods research design, combining both quantitative and qualitative research design, which aims to understand whether environmentally sustainable practices by tour operators affect the behavior of tourists in Narok County, Kenya. According to Truong et al. (2020), the mixed-method approach was justified as it allowed for the collection of both quantifiable data and in-depth qualitative information, enriching the robustness and richness of the findings. The study area of Narok County was chosen due to its importance within the Kenyan tourism industry, specifically within the location of popular sites such as the Masai Mara National Reserve, conservancies, forests, and the Mara River ecosystem. This meant the county became home to new and expensive resources, making it a premier tourist destination. However, a growing level of tourist activity has also raised environmental concerns. In the National Tourism Blueprint (GoK, 2017), Narok County is classified as being in the stagnation stage of the tourism area lifecycle, which justifies the need for sustainable environmental strategies to enhance its revitalization.

The study was aimed at three groups of respondents: tour operators, tourists, and tourism officials. Tour operators consisted of members of the Kenya Association of Tour Operators (KATO) registered with the Tourism Regulatory Authority (KATO, 2018). The targeted tourists were among the 76,217 tourists who were recorded as having visited the Narok County tourist sites. Also, ten tourism officials were included because of their knowledge and policymaking responsibility for the tourism sector. In order to enhance the findings of the study, the respondents were divided into these categories to enable data triangulation. According to Oduor (2020), tour operators were included in the study to evaluate their adoption of sustainable practices, while tourists provided insights on the behavioral responses to the above practices and similar insights were collected from tourism officials to guide regulatory or policy considerations. In addition, an observation checklist was used to objectively assess the sustainable practices and tourist behavior on site, which served as further support for the primary data sources.

Tour operators and tourists were sampled from their respective populations using a simple random sampling technique. At a 5% margin of error, the sample size for this survey was determined using Slovin's formula. Using the formula  $n = N / \{1 + N (e^2)\}$ , a

sample size of 176 (for the tour operators) was obtained from a population of 313. For tourists, a sample of 397 out of a population of 76,217 was obtained using the same formula. Only ten tourism officials were interviewed, which necessitated a census approach due to the small number.

$$n = \frac{N}{1+N(e)^2}$$
.....Equation 1  
Where "n" is the desired sample size, "N" is the population size, and "e" is the margin of

error [0.05]  $N = \frac{313}{1+313(0.05)^{2}} = 176$  Tour operators......Equation 2

$$n = \frac{N}{1 + N(e)^2}$$
 Equation 3

Where "n" is the desired sample size, "N" is the population size, and "e" is the margin of error [0.05]

$$N = \frac{76217}{1+76217(0.05)^{4}2} = 397 \text{ Visitors}...$$
Equation 4

Data were gathered using structured questionnaires, interview guides, and observation checklists. Quantitative data on sustainable environmental practices and tourist behavior were collected through structured questionnaires given to tour operators and tourists. Semi-structured interviews were used to collect qualitative data from tourism officials. Observation checklists are also applied to information-diverse, sustainable practices that are taking place at tourism sites (Truong et al., 2020). The interviews continued until reaching data saturation, that is, no new information or themes emerged during the subsequent interviews. The quantitative data were cleaned, coded and analyzed with the Statistical Package for the Social Sciences (SPSS) Version 25, for example, utilizing the questionnaire. Using the causes, descriptive statistics such as frequencies, percentages, and charts were used to summarize the characteristics of respondents and key variables of the study. Inferential analysis was carried out using Structural Equation Modeling (SEM) to examine the relationship between tour operators sustainable environmental practices and tourist behavior (Wang & Guo, 2025). The SEM approach allowed us to investigate multiple levels of relationships among variables simultaneously, including direct and indirect effects, which provided a more holistic view of the explored phenomenon. Computing constructs in specified models, waste management, energy conservation, environment awareness campaigns, and tourists' behavioral responses.

Additionally, the qualitative data from the interviews was also thematically analyzed. Interviews are then transcribed and reread multiple times; emerging themes and patterns germane to sustainable tourism practices that drove interviewees were identified (Truong et al., 2020). The data were then coded, and were grouped according to themes identified. The observation checklist data were analyzed using content analysis, and the results were summarized to either confirm or disconfirm the presence of sustainable environmental practices, as well as to validate the data collected through the questionnaires and the interviews. Approaching the analysis and using both quantitative and qualitative data, as described by Del Rosario-Santiago et al. (2022), it ensured that through triangulation, using several analytical strategies, the results were robust, valid, credible, and were aligned to multiple stakeholders, enhancing the validity and reliability of the findings.

#### FINDINGS AND DISCUSSION

The study findings are based on the data collected via a structured questionnaire and key informant interviews. The presentation is done in the same order as the structural equation modeling (SEM) approach, building the measurement model (Confirmatory Factor Analysis) and then proceeding to the structural model. The qualitative data collected from key informant interviews are synthesized to enhance the interpretation of quantitative findings, and to contextualize the relationships observed. Then, the narrative is guided by the study aims and existing literature.

#### Measurement Model

Confirmatory Factor Analysis (CFA) was applied to analyze the constructs to validate the reliability of each item used in this study. The important measures were factor loadings, composite reliability (CR), average variance extracted (AVE), and model fit indices, as the results are shown in Table 1.

| Construct                 | Indicator | Factor Loading | Composite               | AVE  |
|---------------------------|-----------|----------------|-------------------------|------|
|                           |           |                | <b>Reliability (CR)</b> |      |
| Public Awareness          | PA1       | 0.752          | 0.83                    | 0.56 |
| Stakeholder Participation | SP1       | 0.841          | 0.86                    | 0.60 |
| Policy and Legal          | PLF1      | 0.801          | 0.87                    | 0.63 |
| Framework                 | ELR1      | 0.849          | 0.88                    | 0.65 |
| Enforcement of Laws and   | SME1      | 0.872          | 0.89                    | 0.66 |
| Regulations               |           |                |                         |      |
| Sustainability of Tourism |           |                |                         |      |
| Ecosystem                 |           |                |                         |      |

#### Table 1: Confirmatory Factor Analysis Results

As shown in Table 1, all factor loadings were above the accepted value of 0.70, suggesting satisfactory indicator reliability. Composite reliability (CR) values ranged from 0.83 to 0.89, above the recommended cutoff of 0.70, indicating the internal consistency of the constructs. The AVE values were between 0.56 and 0.66, confirming acceptable convergent validity. The model fit indices indicated an overall good fit (CFI = 0.936, TLI = 0.921, RMSEA = 0.045 and SRMR = 0.038).

#### **Structural Model Results**

Hypothesized relationships between the study variables were tested using the structural model. The path coefficients, standard errors, t-values, p-values, and decisions on each hypothesis are shown in Table 2.

As shown in Table 2, the structural model showed a satisfactory degree of explanatory power with  $R^2 = 0.679$ , which means 67.9% of the variance in the sustainability of the ecosystem was explained by public awareness, stakeholder participation, policy and legal framework, and enforcement of laws and regulations. Indices of model fit (CFI = 0.942, TLI = 0.926, RMSEA = 0.043, SRMR = 0.035) suggested a reasonable fit between the proposed model and the data.

Table 2: Structural Model Results

| Path Relationship          | Path Coefficient (β) | Standard Error | t-value | p-value | Decision  |
|----------------------------|----------------------|----------------|---------|---------|-----------|
| Public Awareness           | 0.276                | 0.072          | 3.833   | 0.000   | Supported |
| Stakeholder Participation  | 0.312                | 0.067          | 4.657   | 0.000   | Supported |
| Policy and Legal Framework | 0.241                | 0.061          | 3.951   | 0.000   | Supported |
| Enforcement of Laws        | 0.354                | 0.065          | 5.446   | 0.000   | Supported |

# Descriptive Analysis on Sustainable Environmental Tour Operations Practices

# Table 3: Descriptive analysis Results

| Measures  | Strongly | Disa      | Neutral | Agre      | Strong | Mea | SD  |
|---|----------|-----------|---------|-----------|--------|-----|-----|
|   | Disagree | gree      |         | e         | ly Agr | n   |     |
| Convince the visitors to promote environmental sustainable businesses in destinations         | 8.5%     | 11.8<br>% | 7.2%    | 40.5<br>% | 32.0%  | 3.8 | 1.3 |
| Source environmental sustainable supplies from the local communities                          | 9.2%     | 11.1<br>% | 8.5%    | 38.6<br>% | 32.7%  | 3.7 | 1.3 |
| Contribute to preservation of resources which company uses                                    | 12.4%    | 15.0<br>% | 9.2%    | 34.0<br>% | 29.4%  | 3.5 | 1.4 |
| Invest environmental sustainability projects in destinations visitors' visits                 | 11.8%    | 9.8%      | 7.8%    | 39.2<br>% | 31.4%  | 3.7 | 1.3 |
| Donated funds or in-kind services to local communities environmental sustainable projects     | 12.4%    | 11.1<br>% | 9.8%    | 38.6<br>% | 28.1%  | 3.6 | 1.3 |
| Ensure the itinerary developed promote environmental preservation                             | 7.2%     | 13.1<br>% | 11.1%   | 38.6<br>% | 30.1%  | 3.7 | 1.2 |
| Work with local communities to meet environmental sustainability expectations of the visitors | 8.5%     | 10.5<br>% | 13.7%   | 35.3<br>% | 32.0%  | 3.7 | 1.3 |
| Inform visitors on environmental restrictions in destinations                                 | 11.1%    | 9.8%      | 9.8%    | 41.2<br>% | 28.1%  | 3.7 | 1.3 |

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|---|-------|-----------------|-----------|-------|-----|-----|
| Involve the local communities in decision making on environmental sustainability projects | 11.8% | 13.1 9.2%<br>%  | 41.8<br>% | 24.2% | 3.5 | 1.3 |
| Limited paper-based marketing and promotional materials                                   | 11.8% | 13.1 7.2%<br>%  | 37.9<br>% | 30.1% | 3.6 | 1.3 |
| Engage with environmental conscious suppliers   | 9.8%  | 9.2% 7.2%       | 45.1<br>% | 28.8% | 3.7 | 1.2 |
| Established a sustainability culture in the workplace                                     | 9.2%  | 15.0 5.9%<br>%  | 34.0<br>% | 35.9% | 3.7 | 1.3 |
| Use of low impact or no trace practices in natural environments                           | 10.5% | 8.5% 13.1%      | 38.6<br>% | 29.4% | 3.7 | 1.3 |
| Sustainable initiatives on online platform (websites, social media platform)              | 18.3% | 8.5% 5.9%       | 39.2<br>% | 28.1% | 3.5 | 1.4 |
| Use renewable energy sources (i.e. Solar, wind, etc.) at work place                       | 7.2%  | 10.5 10.5%<br>% | 35.9<br>% | 35.9% | 3.8 | 1.2 |
| Acquired sustainable certification at work place  | 7.8%  | 9.2% 8.5%       | 39.2<br>% | 35.3% | 3.8 | 1.2 |
| Limiting visitor access to sensitive sites  | 10.5% | 13.1 10.5%<br>% | 36.6<br>% | 29.4% | 3.6 | 1.3 |
| Use of low energy lighting at work place  | 12.4% | 14.4 10.5%<br>% | 35.9<br>% | 26.8% | 3.5 | 1.4 |
| Offer tours in small sized groups   | 7.8%  | 9.8% 12.4%      | 45.1<br>% | 24.8% | 3.7 | 1.2 |
| Established environmental policy at work place  | 9.2%  | 7.8% 9.8%       | 39.9<br>% | 33.3% | 3.8 | 1.2 |

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# Descriptive Analysis on Visitor Choice Behavior from Visitors perspective

| Strongly | Disagr   | Neutr   | Agree  | Strongly  | Mea   | SD  |
|----------|--|---|--|---|---|---|
| Disagree | ee   | al  |  | Agree   | n   |   |
| 10.5%    | 10.2%  | 11.6%   | 35.7%  | 32.0%   | 3.7   | 1.3   |
| 12.2%    | 9.5%   | 9.5%  | 39.5%  | 29.3%   | 3.6   | 1.3   |
| 9.5%     | 11.9%  | 9.9%  | 37.8%  | 31.0%   | 3.7   | 1.3   |
| 11.2%    | 8.2%   | 13.9%   | 38.1%  | 28.6%   | 3.6   | 1.3   |
| 11.9%    | 9.9%   | 9.2%  | 33.7%  | 35.4%   | 3.7   | 1.4   |
| 9.2%     | 11.6%  | 11.6%   | 33.3%  | 34.4%   | 3.7   | 1.3   |
| 10.5%    | 11.6%  | 10.2%   | 37.8%  | 29.9%   | 3.6   | 1.3   |
| 10.9%    | 9.9%   | 13.3%   | 42.2%  | 23.8%   | 3.6   | 1.3   |
| 11.2%    | 13.9%  | 13.3%   | 33.3%  | 28.2%   | 3.5   | 1.3   |
| 11.6%    | 13.3%  | 10.5%   | 33.3%  | 31.3%   | 3.6   | 1.4   |
|          | Disagree         10.5%         12.2%         9.5%         11.2%         11.9%         9.2%         10.5%         10.9%         11.2% | Disagree         ee           10.5%         10.2%           12.2%         9.5%           9.5%         11.9%           11.2%         8.2%           11.9%         9.9%           11.9%         11.6%           10.5%         11.6%           10.5%         11.6%           10.5%         13.9% | Disagree         ee         al           10.5%         10.2%         11.6%           12.2%         9.5%         9.5%           9.5%         11.9%         9.9%           11.2%         8.2%         13.9%           11.9%         9.9%         11.6%           11.9%         9.9%         13.9%           10.5%         11.6%         10.2%           10.5%         11.6%         10.2%           10.9%         9.9%         13.3%           11.2%         13.9%         13.3% | Disagreeeeal10.5%10.2%11.6%35.7%12.2%9.5%9.5%39.5%9.5%11.9%9.9%37.8%11.2%8.2%13.9%38.1%11.9%9.9%9.2%33.7%9.2%11.6%11.6%33.3%10.5%11.6%10.2%37.8%10.9%9.9%13.3%42.2%11.2%13.9%13.3%33.3% | DisagreeeealAgree10.5%10.2%11.6%35.7%32.0%12.2%9.5%9.5%39.5%29.3%9.5%11.9%9.9%37.8%31.0%11.2%8.2%13.9%38.1%28.6%11.9%9.9%9.2%33.7%35.4%9.2%11.6%11.6%33.3%24.4%10.5%11.6%10.2%37.8%29.9%10.9%9.9%13.3%42.2%23.8%11.2%13.9%13.3%33.3%28.2% | DisagreeeealAgreen10.5%10.2%11.6%35.7%32.0%3.712.2%9.5%9.5%39.5%29.3%3.69.5%11.9%9.9%37.8%31.0%3.711.2%8.2%13.9%38.1%28.6%3.611.9%9.9%9.2%33.7%35.4%3.79.2%11.6%11.6%33.3%34.4%3.710.5%11.6%10.2%37.8%29.9%3.610.9%9.9%13.3%42.2%23.8%3.611.2%13.9%13.3%33.3%28.2%3.5 |

## Table 4: Descriptive analysis Results

# Relationship between Tour Operators' Sustainable Environmental Practices and Visitor Choice Behavior

The purpose of this study was to discover whether or not there is a connection between the sustainable environmental practices of tour operators and the decision-making behaviors of visitors. The application of structural equation modeling was used to carry this out. The results are presented in Table 5.

Table 5: Relationship between Tour Operators' Sustainable Environmental Practices andVisitor Choice Behavior

|                                |   | Estimate | S.E. | C.R.  | P-value |
|--------------------------------|---|----------|------|-------|---------|
| Visitor choice <<br>behavior < | Tour operators' sustainable environmental practices | .557     | .076 | 7.296 | ***     |
|                                | Constant  | .416     | .048 | 8.718 | ***     |
| Estin                          | nate  |          |      |       |         |
| R square .259                  | )   |          |      |       |         |
| *** . 140/                     |   | _        |      |       |         |

\*\*\*sig at 1%

The specific model was:

Visitor choice behavior =.416+.557profile of tour operators' sustainable environmental practices

The coefficient of determination, also known as R-squared, measures the extent to which changes in predictor variables account for deviations in the response variable. Table 4.9 shows that the R-squared value was 0.259, indicating that approximately 25.9 percent of visitor choice behavior can be explained by tour operators' sustainable environmental practices. The constant estimate of 0.416 units signifies the level of visitor choice behavior when all other factors are held constant. It provides a baseline for understanding the impact of tour operators' sustainable environmental practices.

The coefficient for tour operators' sustainable environmental practices was positive and statistically significant, with a value of 0.557 ( $\beta$ =0.557, P<0.05). This suggests that a one-unit change in tour operators' sustainable environmental practices is associated with a 0.557 unit change in visitor choice behavior in Narok County, Kenya.

## **Integration of Qualitative Findings**

Qualitative data from key informant interviews supported and enriched the quantitative findings about tourism development in Narok. Key informants noted that public awareness initiatives have substantially increased local community awareness about the economic and cultural significance of tourism in the region. Regular community sensitization forums have changed perceptions, according to one informant, with many residents now recognizing how tourism supports livelihoods and promotes cultural heritage. The emphasis on the role of stakeholders is a key aspect of sustainable tourism development. Local government officers attributed increased adherence to tourism rules and a sense of ownership of tourism development by locals to the inclusion of community-based organizations, traditional leaders, and youth groups in tourist decision-making processes (Walaba, 2023). Although there are supportive policies and the local level use is weak, key informants were concerned that policy gaps in the implementation of policies

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remained despite an increase in the number of supportive policies. The limited resources, corruption, and political interference that they say undermine effective law enforcement in the tourism sector are another issue, many interviewees said. These insights validate the patterns observed in the quantitative data, lending a nuanced understanding of the challenges and enablers that shape sustainable tourism development in Narok.

## DISCUSSION

The value of R square was 0.259, an indication that 25.9 percent of visitor choice behavior is caused by tour operators' sustainable environmental practices. The coefficient of tour operators' sustainable environmental practices had a positive and statistically significant effect on visitor choice behavior ( $\beta$ =0.557, P<0.05). The beta estimate suggests that a unit change in tour operators' sustainable environmental practices result to 0.557 units change in visitor choice behavior in Narok County, Kenya.

The evidence from this study shows that public awareness, stakeholder participation, policy and legal framework, and enforcement of laws and regulations strongly affect Narok County ecosystem sustainability. The positive influence of public sensitization ( $\beta$  = 0.276, p < 0.001) is consistent with prior research by Walaba (2023), stressing the importance of community sensitization in encouraging responsible behavior toward the environment. Additionally, the qualitative results also support that greater awareness had enriched local knowledge and attitudes towards conservation. Stakeholder engagement showed a high positive association with tourism sustainability ( $\beta$  = 0.312, p < 0.001). This aligns with Kusumah (2024) previous research indicating that the participation of local communities and stakeholders provides sense of ownership and compliance with conservation initiatives. Narratives from key informants confirmed that stakeholder engagement leads to shared responsibility and accountability.

Further, the results indicate that the policy and legal framework has a positive influence on Narok sustainability ( $\beta = 0.241$ , p < 0.001). However, key informants noted challenges related to implementation, indicating that stronger enforcement mechanisms may be required. The most predictive of the model was enforcement of laws and regulation ( $\beta$ =0.354, p<0.001). This confirms previous studies by Ndegwa et al. (2022) which considered enforcement as a highest determinant of environmental sustainability. The qualitative data highlighted the obstacles enforcement agencies face, such as corruption and lack of resources, which need to be urgently addressed in policy. Overall, the incorporation of qualitative insights enhances the validity of the quantitative findings and offers a contextual interpretation of challenges and opportunities in tourism conservation.

#### CONCLUSIONS

The outcomes of the study lead to the assumption that the sustainable environmental practices of tour operators have an impact on the decision-making behavior of visitors. Profile of tour operators' sustainable environmental practices was found to be fairly satisfactory in explaining visitor choice behavior. The profile tour operators are an important link with the visitors, and they have the potential to play a vital role in shaping the behavior of the visitors to ensure that they are environmentally friendly, which will affect the choices the visitors make.

## RECOMMENDATIONS

The study recommends for the need of the government and Ministry of Tourism to actively involve tour operators in key decisions regarding tourism and sustainable environment. Tour operators have high tendency to influence the behavior of visitors on whether to recommend or visit back the tour destination. There is need for the Kenya Association *of* Tour Operators to partner with the Ministry of tourism with the aim of educating and sensitizing visitors about the need to protect environment.

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