



MANAGEMENT'S AND TOURISTS' KNOWLEDGE AND APPRECIATION OF ECO-LABELING AND ECO-CERTIFICATION AT SELECTED COASTAL TOURIST DESTINATIONS IN LAGOS, NIGERIA

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ABSTRACT

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Eco-labels and eco-certification are environmental tools that help tourism providers to adopt environmentally sustainable practices. Although widely adopted in developed countries, there is little information available in developing countries. This study therefore assessed both management's and tourists' knowledge and appreciation of eco-labeling and eco-certification at Santa Cruz and Suntan Beach Resorts in Lagos State, Nigeria. Key informant interviews were conducted with the managers of both sites to determine their level of knowledge about the concept and the type of eco-label awarded. A total of 372 structured questionnaires totaling 372 were administered, proportionately, among tourists at both sites, based on convenience sampling. The data collected was statistically analyzed using descriptive statistics, the t-test, and Pearson product-moment correlation. The results revealed that the Director of Santa Cruz Beach did know about eco-labels and eco-certification, but not the Manager of Suntan Beach; however, neither beach resort have completed eco-certification and acquired an eco-label. With respect to tourists, no significant difference between Santa Cruz and Suntan Beaches exists ($p > 0.05$) in either their knowledge and appreciation of the value of eco-labels ($p > 0.05$) or their interest in and response to eco-labeled products ($p > 0.05$). Tourists at Santa Cruz Beach, however, have a more favorable response (56.7%) to eco-labeled products than at Suntan Beach (48.5%). Finally, a positive correlation ($p < 0.05$) exists between tourists' knowledge of and responsiveness to eco-labels and eco-certification. This study thus concludes that the eco-labels and eco-certification for tourist destinations should be promoted in the Nigerian tourism sector.

Contribution/Originality: This study is one of very few to investigate the adoption of eco-labels and eco-certification for water-based tourist destinations in developing countries. In particular, it analyzes the knowledge and appreciation of the value of environmentally sustainable practices among stakeholders in the tourism sector.

1. INTRODUCTION

Over the past few decades, tourism has become one of the world's most profitable sectors (United Nations World Tourism Organization, 2014), and such a considerable increase in tourist activities equates to significant economic and social benefits (Bastič and Gojčič, 2012). As one of the most up-and-coming economic sectors worldwide, the potential and extent of tourism growth raises concerns about the negative environmental and social impacts (Kasim, 2008; Cucculelli and Goffi, 2015), since it is regarded as one of the most harmful of human activities in terms of environmental degradation (UNWTO, 2014). Bhandari (2014) also noted that the sector's growth has

placed a heavy burden on local economies, culture, and environment; hence, responsible management is required. Due to the intrusion of human activities and intensification of resource extraction (United Nations Environment Programme, 2001), pressure has increased on wildlife and natural habitats, the conservation of which is paramount because it is also what attracts tourists to the destination and promotes investment (De Oliveira, 2003; Byrd, 2007; Aras and Crowther, 2009; Robinot and Giannelloni, 2010).

Over the last decade, it has become increasingly evident to the general public that more effective procedures are needed to safeguard the environment, with many industries experiencing a growing demand for sustainable products and green marketing. More effort to implement environmentally sustainable practices has also been seen in the tourism and hospitality sector, particularly in economically developed nations and the sector focused on ecotourism (Burgin and Hardiman, 2010). For this reason, “going green” is becoming increasingly popular; the term “green” meaning environmentally friendly: conducting business in a way that reduces waste, conserves energy, and generally promotes sustainability and environmental health (Jhawar *et al.*, 2012). In the last few years, “going green” has been an attractive trait for businesses, providing an additional edge over their competitors.

The growth in the use of eco-labels and eco-certification in the tourism industry is a response to the need for standardizing its green message: identifying those tourism establishments that were proactive in preventing environmental damage (Bowman, 2011). Eco-certification has been available to the tourism industry for over 30 years; in theory, it assists tourism providers to adopt environmentally sustainable practices (Mihalič, 2000). There are many instruments for achieving environmentally sustainable tourism, including eco-labels, especially for tourist accommodation facilities and services. Such certification and labeling schemes, which are offered internationally, nationally, and locally by industrial organizations, and government and non-government institutions are becoming more popular (Bohdanowicz, 2005). For the last two decades, eco-certification has voluntarily demonstrated high standards of performance, above and beyond legislative requirements, and given a small number of providers a competitive advantage in the sector (Font *et al.*, 2003).

Likewise, eco-labeling is voluntary, informing consumers about the environmental impact of the production, consumption, and waste phases of the products and services they use (Galarraga, 2002). It has been suggested that eco-labels and eco-certification programs could be the best way to apprise tourists of environmental issues (Sallows and Font, 2004). To date, a few schemes have emerged, such as:

- *Green Globe* provides tourism providers with a framework against which to benchmark their performance, achieve eco-certification, and continuously improve their performance (Spenceley, 2005).
- *Ecotourism Australia* is a national eco-certification program that accredits three types of ecotourism: tours, accommodation, and attractions (Ecotourism Australia, 2005).
- *Fair Trade in Tourism South Africa* is a nonprofit organization that promotes sustainable and equitable tourism development through raising awareness and facilitating a voluntary certification program (FTTSA [Fair Trade in Tourism South Africa], 2005).
- Plus others, such as Blue flag, Seaside Awards, Blue Angel, Green Leaf, Green Suitcase, Esok (Kenya).

Eco-labels are issued by respected accreditation schemes and usually intended to curb tourism’s negative environmental impact on the natural resources in the destinations by encouraging tourism providers to achieve high environmental standards (UNEP, 1998), educating tourists about the impact from their actions and decisions—thereby prompting them to favor “environmental benign” enterprises in their purchasing decisions (UNEP, 1998)—and developing standards for environmentally friendly tourism products and services (Mihalič, 2000). Tourism enterprises promote their environmental achievements in their marketing campaigns by displaying the eco-labels awarded (logo or flag) on brochures, press releases, and noticeboards both on and off their premises (Morgan, 1999).

While there are over a hundred eco-certification schemes globally (Wearing *et al.*, 2002; Esparon *et al.*, 2014; Gössling and Buckley, 2014), uptake rates are low (Weaver, 2009). This may be due to certification being expensive

(Sasidharan *et al.*, 2002; Diamantis, 2004) while the return on investment (Rowe and Higham, 2007) and whether eco-labels do create a competitive advantage (Bramwell and Lane, 2010) remain uncertain. The majority of research on eco-labels and eco-certification in the tourism sector relates to developed countries, and scarce for developing countries. Therefore, this study aims to assess management's and tourists' knowledge and appreciation of eco-labeling and the eco-certification process in two coastal tourist destinations: Santa Cruz and Suntan Beaches in Lagos State, Nigeria. The specific objectives of this study were:

- To investigate the type of eco-labels and eco-certification these resorts have acquired.
- To assess management's and tourists' knowledge and appreciation of eco-labeling and eco-certification programs.
- To assess tourists' response to and interest in eco-labeled products at ecotourism destinations.
- To identify possible challenges the resorts faced in acquiring eco-labels and eco-certification.

2. METHODOLOGY

2.1. Study Area

Lagos State is located in the southwestern part of Nigeria, covering a total land area of 3,577 km², of which 22% comprises lagoon and creeks. Bounded by Ogun State to the north and east, it borders the Republic of Benin in the west, while the Atlantic Ocean lies to the south (Wikipedia, 2015). The average temperature is 27°C. The state is divided into five divisions: Ikeja, incorporating the like-named state capital, and inhabited by the state's original indigenes, the Aworisi; Badagry, inhabited by the majority of the Ogus; Ikorodu and Epe, inhabited mainly by the Ijebus, with pockets of Eko-Awori settlers in coastal and riverine areas; and Lagos (Eko), where there was a mixture of pioneer settlers collectively called the Lagosians (Ekos).

2.2. Santa Cruz Beach Resort

Santa Cruz Beach Resort (also known as O'Jamach Resort) is located at Abraham Adesanya Estate, off Okun-Ajah Road, in Lekki, Lagos (6.4253°N latitude, 3.6004°E longitude). Owned by Chief Jaja Ihesiaba, the resort is a private beach (Figure 1) that not only hosts many celebrity parties but also provides a calm, clean, well-managed environment. Constantly protected by security guards, people of all ages are attracted to the resort for beach weddings and picnics, especially as a bar, stage for performances, and a lounge (the Ala Ngwa) are available for weddings, birthdays, meetings, and so forth, as well as a children's play area.



Figure-1. Santa Cruz Beach Resort.

Source: Field survey, 2018.

There is also good quality and affordable accommodation in Ajah, Lagos: well-furnished rooms feature single or queen-size beds, en suites, air-conditioning, satellite television (DStv), and safety deposit boxes. The hotel's facilities also include ample parking space and storage, guaranteed security, room service, laundry and dry cleaning services, and a restaurant serving local, continental, and international dishes, while, for a fee, an airport transfer and taxi service. The beach is most popular over the weekend, usually during the dry season, between October and April, although Harmattan (the dry and dusty trade winds) can occur from December to February; the rainy season last from May to September.

2.3. Suntan Beach

Suntan Beach (Figure 2; also called coconut beach), owned by the local government (established 1999; commissioned 2000) is located in Badagry, about 4 miles from the town center and 7 miles from Seme Border (6.3922°N latitude, 2.8330°E longitude).



Figure-2. Suntan Beach Resort.

Source: Field survey, 2018.



Figure-3. Map of Lagos State showing the location of the study areas.

Source: Field survey, 2018.

It was this resort that marked the beginning of tourism in the area, to generate more revenue for the local government and employment for residents in and the town surrounding communities, such as the two villages, Fanuvi and Sakpo, which are about 20 miles toward the border with the Benin Republic. Accessed from the Lagos–Badagry Expressway, the beach can accommodate over 5,000 tourists during peak periods—public holidays and festivals. In addition to a chalet for tourists staying overnight, there are sixty straw or asbestos huts available for visitors to rent, while activities such as horse riding, swimming, and photography are available, as well as souvenirs, including raffia hats, bags, purses, and beads. Just outside the resort, there are a minibar, restaurants, spacious car

park, and standard performance stage, as well as a police station to ensure maximum security for tourists. Figure 3 is a map of showing the location of the study areas.

2.4. Data Collection

Data was collected primarily through the following:

- *Direct Observation*: This was conducted at the beach resorts to determine whether they had acquired an eco-label and completed the eco-certification process, as well as to assess the state of the tourist site/center.
- *Structured Questionnaire*: To identify tourists' knowledge and appreciation of eco-labels and eco-certification, as well as sociodemographic information, a total of 372 structured questionnaires (203 at Santa Cruz Beach, 169 at Suntan Beach) with a 5-point Likert scale ranging from "strongly agree" = 1 to "strongly disagree" = 5 were administered. Scores of 1.0–1.7, 1.8–3.4, and 3.5–5.0 represented low, indifference, and high levels of knowledge and appreciation, respectively. To determine the study population, the number of tourists visiting each resort daily was calculated and multiplied by 30 days (1 month), enabling the average number of tourists per month to be derived: 420 at Santa Cruz Beach and 300 at Suntan Beach. The sample population was then determined using Krejcie and Morgan's (1970) table.
- *Key Informant Interviews (KII)*: These were conducted with the director and manager of each resort to assess their knowledge and appreciation of eco-labels and eco certification, the types of eco-label acquired, and the challenges faced while completing the eco-certification process and acquiring the eco-label.
- *Focus Group Discussions (FGD)*: These were undertaken for management staff at each resort, to determine their knowledge and appreciation of eco-labels and eco-certification for water-based tourist destinations.

2.5. Data Analysis

A range of descriptive and inferential statistics was calculated from the data collected: the descriptive statistics included frequency, percentages, mean, and standard deviation, while inferential statistics encompassed the t-test and Pearson product-moment correlation.

3. RESULTS

3.1. Manager's and Director's Knowledge of Eco-Labels and Eco-Certification at Santa Cruz and Suntan Beaches

The results of the KII are given in Table 1 and reveal that the Director of Santa Cruz Beach Resort had heard of and read about eco-labels and eco-certification, but had not completed the certification process and received an eco-label. The Director claimed, though, that their management staff was unaware of eco-labeling. However, neither the Manager nor management staff of Suntan Beach Resort had heard of eco-labels, and thus, nor eco-certification.

Table-1. Managements' knowledge of eco-labels and eco-certification for water-based tourist destinations (Santa Cruz Beach and Suntan Beach).

S/N	Statement	Response	
		Santa Cruz Beach	Suntan Beach
1	What do eco-labels and eco-certification mean to you?	Safeguards tourist destinations and their tourists. Eco-labels serve as a protection strategy, so that tourists feel safe when they visit resorts.	I do not really know what they mean, but I believe it is a safety measure.
2	Have you heard of eco-labels and eco-certification before?	Yes, I have heard and read about eco-labeling and eco-certification before.	No, I have not heard of eco-labeling and eco-certification before.
3	Has this organization completed the eco-certification process and received an eco-label?	No, we have not received eco-certification.	No, we have not received eco-certification.
4	Is the management staff in this organization aware of eco-labeling?	No.	No, we have not heard of or seen eco-labeling before.

Source: Field survey, 2018.

3.2. Challenges Faced in Completing the Eco-Certification Process and Acquiring an Eco-Label

Table 2 presents the challenges faced by Santa Cruz and Suntan Beaches with eco-labeling and eco-certification. Neither was informed of, directed toward, and advised about the concept of eco-labeling and eco-certification in the Nigerian tourism sector; both claimed there was no government assistance.

3.3. Management Staff's Knowledge and Appreciation of Eco-Label and Eco-Certification Program

The result of the FGD is presented in Table 3, revealing that neither Santa Cruz Beach nor Suntan Beach have acquired eco-label, and the staff are unaware of eco-labeled products, but believe eco-labels can serve as informative policy instruments for sustainable tourism. While Santa Cruz Beach staff affirms eco-labels can actually protect the environment, those at Suntan Beach were unsure.

Table-2. Challenges faced in completing the eco-certification process and acquiring an eco-label.

S/N	Statement	Response	
		Santa Cruz Beach	Suntan Beach
1	What are the challenges this organization faces in completing eco-certification and acquiring an eco-label?	There is no direction toward, information about, or advice on eco-labels and eco-certification.	First, we have not heard of eco-labels from anyone before, much less eco-certification. Second, we have never acquired an eco-label. Third, there is no direction toward, information about, advice on eco-labels or eco-certification.
2	Does the Nigerian Government offer any assistance?	No assistance is offered at all.	No assistance is offered by the Nigerian Government.
3	If the Nigerian Government does assist with the eco-certification process, explain how?	No assistance.	No assistance.

Source: Field survey, 2018.

Table-3. Managements' (Staff) knowledge and appreciation of eco-labels and eco-certification programs.

S/N	Statement	Response	
		Santa Cruz Beach	Suntan Beach
1	What do eco-labels and eco-certification mean to you?	Eco-labels and eco-certification represent ecological awareness about the environment and finding out more about the activities taking place in your area.	Eco-labels and eco-certification mean protection to us.
2	Have you heard of eco-labels and eco-certification before?	No, we had never heard of either before.	No, we had never heard of either term before.
3	Has this organization completed eco-certification and acquired an eco-label?	No, but it will work toward eco-labeling in the future.	No.
4	Are you aware of eco-labeled products?	No.	No
5	Do you think eco-labels can serve as an informative policy instruments to teach visitors about sustainable tourism?	Yes, eco-labels are needed by owners, managers, and operators, as well as tourists at tourist destinations, for protection of health and against social activities in terms of informing and raising awareness among people about their lifestyles.	Yes, it provides information not only for the tourist destination but also, picnickers, workers, and the host community on what to do and not do.
6	Do you think that eco-labeling and eco-certification can actually protect the environment?	Yes, eco-labeling provides information about the environment, especially on protection and health.	Yes, but we are not sure how.

Source: Field survey, 2018.

3.4. Tourist Sociodemographics

Table 4 shows that 44.3% of respondents were female and 55.7% male at Santa Cruz Beach, while at Suntan Beach, the split was 52.1% female and 47.9% male. The highest number of visitors were aged 16–24 (49.8% and 56.8%), followed by the 25–34-year-olds (43.3% and 29%), most being single (81.8% and 75.1%) at Santa Cruz Beach and Suntan Beach, respectively. The majority of respondents were Nigerian (96.6% and 98.2%), with just 3.4% and 1.8% of foreigners, at Santa Cruz Beach and Suntan Beach, respectively.

The most common occupations of visitors to Santa Cruz and Suntan Beaches were civil servant (11.8% and 16.6%), artisan (27.6% and 25.4%), and student (24.1% and 28.4%), respectively. In terms of religion, the majority were Christians (91.1% and 83.4%), followed by Muslims (6.9% and 15.4%), respectively, at Santa Cruz and Suntan Beaches. Tourists at both Santa Cruz and Suntan Beaches, most respondents had attained tertiary-level education, (47.8% and 50.3%, respectively), and secondary-level education (43.3% and 39.6%, respectively).

Table-4. Sociodemographic characteristics of respondents at Santa Cruz Beach and Suntan Beach.

Variables	Santa Cruz Beach		Suntan Beach	
	F	%	F	%
Age				
16–24	101	49.8	96	56.8
25–34	88	43.3	49	29.0
35–44	10	4.9	10	5.9
45–54	3	1.5	8	4.7
>54	1	0.5	6	3.6
Gender (Sex)				
Female	90	44.3	88	52.1
Male	113	55.7	81	47.9
Nationality				
Nigerian	196	96.6	166	98.2
Foreigner	7	3.4	3	1.8
Marital status				
Single	166	81.8	127	75.1
Married	31	15.3	40	23.7
Divorced	1	0.5	2	1.2
Widow(ed)	1	0.5	0	0
Separated	1	0.5	0	0
Other	3	1.5	0	0
Occupation				
Civil Servant	24	11.8	28	16.6
Farming	11	5.4	2	1.2
Teaching	11	5.4	28	16.6
Artisan	56	27.6	43	25.4
Student	49	24.1	48	28.4
Others	52	25.6	20	11.8
Religion				
Christianity	185	91.1	141	83.4
Islam	14	6.9	26	15.4
Traditional	2	1.5	2	1.2
Others	1	0.5	0	0
Education				
Tertiary	97	47.8	85	50.3
Secondary	88	43.3	67	39.6
Primary	4	2.0	11	6.5
Vocational	8	3.9	3	1.8
Non-formal	6	3.0	1	0.8
Others	0	0	2	1.2

Source: Field survey, 2018.

3.5. Purpose of Tourists' Visit

Figure 4 illustrates why tourists visited the two resorts. At Santa Cruz Beach, 53.2% came for leisure, 25.6% for business, 18.2% with friends and/or family, and 1.5% for other reasons such as spiritual healing, religious purposes, or solitude. At Suntan Beach, 71.6% came for leisure, 16% for business, 11.8% with friends and/or family, and 0.6% for other reasons.

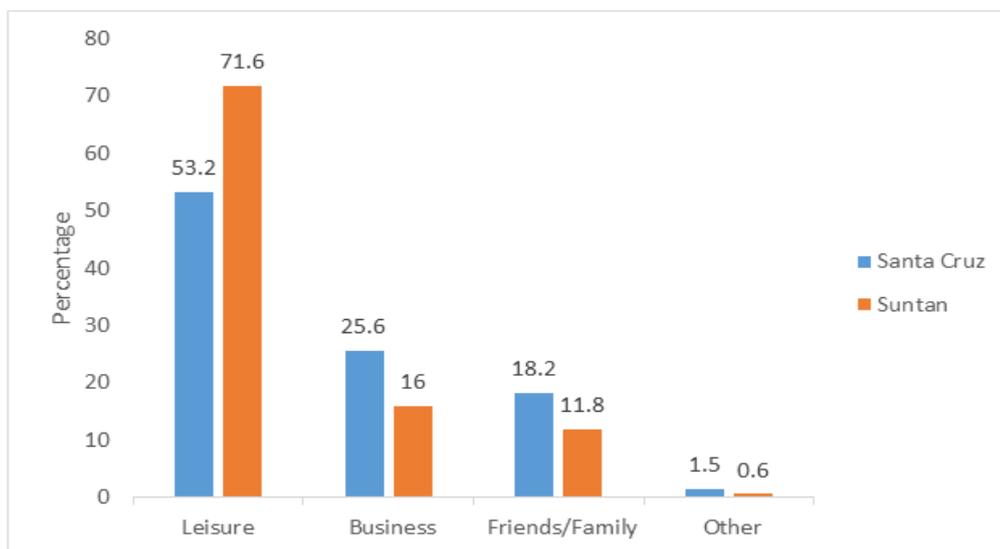


Figure-4. Purpose of tourists' visit.

Source: Field survey, 2018.

3.6. Tourists' Knowledge and Appreciation of Eco-Labels and Eco-Certification

It can be seen from Table 5a that although slightly more knowledgeable than the respondents at Suntan Beach, the respondents at Santa Cruz Beach were unaware that eco-labels and eco-certification could serve as a benchmark for tourist destinations (low mean score of 2.06 ± 1.09 compared with 2.02 ± 1.01) or eco-labels as an informative policy instrument to teach visitors about sustainable tourism (low mean score of 1.89 ± 0.88 compared with 1.73 ± 0.81). However, none of the respondents at both Santa Cruz and Suntan Beaches knew that eco-labels identify overall environmental approval for a product, service, or environment (low mean score of 1.88 ± 0.84 and 1.89 ± 0.93 , respectively) and disagreed that "eco-labels have a positive impact on the environment" (low mean score of 2.35 ± 1.32 and 2.52 ± 1.28 , respectively). Further, they did not know that the concept of eco-labels were not well developed in Nigeria's tourism sector (1.73 ± 1.00 and 1.97 ± 1.14). Generally, the majority of respondents at both resorts have low level of knowledge and appreciation of eco-labels and eco-certification (Table 5b), although slightly higher at Santa Cruz Beach (49.8%) than Suntan Beach (47.3%).

Table-5a. Distribution of respondents' knowledge and appreciation of eco-labels and eco-certification.

S/N	Statement	Santa Cruz Beach						Suntan Beach					
		SA	A	U	D	SD	Mean \pm SD	SA	A	U	D	SD	Mean \pm SD
1	I am aware that eco-labels and eco-certification can act as benchmark for tourist destinations.	5.4	4.9	14.8	40.4	34.5	2.06 \pm 1.09	1.8	11.2	7.7	45.6	33.7	2.02 \pm 1.01
2	Eco-labels can serve as an informative policy instrument to teach visitors about sustainable tourism.	3.0	1.0	12.8	48.8	34.5	1.89 \pm 0.88	0.6	3.6	8.3	43.2	44.4	1.73 \pm 0.81
3	I believe eco-labels and eco-certification can actually protect the environment.	1.0	3.0	14.3	36.5	45.3	1.78 \pm 0.87	1.8	2.4	14.2	30.8	50.9	1.73 \pm 0.92
4	Eco-labels are one essential purchasing criterion when I choose a tourist destination.	2.5	9.9	22.7	36.9	28.1	2.21 \pm 1.04	3.0	14.8	16.0	42.6	23.7	2.31 \pm 1.08
5	I believe eco-labels and eco-certification are crucial in reducing the environmental impact on tourist destinations.	3.4	3.9	13.8	40.9	37.9	1.94 \pm 0.99	2.4	4.1	13.0	39.6	40.8	1.87 \pm 0.95
6	I believe eco-labels and eco-certification is very persuasive in reducing such negative impacts as the spread of bacteria: <i>Listeria monocytogenes</i> and <i>Staphylococcus aureus</i> , and <i>Streptococcus</i> , for instance.	2.5	7.4	17.2	29.1	43.8	1.95 \pm 1.06	3.0	7.1	12.4	35.5	42.0	1.93 \pm 1.05
7	I know that eco-labels identify overall environmental approval for a product, service, or environment.	1.0	2.0	17.7	42.4	36.9	1.88 \pm 0.84	1.2	5.9	13.6	39.1	40.2	1.89 \pm 0.93
8	I will always choose a tourist destination awarded an eco-label because it certifies that it conforms with environmental standards.	2.0	6.9	23.6	30.5	36.9	2.06 \pm 1.03	0.6	7.7	17.2	30.2	44.4	1.90 \pm 0.98
9	I believe that eco-labels can improve tourist facilities, such as hotels, water-based tourist destinations, conference venues, and restaurants.	2.0	3.9	11.8	41.9	40.4	1.85 \pm 0.92	0.6	0.6	13.0	39.1	46.7	1.69 \pm 0.76
10	I do not believe eco-labels have a positive impact on the environment.	9.9	12.8	12.8	31.5	33.0	2.35 \pm 1.32	24.3	35.5	12.4	19.5	8.3	2.52 \pm 1.28
11	I do not believe eco-labels are important to tourist destinations.	37.9	31.5	10.3	10.8	9.4	2.22 \pm 1.31	26.0	40.8	12.4	9.5	11.2	2.39 \pm 1.28
12	I do not believe that eco-labels should be compulsory for tourist destinations.	23.2	24.6	24.1	16.3	11.8	2.69 \pm 1.31	22.5	35.5	14.8	16.0	11.2	2.58 \pm 1.30
13	I do not believe that eco-labels are sufficient to counter negative impacts on the environment	14.8	24.6	18.2	24.6	17.2	3.30 \pm 3.88	12.4	27.8	17.2	33.7	8.9	2.99 \pm 1.21
14	The certification process for eco-labels is not standardized.	2.0	4.4	12.8	26.1	54.7	3.22 \pm 1.19	3.6	9.5	13.6	27.2	46.2	3.44 \pm 1.14
15	The concept of eco-labels is not well developed in Nigeria's tourism sector.	18.2	21.2	32.5	20.2	7.9	1.73 \pm 1.00	18.3	35.5	24.3	16.0	5.9	1.97 \pm 1.14

Note: SA = strongly agree; A = agree; U = undecided; D = disagree; SD = strongly disagree; \pm SD = standard deviation.

Source: Field survey, 2018.

Table-5b. Respondents' level of knowledge and appreciation of eco-labels and eco-certification at Santa Cruz Beach and Suntan Beach.

Level of knowledge	Santa Cruz Beach		Suntan Beach		Minimum	Maximum	Mean	Std. deviation
	F	%	F	%				
Low	102	50.2	89	52.7	19.00	74.00	33.07	7.78
High	101	49.8	80	47.3				

Source: Field survey, 2018.

3.7. Tourists' Response to and Interest in Eco-Labeled Products

Table 6a reveals that the level of responsiveness among respondents is slightly higher than their knowledge and appreciation with respect to eco-labels and eco-certification. The respondents at Santa Cruz Beach did not know that eco-labeled products reduce environmental impacts and conform to environmental standards (1.91 ± 0.96), and were thus less responsive to eco-labeled products than those at Suntan Beach (1.96 ± 0.97). However, the former remained more responsive to eco-labeled products than the latter, despite not knowing that eco-labeled products are environmentally friendly (1.79 ± 0.92 compared with 1.71 ± 0.92), not agreeing that eco-labels teach tourists about environmental awareness (1.76 ± 0.92 compared with 1.74 ± 0.98), nor that eco-labels and eco-certification should be adopted by all water-based tourist destinations (1.67 ± 0.92 compared with 1.61 ± 0.93), or extended to other tourist facilities, such as hotels, restaurants, and conference venues (1.73 ± 0.95 compared with 1.67 ± 0.90).

Table 6b shows that respondents at Santa Cruz Beach (56.7%) have a more favorable response to eco-labeled products than at Suntan Beach (48.5%).

3.8. Hypothesis Testing

H₁: There is no significant difference between Santa Cruz and Suntan Beaches in tourists' perception of the value of eco-labels.

The results of the independent-samples t-test in Table 7 show no significant difference ($t = 0.22$, $p = 0.82$); thus supporting the null and rejecting the alternative hypotheses.

H₂: There is no significant difference between Santa Cruz and Suntan Beaches in tourists' response to and interest in eco-labeled products.

The results of the same statistical analysis in Table 8 reveal no significant difference ($t = 0.96$, $p = 0.33$); thus supporting the null and rejecting the alternative hypotheses.

H₃: There is no correlation between tourists' perception of the value of and response to eco-labels and eco-certification.

The results of Pearson's product-moment correlation in Table 9 reveal a positive correlation between knowledge and responsiveness at both Santa Cruz Beach ($r = 0.432$, $p = 0.000$) and Suntan Beach ($r = 0.622$, $p = 0.000$).

4. DISCUSSION

The increased use of eco-labels and eco-certification in the tourism sector is a response to the need for standardizing the green message: identifying tourist destinations that proactively encourage environmentally friendly activities (Bowman, 2011). Eco-certification has been available to the tourism sector for over 45 years (Mihalič, 2000), yet no water-based tourist destination has acquired an eco-label. Moreover, despite the growing popularity international, national, and local eco-certification and eco-labeling schemes offered by industrial organizations and government and non-government institutions, it is not evident in beach resorts (Bohdanowicz, 2005). Font *et al.* (2003) noted that eco-labels and eco-certification is believed to give a competitive advantage to a small number of providers in their sector; however, this is clearly not the case at the Santa Cruz and Sultan Beach Resorts.

Table-6a. Distribution of respondents' responsive to and interest in of eco-labeled products.

S/N	Statement	Santa Cruz Beach						Suntan Beach					
		SA	A	U	D	SD	MEAN ±SD	SA	A	U	D	SD	MEAN ±SD
1	I am willing to buy eco-labeled instead of conventional products even though I have to pay a higher price/tax.	13.0	10.3	22.7	31.5	32.5	2.20±1.09	3.0	12.4	13.6	33.7	37.3	2.10±1.13
2	Eco-labels are one essential purchasing criterion when I choose tourist products.	3.9	9.4	21.2	37.9	27.6	2.24±1.08	1.2	11.2	17.2	41.4	29.0	2.14±1.00
3	Eco-labels can help solve the world's water shortage.	2.5	4.4	14.3	31.0	47.8	1.83±1.00	2.4	5.3	13.6	37.3	41.4	1.90±0.98
4	I can always find the desired eco-labeled products at tourist destinations.	6.4	18.2	29.6	23.2	22.2	2.67±1.33	5.3	24.3	20.7	24.3	25.4	2.60±1.25
5	I will choose eco-labeled products when visiting tourist destinations.	1.0	7.4	23.2	32.5	36.0	2.05±1.00	1.8	4.7	18.9	43.2	31.4	2.02±0.92
6	I believe eco-labeled products reduce environmental impacts and conform to the environmental standards.	2.5	3.0	17.7	36.5	40.4	1.91±0.96	3.0	5.3	11.8	45.0	34.9	1.96±0.97
7	I believe eco-labeled products are environmentally friendly.	2.5	2.5	11.8	38.4	44.8	1.79±0.92	1.8	3.6	10.7	32.0	52.1	1.71±0.92
8	I believe eco-labels should not be compulsory for tourist destinations.	20.7	24.1	20.7	18.7	15.8	2.85±1.37	13.0	18.9	16.0	37.9	14.2	2.79±1.27
9	Eco-label products are too expensive to buy.	9.4	19.7	38.4	16.7	15.8	3.10±1.17	6.5	20.7	37.9	21.3	13.6	3.15±1.10
10	Tourists do not care whether a tourist destination is certified.	7.4	15.8	21.2	24.6	31.0	3.56±1.28	8.3	19.5	21.9	27.2	23.1	3.37±1.26
11	I am not interested in eco-labeled products because they are not popular in Nigeria.	17.7	28.1	19.2	16.7	18.2	2.90±1.37	13.0	34.3	20.1	17.8	14.8	2.87±1.27
12	I prefer to go to tourist destinations with no eco-label because their services are not so expensive.	15.8	22.7	26.1	15.8	19.7	3.01±1.35	16.0	29.6	17.2	20.7	16.6	2.92±1.34
13	Eco-labels teach tourists about environmental awareness.	2.0	3.0	12.8	34.0	48.3	1.76±0.92	1.8	5.3	11.8	27.2	53.8	1.74±0.98
14	Eco-labels and eco-certification should be adopted by all water-based tourist destinations.	2.0	2.0	13.3	27.1	55.7	1.67±0.92	1.8	3.0	11.2	22.5	61.5	1.61±0.93
15	Eco-labels should be extended to other tourist facilities, such as hotels, restaurants, and conference venues.	2.5	2.5	12.8	30.5	51.7	1.73±0.95	1.2	2.4	14.8	25.4	56.2	1.67±0.90

Note: SA = strongly agree; A = agree; U = undecided; D = disagree; SD = strongly disagree; ±SD = standard deviation.

Source: Field survey, 2018.

Table-6b. Respondents' level of responsiveness to and interest in eco-labeled products.

Level of responsiveness	Santa Cruz Beach		Suntan Beach		Minimum	Maximum	Mean	Std. deviation
	F	%	F	%				
Low	88	43.3	87	51.5	18.00	59.00	34.95	7.16
High	115	56.7	82	48.5				

Source: Field survey, 2018.

Table-7. Testing the difference between Santa Cruz and Suntan Beaches in tourists' perception of the value of eco-labels.

Beach Resort	N	Mean	Std. deviation	t-statistic	df	p-value	Decision
Santa Cruz	203	33.15	8.21	0.22	370	0.82	Not significant
Suntan	169	32.97	7.27				

Source: Field survey, 2018.

Table-8. Testing the difference between Santa Cruz and Suntan Beaches in tourists' response to and interest in eco-labeled products.

Beach Resort	N	Mean	Std. deviation	t-statistic	df	p-value	Decision
Santa Cruz	203	35.27	7.06	0.96	370	0.33	Not significant
Suntan	169	34.56	7.28				

Source: Field survey, 2018.

Table-9. Correlation between tourists' knowledge and responsiveness Santa Cruz and Suntan Beaches.

Beach	r	p-value	Decision
Santa Cruz	0.432	0.000	Significant
Suntan	0.622	0.000	Significant

Source: Field survey, 2018.

Eco-labels intend to curb tourism's negative environmental impacts on the natural resources in destinations by encouraging tourism providers to achieve high environmental standards (UNEP, 1998), educating tourists about the impact from their actions and decisions—thereby prompting them to favor “environmental benign” enterprises in their purchasing decisions (UNEP, 1998)—and developing standards for environmentally friendly tourism products and services (Mihalič, 2000). The lack of uptake at beach resorts, though, defeats this purpose: On the one hand, although the Director of Santa Cruz Beach Resort had heard of and read about eco-labels and eco-certification, neither had been acquired; on the other hand, the Manager of Suntan Beach Resort knew nothing of either eco-labels or eco-certification. In fact, this study agrees with others in finding that while over 100 eco-certification program are available globally (Wearing *et al.*, 2002; Esparon *et al.*, 2014; Gössling and Buckley, 2014), adoption rates remain low (Weaver, 2009).

Meanwhile, tourists' knowledge and appreciation of eco-labels and eco-certification was below average at both Santa Cruz (49.8%) and Suntan Beaches (47.3%), possibly as a result of their lack of popularity in the Nigerian tourism sector. However, with tourists calling for the concept to be put into practice, their environmental awareness seems to be growing. As a result of eco-labels and eco-certification becoming better known, Bastič and Gojčić (2012) explained that many tourists now consider eco-labels as a reliable means of choosing environmentally friendly products and services, while Aliraja and Rughooputh (2004) described how tourists prefer destinations and organizations that protect and conserve the environment and have been awarded eco-labels.

In addition, a study conducted in India's National Capital Region of Delhi found that tourists wanted a definite indication that a hotel was commitment to environmental protection before booking (Manaktola and Jauhari, 2007), because people are becoming more aware of the outcomes of negative environmental impacts. Moreover, Aliraja and Rughooputh (2004) confirmed that an increasing number of tourists are seeking Blue Flag beach resorts as their holiday destinations. As knowledge of eco-labels and eco-certification spreads through the tourism sector in

developed countries, people are more inclined to visit safe, beautiful, and tranquil places where they can enjoy and appreciate nature.

What is more, respondents in this study displayed a greater interest in and response to eco-labeled products, albeit expressing a more favorable response at Santa Cruz (56.7%) than Suntan Beaches (48.5%). Nevertheless, all respondents found eco-labeled products acceptable despite the higher prices, since negative environmental impacts are minimized and there is no threat to the environment. This finding supports those of [Andereck \(2009\)](#) and [Wearing et al. \(2002\)](#), who reported that many tourists considered environmental issues and preferred to purchase products and service from environmentally responsible suppliers. All the respondents indicated that not only these two but also all beach resorts should acquire Blue Flag eco-labels and eco-certification for tourist safety and health, as well as provide visitors with all the necessary information about environmental management.

In addition, [Sasidharan et al. \(2002\)](#) explained that eco-labels provide tourists in many developed countries with information about the environmental performance and actions of tourism providers, enabling them to make informed choices on sustainable products and services. Thus, the advent of eco-labels and eco-certification mean tourists can now decide which destination to visit or which product to purchase that will pose no threat to themselves or the environment. This study similarly showed how people are now environmentally conscious of visiting places that could pose a threat. [Manaktola and Jauhari \(2007\)](#) in their study of consumer attitudes and behavior toward green practices in the Indian hospitality sector also revealed that, given a choice, tourists would to book an eco-friendly rather than a standard hotel.

Furthermore, no significant difference were found between Santa Cruz and Suntan Beaches in either tourists' knowledge and appreciation of the value of eco-labels or their interest in and response to eco-labeled products. In addition, a significant positive correlation was revealed between tourists' knowledge of the value of and responsiveness to eco-labels and eco-certification. Consequently, an increase in knowledge will lead to an increase in responsiveness to products.

5. CONCLUSION

Eco-labels and eco-certification are environmental tools or mechanism for reducing negative environmental impacts in tourist destinations. Neither beach resort in this study (Santa Cruz and Suntan Beaches) have been awarded an eco-label; both state that they have not been informed of, directed toward, advised about these concepts. The level of knowledge and appreciation of eco-labels and eco-certification was likewise low among tourists at both beach resorts. Thus, the government and other stakeholders in the tourism sector need to pay attention to and intervene in this issue urgently.

It is recommended that:

- The concept of eco-labels and eco-certification should be promoted in the Nigerian tourism sector.
- Blue Flag eco-labels should be adopted by both private and public beaches across Nigeria.
- Awareness of eco-labels and eco-certification should be raised among tourist destinations and the general public through information, promotion, and education.

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