

**ANALYSIS OF LANDSCAPE CHARACTERISTICS FOR
TOURISM FUNCTIONALITY: USERS AND EXPERTS'
ASSESSMENT OF THE LAGOS LAGOON**

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ABSTRACT

Tourism is a major income earner for most countries and the existence of a natural water body usually attracts tourists and residents alike to the area. In tourism studies as in many other fields, the views of the experts do not always agree with those of the general public. In examining the current state of tourism and tourism development potentials of the Lagos Lagoon, which is part of the network of lagoons stretching from the Republic of Benin to the Nigerian Niger Delta region, it became necessary to compare the views and perception of the general public (domestic and foreign visitors alike) with those of landscape and tourism experts. The data is to help policy makers as well as investors to plan based on empirical information which is currently lacking. 422 users of various water-based recreation venues in Lagos were sampled using photo questionnaires while the views of 26 experts—landscape and tourism experts—were also sampled, using structured interviews and photo-questionnaires. The different instruments used were structured to explore the status of tourism in the Lagos Lagoon area and their perceptions concerning its tourism development. Results showed a difference in perception by the experts and the general populace. The outcome of the research indicates the need for further research to address the discrepancies in perception in order for industry practitioners and policy makers to properly determine appropriate measures, facilities and land-use planning options to further develop tourism in the Lagos Lagoon.

Keywords: Landscape perception, tourism, experts, water-based recreation, and Lagos Lagoon.

INTRODUCTION

Usually described as the state of aquatic splendour, Metropolitan Lagos is replete with ubiquitous creeks, bays, lagoons, coastlines and breath-taking scenic views; since it consists mostly of water, it therefore has a high capability to benefit from water tourism. The existing developed waterfront sites in Lagos do not appear to have adequate infrastructure, nor do they present water-use in ways that are sufficiently appealing to tourists (Uduma-Olugu & Iyagba, 2009b; Uduma-Olugu & Onukwube, 2012).

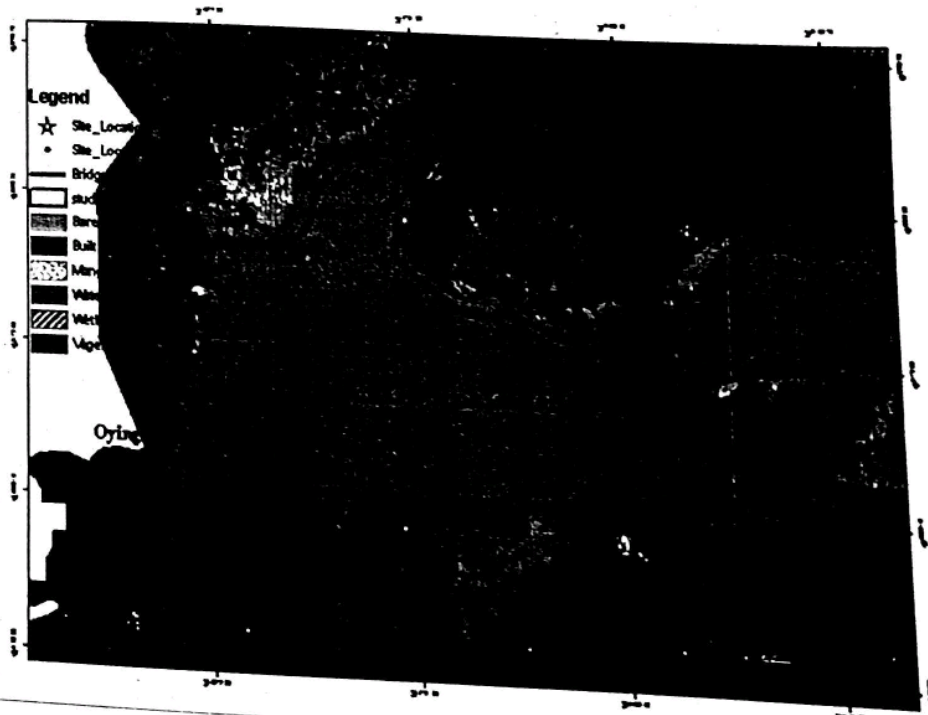


Figure 1: The Communities adjoining the Lagos lagoon shores. (Source: Department of Surveying and Geo informatics, University of Lagos)

The Lagos Lagoon is a key geographical feature in Lagos and the status of tourism in the lagoon is the subject of this paper. Different aspects of the lagoon are polluted and sometimes unsightly. Major sources of pollution in the lagoon have been identified as: the deposition of raw sewage, wood shaving, refuse and other domestic wastes, sand and gravel extraction, dredging, industrial waste, petroleum hydrocarbons and waste oil discharge among others (Nwilo, Peters and Badejo, 2009; Okoye *et al.*,

2010). This has influenced the way it is perceived both by visitors and experts and eroded its uniqueness, scenic value and sense of place. The uniqueness or otherwise of a place can influence tourism. Traditionally, water-based resources, either coastlines or lakes, are important tourism resources (Gunn, 2002). Globally, tourism has been identified as a major revenue source and continues to grow in popularity (UNWTO, 2011).

People's perception of a place makes a difference to its use as a tourism destination. Some studies examined resident's perception of tourism sites while others researched on the perception of the visitors and users of natural park (Sati, 2005), and water-based tourism venues (Uduma-Olugu & Onukwube, 2012). How residents perceive a tourism venue will affect their reception of visitors. The perception of visitors can lead to the development of sense of place and place attachment which helps boost the chances of the venue being repeatedly visited or being popularised by word of mouth.

Tourism along the coast receives more attention and is better developed than on the lagoon as attested to the popularity of places like Bar Beach, Kuramo beach and Lekki/ Maiyegun Beach (Oshundeyi and Babarinde, 2003). Cultural issues were examined by Aina and Babatola (2010) in their study of its effect on a sustainable tourism development strategy for rural areas. Studies by Uduma-Olugu & Onukwube (2012) explored the potentials of tourism in some of these coastal tourism venues and highlighted the deficiencies in the provided facilities.

2.0 HUMAN PERCEPTION OF TOURISM SITES

Human perception of the landscape is important to the landscape assessment and development of water tourism sites. Apart from water which is its main feature, its vegetation, land form, landcover, ecology, human settlement and general scenic quality are major assets in landuse and management (Daniel & Boster, 1976). All these affect its usefulness for tourism or recreation. One of the key indicators of a place's character, is its landscape – comprising not only of the landcover and landscape quality, but also of its very essence which can be captured when the landscape is assessed and evaluated, using pre-determined parameters (Swaffield, 1999).

The development of methods for systematically integrating aesthetic values in ecological and land-use decision making began in the mid-1960s. Ndubuisi (2002) posits that K. Craik, L. Leopold, B. Linton, E.

Shafer, J. Wohwill and E. Zube in the United States and K. Fines and his colleagues in Britain conducted pioneering studies in landscape perception and assessment during the late sixties. Zube's 1966 visual-assessment study on Nantucket Island and his 1968 resource-assessment study of the US Virgin Islands provided significant methodological directives for the assessment and integration of visual resources in ecological planning. Also, notable in this period, was Linton's work which developed a framework in 1968 for describing and analysing visual elements in large forested landscapes (Ndubuisi, 2002).

The landscape functions comprise the current and potential ability of the landscape to fulfil the human needs regarding the natural resources and the landscape experience. The degree of human impact and the visibility in the landscape can be measured by visual indicators as relief, vegetation, landuse, structural elements or lines of sight. But characteristics such as harmony and scenic beauty that depend on the perceptual process the features of the landscape evoke in the human viewer should also be assessed (Daniel, 2001). The Scenic Beauty Model (SBME) which considers the relevance of physical features in evaluating a landscape (Daniel & Boster, 1976). Daniel *et al* (1976) updated by Daniel (2001) and Franco *et al.* (2003), posited that scenic beauty judgments depend jointly on the perceived properties of the landscape and the judgmental criteria of the observer. It is therefore important to measure the perceptions of both the general public as well as experts who are likely to perceive the landscape from viewpoints.

Landscape assessment research has primarily focused on the visual properties of the land area under study. Consequently, the dimension most often measured is the scenic quality of a given area (Zube, 1975). This variable also has been described as scenic beauty (Daniel and Boster, 1976) and landscape preference (Buhyoff and Wellman, 1978). Psychophysical landscape assessments typically represent the experiences of visitors to the area under study by means of colour slides. Criticism has focused on whether human reactions to areas represented by photographs are valid indicators of reactions that would occur if people were to visit the areas and view them directly. However, when comparing between perceptual data gathered using colour slide depictions of landscapes and data obtained at the actual sites where those slide photographs were taken, a very close relationship between the two has been established (Daniel and Boster, 1976; Malm *et al.*, 1981). Correlations between photo-based

and direct on-site assessments have been found to be .80 or greater (Daniel, 1990).

3.0 METHODOLOGY

Different instruments were used to measure the perception of the general public and that of experts. While the public was sampled using questionnaires which had a photo-questionnaire attached to it, the experts were interviewed using some questionnaires as well as the photo-questionnaires. 422 users of the water-based tourism sites were interviewed at six selected venues along the lagoon and on the coast of Lagos during festive season which usually recorded the highest usage. The study locations consisted of the three water-based recreational spots within the study area of the Lagos Lagoon (Unilag waterfront, Lekki Phase1 Club House, The Pavilion and Origin zoo and jetty, Ipakodo, Ikorodu) and three coastal water-based tourist destinations on the Lagos coast in close proximity to Lagos (Bar Beach, Alpha Beach and Maiyegun/Lekki Beach).

Twenty-six experts were interviewed in their offices using semi-structured questionnaires, photo questionnaires and open-ended questions. The motivation for selection of a destination were identified from the literature review is based on how the potential tourist perceives the location, as well as word-of-mouth and previous experience of the venue. These were covered by questions which dealt with facilities and factors as well as how a person feels at tourism venues. The various elements that indicate the landscape perception of the Lagos Lagoon and its influence on tourism were measured from the questionnaire in a table that listed them and used a likert scale to determine their level of influence.

The questionnaires consisted of a combination of types of questions, such as multiple choices, Likert scale, and closed and open-ended questions, relating to respondents' perceptions. Preferences for five mapped landscape categories were compared with expert ratings of the same landscapes. The photo questionnaire presented 20 black and white photographs showing vegetation and landforms characteristic of the study site. Photographic sites were selected in consultation with landscape experts to represent a range of values related to dominant species and degree of human modification of landscape. A bigger, coloured version of the same pictures accompanied the questionnaires since the black and white pictures shown in the questionnaires were too small and insufficiently legible.

4.0 FINDINGS

4.1 Perception of Best Landuse for the Lagos lagoon

To further understand the perception of the public respondents for the preferred use of the Lagos Lagoon, a direct question was asked about the best use of the lagoon in the opinion of the respondents. Their response is indicated in Table 1.

Table 1: The best activity the Lagos lagoon should be used for

Variable	Characteristics	Frequen cy	%	Mean Scale	Mean Response	Total
Waterfront residential development	Not Important (1)	42	13.2			
	Averagely Needed (2)	80	25.2			
	Important (3)	89	28.1			
	Extremely Important (4)	106	33.4	2.5	2.8	317
Urban agriculture	Not Important (1)	40	12.7			
	Averagely Needed (2)	62	19.7			
	Important (3)	81	25.7			
	Extremely Important (4)	132	41.9	2.5	3.0	315
Tourism	Not Important (1)	157	43.4			
	Averagely Needed (2)	80	22.1			
	Important (3)	52	14.4			
	Extremely Important (4)	73	20.2	2.5	2.1	362
Water Transportation	Not Important (1)	76	23.2			
	Averagely Needed (2)	93	28.4			
	Important (3)	75	22.9			
	Extremely Important (4)	83	25.4	2.5	2.5	327
Fishing/Sand dredging	Not Important (1)	59	18.3			
	Averagely Needed (2)	79	24.5			
	Important (3)	69	21.4			
	Extremely Important (4)	116	35.9	2.5	2.7	323

The general public respondents indicated that the lagoon would be good for Urban Agriculture (Mean Response was 3.0), followed by Waterfront residential development (Mean Response was 2.8), followed by fishing/sand dredging (Mean Response was 2.7). They were non-committal in the suggestion of use of the lagoon for water transportation

based on the responses. They however did not agree that the use of the area for tourism was important. One can infer from this that they believe that a lot of work needs to be done to make the Lagos lagoon attractive for tourism.

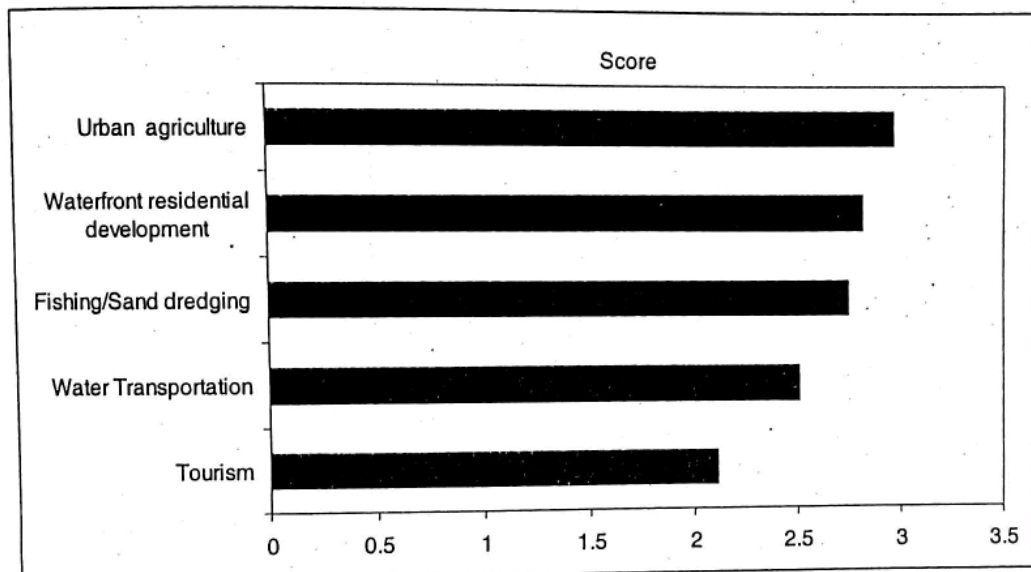


Figure2: Score of Activity in the Lagos Lagoon

Figure 2 further reiterates this result. The result is underscored by the general belief that most Nigerians are more preoccupied with what to eat than recreation and tourism which explains the more frequent choice of urban agriculture, fishing and sand dredging in the top three selections. It is also not surprising that waterfront residential development has a high incidence as well, especially because Nigerians in general and even globally, people like waterfront residences as it often connotes wealth as such properties are usually quite expensive.

The experts were generally of the view that the best use of the Lagoon should be tourism, followed by water transportation and perhaps urban agriculture which is at variance with the public perception.

4.2 Perception of tourism in Lagos Lagoon

Table 2: Perception of tourism in the Lagos Lagoon

Variable	Characteristics	Frequency	%	Mean Scale	Mean Response	Total
General perception of tourism in the Lagos lagoon	Very Bad (1)	28	7.3			
	Bad (2)	90	23.4			
	Good (3)	134	34.9			
	Very Good (4)	84	21.9			
	Excellent (5)	49	12.8	3.0	3.1	384

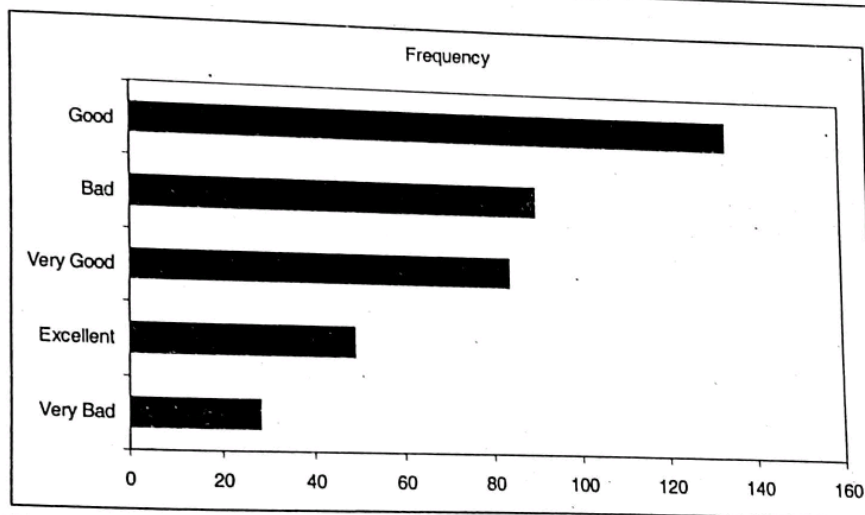


Figure3: Frequency of Perception of Tourism in Lagos Lagoon

The results as shown in Table 2 and Figure 3 indicate the general public's perception of tourism in the Lagos Lagoon is good rather than bad which is surprising. In measuring their perception of tourism in the Lagos Lagoon, it is noticeable that most of the respondents felt that tourism on the lagoon was good 34.9% (134), followed by those who felt it was bad 23.4% (90). 21.9% (84) actually felt that the tourism at the lagoon was very good while 12.8% (49) felt it was excellent. Only 7.3% (28) responded that tourism is very bad at the Lagos Lagoon.

Their responses are in direct contradiction of the expert opinions and even the result of the entire survey which revealed that there is hardly much tourism going on there – certainly very few foreigners comes to the Lagos lagoon for tourism. This implies that the general public may not have a

good understanding of what tourism is all about, or that better education and advertisement is required to properly enlighten the public on various aspects and components of tourism.

4.2 Factors most significant in determining the impact of landscape characteristics of the Lagos lagoon waterfront on tourism

Table 3: Factors influencing the impact of landscape Characteristics of the Lagos Lagoon for tourism

Variable	Characteristics	Frequency	%	Mean Scale	Mean Response	Total
Visibility of the lagoon to the public (lagoon Esplanade Walkway, views)	Extremely Little Impact	37	9.6			
	Little Impact	58	15.1			
	Average	127	33.0			
	Critical Impact	66	17.1			
	Extremely Critical Impact	97	25.2	3.0	3.33	385
Site's landscaping (Presence of trees, shrubs and flowers)	Extremely Little Impact	32	8.4			
	Little Impact	36	9.4			
	Average	74	19.4			
	Critical Impact	108	28.3			
	Extremely Critical Impact	132	34.6	3.0	3.71	382
Surrounding Environment	Extremely Little Impact	23	6.0			
	Little Impact	56	14.7			
	Average	75	19.7			
	Critical Impact	94	24.7			
	Extremely Critical Impact	133	34.9	3.0	3.68	381
Beautiful landscapes/views/scenery	Extremely Little Impact	32	8.5			
	Little Impact	44	11.7			
	Average	58	15.4			
	Critical Impact	94	25.0			
	Extremely Critical Impact	148	39.4	3.0	3.75	376
Regulation of certain activities like dredging, pollution, saw milling	Extremely Little Impact	31	8.1			
	Little Impact	67	17.6			
	Average	79	20.7			
	Critical Impact	93	24.4			
	Extremely Critical Impact	111	29.1	3.0	3.49	381

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Variable	Characteristics	Frequenc y	%	Mean Scale	Mean Respo nse	Total
Development of parks /open spaces for recreation on the waterfront	Extremely Little Impact	21	5.5			
	Little Impact	54	14.2			
	Average	75	19.7			
	Critical Impact	100	26.2			
	Extremely Critical Impact	131	34.4	3.0	3.70	381
Provision of Artificial beaches/Beachfront	Extremely Little Impact	31	8.1			
	Little Impact	79	20.6			
	Average	96	25.1			
	Critical Impact	86	22.5			
	Extremely Critical Impact	91	23.8	3.0	3.33	383
Use of Traditional Building Materials	Extremely Little Impact	47	12.2			
	Little Impact	56	14.6			
	Average	97	25.3			
	Critical Impact	87	22.7			
	Extremely Critical Impact	97	25.3	3.0	3.34	384
Nature of Adjourning Landuses	Extremely Little Impact	20	5.3			
	Little Impact	63	16.8			
	Average	111	29.7			
	Critical Impact	85	22.7			
	Extremely Critical Impact	95	25.4	3.0	3.46	374
Clearance/Evacuation of slum housing on the lagoon	Extremely Little Impact	25	6.6			
	Little Impact	53	14.0			
	Average	48	12.7			
	Critical Impact	103	27.2			
	Extremely Critical Impact	149	39.4	3.0	3.79	378
Enhancement of Physical Properties (landform, Vegetation, Water Quality)	Extremely Little Impact	18	4.7			
	Little Impact	52	13.6			
	Average	75	19.6			
	Critical Impact	96	25.1			
	Extremely Critical Impact	141	36.9	3.0	3.76	382

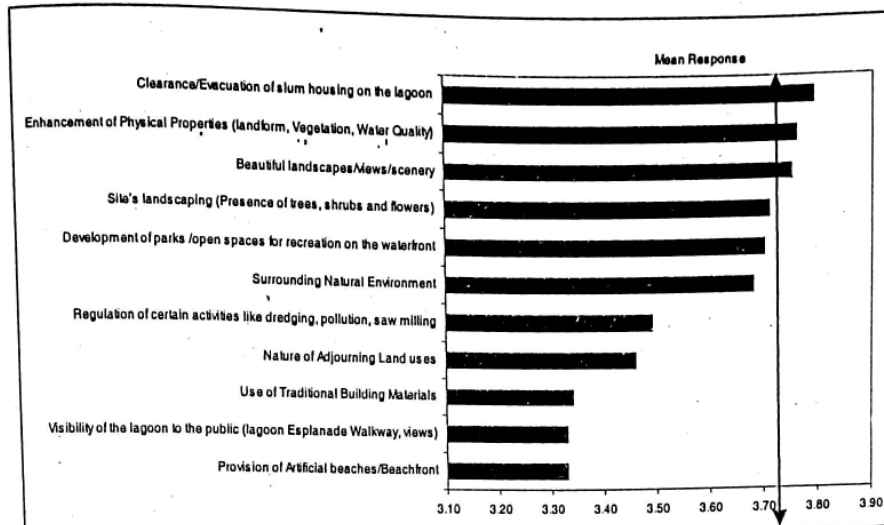


Figure 4: Chart of Mean Response of Landscape Characteristics of the Lagos Lagoon Waterfront on Tourism

Figure 4 shows that six factors were considered important by the general public in perceiving the tourism potentials of the Lagos Lagoon. The landscape factor considered most significant by the respondents as influencing the tourism of the Lagos Lagoon, is the clearance of the slum housing and similar blights on the shores of the lagoon, this is followed by the need to enhance its physical properties (such as the water quality, vegetation, etc). This is understandable as most respondents believe that such places constitute blight to the lagoon environment and reduce its value as a landscape resource. Handling the problem areas along the lagoon shores will help in influencing its acceptability for tourism. The issue of enhancing the physical properties of the lagoon needs to be addressed also as the water is coloured, smelly and polluted (Ajao, 1996; Nwankwo, 2004; Onyema, 2009). This makes it unsuitable for most water tourism activities as visitors cannot swim in it, nor have direct access to it for hygienic reasons.

Next, is the enhancement of views and beautiful landscapes along the waterfront, followed by general landscaping of the properties abutting the shores of the lagoon. The fifth factor considered relevant by the respondents, is the development of parks and open spaces for recreation along the waterfront. Currently, there are very few recreational open spaces or parks directly abutting the shores of the lagoon. Such places would afford the general public an opportunity to directly interact with the lagoon. The surrounding natural environment was also considered

important in determining the effect of the landscape characteristics on tourism.

The provision of artificial beaches and beachfront was least considered relevant. This may be because the lagoon environment is unique and different from the other forms of water bodies that have beaches (like along the coast where several beaches are already popular).

In this section, the experts' perception of the hindrances to the development of the Lagoon was mostly similar to those of the general public as the slums also were mostly identified as the biggest deterrent among the factors. The views of the experts were mostly in alignment with those of the general public regarding the best views of the lagoon shores.

5. CONCLUSION

The results indicate that the perception of the general public and that landscape/tourism experts were similar in the aspects of what the hindrances to the development of tourism of the Lagos Lagoon but different in the aspect of how active tourism is in the study area. The perception of the general public of the Lagos Lagoon as a tourism resource was generally low as most responded negatively to the use of the Lagoon for tourism, preferring rather the option of its use for urban agriculture and urban residential waterfront development. This was at variance with the perception of the experts regarding its use as they were unanimous in stating that the lagoon should be used for tourism, provided the identified problems are addressed.

To a large extent, it indicates that much work needs to be done in bringing the standards of the facilities and infrastructure of the lagoon to more acceptable levels as well as the enlightenment of the public about the benefits and components of tourism to make it more acceptable. One of the very important outcomes of the research is the perception of both groups that the most important factor that is a deterrent to tourism use of the lagoon is the existence of the slums and similar blights along the lagoon shores. These, along with the issue of water pollution, ranked highest as critically impacting the tourism potential of the Lagos Lagoon.

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