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BARRIERS TO IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS IN TOURISM INDUSTRY IN ANAMBRA STATE, NIGERIA

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ABSTRACT
Environmental management in the hotel sector of the tourism industry is receiving priority in this 21st century environmental-conscious human societies worldwide. In their pursuit for good environmental performance, hotels are implementing environmental management systems specified in ISO 14001, however, with some challenges. Thus, this study investigated the barriers to the implementation of environmental management systems in the hotel sector in Anambra State, Nigeria. A quantitative approach using structured questionnaire was used in surveying ninety respondents comprising of directors, managers, receptionists, environmental, health, safety, accounting, public relations and administrative officers. The results revealed that the top two barriers to the implementation of environmental management systems ranked in order of importance based on their mean values on a 5-point Likert scale were cost of implementation (3.8941) and high cost of certification (3.5882).Lack of human resources, quality of consultants, much paper work, exposure of hotel environmental weakness and not too beneficial also hinder implementation of the systems in that order, with mean values above 3.2. Hard to understand, time involved and effect on the existing organizational structure with mean values below 3.0 do not impede implementation of the systems. Hotel associations and regulatory bodies need to devise a way of cutting down cost of certification, while hotels improve on internalizing their externalities to benefit more to offset cost of implementing the systems.

KEYWORDS: Anambra State, EMS, Hotels, ISO 14001, Barriers, Sustainable Tourism.

INTRODUCTION

Background to the Study

Tourism remains a very important sector to many countries' economic development and has the environment as its resource base. It brings in large amounts of income in payment for goods and services available, contributing an estimated 5% to worldwide gross domestic product (GDP) and it creates transportation services such as airlines, cruise ships., and taxicabs, hospitality services such as accommodations, including hotels and resorts, and entertainment venues such as amusement parks, casinos, shopping malls, music venues and theatres (Ashe, 2005 cited in Amalu, Ajake, Oba and Ewa, 2012). Tourism which is the world's largest industry, with total receipts from international tourism equaling US $682 billion (WTO, 2009) employs reasonable percentage of the global work-force and capital formation as well as reduces poverty both in rural and urban settings across the globe. It is the world's largest industry in terms of gross output approaching US $304 trillion (Goodwin, 2010).

Tourism is a mixed blessing, and as such, apart from its benefits, it degrades the environment and social infrastructure as it produces a lot of solid wastes, e-wastes and wastewater as well as some gaseous emissions through incineration of trash and use of air conditioners/refrigerators which make use of gases containing hydrocarbons. Tourism contributed approximately 8% of total global greenhouse gases (GHG) emissions in 2008, and unless new emissions reduction measures are implemented, the industry's emissions of greenhouse gases will increase 130% by 2035 (WOT, 2009). The tourism industry has the potential to destroy the available common environmental resources through overuse and poor management practices, as limited information, disclosure and poor monitoring of action encourage the perpetuation and extension of environmental problems (Tambovceva, 2014). It should have vested interest in environmental management because of the need to preserve attractive and safe surrounding which is an essential feature of its core business (Deehul and Khodabocus, 2010).

An environmental management system is aimed at encouraging an organization to manage its adverse environmental impacts by reducing such impacts continuously for the survival of the organization and indeed that of its environment. The requirements for environmental management systems (EMS) are clearly set out by (ISO) (2004) in ISO 14000 which is a series of voluntary international standards developed by the International Organization for Standardization (ISO) based in Geneva,

Switzerland. The most important ISO 14000 standard is the EMS specification standard ISO 14001 (Metal, 2006) because it provides a framework for establishing or improving an environmental management system and is the only standard of the 1S0 14000 series that can be used in certification by organizations. The 1S0 14001 standard involves implementation and continuous improvement of five key elements: environmental policy; planning; implementation and operation; checking and corrective actions; and management review (Erickson and King, 1999). Adoption of EMS by industries has been shown to provide them with lots of benefits, including cost reductions and savings, improved communication, reduction in fines, improved corporate image and improvement in operational processes (Daily and Huang, 2001; Nee and Nabsiah, 2010; Ayarkwa, 2010).

In the context of environmental management, the area of concern within the hotel sector include waste management, compliance with legislations, recycling of wastewater, use of chemicals, clean air, energy and water conservation, environmental health, maintenance of permits such as building permits, purchasing policy and environmental education (Tambovceva, 2014). These areas of concern need application of environmental management system (EMS) as a sustainability component in managing the hotel sector, however, with some barriers. Thus, this research investigated those barriers that mar the implementation of EMS in the hotel sector in Anambra State, Nigeria so as to proffer adequate solutions.

Conceptual Framework: Sustainable Tourism

Tourism has the environment as its resource base; so the survival of the environment is the survival of tourism. The various concepts that connect tourism and the environment are alternative tourism, environmentally friendly tourism, rural tourism, nature-based tourism, eco-tourism, slow tourism, geo-tourism and sustainable tourism (Aall, 2014). Of all these, the concept of sustainable tourism stands tall as the most desirable as it encompasses other concepts and is in line with the concept of sustainable development, which according to UNCED (1987), is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Simply put, sustainable tourism is sustainable development achieved through tourism. Sustainable development is economic development that takes a long-term view. It balances the benefits of economic development against environmental and social costs. Just as sustainable development assumes continued economic growth, so sustainable tourism assumes continued tourism growth (Doda, 2012). According to him, sustainable tourism has the following three characteristics: economic prosperity; social equity and cohesion; and environmental and cultural protection. To achieve sustainable tourism development of the hotel sector in Anambra State, efforts should be made to remove all barriers against the implementation of EMS.

The Study Area

Anambra State is geographically located within latitudes 5°40 ' N and 6°45' N, and longitudes 6°35 ' E and 7°21' E (Figure 1). It is a state in south-eastern region of Nigeria, bordered by Kogi State to the north, Imo State to the south, Enugu Sate to the east and Delta State to the west. The indigenous ethnic groups in Anambra State are the Igbo and Igala, forming 98% and 2% of the population respectively. According to the National Population Commission (NPC) (2006), the population of the state was 4,177,825 which has been projected to 5,381,039 in 2015 with a population density of 1110 persons/km^2. The climate is of tropical type with high annual rainfall ranging from 1400mm in the north to 2,500mm in the south. Heavy rainfall happens between April and October, while November to February is characterized by scanty rainfall, low humidity and high temperature. The state falls within the tropical rainforest zone known for its rich and luxuriant vegetation of tall trees with thick undergrowth and numerous climbers. However, this has been reduced to savanna as a result of many decades of deforestation. The relics of the original vegetation can be found only in "juju" shrines and remote areas. The state records a mean monthly temperature of 27.6^{0}C which is expected to rise as a result of the global climate change.

The study area lies in the Anambra Basin. The basin is characterized by sedimentary rocks of about 6000m deep (Olusola, Ajibola, Samuel, 2003). The sedimentary rocks are made up of ancient cretaceous deltas that are somewhat similar to the Niger Delta, with the Nkporo Shale, the Mamu Formation, the Ajali Sandstone and the Nsukka Formation as the main deposits. The Imo Shales, a sequence of grey shales, occasional clay iron stones and sandstone beds are found on the surface of the dominant sedimentary rocks. River Niger, Anambra River and their tributaries are among several rivers that drain the area. The soil types of the area are ferallitic, alluvial and hydromorphic soils. The ferallitic soils are deep, red to reddish brown loamy sands, popularly referred to as "red earth or acid sands due to low fertility. They have high erodibility and as such can easily be eroded into gullies such as in the cuestas and other elevated areas underlain by sandstones and shales of the Ameke Formation and the Nanka Sands.

The Nanka Sands underlie Nanka, Oko and Agulu areas, where gullies have created "bad lands" in the state. The alluvial soils are pale brown loamy soils. They differ from hydromorphic soils for being relatively immature, with their horizons not well developed. The alluvial soils are found in Onitsha and Ogbaru areas. They sustain continuous cropping much more longer than the hydromorphic and ferallitic soils. The hydromorphic soils are well-developed on the Mamu plain, east of the cuesta. They extend northward into the eastern part of Anambra River floodplain. They contain underlying impervious clayey shales which trigger water logging of the soils during the rainy season. Hydromorphic soils are fine loamy, with their lower layers faintly mottled and the subsoil layers strongly mottled and spotted, containing stiff grey clay. Crops such as yam, cassava, maize and rice do very well in hydromorphic soils. The study area comprises of three major urban centers: Onitsha, Awka and Nnewi (shown in Figure 1) where the industries studied are located.

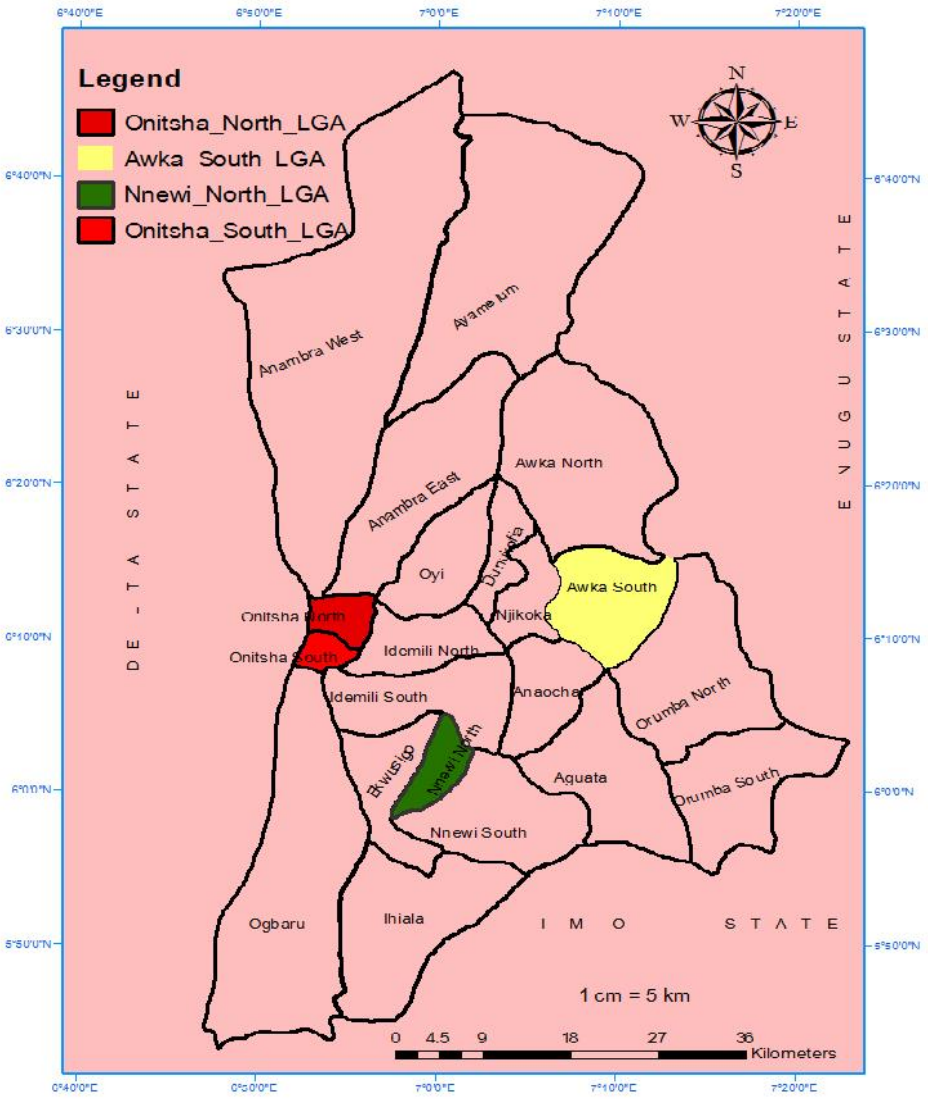

Figure 1: Map of Anambra State showing the three sample locations
Source: Remote Sensing and GIS Laboratory, Department of Environmental Management, Chukwuemeka Odumegwu Ojukwu University, Uli-Campus.

MATERIALS AND METHODS

Data Collection

The researcher made use of a quantitative approach involving structured questionnaire in data collection for this study. The population targeted was directors, managers, receptionists environmental, health and safety, public relations, accommodation, purchase/supply and accounting officers who are to some extent involved in environmental management with respect to decision-making, wastewater discharge, solid waste disposal and sanitation in hotels. The questionnaire was administered to these categories of officers in their hotels in the three major urban centers of Anambra State, namely: Onitsha, Awka and Nnewi by three field assistants, one for each sample location. A total number of 30 hotels, 10 from each city were surveyed with 3 questionnaires each, giving a total of 90 questionnaires used in the research. Before data collection commenced, two environmental managers were consulted to assess the contents of the questionnaire which they certified adequate for the study. The questionnaire covered important issues as follows:

- The number of years the respondents have worked with their hotels;
- The number of years their hotels have operated;
- Respondents' respective departments in their hotels;
- Respondents' awareness of their hotels' ISO1 4001 certification specifying EMS; and
- The barriers of EMS implementation in the respondents' hotels.

The conceptual model used was derived from Famiyeh, Kuttu and Anarfo (2014). The researcher carried out an in-depth

study on the perceived barriers to EMS or Environmental Management Plan (EMP) implementation as referred to by the Anambra State Ministry of Environment.

Sampling Techniques and Statistical Analysis

The researcher visited the Anambra State Ministry of Commerce and Industry at Awka on Monday June 15, 2015 and collected a list of hotels in the three major urban centers of the study area: Onitsha, Awka and Nnewi, from which he purposively selected 10 big hotels each from the cities. On Tuesday, June 16, 2015, the researcher toured Chambers of Commerce and Industry in the three urban centers and introduced the three field assistants, one for each city, who distributed the questionnaire to the respondents in the hotels. Three questionnaires were distributed in each of the 10 hotels in each of the three cities. This gives a total of 90 questionnaires, 30 in each city. In all, a total of 90 respondents were involved in the study. Descriptive statistics, tables, percentages and Spearman's Correlation Matrix using SPSS were used in the analysis of data to arrive at the results.

RESULTS AND DISCUSSION

Number of Years Respondents have Worked in their Hotels

A total of ninety respondents, 3 in each of the sampled 10 hotels located in each of the3 major urban centres: Onitsha, Awka and Nnewi in the study area were surveyed. Out of the 90 respondents, 28 of them have worked less than 5 years in their hotels, 35 said 6-11 years, 19 indicated 12-17 years, 5 agreed 18-23 years while 3 answered 24years or above respectively (Table 3.1). This shows that majority of the respondents have worked more than six years in their hotels which offers them a good opportunity to assess the barriers to EMS implementation.

Table 1: Number of Years Respondents have Worked with their Hotels

Years	Frequency	Percent	Cumulative Percent
5 or less	28	31.1	31.1
6-11	35	38.9	70.0
12-17	19	21.1	91.1
18-23	5	5.6	96.7
24 or above	3	3.3	100
Total	90	100.0	

Source: Researcher's Field-work, 2015

3.2 Number of Years Respondents' Hotels have been in Operation

Out of the 90 respondents, thirteen of them were of the view that their hotels have operated less than 6 years, fifteen of them said 7 to 12 years, thirty indicated 13 to 18 years and forty of them agreed over 19 years representing 14.4%, 16.6%, 33.3% and 35.7% respectively (Table 3.2). This is an indication that majority of the hotels surveyed have existed for more than seven years.

Table 2: Number of Years Respondents' Hotels have been in Operation

Years	Frequency	Percent	Cumulative percent
6 or less	13	14.4	14.4
7-12	15	16.6	31.0
13-18	30	33.3	64.3
19 or above	32	35.7	100.0
Total	90	100.0	

Source: Researcher's field-work, 2015

3.3 Respondents' Departments in their Hotels

In the 30 hotels surveyed, respondents' departments are:

i. Administration;
ii. Health, safety and environment;
iii. Reception and accommodation;
iv. Accounting, purchase and supply;
v. Restaurant; and
vi. Public relations.

These six key departments have 9, 30, 16, 20, 5 and 10 respondents respectively representing 10.0%, 33.3%, 17.8%, 22.2%,5.6% and 11.1% in that order (Table 3.3).

Table 3: Respondents' Departments in their Hotels

Department	Frequency	Percentage	Cumulative percent
Administration	9	10.0	10.0
HSE	30	33.3	43.3
Reception and accommodation	16	17.8	61.1
Accounting, purchase and supply	20	22.2	83.3
Restaurant	5	5.6	89.9
Public relations	10	11.1	100.0
Total	90	100.0	

Source: Researcher's field-work, 2015

Respondents' Awareness of their Hotels' ISO 14001 Certification, specifying EMS

The respondents were asked whether they were aware of their hotels' 1S0 14001 certification which specifies EMS. Sixty-two of them representing 68.9% were of the view that they were aware of EMS and 28 of them representing 31.1% opined that they were not familiar with EMS (Table 3.4).

Table 4: Respondents' Awareness of their Hotels' 1S0 14001 Certification, specifying EMS.

Awareness of EMS	Frequency	Percent	Cumulative percent
Yes	62	68.9	68.9
No	28	31.1	100.0
Total	90	100.0	

Source: Researcher's field-work, 2015

Barriers to Environmental Management Systems Implementation

Descriptive Analysis

The focus of the research is the determination of the barriers to the implementation of EMS in the hotel sector of the tourism industry in Anambra State. The barriers that were indentified which are roadblocks to the implementation of EMS in this research were: cost of implementation (COI); quality of consultants (QOC); hard to understand (HTU); not too beneficial (NTB); lack of human resources (LHR); effect on the existing organizational structure (EOS); high cost of certification (HCC); much paper work (MPW); time involved is high (TIH); and exposure of the hotel environmental weakness ((EEW). These barriers were rated by respondents on a 5-point Likert scale as regards to whether a particular one is indeed a challenge for the successful implementation of EMS in their hotels. The 5-point scale include: 1=strongly disagree; 2 = disagree; 3= neutral; 4=agree; and 5=strongly agree.

Table 3.5 depicts the mean and standard deviations of the barriers that impede EMS implementation in the hotel sector of the tourism industry in Anambra State. From the table, cost of implementation and high cost of certification appear to be the two most important barriers facing EMS implementation in hotels in Anambra State with mean values of 3.8941 and 3.5882 respectively. Following these two most important impediments are lack of human resources, quality of consultants, much papers work, exposure of the hotel environmental weakness and not too beneficial with scores: 3.4459, 3.4250, 3.3735, 3.3256 and 3.2941 respectively. Three factors: hard to understand (2.6667), time involved (2.5476) and effect on the existing organizational structure (2.4048) do not hinder EMS implementation in hotels in Anambra State.

Table 5: Descriptive Statistics of the Barriers to EMS Implementation using SPSS

Barrier	Observation	Minimum	Maximum	Mean	Standard Deviation
COI	85	1.00	5.00	3.8941	1.19546
QOC	80	1.00	5.00	3.4250	1.17759
HTU	78	1.00	5.00	2.6667	1.27582
NTB	85	1.00	5.00	3.2941	1.32578

LHR	74	1.00	5.00	3.4459	1.58885
EOS	84	1.00	5.00	2.4048	1.16287
HCC	85	1.00	5.00	3.5882	1.30287
MPW	83	1.00	5.00	3.3735	1.46263
TIH	84	1.00	5.00	2.5476	1.19643
EEW	86	1.00	5.00	3.3256	1.39277

Source: Researcher's computation from SPSS Result

Correlation Analysis using SPSS

Table 3.6 presents a Spearman's correlation matrix of the variables used in the research. It does not show much multicollinearity problem between the barriers studied apart from high cost of certification that correlates with effects on the existing structure, with a coefficient of 0.551. All other coefficients were less than 0.5 which means that there is virtually no problem of multicollinearity among variables in the research because the barriers were independent from each other.

Table 6: Spearman's Correlation Matrix between the Barriers to EMS Implementation

BARRIER	COI	QOC	HTU	NBT	LHR	EOS	HCC	MPW	TIH	EEW
COI	1.000									
	.									
QOC	.190	1.000								
	.069	.								
HTU	.437**	.198	1.000							
	.000	.055	.							
NBT	-.031	.105	.134	1.000						
	.766	.301	.197	.						
LHR	.177	-.065	.154	.338**	1.000					
	.093	.539	.145	.001	.					
EOS	.181	-.124	.038	.141	.475**	1.000				
	.084	.229	.714	.170	.000	.				
HCC	.021	-.161	-.089	.127	.422**	.551**	1.000			
	.841	.117	.393	.216	.000	.000	.			
MPW	-.002	-.117	.005	.004	.030	.234*	.182	1.000		
	.986	.253	.959	.966	.780	.022	.077	.		
TIH	-.178	-.203*	.012	-.041	-.021	.031	.084	.434**	1.000	
	.089	.048	.910	.692	.842	.763	.418	.000	.	
EEW	-.308**	-.385**	-.201	-.146	.018	.087	.292**	.189	.478**	1.000
	.003	.000	.052	.149	.867	.402	.004	.063	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher's Computation from SPSS Result.

Cost of implementation (COI); quality of consultants (QOC); hard to understand (HTU); not too beneficial (NTB); lack of human resources (LHR); effect on the existing organizational structure (EOS); high cost of certification (HCC); much paper work (MPW); time involved is high (TIH); and exposure of the hotel environmental weakness ((EEW).

CONCLUSION AND RECOMMENDATIONS

The assessment of the barriers to EMS implementation in hotels in Anambra State revealed that cost of implementation and high cost of certification are the most two factors that impede EMS implementation in the study area. These are followed by lack of human resources, quality of consultants, much paper work, exposure of the hotel environmental weakness and not too beneficial. Hard to understand, time involved and effect on the existing organizational structure were not barriers at all. Despite the cost of EMS implementation, hotels should be encouraged to implement EMS because of its long-term benefits. Regulatory bodies ought to assist them to avail green technology for sludge and wastewater treatment and recycling of wastewater, solid wastes and e-wastes at a subsidized cost. Hotels that implement EMS by cutting back their waste output should be given monetary incentives by the regulators in form of subsidies so that they pay less for waste management services than those who do not implement EMS. On the issue of cost of certification, it is necessary for hotel associations and regulators to seek the opinion of directors/managers of hotels that are already implementing EMS on how they feel about the certification cost. This will guide them to reduce the cost. Another highlighted barrier to EMS implementation was lack of human resources. Organizations are expected to train the officers in charge of environment, safety and health to handle adequately all aspects of EMS internally. These officers are to work with high quality consultants for the hotels. Consultants on EMS implementation for hotels must be environmental management practitioners with expertise on waste management and environmental audit which are central issues in the EMS of hotels. To avoid too much paper work, both hotel associations and regulatory bodies need to work together to reduce the paper work involved even if it means cutting some corners. On the exposure of hotel environmental weakness, hotels suppose to welcome this as it is to their own advantage so that they can be properly advised by the regulatory bodies that can only punish them when they fail to take advice and continue to violate the laws and regulations. This work makes contributions to both practice and theory. Practically, the study revealed the factors that mar EMS implementation in one out of thirty-six states of a developing democracy, Nigeria. Ideas contained in this paper are useful to environmental managers, regulatory bodies and heads of environmental management units in hotels to guide and improve on EMS implementation. Theoretically, results of this study can be made use of in conducting more detailed studies on EMS implementation, not only in hotels but also other industrial sectors earthwide.

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