

# HOW GREEN ARE HOTELS IN ACCRA? ENVIRONMENTAL MANAGEMENT PRACTICES AND INITIATIVES IN TOURIST ACCOMMODATION

By

ISHMAEL MENSAH

*Lecturer, Department of Hospitality & Tourism Management, University of Cape Coast, Cape Coast, Ghana.*

## ABSTRACT

*There have been growing concerns about the impacts of hotels on the environment globally and in Accra where there is uncontrolled development of hotel facilities. This has led to calls for hotels to reduce their carbon footprints by embarking on environmental management practices since sustainable hotels lead to sustainable destinations. A number of hotels, mostly in the developed world have responded to such concerns by embarking on a number of environmental initiatives. However, it is larger hotels which are mostly multinationals or have international affiliations which have been at the forefront of environmental initiatives (Wahab and Pigram, 1997; Mauforth and Munt, 1998; Mensah, 2006). This study therefore determines how hotels in a developing sub-saran African city like Accra are responding to the calls for sustainable practices by looking at their environmental management initiatives and environmental management performance. The managers of 200 hotels which were selected through the stratified random sampling method were surveyed using a structured questionnaire. The questionnaire elicited information on the environmental management performance of the hotels in ten key areas. The results of the study indicated that though the hotels performed creditably in the area of environmental health, their performance in the area of voluntary environmental management activities such as eco-labelling and certification was not encouraging. Also, only 34% of the hotels had voluntarily instituted initiatives in improved environmental performance. The results have implications for environmental policy formulation, voluntary environmental initiatives and the realization of the millennium development goals.*

## INTRODUCTION

It cannot be gainsaid that rapid hotel development has a negative impact on the environment. Available evidence suggests that hotels pollute the environment, generate waste and consume large amounts of natural resources. However, as a result of a widely held notion that the impacts of hotels on the environment does not come close to that of manufacturing, extractive and agricultural industries, greater attention has been focused on these industries to the neglect of the hospitality industry which has been described as ‘the silent destroyers of the environment’.

The 1980s saw greater global efforts at safeguarding the environment and enhancing the wellbeing of people. Agenda 21 which was the action plan of the Rio Earth Summit in 1982 and the 1987 Brundtland Commission report dubbed ‘our common future’ set the tone for sustainable tourism development. During the review of ‘the first five years’ of implementation of Agenda 21 in 1997 at the nineteenth Special Session of the UN General Assembly, there was an indication that there was the need to give further consideration to the importance of tourism in the context of Agenda 21. The tourism industry coined the phrase *sustainable tourism* as a corollary of the sustainable development paradigm of the UN. However, for tourism to be truly sustainable, it must achieve the triple bottom line namely; providing quality and enlightening experiences to tourists, conserving the environment and improving the

well-being of host populations. The UN in order to help improve the lives of the world's poorest by 2015 developed a set of eight goals in 2000 at the United Nations Millennium Summit. Target 7 of the MDGs is ensuring environmental sustainability.

These developments have led to calls for the hotel industry to reduce its carbon footprints by embarking on environmental management practices. The industry appears to have yielded to these calls with several environmental initiatives both at the corporate, national and international levels. Environmental initiatives at the international level include International Hotels Environment Initiative (IHEI) and Asian Pacific Hotels Environment Initiative (APHEI). At the corporate level, the environmental policies and programmes of multinational hotels such as Hilton, Accor, Marriott' and the Rezidor Group have been documented (El Dief and Font, 2010). In the wake of all these initiatives, the question as to what environmental initiatives are being undertaken by hotels in Ghana still remains unanswered.

The hotel industry in Ghana is experiencing rapid growth in response to increased tourist arrivals and the government's efforts at promoting foreign investment. For instance, the number of registered hotels in Ghana grew by 23.2% from 1,295 in 2004 to 1,595 in 2008 as shown in Table 1. However, this figure is short of other hotel facilities that have not officially registered with the Ghana Tourist Board.

**Table 1 Number of Hotel Rooms and Beds, 2004-2008**

<b>Year</b>	<b>Number of Hotels</b>	<b>Number of Rooms</b>	<b>Number of Beds</b>
2004	1295	8082	24146
2005	1373	19042	24434
2006	1427	22827	27661
2007	1459	20874	26226
*2008	1595	24410	29645

\*Projections

Source: Ghana Tourist Board (GTB), 2008

Also, the geographic distribution of hotels among the ten regions of Ghana has not been even. The Greater Accra Region (GAR) has the largest number of hotels. Approximately 41.7% of all rooms existed in the GAR in 2007 (GTB, 2008). The uncontrolled and haphazard development and operation of hotels could lead to widespread environmental impacts and this could thwart efforts geared towards the realization of MDG target 7. Already, there have been reports in the media about some hotels that have discharged untreated waste into public places and water bodies. It is against this background that this study seeks to determine the environmental management initiatives of hotels in Accra and to assess their environmental management performance.

## **LITERATURE REVIEW**

### ***Impacts of hotels on the environment***

Environmental impacts of the hospitality industry have been well documented in the available literature (Mathieson and Wall, 1982; Hunter and Green, 1995; Gossling, 2002). Since tourist accommodation constitute the largest sub-sector of the tourism industry, it therefore has undisputable

wide impacts on the environment, rendering sustainability in the industry a priority issue (Graci, 2010). The impacts of hotels on the environment have been in the areas of energy consumption (Chan and Lam, 2003); water consumption (Bohanowicz, 2006); solid and liquid waste generation (Chan and Lam, 2001); use of chemicals and atmospheric pollution (Briguglio and Briguglio, 1996); and displacement of local communities (Torres, 2003).

An estimated 75% of the environmental impacts of the hotel industry could be attributed to the excessive consumption of both local and imported non-durable goods, energy and water (APAT, 2002). A British study reported by Kirk (1995) asserted that hotels use comparatively more energy than other industrial buildings. Gössling (2002) estimated that hotel facilities worldwide consume about a 100 TWh of energy. Hotels also consume disproportionately large volumes of water (Hunter and Green, 1995). Hunter and Green (1995) concluded that in the Mediterranean, hotels could easily consume 400 litres of water per guest per day whilst locals may only require 70 litres per day. Also, waste is the most visible impact of hotels on the environment (Bohdanowicz and Martinac, 2003). According to IHEI (2002), a typical guest produces in excess of one kilogram of waste per day. This amount doubles on checkout days (Shanklin *et al*, 1991). However, the amount of solid waste generated is dependent upon the size and type of the hotel, as well as the existence of waste management facilities (Davies and Cahill, 2000).

Briguglio and Briguglio (1996), attribute the vast amount of dust found in the atmosphere in Malta to the demolishing of existing buildings and construction of new ones for tourism purposes. Moreover, the development of tourism and hospitality facilities especially in the developing world has often resulted in the displacement of host populations. This takes the form of conversion of agricultural lands into holiday resorts (Ratz and Puczko, 1997). Rajentra (1992) claims that in 1984, 70 fishing families on the Malaysian Island of Langkawi were evicted from their land to make way for condominiums and hotels.

### ***Environmental initiatives and management practices of hotels***

The hotel industry mostly in developed countries and multinational hotel companies are initiating environmental management programmes. In Hong Kong alone, a survey conducted in 1992 found that about 30% of hotels have launched environmental programmes with different degrees of success (Barlett, 1992). Graci *et al* (2009) also found out that many of Toronto's hotels were undertaking some degree of environmental initiatives. Environmental management practices in the hotel industry include environmental policy formulation, green purchasing, compliance with environmental laws and regulations, environmental auditing, ecolabelling and certification, waste management and recycling, conservation, environmental education, pollution prevention, environmentally responsible marketing and support for local communities (Bohdanowicz, 2006; Erdogan, and Baris, 2007). However, the most popular environmental management practices in the hospitality industry are those geared towards cost savings; waste management, recycling, energy and water conservation (Forte, 1994; Withiam, 1995; Mensah, 2007).

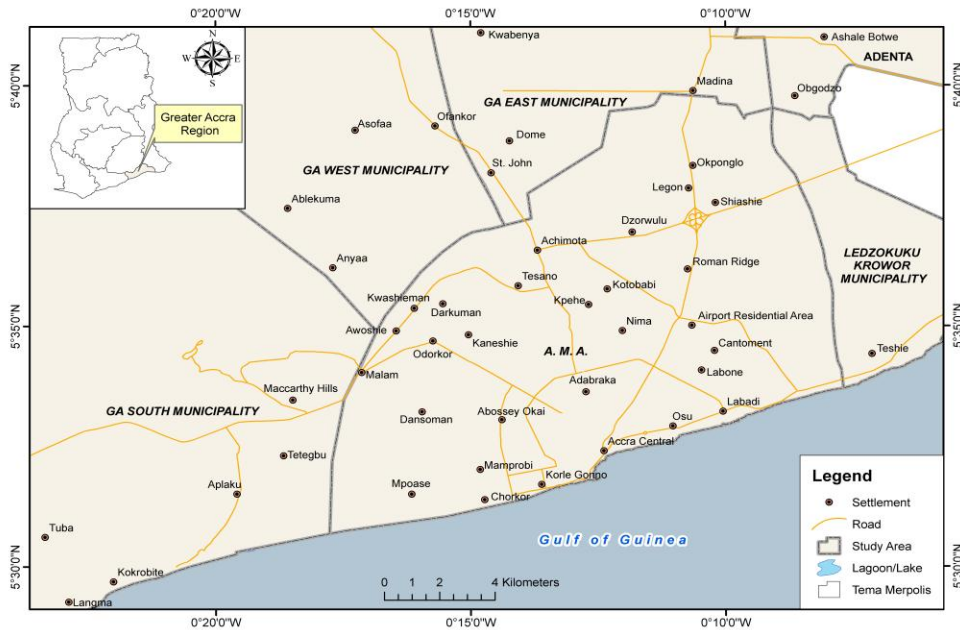
Waste management and energy savings have been critical concerns in hotel environmental management. A survey carried out by the American Hotel and Motel Association (AH&MA) revealed that Hotel managers rated reduction of energy consumption as well as waste management through recycling as their most important concerns (Stipanuk, 1996). A number of hotels are also undertaking waste management programmes. For example, the Hyatt Regency hotel in Chicago has a recycling programme which resulted in the recovery of \$120,000 in hotel items such as silverware from thrash between 1997 and 1998 (Enz and Siguaw, 1999). Chan and Lam (2001) also believe that the thrust of the

green campaign in the hospitality sector has been on energy savings as evidenced by the number of hotels engaging in energy-saving measures which range from the use of compact fluorescent bulbs to shutting down unused appliances. The Inter-Continental in Los Angeles also installed a power monitoring system that enabled the hotel to save \$12,000 in electricity costs. Environmental Management has also been targeted at conserving water and improving the quality of water partly because the hotel industry is greatly affected by the non availability of the right amounts and quality of water and will face difficulty in alleviating over-consumption and dealing with cost of water and water conservation (Zhao and Merna, 1992). For instance, at Sandals Negril, a 215-room hotel in Jamaica, the hotel recorded savings of approximately 45,000 m<sup>3</sup> of water due to an environmental management system which was instituted by management (Meade and Pringle, 2001).

Hotel managers are also increasingly recognising the need to adapt to and support the local environment in which they operate, as part of their corporate social responsibility. An EU funded hotel construction project in Western Samoa uses traditional designs and techniques and only imports materials where local substitutes cannot be produced. The land on which the hotel is located is owned by local villagers, local people are employed and local agricultural produce are consumed by tourists (Eber, 1992). In spite of the growing popularity of environmental management in hotels, only larger hotels have been found to be at the forefront of environmental management (Mauforth and Munt 1998; Edwards, 2000; Mensah 2006). According to Mauforth and Munt (1998), this is due to the fact that small and medium scale accommodation companies do not have the capital resources or internal arrangement structure to conduct environmental management.

## **METHODOLOGY**

This paper is part of a larger study undertaken on environmental performance of hotels in Accra. Accra in this study is defined to include all the eleven sub-metros of the Accra Metropolitan Area (AMA) as well as *Ga East Municipal Area*, *Ga West Municipal Area*, *Ga South Municipal Area*, *Adenta Municipal Area* and *Ledzokuku Krowor Municipal area* (Figure 1). This area was chosen because it has the largest concentration of all classes of hotels in Ghana.



**Figure 1: Map of Study Area**

Source: GIS Unit Department of Geography and Regional Planning, UCC.

Data for this study was obtained through a cross-sectional survey involving managers of sampled hotels. The target population was thus all managers of all categories of hotels and Guest Houses in Accra. The survey was undertaken during the months of June and August 2010. The stratified random sampling procedure was used to select 200 hotel managers. A structured questionnaire was employed for the collection of data. This was first pretested in Cape Coast and Elmina to render the instruments more relevant and appropriate as well as to ensure the content validity of the instrument for the actual data collection. The questionnaire contained both open and close-ended questions which elicited information on respondents' socio-demographic characteristics. Other questions were on organizational characteristics of the hotels and their environmental management practices.

A five-point likert scale ranging from 1(never) to 5 (very frequently) was used to gauge their environmental management performance. The questionnaires were mainly self-administered. The data collected from the field was edited, coded and processed using the Statistical Product for Service Solution (SPSS) software PC version 16.

## DISCUSSION OF FINDINGS

### *Socio-demographic Characteristics of Managers and Profile of Hotels*

The hotel managers surveyed were mainly Ghanaian men between the ages of 21-39 and graduates of tertiary institutions. They were overwhelmingly Ghanaians (98.5%). Also, 70% were males reflecting the gender bias in top managerial positions in the Ghanaian hospitality industry. More than half (56.8%) were between the ages of 21-39 years and about two-thirds (66%) had completed tertiary education.

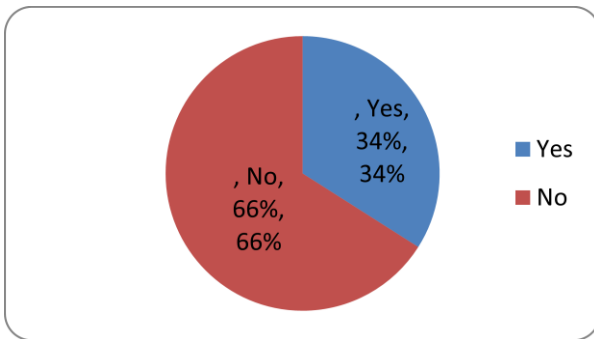
**Table 2 Profile of Hotels**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Affiliation</b>		
Independent	187	94.4
Affiliated	11	5.6
Total	198	100
<b>Number of guestrooms</b>		
Less than 10	46	23.1
10-39	132	66.3
40-69	9	4.5
70-99	4	2.0
100 and above	8	4.0
Total	199	100
$\bar{x} = 23.84$ Mode = 10		
<b>Number of employees</b>		
Less than 10	104	53.1
10-39	72	36.7
40-69	6	3.1
70-99	5	2.6
100 and above	9	4.6
Total	196	100
$\bar{x} = 21.80$ Mode = 10		

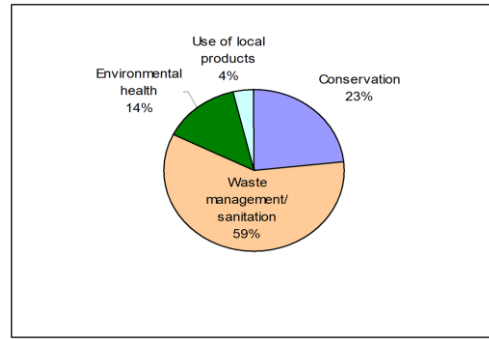
Table 2 shows that the majority of the hotels studied (94.4%) were independent. Only 11.6% were affiliated to foreign multinational companies in the form of franchises, management contract or joint ventures. Also, 23.1% of the hotels had less than 10 guest rooms with the majority (66.3%) having between 10-39 rooms. Only 4% had 100 or more rooms, showing an overall average number of 24 guestrooms. Majority (53.1 %) of the hotels also employed less than 10 people with only 4.6% employing more than 100 people. The average, number of employees was 22. The bulk of the hotels in this study were therefore independent and small to medium scale businesses.

### ***Environmental Initiatives***

About one-third of the hotels (34%) had initiated environmental management programmes (Figure 2) which means the majority had not undertaken such initiatives. However, the environmental programmes, they claimed to have initiated were mostly centred on waste management and sanitation (59%) as shown in Figure 3. There was a dearth of comprehensive environmental management programmes tailored to reduce the carbon footprints of the hotels as well as improving the well-being of host populations. This state of affairs could have been informed by the fact that waste is the most visible impact of hotels on the environment (Bohdanowicz and Martinac, 2003). The hotels therefore had a greater tendency to clean up their waste so that their environmental performance could be more apparent.



**Figure 2: Percentage of hotels with environmental initiatives**

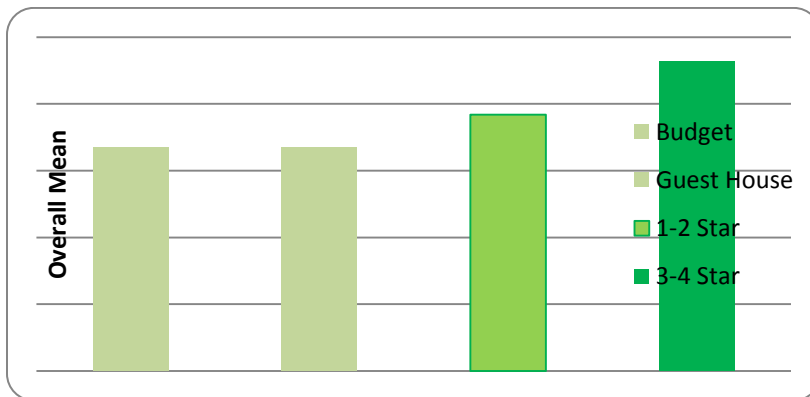


**Figure 3: Initiatives in improved environmental performance**

Indeed, most of the hotels visited during the study were clean and green with waste bins provided in the guestrooms epitomizing the importance management attaches to waste collection and sanitation. However, environmental programmes in other areas such as pollution prevention, water and energy conservation which are popular in developed countries have not attracted the attention of most hotel managers in Ghana.

***Environmental management performance***

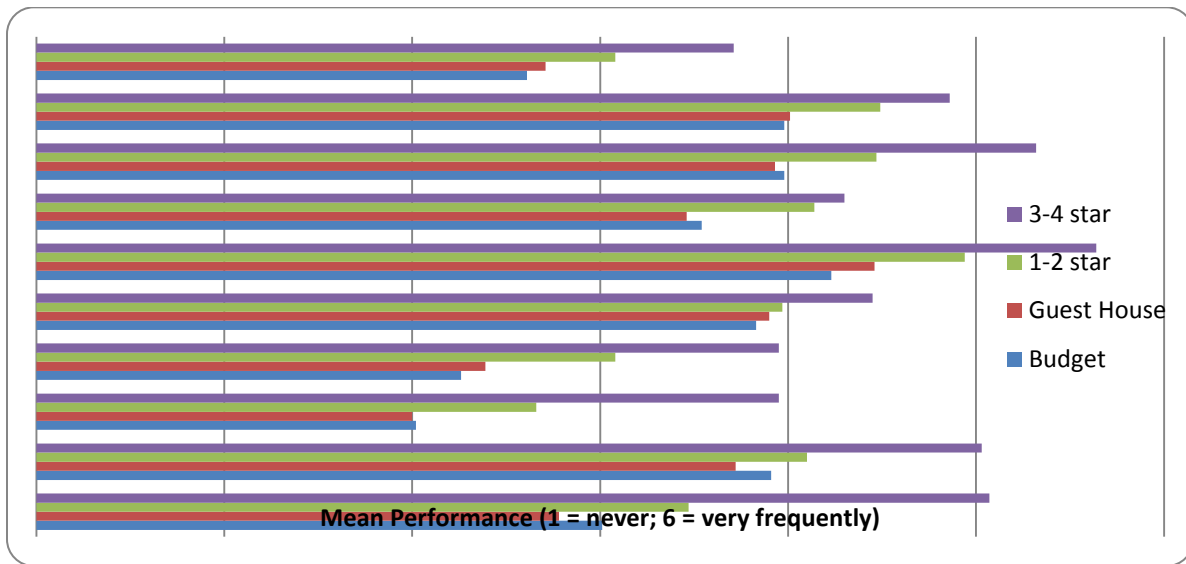
From Figure 4, the 3-4 star hotels were the best environmental performers (overall mean = 4.63) followed by 1-2 star hotels (overall mean = 3.84), budget hotels and guest houses of which both had an Overall Mean of 3.34 suggesting that they rarely undertook the environmental management practices. It appears therefore that size and class of hotel are related to environmental performance. This finding supports the fact that larger hotels are at the forefront of environmental management (Mauforth and Munt 1998; Edwards, 2000; Mensah 2006).



**Figure 4: Overall environmental performance among categories of hotels**

Therefore on the environmental performance spectrum, the 3-4 star hotels could be described as the ‘greenest’ hotels in Accra. This is not surprising because the larger and upscale hotels tend to have the management systems, technology and other resources that foster sound environmental management

practices. Budget and Guest houses in Ghana usually do not have the resources and structures need to embark on sound environmental management practices. Even in the area of enforcement of environmental laws by the GTB and EPA, smaller hotels have often been sidestepped. Smaller hotels (with less than 40 rooms) are not obliged to conduct environmental impact assessments. Also, in February 1998, Golden Tulip hotel attracted all the attention when it had problems with its sewerage plant leading to the spillage of sewage into an open drain. Since such multinational hotels are more sensitive to reputational damages, the hotel subsequently had to invest millions of dollars to rectify the problem.



**Figure 5 Environmental Performance among Hotels in Key Areas**

Figure 5 lends further credence to the fact that the 3-4 star category hotels were the best performers on all the indicators followed by 1-2 star category. Budget hotels and guest houses were the worst performers. Ironically, the hotels rarely or occasionally undertook waste management and recycling though their self-reported environmental initiatives were in the area of waste management. This is because recycling is hardly undertaken by the hotels. Waste management by these hotels involved the collection and deposition of waste rather than minimizing waste or recycling.

Collectively, the hotels performed creditably in terms of environmental health and pollution prevention, their support for local communities and in green purchasing. However they performed abysmally in the areas of eco-labelling and certification and in environmental auditing. Environmental auditing has been described as a fairly new concept in tourism (Butler 1993; Ding and Pigram, 1995) and this perhaps accounts for its unpopularity in the Ghanaian hotel sector. Also, ecolabeling and certification which is assuming popularity globally as a voluntary environmental management tool, is almost non-existent in the Ghanaian hotel industry.

## CONCLUSIONS AND IMPLICATIONS

Results of this study clearly show that the environmental management activities of hotels in Accra are restricted to waste management. Environmental management activities geared towards climate change mitigation has not been given serious consideration by hotel managers. Even with regards to waste management, the major concern has been waste collection and not waste prevention or recycling. This



study also brings to the fore, the fact that voluntary environmental activities are almost non-existent in the hotel industry in Ghana despite its growing popularity globally as relevant environmental management policy alternatives. Apart from the fact that about two-thirds of the hotels had not initiated any environmental programme, coupled with the fact that environmental initiatives by one-third of the hotels were in the area of waste management and sanitation which smacks of compliance to GTB, AMA and EPA laws and directives, the hotels also rarely undertook environmental auditing, ecolabelling and certification.

The close association of environmental management with sanitation and waste management has implications for the achievement of the UN millennium development goals (MDG) target seven which aims at achieving environmental sustainability. Though sustainable tourism development provides the desired impetus for the realization of this goal, unsustainable practices by hotels, especially those that border on resource consumption will render the realization of this goal an illusion. Unfortunately hotel managers in Accra seem to be more concerned about environmental issues that confront their immediate surroundings such as sanitation and waste management. In fact evidence from the study suggests that they equate sanitation and waste management to environmental management. They therefore ignore the broader environmental issues that have ramifications for the realisation of the MDGs. Issues like reducing waste and resource consumption through recycling, conserving energy and water through education and use of appropriate technology as well as regulating climate change through low carbon emissions have not been properly addressed by hotels in Ghana. Hotels in Accra will continue to consume large volumes of resource without due regard to how it impacts on the lives of the urban poor in Accra. In places like *Kokrobite* and *La*, hotels compete with local fishermen for the beaches, and the hotels always have the upper hand because they have enough financial resources to enable them acquire those lands whilst the fishermen are short-changed.

The unpopularity of voluntary environmental management, calls for Ghana's environmental policies to be geared towards encouraging greater industry self-regulation rather than enforcement by state institutions. Incentives should be provided for hotels that subject themselves to third party environmental audits or acquire ecolabels and other certification schemes.

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